OPTIMISASI PENJADWALAN PEMBANGKIT LISTRIK UNTUK SISTEM SULSELBAR DENGAN METODE *DYNAMIC PROGRAMMING*

SKRIPSI

Diajukan sebagai salah satu syarat untuk menyelesaikan
pendidikan diploma empat (D-4) Program Studi Teknik Pembangkit Energi
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HALAMAN PENGESAHAN

Skripsi ini dengan judul "Optimisasi Penjadwalan Pembangkit Listrik Untuk Sistem Sulselbar dengan Metode *Dynamic Programming*" oleh Yuliana NIM 442 12 009 dan Muhammad Fauzan Azdima NIM 442 12 023 telah diterima dan disahkan sebagai salah satu syarat untuk menyelesaikan pendidikan diploma empat (D-4) Program Studi Teknik Pembangkit Energi Jurusan Teknik Mesin Politeknik Negeri Ujung Pandang.

Makassar, 27 Oktober 2016

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HALAMAN PENERIMAAN

Pada hari ini, hari Kamis tanggal 27 Oktober 2016, tim penguji ujian sidang skripsi telah menerima skripsi mahasiswa: Yuliana NIM 442 12 009 dan Muhammad Fauzan Azdima NIM 442 12 023 dengan judul "Optimisasi Penjadwalan Pembangkit Listrik Untuk Sistem Sulselbar dengan Metode *Dynamic Programming*".

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KATA PENGANTAR

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Makassar, 27 Oktober 2016

Penulis

DAFTAR ISI

hlm.

DAFTAR TABEL

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DAFTAR GAMBAR

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DAFTAR SIMBOL, SATUAN, ATAU SINGKATAN

SIMBOL	SATUAN	KETERANGAN
IHR	Ton/MWh	*Incremental Heat Rate*
H_n	Ton/h	*Input* bahan bakar pembangkit termal unit ke-n
P_n	MW	*Output*pembangkit termal unit ke-n
C_n	Rp/h	Biayabahan bakar pembangkit termal unit ke-n
λ	Rp/h	Nilai tertentu
N	-	Jumlah unit
X	MW	Daya tertinggi yang disuplai
Y	MW	Tambahan daya tiap tahap
$B_N(X)$	Rp/h	Biaya N unit, untuk mensuplai daya X
$b_N(Y)$	Rp/h	Biaya total unit ke-N, untuk mensuplai daya Y
$B_{N-1}(X-Y)$	Rp/h	Biaya untuk (N-1) unit untuk mensuplai daya (X-Y)

DAFTAR LAMPIRAN

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SURAT PERNYATAAN

Saya yang bertanda tangan dibawah ini :

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menyatakan dengan sebenar-benarnya bahwa segala pernyataan dalam skripsi ini yang berjudul "Optimisasi Penjadwalan Pembangkit Listrik Untuk Sistem Sulselbar dengan Metode *Dynamic Programming*" merupakan gagasan dan hasil karya penulis dengan arahan komisi pembimbing dan belum pernah diajukan dalam bentuk apa pun pada perguruan tinggi dan instansi mana pun.

Semua data dan informasi yang digunakan telah dinyatakan secara jelas dan dapat diperiksa kebenarannya. Sumber informasi yang berasal atau dikutip dari karya penulis lain telah disebutkan dalam naskah dan dicantumkan dalam skripsi ini.

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Makassar, 27 Oktober 2016

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Optimisasi Penjadwalan Pembangkit Listrik Untuk Sistem Sulselbar Dengan Metode *Dynamic Programming*

RINGKASAN

Salah satu strategi untuk pengoperasian sistem tenaga listrik yang berkaitan dengan pengaturan pembangkit adalah dengan melakukan penjadwalan pembangkit. Dimana bertujuan untuk memperoleh hasil biaya operasi yang minimum. Selain itu dapat diketahui efektifitas penjadwalan pembangkit dan cara perhitungan biaya pengoperasian pembangkit yang optimum pada sistem Sulselbar.

Pada penelitian ini dilakukan dengan menggunakan metode Dynamic Programming. Pada metode ini dilakukan pembagian beban agar dapat diketahui kombinasi-kombinasi unit pembangkit mana yang beroperasi dan tidak beroperasi dengan memperoleh biaya operasi yang minimum. Penelitian ini dilaksanakan di Unit Pengaturan Beban (UPB) PT.PLN Persero dan sektor-sektor pembangkit termal wilayah Sulselbar.

Hasil penelitian ini menunjukkan bahwa kelebihan dari metode ini adalah perhitungan untuk mencari pengoperasian unit yang optimal dilakukan setahap demi setahap sehingga dapat memberikan kemungkinan suatu kombinasi tertentu dari unit-unit pembangkit yang dijadwalkan pada beban tertentu.

SCHEDULING OPTIMIZATION OF POWER

TO REVIEW SULSELBAR WITH SYSTEMS DYNAMIC PROGRAMMING METHOD

SUMMARY

One strategy development to review the operation of the Electricity System relates with regulate setting Power Plant scheduling. Which is aims to review the findings obtained include Operations minimum cost. In addition a scheduling can be known effectiveness of The Plant and how to calculation includes operating costs plant that optimal based on sulselbar system.

Research based on singer performed using Dynamic Programming methond. The Methond is performed by singer division that can be known-Combination of Generating Unit which is unit be operate and not operate with obtain cover the cost of minimum operation. Singer study conducted in load control unit of (UPB) PT PLN (Persero) and region of sulselbar thermal plant.

Research results show that excess of this methond is calculate for finding optimal operational unit is do step by step. So That The Result can be possibility of combination from unit power plant with scheduled at a certain load.

BAB I PENDAHULUAN

1.1 Latar Belakang Masalah

Suatu sistem tenaga listrik biasanya terdiri dari beberapa unit-unit pembangkit tenaga listrik. Pengoperasian sistem tenaga listrik tersebut dapat berlangsung dengan baik jika dilakukan koordinasi antar pembangkit dalam merespon perubahan beban.

Salah satu strategi untuk pengoperasian sistem tenaga listrik yang berkaitan dengan pengaturan pembangkit adalah dengan melakukan penjadwalan pembangkit yang terdiri dari *unit commitment* dan *load dispatch.* Dengan penjadwalan yang baik, maka akan memberikan dampak positif berupa biaya pembangkitan seminimum mungkin. Penjadwalan dilakukan dengan menjadwalkan pembangkit-pembangkit yang ada dalam sistem Sulselbar.

Dari studi literatur yang dilakukan, ada berbagai macam teknik optimisasi yang dilakukan untuk menyelesaikan permasalahan penjadwalan pembangkit. Teknik optimisasi dimaksudkan untuk mendapatkan solusi yang efisien dan efektif dalam mendekati nilai optimal. Beberapa teknik optimisasi yang dikenal antara lain *particle swarm optimization, extended priority list, lagrangian relaxation, algoritma genetika, artificial neural network, dynamic programming,* dan *mixed integer* (Rizky dkk,2014).

Metode *dynamic programming* merupakan salah satu teknik optimisasi yang paling penting diketahui. Salah satu keunggulannya adalah informasi berupa biaya minimum yang dapat dikeluarkan dalam

pengoperasian sejumlah pembangkit dalam sistem tenaga listrik. Oleh karena itu, penulis bermaksud melakukan penelitian tentang penggunaan metode *dynamic programming* dalam pengoperasian sistem kelistrikan Sulselbar.

1.2 Rumusan Masalah

Berdasarkan latar belakang masalah yang telah diuraikan di atas, maka dapat dirumuskan masalah sebagai berikut:

1) Bagaimana efektifitas penjadwalan pengoperasian pembangkit pada sistem sulselbar dengan metode *dynamic programming* ?
2) Bagaimana cara perhitungan biaya pengoperasian pembangkit yang optimum dalam mengatur beban yang ingin disuplai dengan menggunakan matlab?

1.3 Tujuan Penelitian

Tujuan dari penelitian ini adalah:

1) Untuk mengetahui efektifitas penjadwalan pengoperasian pembangkit pada sistem Sulselbar dengan menggunakan metode *dynamic programming.*
2) Untuk mengetahui cara perhitungan biaya pengoperasian pembangkit yang optimum dalam mengatur beban yang ingin disuplai menggunakan matlab.

1.4 Manfaat Penelitian

Ada beberapa manfaat dalam penelitian ini ialah sebagai berikut:

1) Memberikan sumbangsih ilmiah dalam pengembangan metode optimisasi pengoperasian pembangkit dalam sistem tenaga listrik.
2) Menjadi salah satu referensi ilmiah untuk pengembangan IPTEKS.

1.5 Batasan Masalah

Agar dalam pembahasan penelitian ini tidak terlalu meluas, maka penulis mencantumkan batasan masalah sebagai berikut:

1) Pembangkit tenaga listrik area sulselbar, sistem dianggap dalam kondisi operasi normal (*steadystate*).
2) Semua pembangkit hidro dimaksimalkan.
3) Pembangkit termal yang kurang jam pengoperasiannya tidak diperhitungkan dalam *Dynamic programming*.
4) Rugi-rugi transmisi diabaikan.

BAB II TINJAUAN PUSTAKA

5.3 Dasar Penjadwalan

Penjadwalan didefinisikan sebagai proses pengaturan waktu dari suatu kegiatan operasi. Secara umum penjadwalan bertujuan untuk meminimalkan waktu proses, waktu tunggu langganan, dan tingkat persediaan, serta penggunaan yang efisien dari fasilitas, tenaga kerja, dan peralatan. Penjadwalan yang disusun dengan mempertimbangkan berbagai keterbatasan yang ada (Masruroh).

Dengan penjadwalan yang baik, maka akan memberikan dampak positif berupa biaya pembangkitan seminimum mungkin. Penjadwalan pembangkitan dilakukan dengan menjadwalkan pembangkit-pembangkit yang ada di sistem sulselbar. Dalam sistem tenaga listrik yang terdiri dari sejumlah pusat listrik hidro dan sejumlah pusat listrik termis, perlu dicari jalur pembagian beban antara subsistem hidro dan subsistem termis sehingga dapat dioperasikan dengan optimum bagi sistem tenaga listrik secara keseluruhan.

Tujuan dari penjadwalan pembangkitan adalah mengatur daya keluar dari masing-masing pusat pembangkit yang ada dalam sistem atau daya keluar dari masing-masing unit pembangkit yang ada dalam suatu pusat pembangkit, untuk mensuplai beban tertentu sehingga menghasilkan jumlah biaya pembangkitan seminimum mungkin.

Penjadwalan pada sistem tenaga listrik terbagi menjadi 2 bagian yaitu *unit commitment* dan *load dispatch*. Dimana penjadwalan pembangkit listrik mencari pembangkit mana yang harus aktif.

5.3.1 Unit Commitment

Penjadwalan unit pembangkit dalam suatu pusat listrik biasa disebut dengan *unit commitment*.

Unit commitment merupakan penjadwalan waktu penyalaan dan penghubungan unit pembangkit pada suatu sistem tenaga listrik yang direncanakan dalam waktu yang bervariasi dari beberapa jam hingga satu minggu, dengan tujuan utama memenuhi permintaan beban listrik (Hadhi dkk, 2014), sehingga *unit commitment* akan mengatur daya keluar dari suatu unit-unit pembangkit yang akan menghasilkan biaya operasi yang minimum.

Unit commitment bertujuan untuk menentukan unit pembangkit yang paling optimum dioperasikan dalam menghadapi beban yang diperkirakan untuk mencapai biaya bahan bakar minimum (Marifah dkk, 2013).

5.3.2 Load Dispatch

Load dispatch digunakan untuk membagi beban di antara unit-unit termal yang beroperasi agar mencapai biaya bahan bakar yang minimum (Marifah dkk, 2013).

Pengaturan daya keluar secara optimum dari tiap-tiap pusat pembangkit yang ada di dalam suatu sistem tenaga listrik bertujuan untuk mengukur berbagai tingkat beban pada sistem sehingga dengan mengetahui beban-beban pada unit-unit pembangkit maka beban sudah dapat disuplai keluar, dalam hal ini pengaturan daya keluar pada *unit commitment* harus diketahui terlebih dahulu.

5.4 Biaya Pengoperasian Pembangkit

Sebuah sistem tenaga listrik merupakan sebuah unit usaha dimana selain faktor teknis, faktor ekonomis sangat dominan dalam pengoperasiannya. Pendapatan dan pengeluaran dijaga dalam kondisi seimbang agar dapat diperoleh margin keuntungan yang layak sehingga dapat dijaga kelangsungan pada suatu pembangkit. Bagian terbesar dari pembiayaan adalah untuk bahan baku energi sekitar 60 %. Secara garis besar biaya operasi dari suatu sistem tenaga listrik terdiri dari:

1) Biaya pembelian tenaga listrik.
2) Biaya pegawai.
3) Biaya bahan bakar dan material operasi.

Dengan terhubungnya banyak pembangkit kedalam sebuah sistem interkoneksi memberikan kemungkinan pengaturan output dan biaya pembangkitannya pada setiap pembangkit dapat diatur pada tingkat yang rendah/optimum.

Dalam hal pengoptimalan pembangkit untuk memperoleh biaya seminimum mungkin dibutuhkan biaya bahan bakar yang minimum pula. Biaya bahan bakar merupakan unsur biaya terbesar dalam pembangkitan tenaga listrik.

Pada PLTA tidak ada biaya bahan bakar sehingga praktis komponen biaya pembangkitannya adalah biaya tetap saja. Penurunan biaya pembangkitan praktis hanya dapat dilakukan dengan memperbesar produksi atau dengan menurunkan biaya investasi (pembangunan) dalam US$ per kW terpasang.

Dalam pembangkitan tenaga listrik, PLTA adalah pusat listrik yang biaya investasinya paling tinggi, tetapi biaya operasinya paling rendah sehingga biaya tetapnya per tahun juga paling tinggi. Dilain pihak, dalam pembangkitan tenaga listrik, PLTG adalah pusat listrik yang biaya investasinya paling kecil, tetapi biaya operasinya paling tinggi sehingga biaya tetapnya setiap tahun paling kecil (Marsudi, 2005).

5.4.1 Optimasi Hidro-Termis

Sistem tenaga listrik terdiri dari kelompok pembangkit hidro dan kelompok pembangkit termis, dalam mencapai keadaan operasi yang optimum diperlukan jalur pembagian beban antara kedua kelompok pembangkit ini untuk mencapai biaya bahan bakar yang minimum. Hal ini terutama diperlukan:

1) Kelompok pembagkit hidro yang tidak semua PLTA *run-off river*, tetapi ada yang mempunyai kolam tando harian.

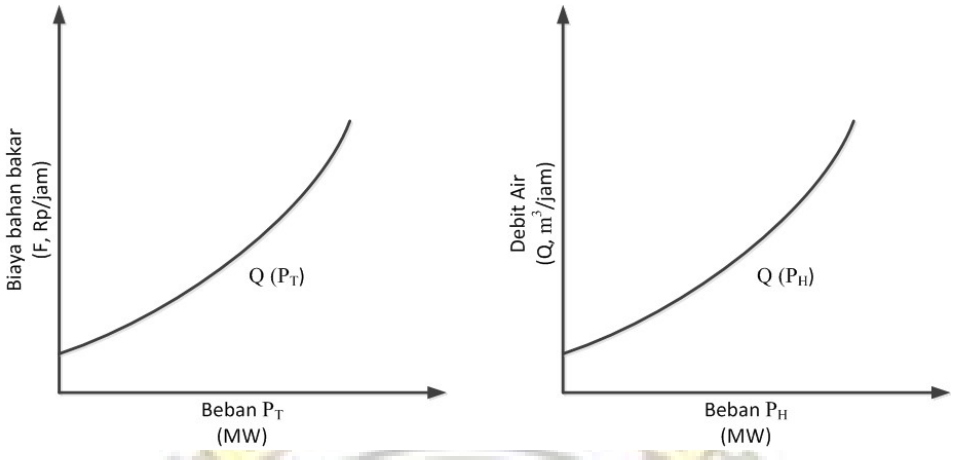
2) Kelompok pembangkit termis terdiri dari beberapa macam jenis pembangkit, misalnya PLTU batubara, PLTGU gas, dan PLTG bahan bakar minyak dengan biaya bahan bakar yang berbeda.

Dalam hal ini, apabila pembangkit listrik tersebut beroperasi masuk dalam sistem interkoneksi dengan pembangkit listrik yang lain, maka pengatur pembagian beban dalam sistem interkoneksi harus terencanakan dengan memperhatikan kendala-kendala yang harus dipenuhi seperti beban minimum dan beban maksimum dari pembangkit listrik.

Pada prinsipnya, harus diusahakan agar yang tersedia untuk PLTA terpakai habis dan unit pembangkit termis yang termahal biaya bahan bakarnya mempunyai produksi kWh yang minimal.

Dalam pengoptimalisasian hidro termis harus memperhatikan nilai *incremental cost system*, dimana pada saat nilai *incremental cost system* tinggi maka nilai air tinggi dan begitupun sebaliknya sehingga dapat menghasilkan biaya operasi yang minimum.

Salah satu yang perlu diketahui adalah kurva input-output pembangkit hidro-termis. Adapun kurva input-output pembangkit hidro-termis sebagai berikut:



Gambar 2.1 (a) Kurva Input-Output dari Unit Pembangkit Termis, (b) Kurva Input-Output dari Unit Pembangkit Hidro
Sumber: Marsudi, 2005

Kurva input-output yang ditunjukkan seperti pada Gambar 2.1 memperlihatkan besar input yang harus diberikan pada unit pembangkit sebagai fungsi dari outputnya. Untuk unit pembangkit termis bahan bakar yang dinyatakan sebagai inputnya sedangkan outputnya adalah daya yang dibangkitkan dinyatakan dalam Mega Watt. Adapun unit pembangkit hidro, inputnya adalah debit air yang dinyatakan dalam m^3 /detik, sedangkan outpunya adalah daya yang dibangkitkan dalam Mega Watt (Marsudi, 2006).

5.4.2 Operasi Ekonomis dengan Mengabaikan Rugi-Rugi Transmisi

Pada umumnya pusat-pusat pembangkit terdiri dari beberapa pembangkit, sehingga dalam proses pendistribusian diantara pembangkit yang berdekatan, rugi-rugi transmisi dapat diabaikan walaupun pada kenyataannya rugi-rugi tetap ada.

Biaya bahan bakar dan biaya pembangkit tenaga listrik dari suatu sistem tenaga listrik dengan mengabaikan rugi-rugi transmisi dapat dinyatakan sebagai berikut:

$$F_T = \sum_{i=1}^{N} F_i\ (P_i) = F_1(P_1) + F_2(P_2) + F_3(P_3) + F_n(P_n) \quad \text{.....(2.1)}$$

$$P_R = P_r \quad \text{.....(2.2)}$$

$$P_T = \sum_{i=1}^{N} P_i = P_1 + P_2 + P_3 + \ldots + P_n \quad \text{.....(2.3)}$$

dimana:

F_T = Biaya bahan bakar total (Rp/jam)

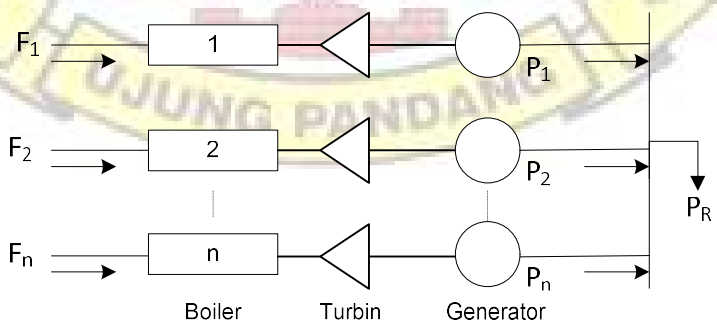
F_i = Biaya bahan bakar pada pembangkit i (Rp/jam)

P_i = Daya output pembangkit ke-i yang optimal (MW)

P_T = Daya output total pembangkit (MW)

P_R = Beban sistem tenaga listrik (MW)

i = 1,2,3,…, n (jumlah unit pembangkit)



Gambar 2.2 Representasi Biaya Pembangkit, Daya Output, dan Beban Suatu Pusat Pembangkit Termal.

5.5 Karakteristik Ekonomis Pembangkit Termal

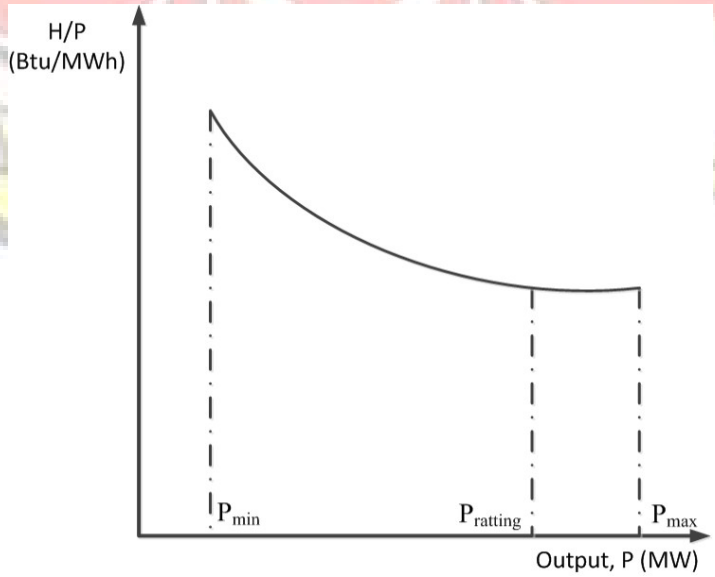
5.5.1 Karakteristik Net Heat Rate

Heat rate adalah ukuran umum dari efisiensi sistem di suatu pembangkit listrik termal sebagai perbandingan antara input output pada kondisi-kondisi pembebanan. Heat rate merupakan kebalikan dari efisiensi, sehingga semakin besar efisiensi maka semakin kecil heat rate dan semakin rendah nilai heat ratenya, maka tingkat pengoperasian suatu pembangkit semakin baik.

Dimana secara sistematis dapat dilihat pada persamaan berikut:

$$\text{Heat Rate} = \frac{\text{Energi dari bahan bakar}}{\text{Energi listrik yang dihasilkan}} \quad \text{..... (2.4)}$$

Adapun kurva heat rate pada suatu pembangkit termal dapat dilihat pada gambar berikut:



Gambar 2.3 Karakteristik Net Heat Rate Pembangkit Termal

5.5.2 Karakteristik *Incremental Fuel Rate*

Incremental Fuel Rate (IFR) biasa disebut juga dengan pertambahan biaya bahan bakar pada suatu pembangkit. Dimana menggambarkan hubungan antara perubahan input dan output yang sesuai dengan perubahan input tersebut. Secara matematis dapat dinyatakan sebagai berikut :

$$IFR = \frac{\Delta F}{\Delta P} \quad \text{..... (2.5)}$$

dimana :

IFR = Incremental Fuel Rate

ΔF = Bahan bakar suatu pembangkit (input)

ΔP = Energi yang dihasilkan (output)

Dari karakteristik input-output pembangkit maka kita dapat mencari kurva pertambahan bahan bakar rata-rata, dimana dapat dicari dengan menggunakan persamaan diatas.

Kurva incremental fuel rate dapat dikonversikan ke kurva kenaikan biaya bahan bakar atau incremental fuel cost (IFC) dengan mengalikan IFR dengan biaya bahan bakarnya.

IFC = IFR x Fuel Cost ..... (2.6)

dimana :

IFC = Incremental Fuel Cost

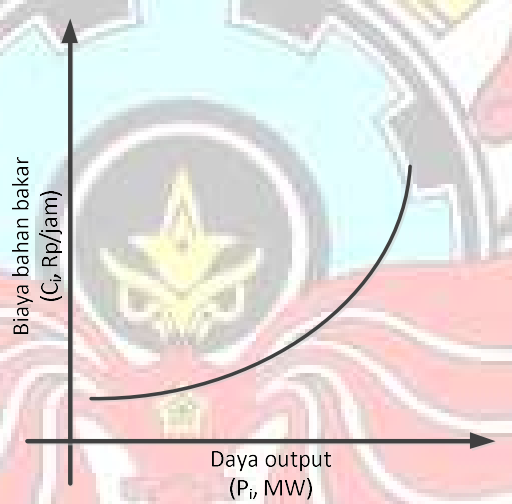
IFR = Incremental Fuel Rate

Fuel Cost = Biaya bahan bakar (Rupiah/MWh)

5.5.3 Karakteristik Input-Output Pembangkit Termal

Karakteristik input-otput pembangkit termal menggambarkan kenaikan kenaikan panas atau biaya bahan bakar dengan adanya kenaikan daya output yang dibangkitkan oleh suatu pembangkit.

Menurut Marsudi, Djiteng (2006), persamaan hubungan biaya bahan bakar suatu unit pembangkit sebagai fungsi daya outputnya, dapat dilihat pada Gambar 2.4 berikut:



Gambar 2.4 Kurva Hubungan Biaya Input Bahan Bakar dengan Daya Output yang Dihasilkan oleh Unit Pembangkit Termal

Pada umumnya karakteristik input-output pembangkit termal didekati dengan fungsi polinomial orde dua yaitu:

$H_n = \alpha_n + \beta_n P_n + \gamma_n P_n^2$ ..... (2.7)

dimana :

H_n ..... = Input bahan bakar pembangkit termal unit ke-n (Liter/jam).

P_n = Output pembangkit termal unit ke-n (MW).

α_n, β_n, γ_n = Konstanta input-output pembangkit termal unit ke-n.

Dalam menentukan nilai $\alpha_n, \beta_n, \gamma_n$ dibutuhkan parameter biaya bahan bakar dan daya keluaran pada suatu pembangkit. Kemudian data tersebut diolah dengan menggunakan metode regresi kuadrat.

Metode regresi kuadrat digunakan untuk mencari suatu fungsi tertentu yang dihasilkan dari data pengamatan. Cara penyelesaian dengan menggunakan metode regresi kuadrat sebagai berikut:

$$S = \Sigma (\alpha_n + \beta_n P_n + \gamma_n P_n^2 - H_n)^2 \quad (2.8)$$

dimana persyaratan yang harus dipenuhi sebagai berikut:

$$\frac{\partial S}{\partial \alpha} = \Sigma\, 2 (\alpha_n + \beta_n P_n + \gamma_n P_n^2 - H_n) = 0 \quad (2.9)$$

$$\frac{\partial S}{\partial \beta} = \Sigma\, 2P_n (\alpha_n + \beta_n P_n + \gamma_n P_n^2 - H_n) = 0 \quad (2.10)$$

$$\frac{\partial S}{\partial \gamma} = \Sigma\, 2P_n^2 (\alpha_n + \beta_n P_n + \gamma_n P_n^2 - H_n) = 0 \quad (2.11)$$

sehingga:

$$(N)\alpha_n + (\Sigma P_n)\beta_n + (\Sigma P_n^2)\gamma_n = \Sigma H_n \quad (2.12)$$

$$(\Sigma P_n)\alpha_n + (\Sigma P_n^2)\beta_n + (\Sigma P_n^3)\gamma_n = \Sigma H_n P_n \quad (2.13)$$

$$(\Sigma P_n^2)\alpha_n + (\Sigma P_n^3)\beta_n + (\Sigma P_n^4)\gamma_n = \Sigma H_n P_n^2 \quad (2.14)$$

Maka akan membentuk suatu Sistem Persamaan Aljabar Linier (SPAL) dengan orde 3 pada persamaan (2.12), (2.13), dan (2.14), bila disusun ialah sebagai berikut:

$$\begin{bmatrix} N & \Sigma P_n & \Sigma P_n^2 \\ \Sigma P_n & \Sigma P_n^2 & \Sigma P_n^3 \\ \Sigma P_n^2 & \Sigma P_n^3 & \Sigma P_n^4 \end{bmatrix} \times \begin{bmatrix} \alpha_n \\ \beta_n \\ \gamma_n \end{bmatrix} = \begin{bmatrix} \Sigma H_n \\ \Sigma H_n P_n \\ \Sigma H_n P_n^2 \end{bmatrix} \quad (2.15)$$

Solusi SPAL pada persamaan (2.15) dapat dilakukan dengan cara:

a) Analitis (aljabar) yaitu dengan menggunakan aturan Cramer

$$\alpha_n = \frac{\det\begin{bmatrix} \Sigma H_n & \Sigma P_n & \Sigma {P_n}^2 \\ \Sigma P_n H_n & \Sigma {P_n}^2 & \Sigma {P_n}^3 \\ \Sigma {P_n}^2 H_n & \Sigma {P_n}^3 & \Sigma {P_n}^4 \end{bmatrix}}{\det\begin{bmatrix} N & \Sigma P_n & \Sigma {P_n}^2 \\ \Sigma P_n & \Sigma {P_n}^2 & \Sigma {P_n}^3 \\ \Sigma {P_n}^2 & \Sigma {P_n}^3 & \Sigma {P_n}^4 \end{bmatrix}} \quad \text{..... (2.16)}$$

$$\beta_n = \frac{\det\begin{bmatrix} N & \Sigma H_n & \Sigma {P_n}^2 \\ \Sigma P_n & \Sigma P_n H_n & \Sigma {P_n}^3 \\ \Sigma {P_n}^2 & \Sigma {P_n}^2 H_n & \Sigma {P_n}^4 \end{bmatrix}}{\det\begin{bmatrix} N & \Sigma P_n & \Sigma {P_n}^2 \\ \Sigma P_n & \Sigma {P_n}^2 & \Sigma {P_n}^3 \\ \Sigma {P_n}^2 & \Sigma {P_n}^3 & \Sigma {P_n}^4 \end{bmatrix}} \quad \text{..... (2.17)}$$

$$\gamma_n = \frac{\det\begin{bmatrix} N & \Sigma P_n & \Sigma H_n \\ \Sigma P_n & \Sigma {P_n}^2 & \Sigma P_n H_n \\ \Sigma {P_n}^2 & \Sigma {P_n}^3 & \Sigma {P_n}^2 H_n \end{bmatrix}}{\det\begin{bmatrix} N & \Sigma P_n & \Sigma {P_n}^2 \\ \Sigma P_n & \Sigma {P_n}^2 & \Sigma {P_n}^3 \\ \Sigma {P_n}^2 & \Sigma {P_n}^3 & \Sigma {P_n}^4 \end{bmatrix}} \quad \text{..... (2.18)}$$

b) Matriks

$$\begin{bmatrix} \alpha_n \\ \beta_n \\ \gamma_n \end{bmatrix} = \begin{bmatrix} n & \Sigma P_n & \Sigma {P_n}^2 \\ \Sigma P_n & \Sigma {P_n}^2 & \Sigma {P_n}^3 \\ \Sigma {P_n}^2 & \Sigma {P_n}^3 & \Sigma {P_n}^4 \end{bmatrix}^{-1} \text{ x } \begin{bmatrix} \Sigma H_n \\ \Sigma P_n H_n \\ \Sigma {P_n}^2 H_n \end{bmatrix} \quad \text{..... (2.19)}$$

sehingga diperoleh persamaan biaya bahan bakar sebagai berikut:

$C_n = \alpha_n + \beta_n P_n + \gamma_n {P_n}^2$ x Harga Bahan Bakar..... (2.20)

atau

$C_n = \alpha_n + \beta_n P_n + \gamma_n {P_n}^2$ (Rp/h) ..... (2.21)

dimana:

C_n = Biaya bahan bakar pembangkit termal unit ke-n (Rp/jam).

P_n = Output pembangkit termal unit ke-n (MW).

$\alpha_n, \beta_n, \gamma_n$ = Konstanta input-output pembangkit termal unit ke-n.

5.6 Dynamic Programming

Dynamic programming merupakan suatu metode untuk mencari pilihan yang optimum diantara beberapa alternatif yang biasa ditempuh. Dengan metode dynamic programming maka dapat di lihat formulasi optimisasi biaya bahan bakar sebagai berikut:

Bila n = 1 maka beban sistem akan diatasi oleh satu-satunya unit yang ada. Tetapi jika ada dua unit yang tertentu besarnya dapat dicari kombinasi dari dua unit yang ada agar dicapai biaya bahan bakar yang minimum. Dari sini bisa disusun kurva biaya minimum untuk dua unit dalam menghadapi berbagai nilai beban sistem. Bila ada unit ketiga dengan kurva biaya bahan bakar diketahui, maka dengan cara mencari kombinasi kembali dari tiga unit, kurva biaya minimum dua unit yang sudah didapat digabungkan dengan kurva biaya unit ketiga untuk mendapatkan kurva biaya minimum dengan unit 3 dalam sistem untuk menghadapi berbagai nilai beban sistem. Begitupun seterusnya sampai dengan unit ke-n. Secara matematis dapat dinyatakan sebagai berikut:

$$B_N(x) = \min \{ b_N(y) + B_{N-1}(x-y) \} \quad \text{.....(2.22)}$$

dimana :

B_N (x) = Biaya N buah unit untuk suplai daya x

b_N (y) = Biaya unit ke-N untuk mensuplai daya y

N = Jumlah unit

x = Daya tertinggi yang disuplai

y = Tambahan daya tiap tahap

Untuk bisa menyelesaikan persamaan (2.22) perlu diketahui kurva bahan bakar masing-masing unit pembangkit, bisa dilihat pada Gambar 2.4 diatas (Marsudi,2006).

Adapun batasan-batasan yang harus selalu diperhatikan yaitu sebagai berikut:

$$P_i\ (min) \leq P_i \leq P_i(max)\ i = 1,2,3,\ldots n \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (2.23)$$

Dimana P_i (min) dan P_i (max) adalah kemampuan daya minimum dan maksimum yang dibangkitkan oleh pembangkit ke-i. Dalam hal ini dilakukan iterasi untuk mendapatkan nilai P_i yang memenuhi persamaan dan pertidaksamaan pembatas (Imran, 2008).

Langkah-langkah perhitungan optimasi pembebanan unit-unit pembangkit termis sebagai berikut:

1) Menentukan terlebih dahulu *step* kenaikan (δ) yang sama antara harga X dan Y.

2) Apabila hanya terdapat sebuah unit pada pembangkit termis (n = 1), maka beban hanya dapat dilayani oleh satu-satunya unit pada pembangkit termal tersebut. Sehingga biaya bahan bakar minimum dapat ditulis menjadi:

$$B_1(X) = b_1(X) \quad \text{..... (2.24)}$$

3) Kemudian diteruskan dengan n = 2, yaitu apabila terdapat dua unit pada pembangkit termal maka biaya bahan bakar minimum dapat diperoleh:

$$B_2(X) = \text{Min}\ \{b_2(Y) + B_1(X-Y)\} \quad \text{..... (2.25)}$$

Persamaan (2.25) dipecahkan dengan urutan sebagai berikut:

a) Memilih beban sistem X mulai dari nilai yang kecil mungkin. Kemudian harga X tersebut dibagi untuk unit ke-1 pembangkit sebesar (X-Y) MW dan untuk unit ke-2 pembangkit sebesar Y MW. Kemudian dengan mengubah-ubah nilai Y dengan variasi δ, maka didapatkan nilai $B_2(X)$ yang minimum.

b) Memilih beban sistem X yang lebih besar dan mengulangi proses perhitungan tersebut dalam butir 3a.

c) Biaya bahan bakar minimum dapat dihitung yaitu: $B_2(0)$, $B_2(Y_{n\ min})$, $B_2(Y_{n\ min} + \delta)$, $B_2(Y_{n\ min} + 2\delta)$, $B_2(Y_{n\ min} + 3\delta)$, ... $B_2(Y_{n\ maks} + Y_{n-1\ maks})$. Sehingga didapatkan komposisi beban unit 1 dan unit 2 yang menghasilkan biaya bahan bakar minimum ($B_2(X)$).

4) Untuk n = 3, perhitungan dilakukan dengan cara yang serupa dengan butir 3, sehingga dapat diperoleh $B_3(X)$.

Hal yang serupa dapat dilakukan untuk unit ke-4 dan seterusnya sampai unit ke-n.

Terdapat komitmen yang berlaku untuk penjadwalan pembangkit, yaitu:

a) Tidak ada biaya pembangkit yang nol.
b) Karakteristik input-output linier mulai dari beban nol sampai beban penuh.
c) Tidak ada batasan lain.
d) Biaya awal (pemanasan) dianggap konstan.

Selain itu, dalam menyelesaikan menggunakan program dinamis berikut terdapat asumsi-asumsi:

a) Adanya sebuah keadaan, dimana sistem terdiri dari deretan (matriks) unit pembangkit dengan karakteristik khusus sedang beroperasi dan lainnya berada di luar sistem tersebut dan siap masuk ke dalam sistem.
b) Biaya pembangkitan awal (pemanas) dari tiap unit adalah tidak terikat waktu dan dia tidak masuk dalam kurva input-output terpakai.
c) Tidak terdapat biaya dalam memutuskan pembangkit keluar sistem.
d) Terdapat instruksi yang ketat mengenai prioritas dan pada setiap interval sejumlah kapasitas minimum yang harus dioperasikan.

BAB III METODE PENELITIAN

5.7 Tempat dan Waktu Penelitian

Penelitian ini dilaksanakan pada bulan Maret 2016 sampai dengan bulan Agustus 2016. Penelitian ini bertempat di Unit Pengatur Beban (UPB) PT. PLN (Persero) yang berlokasi di Jl. Letjen. Hertasning Blok B, Makassar dan di sektor-sektor pembangkit termal wilayah Sulselbar.

5.8 Obyek Penelitian

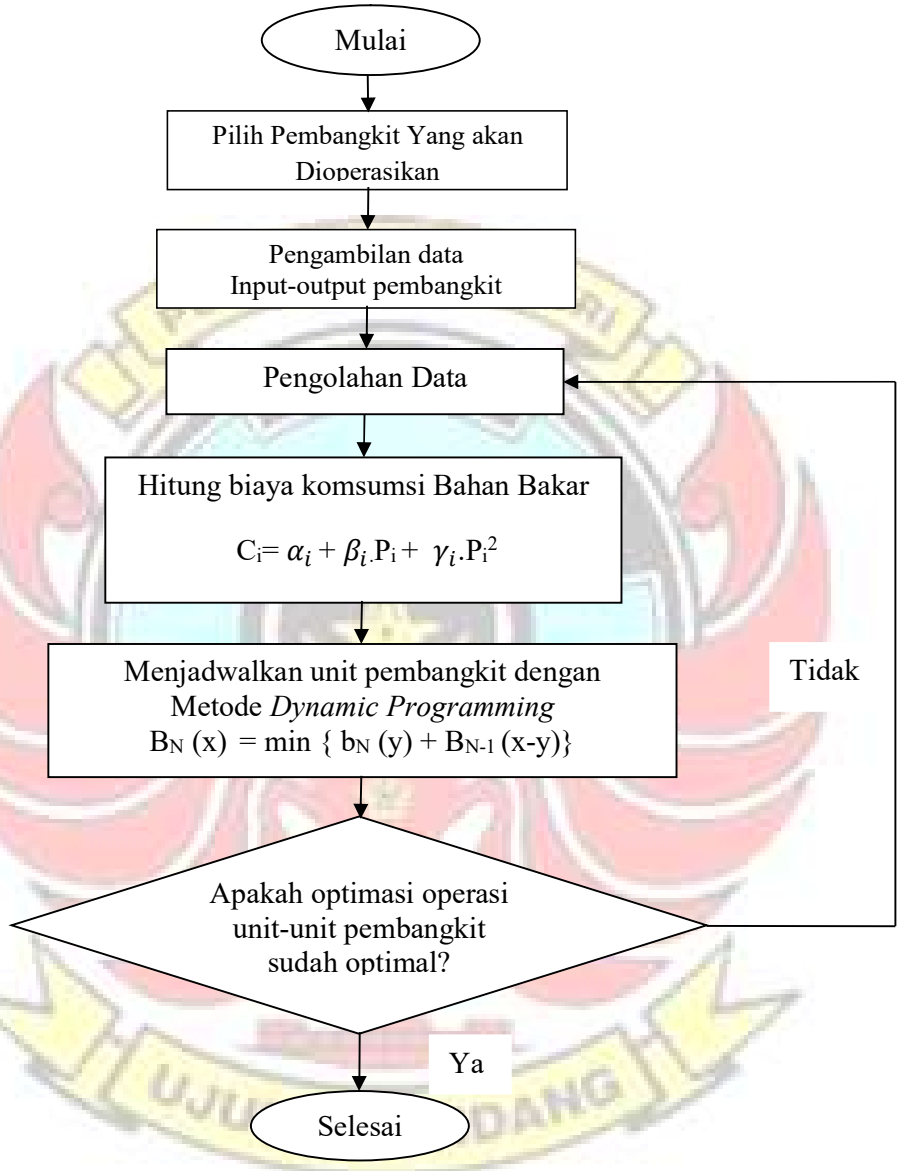
Obyek yang akan diteliti adalah penjadwalan pembangkit listrik untuk sistem Sulselbar yang ada di Unit Pengatur Beban (UPB) PT. PLN (Persero).

5.9 Alat dan Bahan

Alat dan bahan yang diperlukan ialah:

1) Komputer/laptop sebagai alat pengolahan laporan dan data lapangan.
2) Printer dan kertas untuk pencetakan laporan.
3) Software Matlab sebagai bahan pengolahan datanya.
4) Data input-output pembangkit, daya maksimum dan minimum serta data beban untuk sistem Sulselbar.

5.10 Metode Penelitian



Gambar 3.1 Diagram Alir Penelitian

5.11 Teknik Pengumpulan Data

Dalam pengambilan data lapangan dapat dilakukan dengan cara:

1) Wawancara

Metode ini dilakukan untuk mendapatkan data melalui pertanyaan-pertanyaan kepada user atau kepada operator sebagai pengatur penjadwal pembangkitan Sulselbar.

2) Observasi Partisipatif

Metode dalam memperoleh data dengan cara mengamati, mendengar apa yang dijelaskan, dan berpartisipasi dalam operasional di UPB PT. PLN (Persero) serta pembangkit-pembangkit termal di Sulselbar.

3) Dokumen

Pengambilan data melalui dokumen tertulis maupun elektronik di PT. PLN (Persero) UPB dan pembangkit-pembangkit termal di Sulselbar. Dokumen-dokumen diperlukan untuk mendukung kelengkapan data yang lain.

5.12 Teknik Pengolahan Data

Adapun teknik analisa data yang digunakan yakni mengolah data menggunakan software Matlab yang didukung dengan menggunakan rumus-rumus persamaan input-otput pembangkitan (2.7), persamaan biaya bahan bakar (2.21), dan persamaan dynamic programming (2.22).

BAB IV HASIL DAN PEMBAHASAN

4.1 Hasil

4.1.1 Data Pengamatan

Untuk mengetahui hasil analisa penjadwalan pembangkit listrik pada sistem Sulselbar digunakan program Matlab dan perhitungan manual. Dengan menggunakan program Matlab dan manual tersebut maka akan diperoleh hasil perhitungan biaya bahan bakar yang minimum dan jadwal kerja pengoperasian unit-unit pembangkit, terkhususkan untuk unit-unit pembangkit termis.

Data yang digunakan dalam pengolahan tugas akhir ini merupakan data input-output pembangkit, daya minimal dan maksimum pembangkit serta data beban listrik yang terdapat pada sistem interkoneksi Sulselbar yang dinyatakan dalam Rupiah per jam (Rp/jam) dan Mega Watt (MW). Data acuan untuk pengolahan data merupakan data beban listrik harian pada bulan Agustus 2016 yang tersaji dalam lampiran. Pengambilan sampel dalam rentang waktu tersebut cukup untuk melihat dan mengetahui karakteristik penjadwalan yang terbentuk berdasarkan hasil perencanaan.

4.1.1.1 Batasan Generator Pembangkit Sulselbar

Salah satu syarat penting penjadwalan pembangkit adalah mengetahui batasan-batasan generator dalam menyuplai beban sistem yaitu meliputi daya maksimum dan daya minimum sebuah generator.

Kapasitas daya maksimum dan daya minimum pembangkit pada sistem Sulselbar dapat dilihat pada Tabel 4.1.

Tabel 4.1 Kapasitas Daya Maksimum dan Minimum Pada Sistem Sulselbar

No	Unit pembangkit		Daya (MW)		
			Terpasang	Maks	Min
1	PLN	PLTA Bakaru Unit 1	63,0	63,0	27,0
2		PLTA Bakaru Unit 2	63,0	63,0	27,0
3		PLTA Bili-bili	20,0	11,0	0,2
4		PLTU Barru Unit 1	50,0	50,0	10,0
5		PLTU Barru Unit 2	50,0	50,0	10,0
6		PLTG GE Unit 1	33,4	26,0	8,0
7		PLTG GE Unit 2	33,4	28,0	8,0
8		PLTG Alsthom Unit 1	21,4	12,0	5,0
9		PLTG Alsthom Unit 2	20,1	12,0	5,0
10		PLTG WestHan	14,5	12,0	5,0
11		PLTD Mitsubitshi Unit 1	12,6	8,0	5,0
12		PLTD Mitsubitshi Unit 2	12,6	8,0	5,0
13		PLTD SWD Unit 1	12,4	8,0	5,0
14		PLTD SWD Unit 2	12,4	8,0	5,0
15		PLTD Masamba	6,3	5,0	1,0
16	IPP	PLTA Poso Unit 1	65,0	65,0	35,0
17		PLTA Poso Unit 2	65,0	65,0	35,0
18		PLTA Poso Unit 3	65,0	65,0	35,0
19		PLTA Malea	14,0	6,0	3,0
20		PLTA Tangka manipi	10,0	10,0	2,5
21		PLTGU Sengkang GT 11	42,5	135,0	55,0
22		PLTGU Sengkang GT 12	42,5		
23		PLTGU Sengkang ST 18	50,0		
24		PLTGU Sengkang GT 21	60,0	180,0	70,0
25		PLTGU Sengkang GT 22	60,0		
26		PLTGU Sengkang ST 28	60,0		
27		PLTU Jeneponto Unit 1	125,0	100,0	70,0
28		PLTU Jenenponto Unit 2	125,0	100,0	70,0
29		PLTD Suppa	62,5	62,2	8,0
31	S	PLTD Talassa	115,0	90,0	22,0

Sumber data : Unit Pengatur Beban PT. PLN (Persero)

4.1.1.2 Input-Output Pembangkit Termal

Dalam penelitian ini terbagi menjadi tiga jenis penjadwalan yaitu harian, mingguan dan bulanan.

Penjadwalan harian merupakan jenis penjadwalan pertanggal dalam satu bulan full, dimana datanya diperoleh dari jenis-jenis pembangkit di Sulselbar. Jenis penjadwalan mingguan merupakan jenis penjadwalan perpekan dimana datanya diambil dari data harian kemudian dijadikan perminggu, maka data tetap sama namun hasil dari peritungan konstanta input-outputnya akan berbeda,begitun dengan penjadwalan bulan.

Data input-output pembangkit termal yang akan dijadwalkan dapat dilihat pada Tabel 4.2.

Tabel 4.2 Data Input-Output PLTU Barru Unit 2 pada Tanggal 1 Juni 2016

Waktu	Pemakaian Bahan Bakar (Ton/jam)	Daya Yang Dibangkitkan (MW)
01.00	35,80	38,99
02.00	36,20	38,99
03.00	36,37	39,34
04.00	37,52	39,40
05.00	35,60	39,37
06.00	37,24	39,05
07.00	36,50	40,00
08.00	36,70	39,70
09.00	36,10	39,40
10.00	36,40	39,00
11.00	35,80	39,10
12.00	36,70	39,00
13.00	36,20	39,20
14.00	37,60	39,30
15.00	35,79	39,93
16.00	34,87	38,97
17.00	36,46	39,69

Tabel 4.2 Data Input-Output PLTU Barru Unit 2 pada Tanggal 1 Juni 2016 (Lanjutan)

Waktu	Pemakaian Bahan Bakar (Ton/jam)	Daya Yang Dibangkitkan (MW)
18.00	34,57	40,46
19.00	33,46	40,79
20.00	34,79	39,03
21.00	33,71	38,67

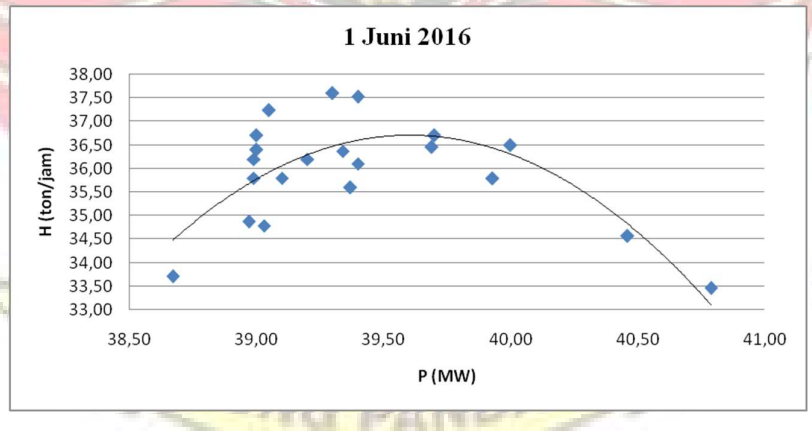
Sumber data : PLTU Barru Indonesia Power

Data input-output harian selengkapnya untuk tiap-tiap pembangkit pada bulan Juni dapat dilihat pada Lampiran 1a s/d 1f.

4.1.2 Hasil Pengolahan Data

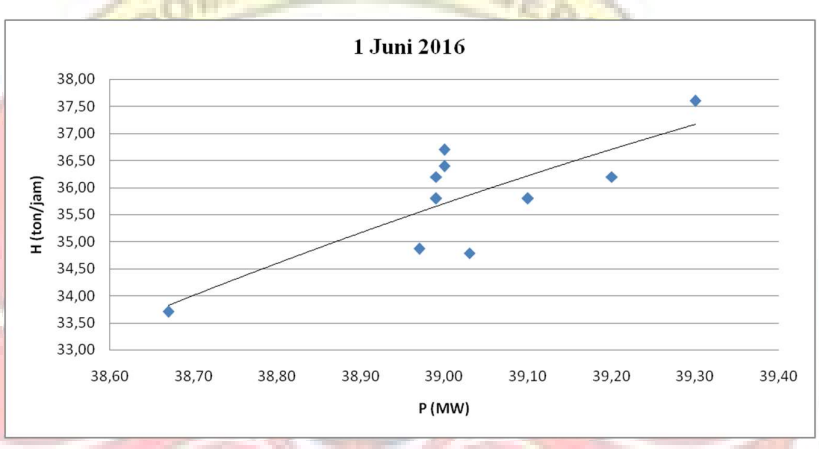
4.1.2.1 Menghitung konstanta α_i, β_i, dan γ_i pada masing-masing Unit Pembangkit

Pada Tabel 4.2 tanggal 1 Juni 2016 diatas, dapat digambarkan dalam bentuk grafik, seperti sebagai berikut:



Gambar 4.1 Grafik Persamaan Input-Output PLTU Barru Unit 2

Dengan melihat hasil gambaran dari grafik input output pembangkit maka dapat diprediksikan bahwa nilai α dan γ adalah minus, dimana karakteristik Input-Output pembangkit termal mengambarkan bahwa pemakaian bahan bakar berbanding lurus dengan daya yang dibangkitkan. Sehingga grafik diatas akan dikelolah berdasarkan karakteristik Input-Output pembangkit, sebagai berikut:



Gambar 4.2 Grafik Persamaan Input-Output PLTU Barru Unit 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal.

Untuk grafik yang telah dikelolah berdasarkan karakteristik Input-Output pembangkit yang lainnya dapat dilihat pada Lampiran 2a s/d 2f.

Hasil persamaan Input-Output pembangkit pada Gambar 4.2 akan diolah dengan menggunakan persamaan kuadrat terkecil. Dengan menggunakan persamaan (2.7) dan persamaan (2.15) sehingga diperoleh persamaan input-output unit pembangkit, sebagai berikut:

1) Perhitungan secara Manual

$H_n = \alpha_n + \beta_n P_n + \gamma_n P_n^2$

Diketahui: ΣP = 361,380 MW

ΣH = 339,320 Ton/h

$\Sigma(PH)$ = 12.808,148 Ton/MWh

ΣP^2 = 13.781,092 MW

ΣP^3 = 533.933,717 MW

ΣP^4 = 20.781.237,097 MW

$\Sigma(P^2H)$ = 494.792,234 Ton/MWh

n = 9

Penyelesaian :

$$\alpha = \frac{\begin{bmatrix} \Sigma H_i & \Sigma P_i & \Sigma {P_i}^2 \\ \Sigma P_i H_i & \Sigma {P_i}^2 & \Sigma {P_i}^3 \\ \Sigma {P_i}^2 H_i & \Sigma {P_i}^3 & \Sigma {P_i}^4 \end{bmatrix}}{\begin{bmatrix} n & \Sigma P_i & \Sigma {P_i}^2 \\ \Sigma P_i & \Sigma {P_i}^2 & \Sigma {P_i}^3 \\ \Sigma {P_i}^2 & \Sigma {P_i}^3 & \Sigma {P_i}^4 \end{bmatrix}}$$

$$= \frac{\Sigma H_i \begin{bmatrix} \Sigma {P_i}^2 & \Sigma {P_i}^3 \\ \Sigma {P_i}^3 & \Sigma {P_i}^4 \end{bmatrix} - \Sigma P_i \begin{bmatrix} \Sigma P_i H_i & \Sigma {P_i}^3 \\ \Sigma {P_i}^2 H_i & \Sigma {P_i}^4 \end{bmatrix} + \Sigma {P_i}^2 \begin{bmatrix} \Sigma P_i H_i & \Sigma {P_i}^2 \\ \Sigma {P_i}^2 H_i & \Sigma {P_i}^3 \end{bmatrix}}{n \begin{bmatrix} \Sigma {P_i}^2 & \Sigma {P_i}^3 \\ \Sigma {P_i}^3 & \Sigma {P_i}^4 \end{bmatrix} - \Sigma P_i \begin{bmatrix} \Sigma P_i & \Sigma {P_i}^3 \\ \Sigma {P_i}^2 & \Sigma {P_i}^4 \end{bmatrix} + \Sigma {P_i}^2 \begin{bmatrix} \Sigma P_i & \Sigma {P_i}^2 \\ \Sigma {P_i}^2 & \Sigma {P_i}^3 \end{bmatrix}}$$

$$= \frac{\begin{array}{c} 339{,}320\,((13.781{,}092 \text{ x } 20.781.237{,}097) - (533.933{,}717 \text{ x } 533.933{,}717)) \\ -361{,}380\,((12.808{,}148 \text{ x } 20.781.237{,}097) - (533.933{,}717 \text{ x } 494.792{,}234)) \\ +13.781{,}092\,((12.808{,}148 \text{ x } 533.933{,}717) - (13.781{,}092 \text{ x } 494.792{,}234)) \end{array}}{\begin{array}{c} 9\,((13.781{,}092 \text{ x } 20.781.237{,}097) - (533.933{,}717 \text{ x } 533.933{,}717)) \\ -361{,}380\,((361{,}380 \text{ x } 20.781.237{,}097) - (533.933{,}717 \text{ x } 13.781{,}092)) \\ +13.781{,}092\,((361{,}380 \text{ x } 533.933{,}717) - (13.781{,}092 \text{ x } 13.781{,}092)) \end{array}}$$

$$= \frac{107{,}834}{0{,}083} = 1.302{,}987$$

$$\beta = \begin{bmatrix} n & \Sigma H_i & \Sigma P_i^2 \\ \Sigma P_i & \Sigma P_i H_i & \Sigma P_i^3 \\ \Sigma P_i^2 & \Sigma P_i^2 H_i & \Sigma P_i^4 \end{bmatrix} \Big/ \begin{bmatrix} n & \Sigma P_i & \Sigma P_i^2 \\ \Sigma P_i & \Sigma P_i^2 & \Sigma P_i^3 \\ \Sigma P_i^2 & \Sigma P_i^3 & \Sigma P_i^4 \end{bmatrix}$$

$$= \frac{n \begin{bmatrix} \Sigma P_i H_i & \Sigma P_i^3 \\ \Sigma P_i^2 H_i & \Sigma P_i^4 \end{bmatrix} - \Sigma H_i \begin{bmatrix} \Sigma P_i & \Sigma P_i^3 \\ \Sigma P_i^2 & \Sigma P_i^4 \end{bmatrix} + \Sigma P_i^2 \begin{bmatrix} \Sigma P_i & \Sigma P_i H_i \\ \Sigma P_i^2 & \Sigma P_i^2 H_i \end{bmatrix}}{n \begin{bmatrix} \Sigma P_i^2 & \Sigma P_i^3 \\ \Sigma P_i^3 & \Sigma P_i^4 \end{bmatrix} - \Sigma P_i \begin{bmatrix} \Sigma P_i & \Sigma P_i^3 \\ \Sigma P_i^2 & \Sigma P_i^4 \end{bmatrix} + \Sigma P_i^2 \begin{bmatrix} \Sigma P_i & \Sigma P_i^2 \\ \Sigma P_i^2 & \Sigma P_i^3 \end{bmatrix}}$$

$$= \frac{\begin{array}{c} 9\left((12.808{,}148 \text{ x } 20.781.237{,}097\ ) - (533.933{,}717 \text{ x } 494.792{,}234\ )\right) \\ -339{,}320\ \left((\ 361{,}380 \text{ x } 20.781.237{,}097\ ) - (533.933{,}717 \text{ x } 13.781{,}092)\right) \\ +\ 13.781{,}092\ \left((361{,}380 \text{ x } 494.792{,}234\ ) - (12.808{,}148 \text{ x } 13.781{,}092)\right) \end{array}}{\begin{array}{c} 9\left((13.781{,}092 \text{ x } 20.781.237{,}097\ ) - (533.933{,}717 \text{ x } 533.933{,}717\ )\right) \\ -\ 361{,}380\ \left((361{,}380 \text{ x } 20.781.237{,}097) - (533.933{,}717 \text{ x } 13.781{,}092\ )\right) \\ +\ 13.781{,}092\ \left((361{,}380 \text{ x } 533.933{,}717\ ) - (13.781{,}092 \text{ x } 13.781{,}092\ )\right) \end{array}}$$

$$= \frac{-5{,}820}{0{,}083}$$

$$= \text{-}70{,}323$$

$$\gamma = \begin{bmatrix} n & \Sigma P_i & \Sigma H_i \\ \Sigma P_i & \Sigma P_i^2 & \Sigma P_i H_i \\ \Sigma P_i^2 & \Sigma P_i^3 & \Sigma P_i^2 H_i \end{bmatrix} \Big/ \begin{bmatrix} n & \Sigma P_i & \Sigma P_i^2 \\ \Sigma P_i & \Sigma P_i^2 & \Sigma P_i^3 \\ \Sigma P_i^2 & \Sigma P_i^3 & \Sigma P_i^4 \end{bmatrix}$$

$$= \frac{n \begin{bmatrix} \Sigma P_i^2 & \Sigma P_i H_i \\ \Sigma P_i^3 & \Sigma P_i^2 H_i \end{bmatrix} - \Sigma P_i \begin{bmatrix} \Sigma P_i & \Sigma P_i H_i \\ \Sigma P_i^2 & \Sigma P_i^2 H_i \end{bmatrix} + \Sigma H_i \begin{bmatrix} \Sigma P_i & \Sigma P_i^2 \\ \Sigma P_i^2 & \Sigma P_i^3 \end{bmatrix}}{n \begin{bmatrix} \Sigma P_i^2 & \Sigma P_i^3 \\ \Sigma P_i^3 & \Sigma P_i^4 \end{bmatrix} - \Sigma P_i \begin{bmatrix} \Sigma P_i & \Sigma P_i^3 \\ \Sigma P_i^2 & \Sigma P_i^4 \end{bmatrix} - \Sigma P_i^2 \begin{bmatrix} \Sigma P_i & \Sigma P_i^2 \\ \Sigma P_i^2 & \Sigma P_i^3 \end{bmatrix}}$$

$$= \frac{\begin{array}{c} 9\left((13.781{,}092 \;\; \text{x} \;\; 494.792{,}234\,) - (12.808{,}148 \;\text{x}\; 533.933{,}717\,)\right) \\ -361{,}380 \;\; \left((\,361{,}380 \;\text{x}\; 494.792{,}234\,) - (12.808{,}148 \;\text{x}\; 13.781{,}092\,)\right) \\ +\; 339{,}320\,((361{,}380 \;\text{x}\; 4533.933{,}717\,) - (13.781{,}092 \;\text{x}\; 13.781{,}092)) \end{array}}{\begin{array}{c} 9\left((13.781{,}092 \;\text{x}\; 20.781.237{,}097\,) - (533.933{,}717 \;\text{x}\; 533.933{,}717\,)\right) \\ -\; 361{,}380 \;\; \left((361{,}380 \;\text{x}\; 20.781.237{,}097) - (533.933{,}717 \;\text{x}\; 13.781{,}092\,)\right) \\ +\; 13.781{,}092 \;\; ((361{,}380 \;\text{x}\; 533.933{,}717\,) - (13.781{,}092 \;\text{x}\; 13.781{,}092\,)) \end{array}}$$

$$= \frac{0{,}080}{0{,}083}$$

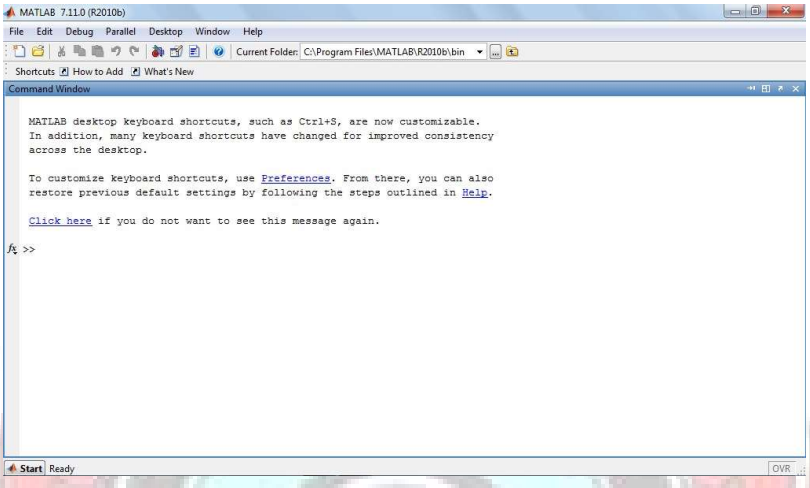
$$= 0{,}970$$

Jadi, untuk PLTU Barru Unit 2 pada tanggal 1 Juni 2016 diperoleh persamaan input-output yaitu H = 1.302,987 – 70,323.P + 0,970.P^2. Untuk perhitungan konstanta Input-Output harian lainnya secara manual diperoleh dengan menggunakan Microsoft Office Excel 2007 dan dapat dilihat pada Lampiran 3a s/d 3f.

2) Perhitungan Menggunakan Matlab

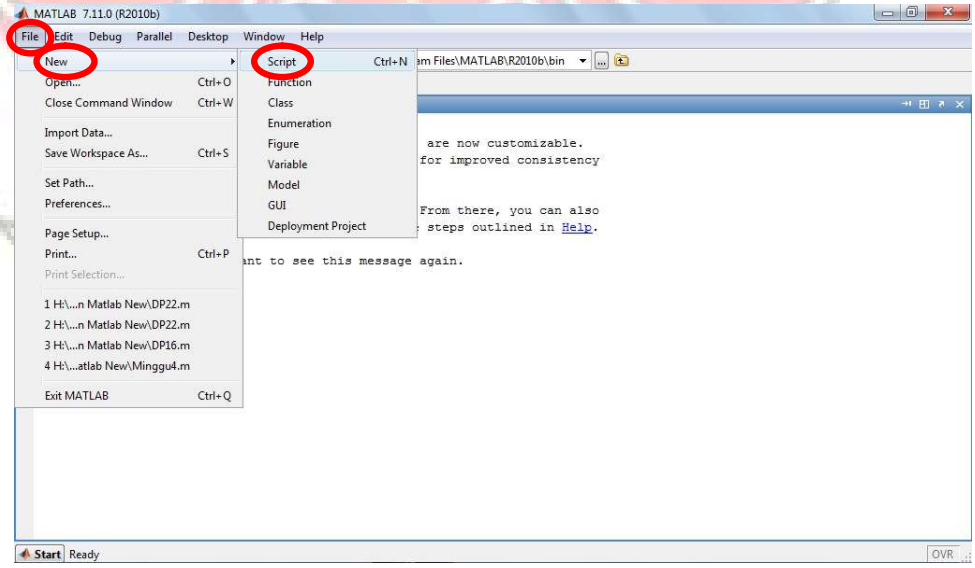
Perhitungan Konstanta Input-output harian menggunakan program Matlab 7.11.0.584 (R2010b) sama halnya dengan perhitungan manual yang menggunakan persamaaan kuadrat terkecil. Berikut langkah melakukan perhitungan pada program Matlab untuk memperoleh besar nilai α_i, β_i, dan γ_i pada setiap unit pembangkitan.

a) Buka aplikasi Matlab 7.11.0.584 (R2010b), sehingga muncul halaman kerja matlab seperti pada gambar dibawah ini.



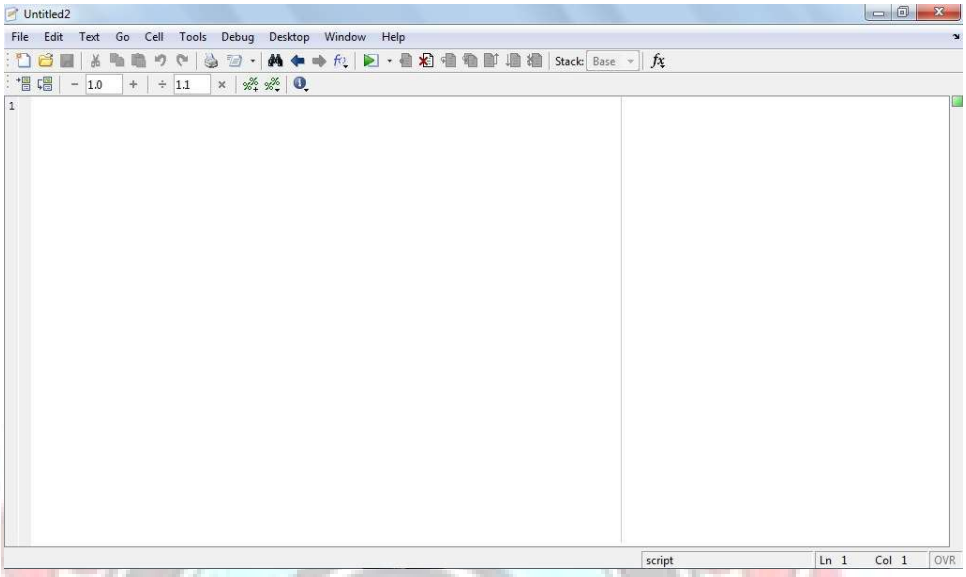
Gambar 4.3 Lembaran Kerja Matlab 7.11.0.584 (R2010b)

b) Pada saat muncul halaman kerja pada gambar di atas, pilih File – New – Scipt, seperti Gambar 4.4.



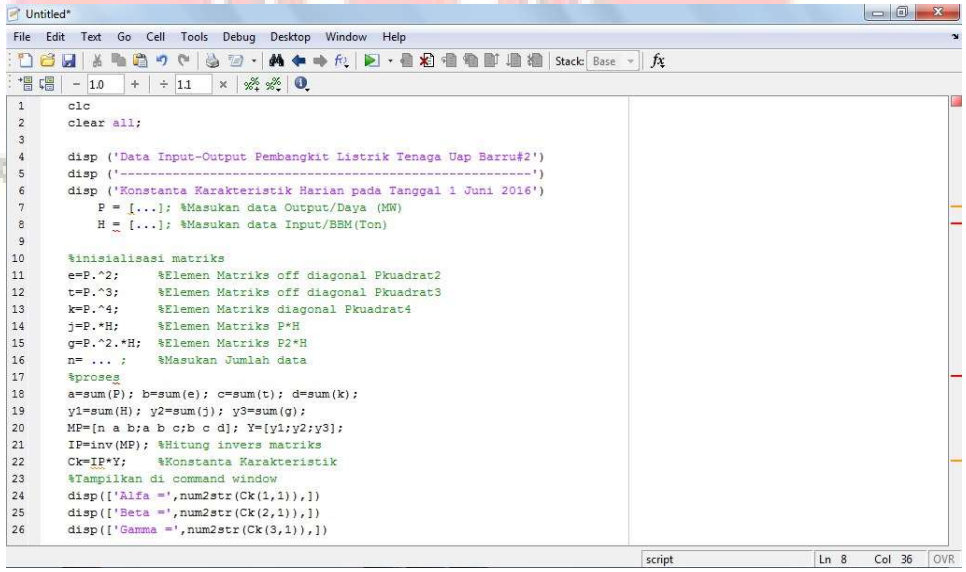
Gambar 4.4 Cara Memulai Program Matlab 7.11.0.584 (R2010b)

c) Maka akan muncul lembaran kerja baru, sebagai berikut:



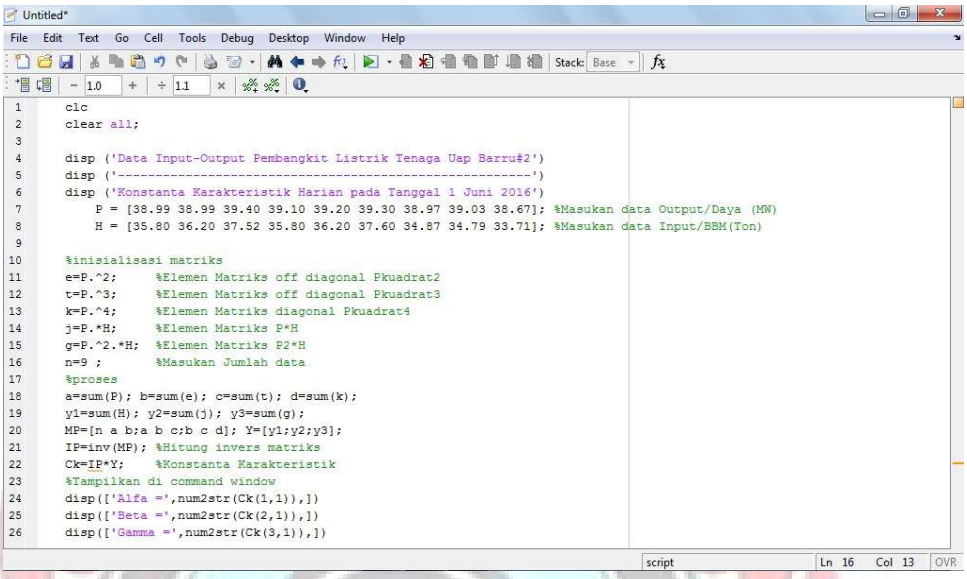
Gambar 4.5 Lembaran Kerja Baru Matlab

d) Membuat program perhitungan kostanta α_i, β_i, dan γ_i dengan menggunakan persamaan kuadrat terkecil pada persamaan (2.7) dan persamaan (2.15).



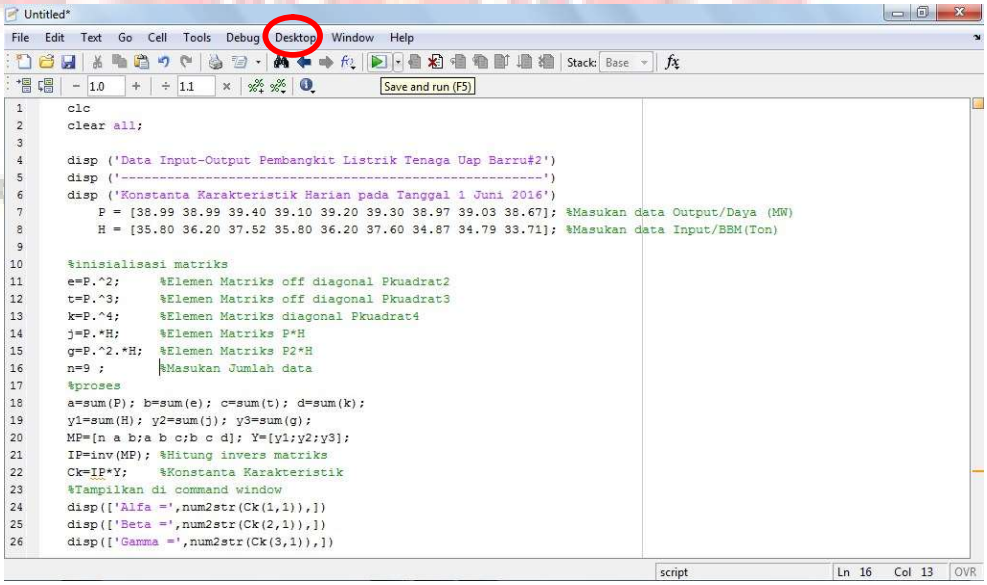
Gambar 4.6 Tampilan Program Perhitungan Konstanta α_i, β_i, dan γ_i

e) Masukkan data Input-Output pembangkit yang akan dihitung konstantanya.



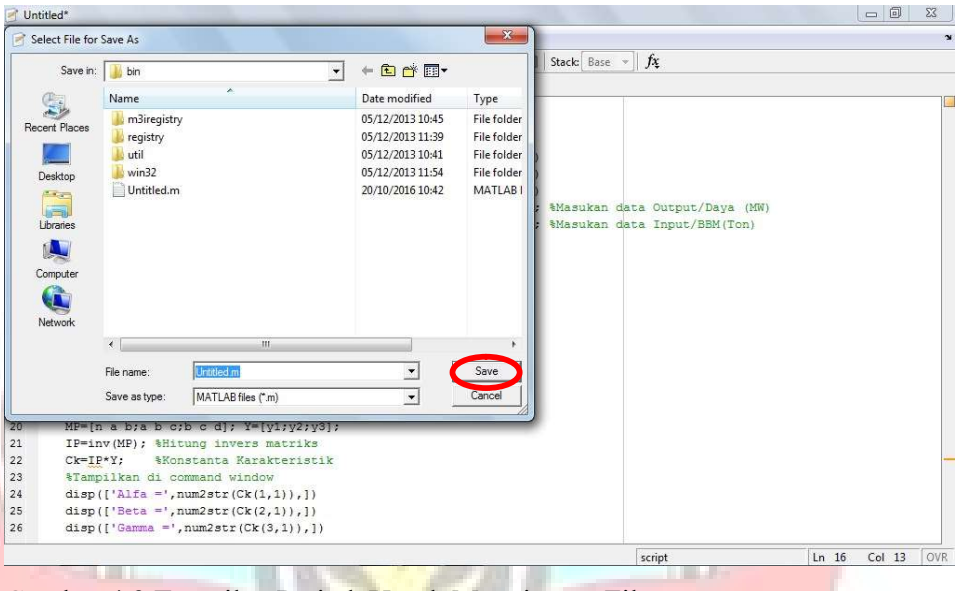
Gambar 4.7 Program Perhitungan Konstanta α_i, β_i, dan γ_i yang Siap Diproses

f) Klik Run atau F5 agar hasil akhir program perhitungan konstanta α_i, β_i, dan γ_i dapat diproses.



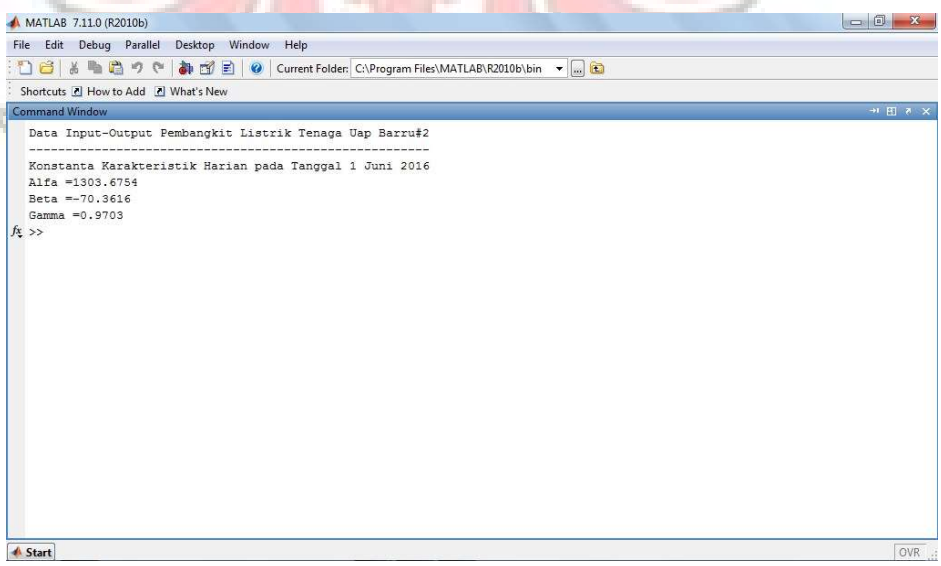
Gambar 4.8 Tampilan Proses Perhitungan Program yang Telah Dibuat

g) Setelah di klik Run atau F5 seperti yang ditampilkan pada gambar diatas, maka akan mucul perintah baru untuk menyimpan file selanjutnya klik save.



Gambar 4.9 Tampilan Peritah Untuk Menyimpan File

h) Setelah file berhasil di simpan maka akan muncul hasil akhir program pada *Command Window*, sebagai berikut:



Gambar 4.10 Tampilan *Command Windows*

Jadi, perhitungan konstanta Input-Ouput pembangkit untuk PLTU Barru Unit 2 pada tanggal 1 Juni 2016 diperoleh persamaan input-output yaitu H = 1.303,6754 – 70,3616.P + 0,9703.P^2. Dimana hasil dari perhitungan secara manual dengan perhitungan dengan menggunkan matlab hampir sama. Adapun hasil persamaan input-output pembangkit termal, yaitu sebagai berikut:

Tabel 4.3 Persamaan Karakteristik Input-Output Harian Pada PLTU Barru Unit 2

Tgl	Persamaan Input-Output	
	Microsoft Office Excel	Matlab
1	1.302,987 – 70,323 P + 0,970 P^2	1.303,677 – 70,362 P + 0,9703 P^2
2	22,662 – 0,448 P + 0,0198 P^2	22,691 – 0,449 P + 0,0198 P^2
3	691,380 – 34,4409 P + 0,4513 P^2	691,3813 – 34,441 P + 0,45127 P^2
4	65,819 – 1,8445 P + 0,0266 P^2	65,819 – 1,8445 P + 0,026632 P^2
7	668,447 – 32,414 P + 0,415 P^2	668,4461 – 32,4137 P + 0,41502 P^2
8	472,182 – 22,7822 P + 0,2975P^2	472,1824 – 22,7823 P + 0,29747 P^2
9	907,865 – 45,1075 P + 0,5883 P^2	907,8709 – 45,1078 P + 0,5833 P^2
10	52,318 – 1,462 P + 0,0272 P^2	52,318 – 1,4618 P + 0,00272 P^2
11	215,146 – 9,8884 P + 0,1366 P^2	215,1461– 9,8884 P + 0,1366 P^2
12	186,179 – 7,552 P + 0,095 P^2	186,1786 – 7,5516 P + 0,0948 P^2
13	64,686 – 2,492 P + 0,043 P^2	64,686 – 2,4916 P + 0,0431 P^2
15	495,039 – 25,884 P – 0,3615 P^2	495,039 – 25,884 P + 0,3615 P^2
16	564,640 – 27,043 P + 0,344 P^2	564,6111 – 27,0418 P + 0,34399 P^2
17	2.151,674 – 105,986 P +1,326 P^2	2.151,6384 – 105,984 P + 1,3261 P^2
18	682,694 – 33,152 P + 0,424 P^2	682,6953 – 33,1517 P + 0,42394 P^2
19	141,881 – 5,6251 P + 0,0735 P^2	141,8815 – 5,6251 P + 0,073451 P^2
20	43,564 – 1,1857 P + 0,0251 P^2	43,564 – 1,1857 P + 0,025 P^2
21	164,136 – 7,187 P + 0,0999 P^2	164,136 – 7,1869 P + 0,0999 P^2
22	549,059 – 27,197 P + 0,3593 P^2	549,06 – 27,197 P + 0,0359 P^2
23	75,287 – 2,6585 P + 0,0420 P^2	75,2872 – 2,6585 P + 0,041963 P^2
24	25,261 – 0,15808 P + 0,01041 P^2	25,2608 – 0,15808 P + 0,010406 P^2
25	45,237 – 0,999 P + 0,0186 P^2	45,237 – 0,999 P + 0,0186 P^2
26	571,086 – 30,79 P + 0,438 P^2	571,102 – 30,791 P + 0,43804 P^2
27	8,006 – 0,5896 P + 0,0034 P^2	8,0057 + 0,059 P + 0,00034 P^2

Tabel 4.4 Persamaan Karakteristik Input-Output Harian Pada PLTU Barru Unit 1

Tgl	Persamaan karakteristik Input-Output	
	Microsoft Office Excel	Matlab
1	654,293 – 28,783 P + 0,334 P^2	654,410 – 28,788 P + 0,334 P^2
2	81,549 – 3,6299 P + 0,0594 P^2	81,364 – 3,620 P + 0,0592 P^2
3	346,2 – 14,686 P + 0,172 P^2	346,199 – 14,686 P + 0,172 P^2
4	119,260 – 4,4494 P + 0,0567 P^2	119,260 – 4,449 P + 0,057 P^2
7	25,315 – 0,2218 P + 0,0097 P^2	25,315 – 0,222 P + 0,01 P^2
8	1.092,245 – 49,08358 P + 0,57 P^2	1.092,277 – 49,083 P + 0,569 P^2
9	910,552 – 40,2087 P + 0,4612 P^2	910,546 – 40,208 P + 0,461 P^2
10	93,708 – 3,2089 P + 0,0424 P^2	93,7079 – 3,2089 P + 0,042408 P^2
11	58,717 – 2,4041 P + 0,0426 P^2	58,717 – 2,404 P + 0,043 P^2
12	737,557 – 31,5128 P + 0,3533 P^2	737,5543 – 31,5127P + 0,35329P^2
13	482,243 – 21,526 P + 0,257 P^2	482,245 – 21,526 P + 0,257 P^2
15	343,665 – 15,1093 P + 0,1880 P^2	343,665 – 15,109 P + 0,188 P^2
16	130,391 – 4,4569 P + 0,0508 P^2	130,3892 – 4,4568 P + 0,050752 P^2
17	221,120 – 8,6329 P + 0,0989 P^2	204,835 – 7,917 P + 0,091035 P^2
18	1.116,893 – 48,8534 P + 0,55P^2	1.116,9235 – 48,8547 P + 0,5501 P^2
19	634,201 – 26,960 P + 0,302 P^2	634,2044 – 26,9602 P + 0,30206 P^2
20	86,544 – 3,1230 P + 0,0436 P^2	86,544 – 3,123 P + 0,044 P^2
21	357,742 – 14,6179 P + 0,1653 P^2	357,747 – 14,618 P + 0,165 P^2
22	239,420 – 10,0437 P + 0,1219 P^2	239,4204 – 10,0437 P + 0,12192 P^2
23	871,160 – 37,924 P + 0,429 P^2	847,6164 – 36,8663 P + 0,41725 P^2
24	1.281,851 – 56,528 P + 0,640 P^2	1.281,8494 – 56,5282 P + 0,6398 P^2
25	990,475 – 42,746 P + 0,478 P^2	990,8154 – 42,762 P + 0,47777 P^2
26	271,983 – 11,1581 P + 0,1303 P^2	271,9807 – 11,158 P + 0,13032 P^2
27	941,172 – 40,178 P + 0,445 P^2	941,2056 – 40,1795 P + 0,44497 P^2
28	356,168 – 14,7432 P + 0,1687 P^2	356,1696 – 14,7432P + 0,16873 P^2
29	60,573 – 2,1660 P + 0,0360 P^2	60,573 – 2,166 P + 0,036 P^2
30	28,629 – 0,4311 P + 0,0128 P^2	28,6287 – 0,43108 P + 0,012846 P^2

Tabel 4.5 Persamaan Karakteristik Input-Output Harian Pada PLTU Jeneponto Unit 1

Tgl	Persamaan Input-Output	
	Microsoft Office Excel	Matlab
1	97,578 – 1,4761 P + 0,0111 P^2	97,5778 – 1,4761 P + 0,011115 P^2
2	41,924 – 0,189 P + 0,0041 P^2	41,924 – 0,1888 P + 0,0041 P^2
3	37,844 – 0,1545 P + 0,0041 P^2	37,844 – 0,1545 P + 0,004076 P^2
4	89,842 – 1,3679 P + 0,0105 P^2	89,842 – 1,3679 P + 0,010461 P^2
5	124,617 – 2,0633 P + 0,0138 P^2	124,6174 – 2,0633P + 0,013814 P^2
6	41,358 – 0,371 P + 0,005 P^2	41,358 – 0,3708 P + 0,0049 P^2
7	10,127 + 0,3674 P + 0,0008 P^2	10,1273 + 0,36737 P + 0,000757 P^2
8	25,439 + 0,0622 P + 0,00212 P^2	25,439 + 0,062 P + 0,002 P^2

Tabel 4.5 Persamaan Karakteristik Input-Output Harian Pada PLTU Jeneponto Unit 1 (Lanjutan)

Tgl	Persamaan karakteristik Input-Output	
	Microsoft Office Excel	Matlab
9	27,884 + 0,1993 P + 0,0010 P^2	27,884 + 0,19932 P + 0,00105 P^2
10	11,284 + 0,3495 P + 0,0010 P^2	11,284 + 0,34945 P + 0,001 P^2
11	35,243 – 0,1799 P + 0,0036 P^2	35,2429 – 0,17988 P + 0,0036072 P^2
12	47,956 – 0,3499 P + 0,0046 P^2	47,9564 – 0,34992 P + 0,0045834 P^2
13	18,004 + 0,3678 P + 0,0006 P^2	18,004 + 0,368 P + 0,000603 P^2
14	28,446 + 0,1262 P + 0,0018 P^2	28,446 + 0,1262 P + 0,0018 P^2
15	16,165 + 0,3657 P + 0,0006 P^2	16,165 + 0,366 P + 0,00057 P^2
16	27,693 + 0,1961 P + 0,0011 P^2	27,693 + 0,19611 P + 0,00112 P^2
17	8,385 + 0,4211 P + 0,0010 P^2	8,3848 + 0,4211 P + 0,00099 P^2
18	29,412 – 0,03891 P + 0,00339P^2	29,4115 – 0,038909 P + 0,003389 P^2
19	8,405 + 0,45672 P + 0,00062 P^2	8,4053 + 0,45672 P + 0,00062338 P^2
20	11,693 + 0,4410 P + 0,0005 P^2	11,6926 + 0,44104 P + 0,0005098 P^2
21	34,549 – 0,1705 P + 0,0043 P^2	34,549 – 0,1705 P + 0,0043 P^2
22	44,785 – 0,3282 P + 0,0044 P^2	44,785 – 0,328 P + 0,0044 P^2
23	82,583 – 1,1132 P + 0,0084 P^2	82,583 – 1,1132 P + 0,0084 P^2
24	99,641 – 1,5860 P + 0,0113 P^2	99,6412 – 1,586 P + 0,011302 P^2
25	25,280 + 0,2518 P + 0,0009 P^2	25,28 + 0,25184 P + 0,00090253 P^2
27	21,130 + 0,06044 P+0,00354 P^2	21,1305 + 0,060443 P + 0,003536 P^2
28	14,507 + 0,54278 P – 0,00053P^2	14,5068 + 0,54278 P - 0,0005334 P^2
29	70,816 – 0,8345 P + 0,0076 P^2	70,8161 – 0,83447 P + 0,007644 P^2
30	410,815 – 9,5629P + 0,0629 P^2	410,815 – 9,5629 P + 0,062918 P^2

Tabel 4.6 Persamaan Karakteristik Input-Output Harian Pada PLTU Jeneponto Unit 2

Tgl	Persamaan Input-Output	
	Microsoft Office Excel	Matlab
1	16,780 + 0,7845 P – 0,0023 P^2	16,7804 + 0,7845 P – 0,0023339 P2
2	73,943 – 0,911 P + 0,0104 P^2	73,943 – 0,911 P + 0,01044 P^2
3	685,579 – 17,221 P + 0,118 P^2	685,579 – 17,221 P + 0,11836 P^2
4	99,414 – 1,461 P + 0,012 P^2	99,414 – 1,461 P + 0,012 P^2
5	80,836 – 0,938 P + 0,008 P^2	80,8358 – 0,93765 P + 0,0080489 P2
6	73,520 – 1,013 P + 0,0095 P^2	73,52 – 1,013 P + 0,00952 P^2
7	170,121 – 3,2873 P + 0,023 P^2	170,121 – 3,2873 P + 0,02298 P^2
8	31,429 + 0,159 P + 0,0017 P^2	31,429 + 0,1588 P + 0,0017 P^2
9	71,147 – 0,5817 P + 0,005 P^2	71,147 – 0,58166 P + 0,0055 P^2
10	102,380 – 1,87 P + 0,0161 P^2	102,380 – 1,869 P + 0,0161 P^2
11	24,853 + 0,1337 P + 0,0029 P^2	24,853 + 0,1337 P + 0,0029 P^2
12	45,790 – 0,1234 P + 0,0039 P^2	45,79 – 0,1234 P + 0,00394 P^2
13	82,495 – 0,8079 P + 0,0066 P^2	82,495 – 0,80788 P + 0,00664 P^2

Tabel 4.6 Persamaan Karakteristik Input-Output Harian Pada PLTU Jeneponto Unit 2 (Lanjutan)

Tgl	Persamaan Input-Output	
	Microsoft Office Excel	Matlab
14	82,019 – 0,875 P + 0,0076 P^2	82,047 – 0,875 P + 0,0076 P^2
15	43,405 + 0,15361 P + 0,00063P^2	43,4048 + 0,15361 P + 0,0006846P2
16	143,917 – 2,6553 P + 0,0206 P^2	143,917 – 2,6553 P + 0,02063 P^2
17	49,354 – 0,3163 P + 0,0057 P^2	49,354 – 0,316 P + 0,0057 P^2
18	44,864 – 0,2311P + 0,0052 P^2	44,8638 – 0,23106 P + 0,0051889 P2
19	28,668 + 0,1890P + 0,0027 P^2	28,6678 + 0,18902 P + 0,0027077 P^2
20	88,971 – 1,178 P + 0,0103 P^2	88,971 – 1,1783 P + 0,01032 P^2
21	174,846 – 3,5798P + 0,0271 P^2	174,8458 – 3,5798 P + 0,027051 P^2
22	27,169 + 0,2975 P + 0,0009 P^2	27,169 + 0,2975 P + 0,00095 P^2
23	41,048 + 0,0979 P + 0,0015 P^2	41,048 + 0,0979 P + 0,00154 P^2
24	54,064 – 0,2961P + 0,0041P^2	54,0637 – 0,2961 P + 0,0041417 P^2
25	82,047 – 1,1637 P + 0,011 P^2	82,047 – 1,1637 P + 0,011 P^2
27	85,847 – 1,466 P + 0,015 P^2	85,847 – 1,4663 P + 0,0146 P^2
28	50,111 – 0,1271 P + 0,0038 P^2	50,111 – 0,127 P + 0,00385 P^2
29	251,667– 4,8842 P + 0,0316 P^2	251,6671 – 4,8842 P + 0,031609 P^2
30	100,475 – 1,2301 P + 0,0099 P^2	100,475 – 1,2301 P + 0,00988 P^2

Tabel 4.7 Persamaan Karakteristik Input-Output Harian Pada PLTGU Sengkang Blok I

Tgl	Persamaan Input-Output	
	Microsoft Office Excel	Matlab
1	707,014 + 3,1533 P + 0,002 P^2	706,955 + 3,1546 P + 0,002 P^2
2	809,774 + 3,0087 P + 0,0271 P^2	809,6758 + 3,0129 P + 0,027092 P^2
3	692,987 + 3,466 P + 0,0001 P^2	693,0846 + 3,4637 P + 0,000073291 P^2
4	756,853 + 1,969 P+0,0082 P^2	756,8634 + 1,9685 P + 0,0082109 P^2
5	796,240 + 0,861 P + 0,0159 P^2	796,191 + 0,8617 P + 0,015893 P^2
6	713,179 + 3,0217 P + 0,0022 P^2	713,1908 + 3,0214 P + 0,0022318 P^2
7	790,374 + 1,1626 P + 0,013 P^2	790,3584 + 1,1629 P + 0,012831 P^2
8	742,439 + 2,375 P + 0,0055 P^2	742,4949 + 2,3733 P + 0,0054932 P^2
9	784,385 + 1,3028 P + 0,0122 P^2	784,3966 + 1,3027 P + 0,012152 P^2
10	701,956 + 3,0782 P + 0,0029 P^2	701,63 + 3,0782 P + 0,0029 P^2
11	732,747+ 2,5655 P + 0,0046 P^2	732,7512 + 2,5654 P + 0,004635 P^2
12	920,292 – 1,407 P + 0,0248 P^2	920,2798 – 1,4064 P + 0,024747 P^2
13	777,837 + 1,304 P + 0,0133 P^2	777,8293 + 1,3039 P + 0,013259 P^2
14	729,984 + 2,691 P + 0,0036 P^2	729,557 + 2,7031 P + 0,00351 P^2
15	781,808 + 1,3121 P + 0,0124 P^2	781,7816 + 1,3127 P + 0,012389 P^2
16	770,335 + 1,605P + 0,0105 P^2	770,3652 + 1,6041 P + 0,010518 P^2
17	751,656 + 2,103P + 0,0074 P^2	751,665 + 2,1032 P + 0,0074114 P^2
18	706,677 + 3,354 P – 0,0014 P^2	706,67 + 3,3544 P – 0,00143 P^2

Tabel 4.7 Persamaan Karakteristik Input-Output Harian Pada PLTGU Sengkang Blok I (Lanjutan)

Tgl	Persamaan Input-Output	
	Microsoft Office Excel	Matlab
19	713,292 + 3,0809P + 0,0012 P^2	713,4013 + 3,0782 P + 0,0011994 P^2
20	711,525 + 3,1580 P + 0,0006 P^2	704,4127 + 3,3004 P – 0,00011094 P^2
21	737,573 + 2,4529 P + 0,005 P^2	730,1995 + 2,6483 P + 0,004202 P^2
22	742,564 + 2,2376 P + 0,0073 P^2	742,5574 + 2,2378 P + 0,0072826 P^2
23	740,192 + 2,309 P + 0,0067 P^2	740,1868 + 2,3096 P + 0,0066646 P^2
24	740,108 + 2,3485 P + 0,00623 P^2	740,1093 + 2,3485 P + 0,0062322 P^2
25	740,537 + 2,3779 P + 0,0058 P^2	740,5423 + 2,3778 P + 0,0057958 P^2
26	717,755 + 3,1324 P – 0,00034 P^2	717,73 + 3,133 P – 0,00034 P^2
27	765,426 + 1,7112 P + 0,01015 P^2	765,4819 + 1,71 P + 0,010155 P^2
28	784,930 + 1,2942 P + 0,0122 P^2	784,845 + 1,2955 P + 0,012244 P^2
29	685,871 + 3,518 P + 0,0005 P^2	685,9121 + 3,5171 P + 0,00047583 P^2
30	677,315 + 3,6689P + 0,0008 P^2	677,4348 + 3,6661 P + 0,00084801 P^2

Tabel 4.8 Persamaan Karakteristik Input-Output Harian Pada PLTGU Sengkang Blok II

Tgl	Persamaan Input-Output	
	Microsoft Office Excel	Matlab
1	713,459 – 0,5962 P + 0,0178 P^2	713,4621 – 0,59626 P + 0,017794 P^2
2	313,004 + 0,441 P + 0,0101 P^2	294,2022 + 0,85274 P + 0,0079133 P^2
3	879,155 – 3,263 P + 0,033 P^2	879,155 – 3,2632 P + 0,033305 P^2
4	700,305 – 0,947P + 0,0226 P^2	699,8838 – 0,94262 P + 0,02254 P^2
5	703,809 – 0,788 P + 0,0216 P^2	703,8045 – 0,78801 P + 0,021645 P^2
6	864,304 – 2,9068 P + 0,0319 P^2	864,309 – 2,9069 P + 0,031899 P^2
7	862,358 – 2,3244 P + 0,029 P^2	862,3632 – 2,3245 P + 0,029048 P^2
8	990,409 – 4,113 P + 0,0374 P^2	990,4138 – 4,1127 P + 0,037364 P^2
9	1.003,852 – 3,191 P + 0,0324 P^2	1.003,9229 – 3,1917 P + 0,032412 P^2
10	952,067 – 1,2968 P + 0,0241 P^2	952,0665 – 1,2967 P + 0,024122 P^2
11	832,907 – 2,2605 P + 0,0282 P^2	832,9065 – 2,2605 P + 0,028246 P^2
12	771,002 – 1,591 P + 0,0257 P^2	770,9804 – 1,5908 P + 0,025669 P^2
13	864,509 – 2,353 P + 0,0290 P^2	864,715 – 2,356 P + 0,029051P^2
14	878,292 – 2,5354 P + 0,0307 P^2	875,9992 – 2,4933 P + 0,030547 P^2
15	811,797 – 2,8430 P + 0,0318 P^2	811,7867 – 2,8428 P + 0,03175 P^2
16	772,832 – 0,779 P + 0,0213 P^2	772,7479 – 0,77892 P + 0,021255 P^2
17	795,665 – 2,304 P + 0,0266 P^2	795,665 – 2,3039 P + 0,026586 P^2
18	765,174 – 1,019 P + 0,0185 P^2	765,1795 – 1,0195 P + 0,018452 P^2
19	740,048 – 0,5305 P + 0,0172 P^2	740,0559 – 0,53062 P + 0,017159 P^2
20	623,963 + 1,222 P + 0,0067 P^2	623,9806 + 1,2217 P + 0,0067035 P^2
21	661,188 + 0,1606 P + 0,014 P^2	661,1897 + 0,165054 P + 0,014137 P^2
22	694,793 – 0,1197 P + 0,0194 P^2	694,8094 – 0,12 P + 0,019408 P^2

Tabel 4.8 Persamaan Karakteristik Input-Output Harian Pada PLTGU Sengkang Blok II (Lanjutan)

Tgl	Persamaan Input-Output	
	Microsoft Office Excel	Matlab
23	846,290 – 1,837 P + 0,0267 P^2	846,2853 – 1,8373 P + 0,026731 P^2
24	573,832 + 3,4112 P + 0,00159 P^2	573,8407 + 3,4111 P + 0,0015914 P^2
25	617,331 + 1,5153 P + 0,0081 P^2	617,666 + 1,5098 P + 0,0081546 P^2
26	645,696 + 1,0745 P + 0,00689 P^2	645,6819 + 1,0748 P + 0,0068877 P^2
27	803,401 – 2,6412 P + 0,03084 P^2	803,399 – 2,6412 P + 0,030837 P^2
28	1.011,161 – 3,571 P + 0,0336 P^2	1.011,097 – 3,5698 P + 0,033641 P^2
29	894,571 – 2,244 P + 0,0278 P^2	894,5648 – 2,2441 P + 0,027785 P^2
30	1.157,14 – 5,7436 P + 0,0452 P^2	1.157,1362 – 5,7436 P + 0,045207 P^2

Seperti yang dijelaskan diatas bahwa penjadwalan pembangkit terbagi menjadi tiga yaitu penjadwalan harian, penjadwalan mingguan dan penjadwalan bulanan, sehingga dengan cara yang sama diatas maka di peroleh pula persamaan Input-Output pembangkit untuk mingguan dan bulanan yaitu sebagai berikut:

Tabel 4.9 Persamaan Karakteristik Input-Output Mingguan Pada PLTU Barru Unit 1

Minggu ke-	Persamaan Input-Output	
	Microsoft Office Excel	Matlab
1	687,68 – 30,462 P + 0,355 P^2	687,828 – 30,469 P + 0,3547 P^2
2	15.503,953 – 690,3 P + 7,701 P^2	15.483,01 – 689,881 P + 7,691 P^2
3	537,593 – 20,612 P + 0,209 P^2	537,629 – 20,613 P + 0,209 P^2
4	1.371,773 – 60,733 P + 0,689 P^2	1.371,728 – 60,732 P + 0,689 P^2

Tabel 4.10 Persamaan Karakteristik Input-Output Mingguan Pada PLTU Barru Unit 2

Minggu ke-	Persamaan Input-Output	
	Microsoft Office Excel	Matlab
1	1.285,772 – 65,893 P + 0,867 P^2	1.285,718 – 65,893 P + 0,867 P^2
2	6.101,358 – 307,347 P + 3,893 P^2	6.097,47 – 307,151 P + 3,891 P^2
3	948,54 – 45,131 P + 0,557 P^2	948,597 – 45,134 P + 0,557 P^2
4	451,729 – 22,294 P + 0,298 P^2	451,73 – 22,294 P + 0,298 P^2

Tabel 4.11 Persamaan Karakteristik Input-Output Mingguan Pada PLTU Jeneponto Unit 1

Minggu ke-	Persamaan Input-Output	
	Microsoft Office Excel	Matlab
1	247,4229 – 4,9285 P + 0,0308 P^2	247,4229 – 4,9285 P + 0,0308 P^2
2	524,2339 – 9,5208 P + 0,0484 P^2	524,2339 – 9,5208 P + 0,0484 P^2
3	149,2721 – 2,3938 P + 0,0150 P^2	149,2721 – 2,3938 P + 0,0150 P^2
4	50,5427 – 0,6302 P + 0,0074 P^2	50,5427 – 0,6302 P + 0,0074 P^2

Tabel 4.12 Persamaan Karakteristik Input-Output Mingguan Pada PLTU Jeneponto Unit 2

Minggu ke-	Persamaan Input-Output	
	Microsoft Office Excel	Matlab
1	1.192,68 – 31,646 P + 0,2201P^2	1.192,68 – 31,646 P + 0,2201P^2
2	262,3137 – 4,8672 P + 0,0293 P^2	262,3137 – 4,8672 P + 0,02928P^2
3	59,4009 – 0,1981 P + 0,0027 P^2	59,4009 – 0,1981 P + 0,0027 P^2
4	1.009,776 – 25,91 P + 0, 1759 P^2	1.009,776 – 25,91 P + 0, 1759 P^2

Tabel 4.13 Persamaan Karakteristik Input-Output Mingguan Pada PLTGU Sengkang Unit I

Minggu ke-	Persamaan Input-Output	
1	Microsoft Office Excel	1.942,82 – 23,583 P + 0,146 P^2
2		1.277,079 – 8,135 P + 0,057 P^2
3		1.046,186 – 4,918 P + 0,049 P^2
4		526,547 + 7,116 P – 0,02 P^2
1	Matlab	1.942,821 – 23,5828 P + 0,146 P^2
2		1.277,0793 – 8,1348 P + 0,0574 P^2
3		1.046,1857 – 4,9181 P + 0,0493 P^2
4		526,5472 + 7,1156 P – 0,0197 P^2

Tabel 4.14 Persamaan Karakteristik Input-Output Mingguan Pada PLTGU Sengkang Unit II

Minggu ke-	Persamaan Input-Output	
1	Microsoft Office Excel	–1.320,719 + 38,963 P – 0,162 P^2
2		9.890,6 – 208,051 P + 1,201 P^2
3		1.299,326 – 20,474 P + 0,174 P^2
4		13.896,45 – 332,329 P + 2,105 P^2
1	Matlab	–1.320,677 + 38,962 – 0,1618 P^2
2		9.890,617 – 208,0516 P + 1,2006 P^2
3		1.299,2757 – 20,4731 P + 0,17387 P^2
4		13.896,485 – 332,3295 P + 2,1051 P^2

Tabel 4.15 Persamaan Karakteristik Input-Output Bulanan

Unit pembangkit	Persamaan Input-Output	
Barru Unit 1	Microsoft Excel	32,219 – 0,508 P + 0,013 P^2
	Matlab	32,219 – 0,508 P + 0,013 P^2
Barru Unit 2	Microsoft Excel	195,704 – 9,275 P + 0,133 P^2
	Matlab	195,704 – 9,275 P + 0,133 P^2
Jeneponto Unit 1	Microsoft Excel	10,0603 + 0,6502 P – 0,0017 P^2
	Matlab	10,0603 + 0,65017 P – 0,0016749 P^2
Jeneponto Unit 2	Microsoft Excel	3,085 + 0,647 P + 0,001 P^2
	Matlab	3,0851 + 0,647 P + 0,001102 P^2
Sengkang Blok I	Microsoft Excel	1.698,999 – 17,285 P + 0,106 P^2
	Matlab	1.698,9986 – 17,2852 P + 0,10609 P^2
Sengkang Blok II	Microsoft Excel	1.340,838 – 17.014 P + 0.128 P^2
	Matlab	1.340,836 – 17.0141 P + 0.12838 P^2

Setelah diperoleh persamaan Input-Output maka selanjutnya dikelolah untuk diperoleh persamaan biaya bahan bakar yang kemudian akan dijadwalkan berdasarkan permintaan beban.

4.1.2.2 Persamaan Biaya Bahan Bakar

Pembangkit Termal yang akan dijadwalkan pada tugas akhir ini merupakan pembangkit-pembangkit yang ada pada sistem Sulselbar yang memiliki berbagai jenis bahan bakar seperti HSD (High Speed Diesel), MFO (Marine Fuel Oil), batu bara dan gas dengan memiliki harga yang berbeda-beda.

Tabel 4.16 Harga Biaya Bahan Bakar

Jenis Bahan Bakar	Harga
Batu Bara	Rp. 487,57/Kg
Gas Metana	Rp. 530,53/MMBTu

Sumber data: UPB PT. PLN (Persero) dan PLTU Barru Indonesia Power

Persamaan biaya bahan bakar dari unit-unit pembangkit tersebut diperoleh dengan mengalikan persamaan input-output pembangkit dengan harga bahan bakarnya.

Misalnya untuk persamaan input-output harian : $H = 1.303,6754 – 70,3616.P + 0,9703.P^2$ dengan harga bahan bakar sebesar Rp. 487,57 per kg. Maka diperoleh persamaan biaya bahan bakar bahan bakar, yaitu : $C = 6,356 - 0,34306\ P + 0,00473\ P^2$.

Persamaan biaya bahan bakar selengkapnya untuk semua unit pembangkit termal sebagai berikut:

1) Persamaan Biaya Bahan Bakar Harian

Tabel 4.17 Persamaan Biaya Bahan Bakar Harian PLTU Barru Unit 2

Tgl	Persamaan Biaya Bahan Bakar (Rp/h) x 10^8
1	6,356 - 0,34306 P + 0,00473 P^2
2	0,111 - 0,00219 P + 0,000097 P^2
3	3,371 - 0,1679 P + 0,0022 P^2
4	0,321 - 0,00899 P + 0,0001299 P^2
7	3,259 - 0,15804 P + 0,002024 P^2
8	2,302 - 0,111 P + 0,00145 P^2
9	4,427 - 0,21993 P + 0,002844 P^2
10	0,255 - 0,00713 P + 0,000013 P^2
11	1,049 - 0,04821 P + 0,00067 P^2
12	0,908 - 0,03682 P + 0,00046 P^2
13	0,315 - 0,01215 P + 0,00021 P^2
15	2,414 - 0,1262 P + 0,00176 P^2
16	2,753 - 0,13185 P + 0,00168 P^2
17	10,491 - 0,51675 P + 0,00647 P^2
18	3,329 - 0,1616 P + 0,00207 P^2
19	0,692 - 0,0274 P + 0,00036 P^2
20	0,212 - 0,0058 P + 0,00012 P^2
21	0,8 - 0,035 P + 0,00049 P^2
22	2,677 - 0,1326 P + 0,00017 P^2
23	0,367 - 0,013 P + 0,0002 P^2
24	0,123 - 0,00077 P + 0,00005 P^2
25	0,221 - 0,0049 P + 0,00009 P^2
26	2,78 - 0,1501 P + 0,00214 P^2
27	0,04 + 0,00029 P + 0,000002 P^2

Tabel 4.18 Persamaan Biaya Bahan Bakar Harian PLTU Barru Unit 1

Tgl	Persamaan Biaya Bahan Bakar (Rp/h) x 10^8
1	3,19 - 0,1404 P + 0,00163 P^2
2	0,397 - 0,0176 P + 0,00029 P^2
3	1,688 - 0,0716 P + 0,00084 P^2
4	0,581 - 0,0217 P + 0,00028 P^2
7	0,123 - 0,0011 P + 0,00005 P^2
8	5,326 - 0,239 P + 0,0028 P^2
9	4,44 - 0,196 P + 0,00225 P^2
10	0,457 - 0,0156 P + 0,00021 P^2
11	0,286 - 0,0117 P + 0,0002 P^2
12	3,596 - 0,1536 P + 0,00172 P^2

Tabel 4.18 Persamaan Biaya Bahan Bakar Harian PLTU Barru Unit 1 (Lanjutan)

Tgl	Persamaan Biaya Bahan Bakar (Rp/h) x 10^8
13	2,351 - 0,1049 P + 0,00125 P^2
15	1,676 - 0,0737 P + 0,00092 P^2
16	0,636 - 0,0217 P + 0,00025 P^2
17	0,999 - 0,0386 P + 0,00044 P^2
18	5,446 - 0,2382 P + 0,0027 P^2
19	3,092 - 0,1315 P + 0,0015 P^2
20	0,422 - 0,01523 P + 0,0002 P^2
21	1,744 - 0,0713 P + 0,0008 P^2
22	1,167 - 0,05 P + 0,0006 P^2
23	4,133 - 0,1798 P + 0,002 P^2
24	6,25 - 0 ,2756 P + 0,00312 P^2
25	4,831 - 0,2085 P + 0,00233 P^2
26	1,326 - 0,0544 P + 0,0006 P^2
27	4,589 - 0,1959 P + 0,00217 P^2
28	1,737 - 0,0719 P + 0,0008 P^2
29	0,3 - 0,0106 P + 0,00018 P^2
30	0,14 - 0,0021 P + 0,000063 P^2

Tabel 4.19 Persamaan Biaya Bahan Bakar Harian PLTU JenepontoUnit 1

Tgl	Persamaan Biaya Bahan Bakar (Rp/h) x 10^8
1	0,476 - 0,0072 P + 0,00005 P^2
2	0,204 - 0,0009 P + 0,00002 P^2
3	0,184 - 0,0007 P + 0,00002 P^2
4	0,438 - 0,0067 P + 0,00005 P^2
5	0,606 - 0,01 P + 0,00007 P^2
6	0,202 - 0,0018 P + 0,000024 P^2
7	0,049 + 0,0018 P + 0,000004 P^2
8	0,124 + 0,0003 P + 0,00001 P^2
9	0,136 + 0,001 P + 0,000005 P^2
10	0,055 + 0,0017 P + 0,000005 P^2
11	0,172 - 0,0008 P + 0,000018 P^2
12	0,234 - 0,0017 P + 0,000022 P^2
13	0,088 + 0,0018 P + 0,000003 P^2
14	0,139 + 0,0006 P + 0,000009 P^2
15	0,079 + 0,0018 P + 0,000003 P^2
16	0,135 + 0,001 P + 0,000005 P^2
17	0,041 + 0,0021 P + 0,000005 P^2

Tabel 4.19 Persamaan Biaya Bahan Bakar Harian PLTU Jeneponto Unit 1 (Lanjutan)

Tgl	Persamaan Biaya Bahan Bakar (Rp/h) x 10^8
18	0,143 - 0,0002 P + 0,000017 P^2
19	0,041 + 0,0022 P + 0,000003 P^2
20	0,057 + 0,0022 P + 0,000002 P^2
21	0,168 - 0,0008 P + 0,000021 P^2
22	0,218 - 0,0016 P + 0,000021 P^2
23	0,403 - 0,0054 P + 0,000041 P^2
24	0,486 - 0,0077 P + 0,000055 P^2
25	0,123 + 0,0012 P + 0,0000044 P^2
26	-0,024 + 0,0033 P - 0,0000016 P^2
27	0,103 + 0,0003 P + 0,000017 P^2
28	0,071 + 0,0026 P - 0,0000026P^2
29	0,345 - 0,0041 P + 0,000037 P^2
30	2,003 - 0,0466 P + 0,000307 P^2

Tabel 4.20 Persamaan Biaya Bahan Bakar Harian PLTU Jeneponto Unit 2

Tgl	Persamaan Biaya Bahan Bakar (Rp/h) x 10^8
1	0,082 + 0,00383 P - 0,0000114 P^2
2	0,361 - 0,00444 P + 0,000051 P^2
3	3,343 - 0,084 P + 0,00058 P^2
4	0,485 - 0,00712 P + 0,000058 P^2
5	0,394 - 0,00457 P + 0,000039 P^2
6	0,358 - 0,00494 P + 0,000046 P^2
7	0,83 - 0,01603 P + 0,000112 P^2
8	0,153 + 0,00077 P + 0,000008 P^2
9	0,347 - 0,00284 P + 0,000027 P^2
10	0,499 - 0,00911 P + 0,000078 P^2
11	0,121 + 0,00065 P + 0,000014 P^2
12	0,223 - 0,0006 P + 0,000019 P^2
13	0,402 - 0,00394 P + 0,000032 P^2
14	0,4 - 0,00427 P + 0,000037 P^2
15	0,212 + 0,00075 P + 0,000003 P^2
16	0,702 - 0,01295 P + 0,0001 P^2
17	0,241 - 0,00154 P + 0,0000278 P^2
18	0,219 - 0,00113 P + 0,0000253 P^2
19	0,14 + 0,00092 P + 0,000013 P^2
20	0,434 - 0,00575 P + 0,00005P^2
21	0,853 - 0,01745 P + 0,000132 P^2

Tabel 4.20 Persamaan Biaya Bahan Bakar Harian PLTU Jeneponto Unit 2 (Lanjutan)

Tgl	Persamaan Biaya Bahan Bakar (Rp/h) x 10^8
22	0,133 + 0,00145 P + 0,0000046 P^2
23	0,2 + 0,00048 P + 0,0000075 P^2
24	0,264 - 0,00144 P + 0,00002 P^2
25	0,4 - 0,00567 P + 0,000054 P^2
26	-0,464 + 0,01585 P - 0,00008 P^2
27	0,419 - 0,00715 P + 0,000071 P^2
28	0,244 - 0,00062 P + 0,000019 P^2
29	1,227 - 0,0238 P + 0,000154 P^2
30	0,49 - 0,006 P + 0,000048 P^2

Tabel 4.21 Persamaan Biaya Bahan Bakar Harian PLTGU Sengkang Blok I

Tgl	Persamaan Biaya Bahan Bakar (Rp/h) x 10^8
1	0,106 + 0,00047 P + 0,0000003 P^2
2	0,122 + 0,00045 P + 0,0000041 P^2
3	0,104 + 0,00052 P + 0,0000011 P^2
4	0,114 + 0,0003 P + 0,0000012 P^2
5	0,12 + 0,00013 P + 0,0000024 P^2
6	0,107 + 0,00045 P + 0,0000003 P^2
7	0,119 + 0,00017 P + 0,0000019 P^2
8	0,112 + 0,00036 P + 0,0000008 P^2
9	0,118 + 0,0002 P + 0,0000018 P^2
10	0,105 + 0,00046 P + 0,00000044 P^2
11	0,11 + 0,00038 P + 0,0000007 P^2
12	0,138 - 0,00021 P + 0,0000037 P^2
13	0,117 + 0,0002 P + 0,000002 P^2
14	0,12 + 0,00041 P + 0,0000005 P^2
15	0,117 + 0,0002 P + 0,0000019 P^2
16	0,116 + 0,00024 P + 0,0000016 P^2
17	0,113 + 0,00032 P + 0,0000011 P^2
18	0,106 + 0,0005 P - 0,0000002 P^2
19	0,107 + 0,00046 P + 0,00000018 P^2
20	0,106 + 0,0005 P - 0,00000002 P^2
21	0,12 + 0,0004 P + 0,00000063 P^2
22	0,112 + 0,00034 P + 0,0000011 P^2
23	0,111 + 0,00035 P + 0,000001 P^2
24	0,111 + 0,00035 P + 0,0000009 P^2
25	0,111 + 0,00036 P + 0,0000009 P^2
26	0,108 + 0,00047 P - 0,00000005 P^2

Tabel 4.21 Persamaan Biaya Bahan Bakar Harian PLTGU Sengkang Blok I (Lanjutan)

Tgl	Persamaan Biaya Bahan Bakar (Rp/h) x 10^8
27	0,115 + 0,00027 P + 0,0000015 P^2
28	0,118 + 0,00019 P + 0,0000018 P^2
29	0,103 + 0,00053 P + 0,00000007 P^2
30	0,102 + 0,00055 P + 0,00000013 P^2

Tabel 4.22 Persamaan Biaya Bahan Bakar Harian PLTGU Sengkang Blok II

Tgl	Persamaan Biaya Bahan Bakar (Rp/h) x 10^8
1	0,107 - 0,00009 P + 0,0000027 P^2
2	0,044 + 0,00013 P + 0,0000012 P^2
3	0,132 - 0,00049 P + 0,000005 P^2
4	0,105 - 0,00014 P + 0,0000034 P^2
5	0,106 - 0,00012 P + 0,0000032 P^2
6	0,13 - 0,00044 P + 0,0000048 P^2
7	0,13 - 0,00035 P + 0,0000044 P^2
8	0,149 - 0,00062 P + 0,0000056 P^2
9	0,151 - 0,00048 P + 0,0000049 P^2
10	0,143 - 0,00019 P + 0,0000036 P^2
11	0,125 - 0,00034 P + 0,0000042 P^2
12	0,116 - 0,00024 P + 0,0000038 P^2
13	0,13 - 0,00035 P + 0,0000044 P^2
14	0,132 - 0,00037 P + 0,0000046 P^2
15	0,122 - 0,00043 P + 0,0000048 P^2
16	0,116 - 0,00012 P + 0,0000032 P^2
17	0,12 - 0,00035 P + 0,000004 P^2
18	0,115 - 0,00015 P + 0,0000028 P^2
19	0,111 - 0,00008 P + 0,0000026 P^2
20	0,094 + 0,00018 P + 0,000001 P^2
21	0,099 + 0,000025 P + 0,0000021 P^2
22	0,104 - 0,000018 P + 0,0000029 P^2
23	0,127 - 0,00028 P + 0,000004 P^2
24	0,086 + 0,00051 P + 0,00000024 P^2
25	0,093 + 0,00023 P + 0,0000012 P^2
26	0,097 + 0,00016 P + 0,000001 P^2
27	0,121 - 0,0004 P + 0,0000046 P^2
28	0,152 - 0,00054 P + 0,0000051 P^2
29	0,134 - 0,00034 P + 0,0000042 P^2
30	0,174 - 0,00086 P + 0,0000068 P^2

2) Persamaan Biaya Bahan Bakar Mingguan

Tabel 4.23 Persamaan Biaya Bahan Bakar Mingguan Pada Unit-Unit Pembangkit Termis

Tgl	Unit Pembangkit	Persamaan Biaya Bahan Bakar (Rp/h) x 10^8
1	PLTU Barru Unit 1	3,3529 – 0,1486 P + 0,001729 P^2
2		75,4905 – 3,3636 P + 0,037499 P^2
3		2,6213 – 0,1005 P + 0,001019 P^2
4		6,6859 – 0,2961 P + 0,003359 P^2
1	PLTU Barru Unit 2	6,2688 – 0,3213 P + 0,004227 P^2
2		29,7294 – 1,4976 P + 0,018971 P^2
3		4,6251 – 0,2201 P + 0,002716 P^2
4		2,2025 – 0,1087 P + 0,001453 P^2
1	PLTU Jeneponto Unit 1	1,2064 – 0,0240 P + 0,000150 P^2
2		2,5560 – 0,0464 P + 0,000236 P^2
3		0,7278 – 0,0117 P + 0,000073 P^2
4		0,2464 – 0,0031 P + 0,000036 P^2
1	PLTU Jeneponto Unit 2	5,8151 – 0,1543 P + 0,001073 P^2
2		1,2790 – 0,0237 P + 0,000143 P^2
3		0,2896 – 0,0010 P + 0,000013 P^2
4		4,9234 – 0,1263 P + 0,000858 P^2
1	PLTGU Sengkang Blok I	0,2919 – 0,0035 P + 0,000022 P^2
2		0,1919 – 0,0012 P + 0,000009 P^2
3		0,1572 – 0,0007 P + 0,000007 P^2
4		0,0791 + 0,0011 P – 0,000003 P^2
1	PLTGU Sengkang Blok II	-0,1984 + 0,0058 P – 0,000024 P^2
2		1,4861 – 0,0313 P + 0,000180 P^2
3		0,1952 – 0,0031 P + 0,000026 P^2
4		2,0879 – 0,0499 P + 0,000316 P^2

3) Persamaan Biaya Bahan Bakar Bulanan

Tabel 4.24 Persamaan Biaya Bahan Bakar Bulanan Pada Unit-Unit Pembangkit Termis.

Unit pembangkit	Persamaan Biaya Bahan Bakar (Rp/h) x 10^8
Barru Unit 1	0,1571 – 0,0025 P + 0,000063 P^2
Barru Unit 2	0,9542 – 0,0452 P + 0,000648 P^2
Jeneponto Unit 1	0,0491 + 0,0032 P – 0,000008 P^2
Jeneponto Unit 2	0,0150 + 0,0032 P + 0,000005 P^2
Sengkang Blok I	0,2553 – 0,0026 P + 0,000016 P^2
Sengkang Blok II	0,2015 – 0,0026 P + 0,000019 P^2

4.1.2.3 Beban Sistem Tenaga Listrik Wilayah Sulselbar

Energi yang dihasilkan tidak dapat disimpan, melainkan langsung habis digunakan oleh konsumen. Oleh karena itu, daya yang dibangkitkan harus selalu sama dengan daya yang digunakan oleh konsumen. Apabila pembangkit daya tidak mencukupi kebutuhan konsumen, maka hal ini akan ditandai turunnya frekuensi dalam sistem. Penyediaan tenaga listrik misalanya PLN, harus menyediakan tenaga listrik dengan frekuensi konstant, dalam batas penyimpanan yang masih diizinkan (Marsudi, 2005).

Karena kebutuhan daya oleh konsumen terus berubah sepanjang waktu, maka untuk mempertahankan frekuensi, daya yang dibangkitkan dipusat listrik harus diubah-ubah disepanjang waktu untuk menyesuaikan daya tersebut dengan kebutuhan konsumen agar frekuensi bisa konstan.

Dalam penjadwalan pengoperasian pembangkit yang ekonomis dibutuhkan data beban yang akan dibangkitkan oleh masing-masing unit pembangkit sebagai salah satu batasan penjadwalan dengan memaksimalkan pembangkit hidro yang ada disulselbar maka adapun besar beban listrik harian pada bulan Agustus 2016 untuk sistem sulselbar untuk pembangkit termal, yaitu sebagai berikut:

Tabel 4.25 Beban Listrik Sistem Sulselbar pada Tanggal 1 Agustus 2016

No	Jam	Beban (MW)	Beban Pembangkit Termal (MW)
1	00.00	676	328
2	01.00	659	311
3	02.00	629	281
4	03.00	595	247
5	04.00	601	253
6	05.00	615	267
7	06.00	648	300
8	07.00	613	265
9	08.00	665	317
10	09.00	708	360
11	10.00	734	386
12	11.00	746	398
13	12.00	756	408
14	13.00	768	420
15	14.00	779	431
16	15.00	755	407
17	16.00	760	412
18	17.00	777	429
19	18.00	980	632
20	19.00	961	613
21	20.00	943	595
22	21.00	892	544
23	22.00	792	444
24	23.00	735	387

Sumber data : PT PLN (Persero) UPB

Data selengkapnya bisa dilihat pada Lampiran 4.

Untuk melakukan pegoptimasian atau operasi ekonomi penulis mengambil sampel data pada tanggal 1 sampai tanggal 31 yang merupakan perkiraan beban pada bulan Agustus 2016 oleh PT.PLN (Persero).

Dari data beban harian tersebut. Priode kerja dibagi menjadi 24 priode, yaitu tiap satu jam tiap priode, dimana tiap priode akan ditentukan konfigurasi pembebanan yang akan dibangkitkan, kemudian data perjam nya akan digunakan untuk menghitung data beban perhari, perminggu, serta perbulannya.

4.2 Pembahasan

4.2.1 Penjadwalan Pengoperasian Pembangkit Termis

Dengan mengacu pada Tabel 4.25 bisa didapat besar daya yang ditanggung pembangkit termal, yang nantinya akan dijadikan patokan untuk perhitungan penjadwalan pembangkit pada sistem Sulselbar.

Langkah selanjutnya yaitu mengitung biaya pembangkitan dan penjadwalan unit pembangkit untuk beban listrik yang akan dilayani oleh tiap unit-unit pembangkit pada sistem Sulselbar.

4.2.1.1 Perhitungan Secara Manual

Pada Tabel 4.17 s/d Tabel 4.22 (Persamaan Input-Output Pembangkit) dengan beban sistem sebesar 300 MW berdasarkan Tabel 4.25 pada tanggal 1 jam 06.00 akan diperoleh biaya bahan bakar yang optimum berdasarkan persamaan (2.22) menggunakan karakteristik

input-output harian untuk setiap unit-unit pembangkit yang akan dijadwalkan, adapun pernjadwalan secara manualnya sebagai berikut:

$B_N (x) = \min \{ b_N (y) + B_{N-1} (x-y)\}$

Diketahui:

C_1 = PLTU Barru Unit 1 C_4 = PLTU Jeneponto Unit 2

C_2 = PLTU Barru Unit 2 C_5 = PLTGU Sengkang Blok I

C_3 = PLTU Jeneponto Unit 1 C_6 = PLTGU Sengkang Blok II

Maka:

$C_1 = 3{,}19 - 0{,}1404\ P_1 + 0{,}00163\ P_1^2$ (x 10^8 Rp/h)

$C_2 = 6{,}356 - 0{,}34306\ P_2 + 0{,}00473\ P_2^2$ (x 10^8 Rp/h)

$C_3 = 0{,}476 - 0{,}0072\ P_3 + 0{,}00005\ P_3^2$ (x 10^8 Rp/h)

$C_4 = 0{,}082 + 0{,}00383\ P_4 - 0{,}0000114\ P_4^2$ (x 10^8 Rp/h)

$C_5 = 0{,}106 + 0{,}00047\ P_5 + 0{,}0000003\ P_5^2$ (x 10^8 Rp/h)

$C_6 = 0{,}107 - 0{,}00009\ P_6 + 0{,}0000027\ P_6^2$ (x 10^8 Rp/h)

P_{sistem} = 300 MW

y = 10 MW

Penyelesaian:

$B_1 = b_1 (390) = 3{,}19 - 0{,}1404\ (300) + 0{,}00637\ (300)^2 = 107{,}77$

$B_2 = b_2 (0) = 6{,}356 - 0{,}34306\ (0) + 0{,}00473\ (0)^2 = 6{,}356$

Sehingga:

$B_N (X) = b_N(Y) + B_{N-1} (X-Y)$

$B_2 (390) = b_2(0) + B_1(300)$

$= 6{,}356 + 107{,}77 = 114{,}13 \times 10^8$ Rp/h

Untuk perhitungan yang selengkapnya dapat dilihat pada Tabel 4.26 dengan menggunakan Microsoft Office Excel 2007, sebagai berikut:

Tabel 4.26 Model Perhitungan Manual Penjadwalan Pembangkit Metode Dynamic Programming

No.	y	Biaya minimum : Bn(x) = min{bn(y) + B(n-1)(x-y)} ($/h)																																
		2 Unit																																
	(MW)	Unit 1	bn(y)	300	290	280	270	260	250	240	230	220	210	200	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10	0
				MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW
1	0	3,19	6,356	114,126	105,913	98,026	90,465	83,23	76,321	69,738	63,481	57,55	51,945	46,666	41,713	37,086	32,785	28,81	25,161	21,838	18,841	16,17	13,825	11,806	10,113	8,746	7,705	6,99	6,601	6,538	6,801	7,39	8,305	9,546
2	10	1,949	3,3984	102,9554	95,0684	87,5074	80,2724	73,3634	66,7804	60,5234	54,5924	48,9874	43,7084	38,7554	34,1284	29,8274	25,8524	22,2034	18,8804	15,8834	13,2124	10,8674	8,8484	7,1554	5,7884	4,7474	4,0324	3,6434	3,5804	3,8434	4,4324	5,3474	6,5884	
3	20	1,034	1,3868	93,0568	85,4958	78,2608	71,3518	64,7688	58,5118	52,5808	46,9758	41,6968	36,7438	32,1168	27,8158	23,8408	20,1918	16,8688	13,8718	11,2008	8,8558	6,8368	5,1438	3,7768	2,7358	2,0208	1,6318	1,5688	1,8318	2,4208	3,3358	4,5768		
4	30	0,445	0,3212	84,4302	77,1952	70,2862	63,7032	57,4462	51,5152	45,9102	40,6312	35,6782	31,0512	26,7502	22,7752	19,1262	15,8032	12,8062	10,1352	7,7902	5,7712	4,0782	2,7112	1,6702	0,9552	0,5662	0,5032	0,7662	1,3552	2,2702	3,5112			
5	40	0,182	0,2016	77,0756	70,1666	63,5836	57,3266	51,3956	45,7906	40,5116	35,5586	30,9316	26,6306	22,6556	19,0066	15,6836	12,6866	10,0156	7,6706	5,6516	3,9586	2,5916	1,5506	0,8356	0,4466	0,3836	0,6466	1,2356	2,1506	3,3916				
6	50	0,245	1,028	70,993	64,41	58,153	52,222	46,617	41,338	36,385	31,758	27,457	23,482	19,833	16,51	13,513	10,842	8,497	6,478	4,785	3,418	2,377	1,662	1,273	1,21	1,473	2,062	2,977	4,218					
7	60	0,634	2,8004	66,1824	59,9254	53,9944	48,3894	43,1104	38,1574	33,5304	29,2294	25,2544	21,6054	18,2824	15,2854	12,6144	10,2694	8,2504	6,5574	5,1904	4,1494	3,4344	3,0454	2,9824	3,2454	3,8344	4,7494	5,9904						
8	70	1,349	5,5188	62,6438	56,7128	51,1078	45,8288	40,8758	36,2488	31,9478	27,9728	24,3238	21,0008	18,0038	15,3328	12,9878	10,9688	9,2758	7,9088	6,8678	6,1528	5,7638	5,7008	5,9638	6,5528	7,4678	8,7088							
9	80	2,39	9,1832	60,3772	54,7722	49,4932	44,5402	39,9132	35,6122	31,6372	27,9882	24,6652	21,6682	18,9972	16,6522	14,6332	12,9402	11,5732	10,5322	9,8172	9,4282	9,3652	9,6282	10,2172	11,1322	12,3732								
10	90	3,757	13,7936	59,3826	54,1036	49,1506	44,5236	40,2226	36,2476	32,5986	29,2756	26,2786	23,6076	21,2626	19,2436	17,5506	16,1836	15,1426	14,4276	14,0386	13,9756	14,2386	14,8276	15,7426	16,9836									
11	100	5,45	19,35	59,66	54,707	50,08	45,779	41,804	38,155	34,832	31,835	29,164	26,819	24,8	23,107	21,74	20,699	19,984	19,595	19,532	19,795	20,384	21,299	22,54										
12	110	7,469	25,8524	61,2094	56,5824	52,2814	48,3064	44,6574	41,3344	38,3374	35,6664	33,3214	31,3024	29,6094	28,2424	27,2014	26,4864	26,0974	26,0344	26,2974	26,8864	27,8014	29,0424											
13	120	9,814	33,3008	64,0308	59,7298	55,7548	52,1058	48,7828	45,7858	43,1148	40,7698	38,7508	37,0578	35,6908	34,6498	33,9348	33,5458	33,4828	33,7458	34,3348	35,2498	36,4908												
14	130	12,485	41,6952	68,1242	64,1492	60,5002	57,1772	54,1802	51,5092	49,1642	47,1452	45,4522	44,0852	43,0442	42,3292	41,9402	41,8772	42,1402	42,7292	43,6442	44,8852													
15	140	15,482	51,0356	73,4896	69,8406	66,5176	63,5206	60,8496	58,5046	56,4856	54,7926	53,4256	52,3846	51,6696	51,2806	51,2176	51,4806	52,0696	52,9846	54,2256														
16	150	18,805	61,322	80,127	76,804	73,807	71,136	68,791	66,772	65,079	63,712	62,671	61,956	61,567	61,504	61,767	62,356	63,271	64,512															
17	160	22,454	72,5544	88,0364	85,0394	82,3684	80,0234	78,0044	76,3114	74,9444	73,9034	73,1884	72,7994	72,7364	72,9994	73,5884	74,5034	75,7444																
18	170	26,429	84,7328	97,2178	94,5468	92,2018	90,1828	88,4898	87,1228	86,0818	85,3668	84,9778	84,9148	85,1778	85,7668	86,6818	87,9228																	
19	180	30,73	97,8572	107,6712	105,3262	103,3072	101,6142	100,2472	99,2062	98,4912	98,1022	98,0392	98,3022	98,8912	99,8062	101,0472																		
20	190	35,357	111,9276	119,3966	117,3776	115,6846	114,3176	113,2766	112,5616	112,1726	112,1096	112,3726	112,9616	113,8766	115,1176																			
21	200	40,31	126,944	132,394	130,701	129,334	128,293	127,578	127,189	127,126	127,389	127,978	128,893	130,134																				
22	210	45,589	142,9064	146,6634	145,2964	144,2554	143,5404	143,1514	143,0884	143,3514	143,9404	144,8554	146,0964																					
23	220	51,194	159,8148	162,2048	161,1638	160,4488	160,0598	159,9968	160,2598	160,8488	161,7638	163,0048																						
24	230	57,125	177,6692	179,0182	178,3032	177,9142	177,8512	178,1142	178,7032	179,6182	180,8592																							
25	240	63,382	196,4696	197,1036	196,7146	196,6516	196,9146	197,5036	198,4186	199,6596																								
26	250	69,965	216,216	216,461	216,398	216,661	217,25	218,165	219,406																									
27	260	76,874	236,9084	237,0904	237,3534	237,9424	238,8574	240,0984																										
28	270	84,109	258,5468	258,9918	259,5808	260,4958	261,7368																											
29	280	91,67	281,1312	282,1652	283,0802	284,3212																												
30	290	99,557	304,6616	306,6106	307,8516																													
31	300	107,77	329,138	332,328																														
Biaya Minimum				59,3826	54,1036	49,1506	44,5236	39,9132	35,6122	31,6372	27,9728	24,3238	21,0008	18,0038	15,2854	12,6144	10,2694	8,2504	6,478	4,785	3,418	2,377	1,5506	0,8356	0,4466	0,3836	0,5032	0,7662	1,3552	2,2702	3,3358	4,5768	6,5884	9,546

Tabel 4.26 Model Perhitungan Manual Penjadwalan Pembangkit Metode Dynamic Programming (Lanjutan)

No.	y	bn(y)	3 Unit																													
	(MW)		300	290	280	270	260	250	240	230	220	210	200	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10	0
			MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW
1	0	0,476	59,8586	54,5796	49,6266	44,9996	40,3892	36,0882	32,1132	28,4488	24,7998	21,4768	18,4798	15,7614	13,0904	10,7454	8,7264	6,954	5,261	3,894	2,853	2,0266	1,3116	0,9226	0,8596	0,9792	1,2422	1,8312	2,7462	3,8118	5,0528	7,0644	10,022
2	10	0,404	54,5076	49,5546	44,9276	40,3172	36,0162	32,0412	28,3768	24,7278	21,4048	18,4078	15,6894	13,0184	10,6734	8,6544	6,882	5,189	3,822	2,781	1,9546	1,2396	0,8506	0,7876	0,9072	1,1702	1,7592	2,6742	3,7398	4,9808	6,9924	9,95	
3	20	0,332	49,4826	44,8556	40,2452	35,9442	31,9692	28,3048	24,6558	21,3328	18,3358	15,6174	12,9464	10,6014	8,5824	6,81	5,117	3,75	2,709	1,8826	1,1676	0,7786	0,7156	0,8352	1,0982	1,6872	2,6022	3,6678	4,9088	6,9204	9,878		
4	30	0,26	44,7836	40,1732	35,8722	31,8972	28,2328	24,5838	21,2608	18,2638	15,5454	12,8744	10,5294	8,5104	6,738	5,045	3,678	2,637	1,8106	1,0956	0,7066	0,6436	0,7632	1,0262	1,6152	2,5302	3,5958	4,8368	6,8484	9,806			
5	40	0,268	40,1812	35,8802	31,9052	28,2408	24,5918	21,2688	18,2718	15,5534	12,8824	10,5374	8,5184	6,746	5,053	3,686	2,645	1,8186	1,1036	0,7146	0,6516	0,7712	1,0342	1,6232	2,5382	3,6038	4,8448	6,8564	9,814				
6	50	0,241	35,8532	31,8782	28,2138	24,5648	21,2418	18,2448	15,5264	12,8554	10,5104	8,4914	6,719	5,026	3,659	2,618	1,7916	1,0766	0,6876	0,6246	0,7442	1,0072	1,5962	2,5112	3,5768	4,8178	6,8294	9,787					
7	60	0,224	31,8612	28,1968	24,5478	21,2248	18,2278	15,5094	12,8384	10,4934	8,4744	6,702	5,009	3,642	2,601	1,7746	1,0596	0,6706	0,6076	0,7272	0,9902	1,5792	2,4942	3,5598	4,8008	6,8124	9,77						
8	70	0,217	28,1898	24,5408	21,2178	18,2208	15,5024	12,8314	10,4864	8,4674	6,695	5,002	3,635	2,594	1,7676	1,0526	0,6636	0,6006	0,7202	0,9832	1,5722	2,4872	3,5528	4,7938	6,8054	9,763							
9	80	0,22	24,5438	21,2208	18,2238	15,5054	12,8344	10,4894	8,4704	6,698	5,005	3,638	2,597	1,7706	1,0556	0,6666	0,6036	0,7232	0,9862	1,5752	2,4902	3,5558	4,7968	6,8084	9,766								
10	90	0,233	21,2338	18,2368	15,5184	12,8474	10,5024	8,4834	6,711	5,018	3,651	2,61	1,7836	1,0686	0,6796	0,6166	0,7362	0,9992	1,5882	2,5032	3,5688	4,8098	6,8214	9,779									
11	100	0,256	18,2598	15,5414	12,8704	10,5254	8,5064	6,734	5,041	3,674	2,633	1,8066	1,0916	0,7026	0,6396	0,7592	1,0222	1,6112	2,5262	3,5918	4,8328	6,8444	9,802										
12	110	0,289	15,5744	12,9034	10,5584	8,5394	6,767	5,074	3,707	2,666	1,8396	1,1246	0,7356	0,6726	0,7922	1,0552	1,6442	2,5592	3,6248	4,8658	6,8774	9,835											
13	120	0,332	12,9464	10,6014	8,5824	6,81	5,117	3,75	2,709	1,8826	1,1676	0,7786	0,7156	0,8352	1,0982	1,6872	2,6022	3,6678	4,9088	6,9204	9,878												
14	130	0,385	10,6544	8,6354	6,863	5,17	3,803	2,762	1,9356	1,2206	0,8316	0,7686	0,8882	1,1512	1,7402	2,6552	3,7208	4,9618	6,9734	9,931													
15	140	0,448	8,6984	6,926	5,233	3,866	2,825	1,9986	1,2836	0,8946	0,8316	0,9512	1,2142	1,8032	2,7182	3,7838	5,0248	7,0364	9,994														
16	150	0,521	6,999	5,306	3,939	2,898	2,0716	1,3566	0,9676	0,9046	1,0242	1,2872	1,8762	2,7912	3,8568	5,0978	7,1094	10,067															
17	160	0,604	5,389	4,022	2,981	2,1546	1,4396	1,0506	0,9876	1,1072	1,3702	1,9592	2,8742	3,9398	5,1808	7,1924	10,15																
18	170	0,697	4,115	3,074	2,2476	1,5326	1,1436	1,0806	1,2002	1,4632	2,0522	2,9672	4,0328	5,2738	7,2854	10,243																	
19	180	0,8	3,177	2,3506	1,6356	1,2466	1,1836	1,3032	1,5662	2,1552	3,0702	4,1358	5,3768	7,3884	10,346																		
20	190	0,913	2,4636	1,7486	1,3596	1,2966	1,4162	1,6792	2,2682	3,1832	4,2488	5,4898	7,5014	10,459																			
21	200	1,036	1,8716	1,4826	1,4196	1,5392	1,8022	2,3912	3,3062	4,3718	5,6128	7,6244	10,582																				
22	210	1,169	1,6156	1,5526	1,6722	1,9352	2,5242	3,4392	4,5048	5,7458	7,7574	10,715																					
23	220	1,312	1,6956	1,8152	2,0782	2,6672	3,5822	4,6478	5,8888	7,9004	10,858																						
24	230	1,465	1,9682	2,2312	2,8202	3,7352	4,8008	6,0418	8,0534	11,011																							
25	240	1,628	2,3942	2,9832	3,8982	4,9638	6,2048	8,2164	11,174																								
26	250	1,801	3,1562	4,0712	5,1368	6,3778	8,3894	11,347																									
27	260	1,984	4,2542	5,3198	6,5608	8,5724	11,53																										
28	270	2,177	5,5128	6,7538	8,7654	11,723																											
29	280	2,38	6,9568	8,9684	11,926																												
30	290	2,593	9,1814	12,139																													
31	300	2,816	12,362																														
Biaya Minimum			1,6156	1,4826	1,3596	1,2466	1,1436	1,0506	0,9676	0,8946	0,8316	0,7686	0,7156	0,6726	0,6396	0,6166	0,6036	0,6006	0,6076	0,6246	0,6516	0,6436	0,7156	0,7876	0,8596	0,9792	1,2422	1,8312	2,7462	3,8118	5,0528	7,0644	10,022

Tabel 4.26 Model Perhitungan Manual Penjadwalan Pembangkit Metode Dynamic Programming (Lanjutan)

No.	y	bn(y)	4 Unit																													
	(MW)		300	290	280	270	260	250	240	230	220	210	200	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10	0
			MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW
1	0	0,082	1,6976	1,5646	1,4416	1,3286	1,2256	1,1326	1,0496	0,9766	0,9136	0,8506	0,7976	0,7546	0,7216	0,6986	0,6856	0,6826	0,6896	0,7066	0,7336	0,7256	0,7976	0,8696	0,9416	1,0612	1,3242	1,9132	2,8282	3,8938	5,1348	7,1464	10,104
2	10	0,11916	1,60176	1,47876	1,36576	1,26276	1,16976	1,08676	1,01376	0,95076	0,88776	0,83476	0,79176	0,75876	0,73576	0,72276	0,71976	0,72676	0,74376	0,77076	0,76276	0,83476	0,90676	0,97876	1,09836	1,36136	1,95036	2,86536	3,93096	5,17196	7,18356	10,14116	
3	20	0,15404	1,51364	1,40064	1,29764	1,20464	1,12164	1,04864	0,98564	0,92264	0,86964	0,82664	0,79364	0,77064	0,75764	0,75464	0,76164	0,77864	0,80564	0,79764	0,86964	0,94164	1,01364	1,13324	1,39624	1,98524	2,90024	3,96584	5,20684	7,21844	10,17604		
4	30	0,18664	1,43324	1,33024	1,23724	1,15424	1,08124	1,01824	0,95524	0,90224	0,85924	0,82624	0,80324	0,79024	0,78724	0,79424	0,81124	0,83824	0,83024	0,90224	0,97424	1,04624	1,16584	1,42884	2,01784	2,93284	3,99844	5,23944	7,25104	10,20864			
5	40	0,21696	1,36056	1,26756	1,18456	1,11156	1,04856	0,98556	0,93256	0,88956	0,85656	0,83356	0,82056	0,81756	0,82456	0,84156	0,86856	0,86056	0,93256	1,00456	1,07656	1,19616	1,45916	2,04816	2,96316	4,02876	5,26976	7,28136	10,23896				
6	50	0,245	1,2956	1,2126	1,1396	1,0766	1,0136	0,9606	0,9176	0,8846	0,8616	0,8486	0,8456	0,8526	0,8696	0,8966	0,8886	0,9606	1,0326	1,1046	1,2242	1,4872	2,0762	2,9912	4,0568	5,2978	7,3094	10,267					
7	60	0,27076	1,23836	1,16536	1,10236	1,03936	0,98636	0,94336	0,91036	0,88736	0,87436	0,87136	0,87836	0,89536	0,92236	0,91436	0,98636	1,05836	1,13036	1,24996	1,51296	2,10196	3,01696	4,08256	5,32356	7,33516	10,29276						
8	70	0,29424	1,18884	1,12584	1,06284	1,00984	0,96684	0,93384	0,91084	0,89784	0,89484	0,90184	0,91884	0,94584	0,93784	1,00984	1,08184	1,15384	1,27344	1,53644	2,12544	3,04044	4,10604	5,34704	7,35864	10,31624							
9	80	0,31544	1,14704	1,08404	1,03104	0,98804	0,95504	0,93204	0,91904	0,91604	0,92304	0,94004	0,96704	0,95904	1,03104	1,10304	1,17504	1,29464	1,55764	2,14664	3,06164	4,12724	5,36824	7,37984	10,33744								
10	90	0,33436	1,10296	1,04996	1,00696	0,97396	0,95096	0,93796	0,93496	0,94196	0,95896	0,98596	0,97796	1,04996	1,12196	1,19396	1,31356	1,57656	2,16556	3,08056	4,14616	5,38716	7,39876	10,35636									
11	100	0,351	1,0666	1,0236	0,9906	0,9676	0,9546	0,9516	0,9586	0,9756	1,0026	0,9946	1,0666	1,1386	1,2106	1,3302	1,5932	2,1822	3,0972	4,1628	5,4038	7,4154	10,373										
12	110	0,36536	1,03796	1,00496	0,98196	0,96896	0,96596	0,97296	0,98996	1,01696	1,00896	1,08096	1,15296	1,22496	1,34456	1,60756	2,19656	3,11156	4,17716	5,41816	7,42976	10,38736											
13	120	0,37744	1,01704	0,99404	0,98104	0,97804	0,98504	1,00204	1,02904	1,02104	1,09304	1,16504	1,23704	1,35664	1,61964	2,20864	3,12364	4,18924	5,43024	7,44184	10,39944												
14	130	0,38724	1,00384	0,99084	0,98784	0,99484	1,01184	1,03884	1,03084	1,10284	1,17484	1,24684	1,36644	1,62944	2,21844	3,13344	4,19904	5,44004	7,45164	10,40924													
15	140	0,39476	0,99836	0,99536	1,00236	1,01936	1,04636	1,03836	1,11036	1,18236	1,25436	1,37396	1,63696	2,22596	3,14096	4,20656	5,44756	7,45916	10,41676														
16	150	0,4	1,0006	1,0076	1,0246	1,0516	1,0436	1,1156	1,1876	1,2596	1,3792	1,6422	2,2312	3,1462	4,2118	5,4528	7,4644	10,422															
17	160	0,40296	1,01056	1,02756	1,05456	1,04656	1,11856	1,19056	1,26256	1,38216	1,64516	2,23416	3,14916	4,21476	5,45576	7,46736	10,42496																
18	170	0,40364	1,02824	1,05524	1,04724	1,11924	1,19124	1,26324	1,38284	1,64584	2,23484	3,14984	4,21544	5,45644	7,46804	10,42564																	
19	180	0,40204	1,04164	1,01864	1,00564	1,00264	1,00964	1,02664	1,05364	1,04564	1,11764	1,18964	1,26164	1,38124	1,64424																		
20	190	0,39816	1,04176	1,11376	1,18576	1,25776	1,37736	1,64036	2,22936	3,14436	4,20996	5,45096	7,46256	10,42016																			
21	200	0,392	1,1076	1,1796	1,2516	1,3712	1,6342	2,2232	3,1382	4,2038	5,4448	7,4564	10,414																				
22	210	0,38356	1,17116	1,24316	1,36276	1,62576	2,21476	3,12976	4,19536	5,43636	7,44796	10,40556																					
23	220	0,37284	1,23244	1,35204	1,61504	2,20404	3,11904	4,18464	5,42564	7,43724	10,39484																						
24	230	0,35984	1,33904	1,60204	2,19104	3,10604	4,17164	5,41264	7,42424	10,38184																							
25	240	0,34456	1,58676	2,17576	3,09076	4,15636	5,39736	7,40896	10,36656																								
26	250	0,327	2,1582	3,0732	4,1388	5,3798	7,3914	10,349																									
27	260	0,30716	3,05336	4,11896	5,35996	7,37156	10,32916																										
28	270	0,28504	4,09684	5,33784	7,34944	10,30704																											
29	280	0,26064	5,31344	7,32504	10,28264																												
30	290	0,23396	7,29836	10,25596																													
31	300	0,205	10,227																														
Biaya Minimum			0,99836	0,99084	0,98104	0,9676	0,95096	0,93204	0,91036	0,8846	0,85656	0,82624	0,79176	0,7546	0,7216	0,6986	0,6856	0,6826	0,6896	0,7066	0,7336	0,7256	0,7976	0,8696	0,9416	1,0612	1,3242	1,9132	2,8282	3,8938	5,1348	7,1464	10,104

Tabel 4.26 Model Perhitungan Manual Penjadwalan Pembangkit Metode Dynamic Programming (Lanjutan)

No.	y	bn(y)	5 Unit																													
			300	290	280	270	260	250	240	230	220	210	200	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10	0
	(MW)		MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW
1	0	0,106	1,10436	1,09684	1,08704	1,0736	1,05696	1,03804	1,01636	0,9906	0,96256	0,93224	0,89776	0,8606	0,8276	0,8046	0,7916	0,7886	0,7956	0,8126	0,8396	0,8316	0,9036	0,9756	1,0476	1,1672	1,4302	2,0192	2,9342	3,9998	5,2408	7,2524	10,21
2	10	0,11067	1,10151	1,09171	1,07827	1,06163	1,04271	1,02103	0,99527	0,96723	0,93691	0,90243	0,86527	0,83227	0,80927	0,79627	0,79327	0,80027	0,81727	0,84427	0,83627	0,90827	0,98027	1,05227	1,17187	1,43487	2,02387	2,93887	4,00447	5,24547	7,25707	10,21467	
3	20	0,11528	1,09632	1,08288	1,06624	1,04732	1,02564	0,99988	0,97184	0,94152	0,90704	0,86988	0,83688	0,81388	0,80088	0,79788	0,80488	0,82188	0,84888	0,84088	0,91288	0,98488	1,05688	1,17648	1,43948	2,02848	2,94348	4,00908	5,25008	7,26168	10,21928		
4	30	0,11983	1,08743	1,07079	1,05187	1,03019	1,00443	0,97639	0,94607	0,91159	0,87443	0,84143	0,81843	0,80543	0,80243	0,80943	0,82643	0,85343	0,84543	0,91743	0,98943	1,06143	1,18103	1,44403	2,03303	2,94803	4,01363	5,25463	7,26623	10,22383			
5	40	0,12432	1,07528	1,05636	1,03468	1,00892	0,98088	0,95056	0,91608	0,87892	0,84592	0,82292	0,80992	0,80692	0,81392	0,83092	0,85792	0,84992	0,92192	0,99392	1,06592	1,18552	1,44852	2,03752	2,95252	4,01812	5,25912	7,27072	10,22832				
6	50	0,12875	1,06079	1,03911	1,01335	0,98531	0,95499	0,92051	0,88335	0,85035	0,82735	0,81435	0,81135	0,81835	0,83535	0,86235	0,85435	0,92635	0,99835	1,07035	1,18995	1,45295	2,04195	2,95695	4,02255	5,26355	7,27515	10,23275					
7	60	0,13312	1,04348	1,01772	0,98968	0,95936	0,92488	0,88772	0,85472	0,83172	0,81872	0,81572	0,82272	0,83972	0,86672	0,85872	0,93072	1,00272	1,07472	1,19432	1,45732	2,04632	2,96132	4,02692	5,26792	7,27952	10,23712						
8	70	0,13743	1,02203	0,99399	0,96367	0,92919	0,89203	0,85903	0,83603	0,82303	0,82003	0,82703	0,84403	0,87103	0,86303	0,93503	1,00703	1,07903	1,19863	1,46163	2,05063	2,96563	4,03123	5,27223	7,28383	10,24143							
9	80	0,14168	0,99824	0,96792	0,93344	0,89628	0,86328	0,84028	0,82728	0,82428	0,83128	0,84828	0,87528	0,86728	0,93928	1,01128	1,08328	1,20288	1,46588	2,05488	2,96988	4,03548	5,27648	7,28808	10,24568								
10	90	0,14587	0,97211	0,93763	0,90047	0,86747	0,84447	0,83147	0,82847	0,83547	0,85247	0,87947	0,87147	0,94347	1,01547	1,08747	1,20707	1,47007	2,05907	2,97407	4,03967	5,28067	7,29227	10,24987									
11	100	0,15	0,94176	0,9046	0,8716	0,8486	0,8356	0,8326	0,8396	0,8566	0,8836	0,8756	0,9476	1,0196	1,0916	1,2112	1,4742	2,0632	2,9782	4,0438	5,2848	7,2964	10,254										
12	110	0,15407	0,90867	0,87567	0,85267	0,83967	0,83667	0,84367	0,86067	0,88767	0,87967	0,95167	1,02367	1,09567	1,21527	1,47827	2,06727	2,98227	4,04787	5,28887	7,30047	10,25807											
13	120	0,15808	0,87968	0,85668	0,84368	0,84068	0,84768	0,86468	0,89168	0,88368	0,95568	1,02768	1,09968	1,21928	1,48228	2,07128	2,98628	4,05188	5,29288	7,30448	10,26208												
14	130	0,16203	0,86063	0,84763	0,84463	0,85163	0,86863	0,89563	0,88763	0,95963	1,03163	1,10363	1,22323	1,48623	2,07523	2,99023	4,05583	5,29683	7,30843	10,26603													
15	140	0,16592	0,85152	0,84852	0,85552	0,87252	0,89952	0,89152	0,96352	1,03552	1,10752	1,22712	1,49012	2,07912	2,99412	4,05972	5,30072	7,31232	10,26992														
16	150	0,16975	0,85235	0,85935	0,87635	0,90335	0,89535	0,96735	1,03935	1,11135	1,23095	1,49395	2,08295	2,99795	4,06355	5,30455	7,31615	10,27375															
17	160	0,17352	0,86312	0,88012	0,90712	0,89912	0,97112	1,04312	1,11512	1,23472	1,49772	2,08672	3,00172	4,06732	5,30832	7,31992	10,27752																
18	170	0,17723	0,88383	0,91083	0,90283	0,97483	1,04683	1,11883	1,23843	1,50143	2,09043	3,00543	4,07103	5,31203	7,32363	10,28123																	
19	180	0,18088	0,90248	0,87948	0,86648	0,86348	0,87048	0,88748	0,91448	0,90648	0,97848	1,05048	1,12248	1,24208	1,50508																		
20	190	0,18447	0,91007	0,98207	1,05407	1,12607	1,24567	1,50867	2,09767	3,01267	4,07827	5,31927	7,33087	10,28847																			
21	200	0,188	0,9856	1,0576	1,1296	1,2492	1,5122	2,1012	3,0162	4,0818	5,3228	7,3344	10,292																				
22	210	0,19147	1,06107	1,13307	1,25267	1,51567	2,10467	3,01967	4,08527	5,32627	7,33787	10,29547																					
23	220	0,19488	1,13648	1,25608	1,51908	2,10808	3,02308	4,08868	5,32968	7,34128	10,29888																						
24	230	0,19823	1,25943	1,52243	2,11143	3,02643	4,09203	5,33303	7,34463	10,30223																							
25	240	0,20152	1,52572	2,11472	3,02972	4,09532	5,33632	7,34792	10,30552																								
26	250	0,20475	2,11795	3,03295	4,09855	5,33955	7,35115	10,30875																									
27	260	0,20792	3,03612	4,10172	5,34272	7,35432	10,31192																										
28	270	0,21103	4,10483	5,34583	7,35743	10,31503																											
29	280	0,21408	5,34888	7,36048	10,31808																												
30	290	0,21707	7,36347	10,32107																													
31	300	0,22	10,324																														
Biaya Minimum			0,85152	0,84763	0,84368	0,83967	0,8356	0,83147	0,82728	0,82303	0,81872	0,81435	0,80992	0,80543	0,80088	0,79627	0,7916	0,7886	0,7956	0,8126	0,83627	0,8316	0,9036	0,9756	1,0476	1,1672	1,4302	2,0192	2,9342	3,9998	5,2408	7,2524	10,21

Tabel 4.26 Model Perhitungan Manual Penjadwalan Pembangkit Metode Dynamic Programming (Lanjutan)

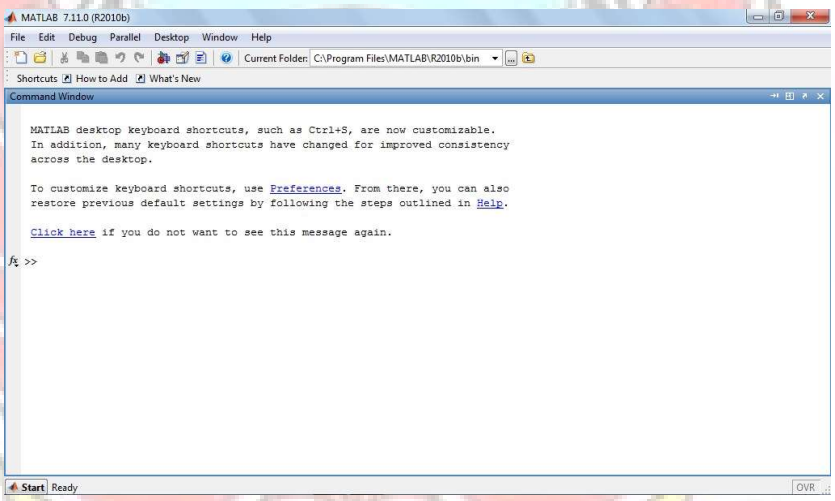
No.	y	bn(y)	6 Unit																													
			300	290	280	270	260	250	240	230	220	210	200	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10	0
	(MW)		MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW
1	0	0,107	0,95852	0,95463	0,95068	0,94667	0,9426	0,93847	0,93428	0,93003	0,92572	0,92135	0,91692	0,91243	0,90788	0,90327	0,8986	0,8956	0,9026	0,9196	0,94327	0,9386	1,0106	1,0826	1,1546	1,2742	1,5372	2,1262	3,0412	4,1068	5,3478	7,3594	10,317
2	10	0,10637	0,954	0,95005	0,94604	0,94197	0,93784	0,93365	0,9294	0,92509	0,92072	0,91629	0,9118	0,90725	0,90264	0,89797	0,89497	0,90197	0,91897	0,94264	0,93797	1,00997	1,08197	1,15397	1,27357	1,53657	2,12557	3,04057	4,10617	5,34717	7,35877	10,31637	
3	20	0,10628	0,94996	0,94595	0,94188	0,93775	0,93356	0,92931	0,925	0,92063	0,9162	0,91171	0,90716	0,90255	0,89788	0,89488	0,90188	0,91888	0,94255	0,93788	1,00988	1,08188	1,15388	1,27348	1,53648	2,12548	3,04048	4,10608	5,34708	7,35868	10,31628		
4	30	0,10673	0,9464	0,94233	0,9382	0,93401	0,92976	0,92545	0,92108	0,91665	0,91216	0,90761	0,903	0,89833	0,89533	0,90233	0,91933	0,943	0,93833	1,01033	1,08233	1,15433	1,27393	1,53693	2,12593	3,04093	4,10653	5,34753	7,35913	10,31673			
5	40	0,10772	0,94332	0,93919	0,935	0,93075	0,92644	0,92207	0,91764	0,91315	0,9086	0,90399	0,89932	0,89632	0,90332	0,92032	0,94399	0,93932	1,01132	1,08332	1,15532	1,27492	1,53792	2,12692	3,04192	4,10752	5,34852	7,36012	10,31772				
6	50	0,10925	0,94072	0,93653	0,93228	0,92797	0,9236	0,91917	0,91468	0,91013	0,90552	0,90085	0,89785	0,90485	0,92185	0,94552	0,94085	1,01285	1,08485	1,15685	1,27645	1,53945	2,12845	3,04345	4,10905	5,35005	7,36165	10,31925					
7	60	0,11132	0,9386	0,93435	0,93004	0,92567	0,92124	0,91675	0,9122	0,90759	0,90292	0,89992	0,90692	0,92392	0,94759	0,94292	1,01492	1,08692	1,15892	1,27852	1,54152	2,13052	3,04552	4,11112	5,35212	7,36372	10,32132						
8	70	0,11393	0,93696	0,93265	0,92828	0,92385	0,91936	0,91481	0,9102	0,90553	0,90253	0,90953	0,92653	0,9502	0,94553	1,01753	1,08953	1,16153	1,28113	1,54413	2,13313	3,04813	4,11373	5,35473	7,36633	10,32393							
9	80	0,11708	0,9358	0,93143	0,927	0,92251	0,91796	0,91335	0,90868	0,90568	0,91268	0,92968	0,95335	0,94868	1,02068	1,09268	1,16468	1,28428	1,54728	2,13628	3,05128	4,11688	5,35788	7,36948	10,32708								
10	90	0,12077	0,93512	0,93069	0,9262	0,92165	0,91704	0,91237	0,90937	0,91637	0,93337	0,95704	0,95237	1,02437	1,09637	1,16837	1,28797	1,55097	2,13997	3,05497	4,12057	5,36157	7,37317	10,33077									
11	100	0,125	0,93492	0,93043	0,92588	0,92127	0,9166	0,9136	0,9206	0,9376	0,96127	0,9566	1,0286	1,1006	1,1726	1,2922	1,5552	2,1442	3,0592	4,1248	5,3658	7,3774	10,335										
12	110	0,12977	0,9352	0,93065	0,92604	0,92137	0,91837	0,92537	0,94237	0,96604	0,96137	1,03337	1,10537	1,17737	1,29697	1,55997	2,14897	3,06397	4,12957	5,37057	7,38217	10,33977											
13	120	0,13508	0,93596	0,93135	0,92668	0,92368	0,93068	0,94768	0,97135	0,96668	1,03868	1,11068	1,18268	1,30228	1,56528	2,15428	3,06928	4,13488	5,37588	7,38748	10,34508												
14	130	0,14093	0,9372	0,93253	0,92953	0,93653	0,95353	0,9772	0,97253	1,04453	1,11653	1,18853	1,30813	1,57113	2,16013	3,07513	4,14073	5,38173	7,39333	10,35093													
15	140	0,14732	0,93892	0,93592	0,94292	0,95992	0,98359	0,97892	1,05092	1,12292	1,19492	1,31452	1,57752	2,16652	3,08152	4,14712	5,38812	7,39972	10,35732														
16	150	0,15425	0,94285	0,94985	0,96685	0,99052	0,98585	1,05785	1,12985	1,20185	1,32145	1,58445	2,17345	3,08845	4,15405	5,39505	7,40665	10,36425															
17	160	0,16172	0,95732	0,97432	0,99799	0,99332	1,06532	1,13732	1,20932	1,32892	1,59192	2,18092	3,09592	4,16152	5,40252	7,41412	10,37172																
18	170	0,16973	0,98233	1,006	1,00133	1,07333	1,14533	1,21733	1,33693	1,59993	2,18893	3,10393	4,16953	5,41053	7,42213	10,37973																	
19	180	0,17828	0,97916	0,97455	0,96988	0,96688	0,97388	0,99088	1,01455	1,00988	1,08188	1,15388	1,22588	1,34548	1,60848																		
20	190	0,18737	1,01897	1,09097	1,16297	1,23497	1,35457	1,61757	2,20657	3,12157	4,18717	5,42817	7,43977	10,39737																			
21	200	0,197	1,1006	1,1726	1,2446	1,3642	1,6272	2,2162	3,1312	4,1968	5,4378	7,4494	10,407																				
22	210	0,20717	1,18277	1,25477	1,37437	1,63737	2,22637	3,14137	4,20697	5,44797	7,45957	10,41717																					
23	220	0,21788	1,26548	1,38508	1,64808	2,23708	3,15208	4,21768	5,45868	7,47028	10,42788																						
24	230	0,22913	1,39633	1,65933	2,24833	3,16333	4,22893	5,46993	7,48153	10,43913																							
25	240	0,24092	1,67112	2,26012	3,17512	4,24072	5,48172	7,49332	10,45092																								
26	250	0,25325	2,27245	3,18745	4,25305	5,49405	7,50565	10,46325																									
27	260	0,26612	3,20032	4,26592	5,50692	7,51852	10,47612																										
28	270	0,27953	4,27933	5,52033	7,53193	10,48953																											
29	280	0,29348	5,53428	7,54588	10,50348																												
30	290	0,30797	7,56037	10,51797																													
31	300	0,323	10,533																														
Biaya Minimum			0,93492	0,93043	0,92588	0,92127	0,9166	0,91237	0,90868	0,90553	0,90253	0,89992	0,89785	0,89632	0,89533	0,89488	0,89497	0,8956	0,9026	0,9196	0,93797	0,9386	1,0106	1,0826	1,1546	1,2742	1,5372	2,1262	3,0412	4,1068	5,3478	7,3594	10,317

Dari beberapa skenario diatas, maka diperoleh P1 = 40 MW, P2 = 40 MW, P3 = 80 MW, P4 = 0 MW, P5 = 40 MW, P6 = 100 MW dengan biaya minimum sebesar 0,9349 x 10^8 Rp/h.

4.2.1.2 Perhitungan Menggunakan Matlab

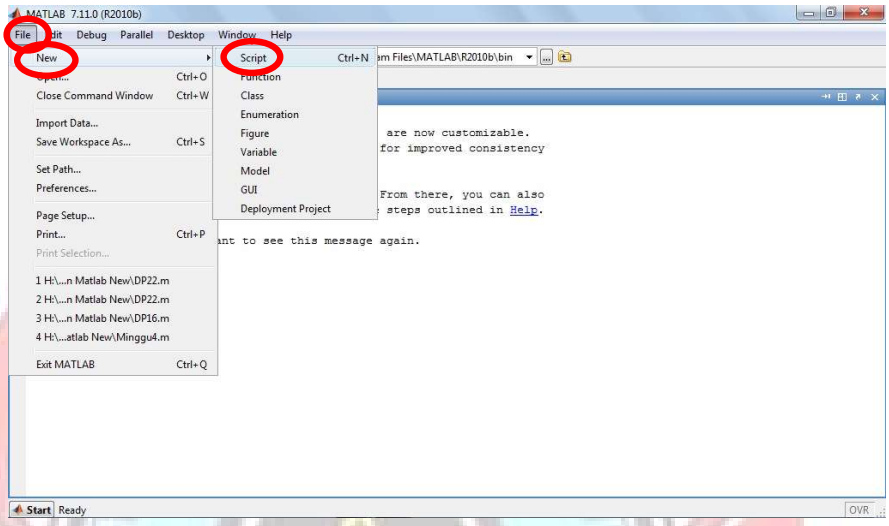
Adapun Langkah penjadwalan pengoperasian pembangkit harian dengan menggunakan Matlab 7.11.0.584 (R2010b) sebagai berikut:

1) Buka aplikasi Matlab 7.11.0.584 (R2010b), sehingga muncul halaman kerja matlab seperti pada gambar dibawah ini.



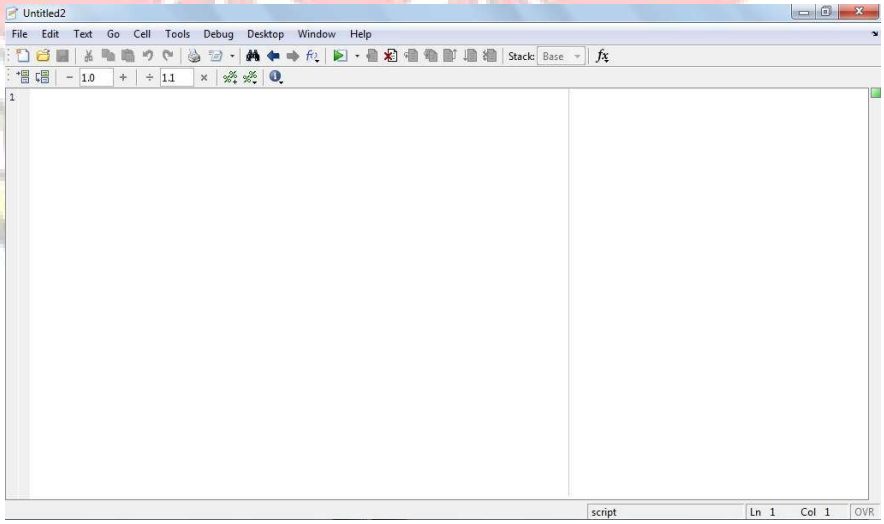
Gambar 4.11 Lembaran Kerja Matlab 7.11.0.584 (R2010b)

2) Pada saat muncul halaman kerja pada gambar di atas, pilih File – New – Scipt, seperti Gambar 4.12.



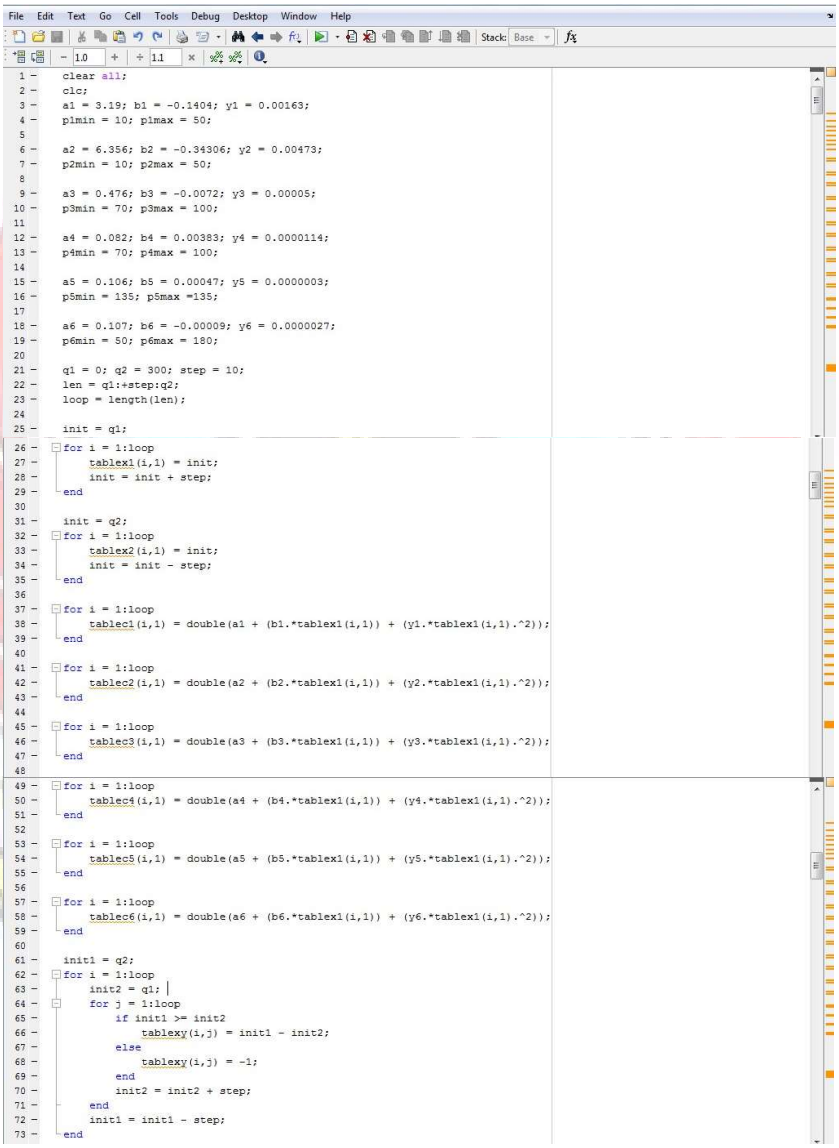
Gambar 4.12 Cara Memulai Program Matlab 7.11.0.584 (R2010b)

3) Maka akan muncul lembaran kerja baru, sebagai berikut:



Gambar 4.13 Lembaran Kerja Baru Matlab

4) Membuat program perhitungan penjadwalan dengan persamaan (2.22) menggunakan karakteristik input-output harian untuk setiap unit-unit pembangkit yang akan dijadwalkan.



```
clear all;
clc;
a1 = 3.19; b1 = -0.1404; y1 = 0.00163;
p1min = 10; p1max = 50;

a2 = 6.356; b2 = -0.34306; y2 = 0.00473;
p2min = 10; p2max = 50;

a3 = 0.476; b3 = -0.0072; y3 = 0.00005;
p3min = 70; p3max = 100;

a4 = 0.082; b4 = 0.00383; y4 = 0.0000114;
p4min = 70; p4max = 100;

a5 = 0.106; b5 = 0.00047; y5 = 0.0000003;
p5min = 135; p5max =135;

a6 = 0.107; b6 = -0.00009; y6 = 0.0000027;
p6min = 50; p6max = 180;

q1 = 0; q2 = 300; step = 10;
len = q1:+step:q2;
loop = length(len);

init = q1;
for i = 1:loop
    tablex1(i,1) = init;
    init = init + step;
end

init = q2;
for i = 1:loop
    tablex2(i,1) = init;
    init = init - step;
end

for i = 1:loop
    tablec1(i,1) = double(a1 + (b1.*tablex1(i,1)) + (y1.*tablex1(i,1).^2));
end

for i = 1:loop
    tablec2(i,1) = double(a2 + (b2.*tablex1(i,1)) + (y2.*tablex1(i,1).^2));
end

for i = 1:loop
    tablec3(i,1) = double(a3 + (b3.*tablex1(i,1)) + (y3.*tablex1(i,1).^2));
end

for i = 1:loop
    tablec4(i,1) = double(a4 + (b4.*tablex1(i,1)) + (y4.*tablex1(i,1).^2));
end

for i = 1:loop
    tablec5(i,1) = double(a5 + (b5.*tablex1(i,1)) + (y5.*tablex1(i,1).^2));
end

for i = 1:loop
    tablec6(i,1) = double(a6 + (b6.*tablex1(i,1)) + (y6.*tablex1(i,1).^2));
end

init1 = q2;
for i = 1:loop
    init2 = q1;
    for j = 1:loop
        if init1 >= init2
            tablexy(i,j) = init1 - init2;
        else
            tablexy(i,j) = -1;
        end
        init2 = init2 + step;
    end
    init1 = init1 - step;
end
```

Gambar 4.14 Tampilan Program Perhitungan Penjadwalan Unit-Unit Pembangkit

```
end

for i = 1:loop
    for j = 1:loop
        if tablexy(i,j) >= 0
            tableb2(i,j) = double(tablec2(i,1) + a1 + b1.*tablexy(i,j) + (y1.*tablexy(i,j).^2));
        else
            tableb2(i,j) = 0;
        end
    end
end

for i = 1:loop
    if find(tableb2(:,i)) ~= 0
        tableminb2(i,1) = min(tableb2(find(tableb2(:,i)),i));
    else
        tableminb2(i,1) = 0;
    end
end

for i = 1:loop
    last = i;
    for j = 1:loop
        if(j >= last)
            if (j > 1)
                k = j - (last-1);
                tableb3(i,k) = double(tablec3(i,1) + tableminb2(j,1));
            else
                tableb3(i,j) = double(tablec3(i,1) + tableminb2(j,1));
            end
        end
    end
end

for i = 1:loop
    if find(tableb3(:,i)) ~= 0
        tableminb3(i,1) = min(tableb3(find(tableb3(:,i)),i));
    else
        tableminb3(i,1) = 0;
    end
end

for i = 1:loop
    last = i;
    for j = 1:loop
        if(j >= last)
            if (j > 1)
                k = j - (last-1);
                tableb4(i,k) = double(tablec4(i,1) + tableminb3(j,1));
            else
                tableb4(i,j) = double(tablec4(i,1) + tableminb3(j,1));
            end
        end
    end
end

for i = 1:loop
    if find(tableb4(:,i)) ~= 0
        tableminb4(i,1) = min(tableb4(find(tableb4(:,i)),i));
    else
        tableminb4(i,1) = 0;
    end
end

for i = 1:loop
    last = i;
    for j = 1:loop
```

Gambar 4.14 Tampilan Program Perhitungan Penjadwalan Unit-Unit Pembangkit (Lanjutan)

```
for i = 1:loop
    last = i;
    for j = 1:loop
        if(j >= last)
            if (j > 1)
                k = j - (last-1);
                tableb5(i,k) = double(tablec5(i,1) + tableminb4(j,1));
            else
                tableb5(i,j) = double(tablec5(i,1) + tableminb4(j,1));
            end
        end
    end
end

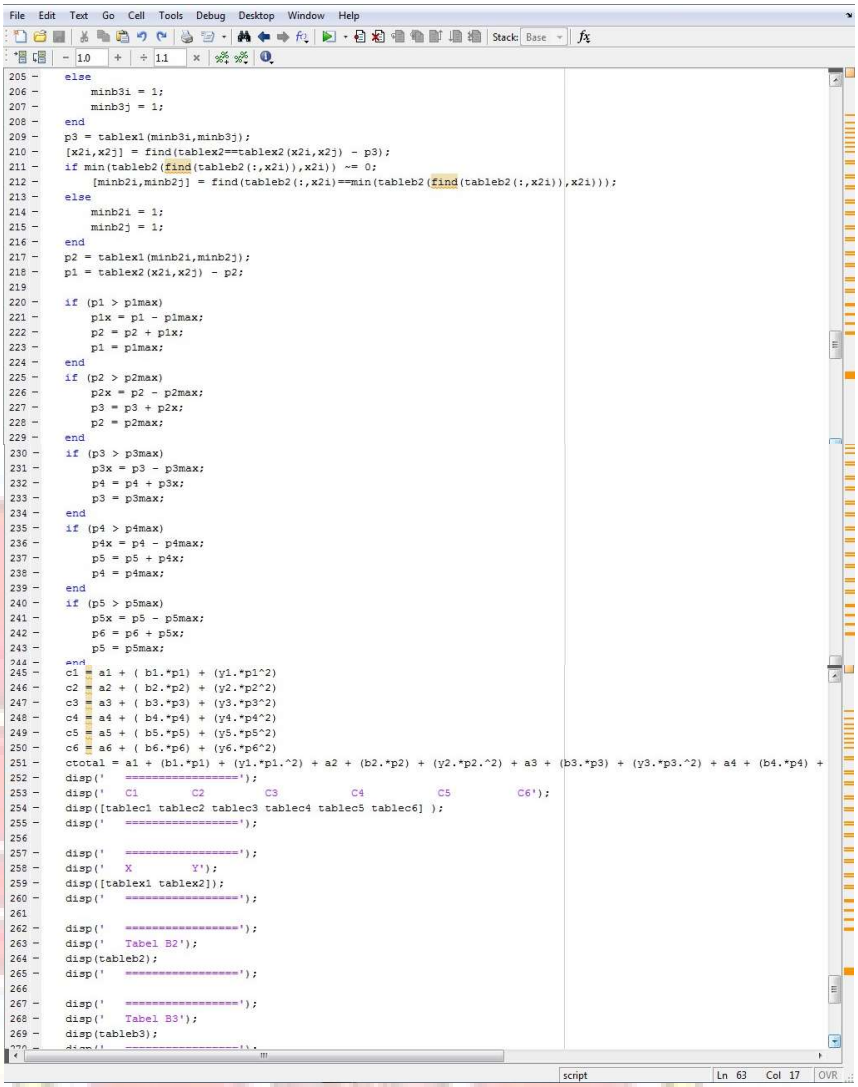
for i = 1:loop
    if find(tableb5(:,i)) ~= 0
        tableminb5(i,1) = min(tableb5(find(tableb5(:,i)),i));
    else
        tableminb5(i,1) = 0;
    end
end

for i = 1:loop
    last = i;
    for j = 1:loop
        if(j >= last)
            if (j > 1)
                k = j - (last-1);
                tableb6(i,k) = double(tablec6(i,1) + tableminb5(j,1));
            else
                tableb6(i,j) = double(tablec6(i,1) + tableminb5(j,1));
            end
        end
    end
end

for i = 1:loop
    if find(tableb6(:,i)) ~= 0
        tableminb6(i,1) = min(tableb6(find(tableb6(:,i)),i));
    else
        tableminb6(i,1) = 0;
    end
end


 [x2i,x2j] = find(tablex2==q2);
 [minb6i,minb6j] = find(tableb6(:,x2i)==min(tableb6(:,x2i)));
 total = min(tableb6(:,x2i));
 p6= tablex1(minb6i,minb6j);
 [x2i,x2j] = find(tablex2==tablex2(x2i,x2j) - p6);
 if min(tableb5(find(tableb5(:,x2i)),x2i)) ~= 0;
     [minb5i,minb5j] = find(tableb5(:,x2i)==min(tableb5(find(tableb5(:,x2i)),x2i)));
 else
     minb5i = 1;
     minb5j = 1;
 end
 p5 = tablex1(minb5i,minb5j);
 [x2i,x2j] = find(tablex2==tablex2(x2i,x2j) - p5);
 if min(tableb4(find(tableb4(:,x2i)),x2i)) ~= 0;
     [minb4i,minb4j] = find(tableb4(:,x2i)==min(tableb4(find(tableb4(:,x2i)),x2i)));
 else
     minb4i = 1;
     minb4j = 1;
 end
 p4 = tablex1(minb4i,minb4j);
 [x2i,x2j] = find(tablex2==tablex2(x2i,x2j) - p4);
 if min(tableb3(find(tableb3(:,x2i)),x2i)) ~= 0;
     [minb3i,minb3j] = find(tableb3(:,x2i)==min(tableb3(find(tableb3(:,x2i)),x2i)));
 else
     minb3i = 1;
```

Gambar 4.14 Tampilan Program Perhitungan Penjadwalan Unit-Unit Pembangkit (Lanjutan)



```
    else
        minb3i = 1;
        minb3j = 1;
    end
    p3 = tablex1(minb3i,minb3j);
    [x2i,x2j] = find(tablex2==tablex2(x2i,x2j) - p3);
    if min(tableb2(find(tableb2(:,x2i)),x2i)) ~= 0;
        [minb2i,minb2j] = find(tableb2(:,x2i)==min(tableb2(find(tableb2(:,x2i)),x2i)));
    else
        minb2i = 1;
        minb2j = 1;
    end
    p2 = tablex1(minb2i,minb2j);
    p1 = tablex2(x2i,x2j) - p2;

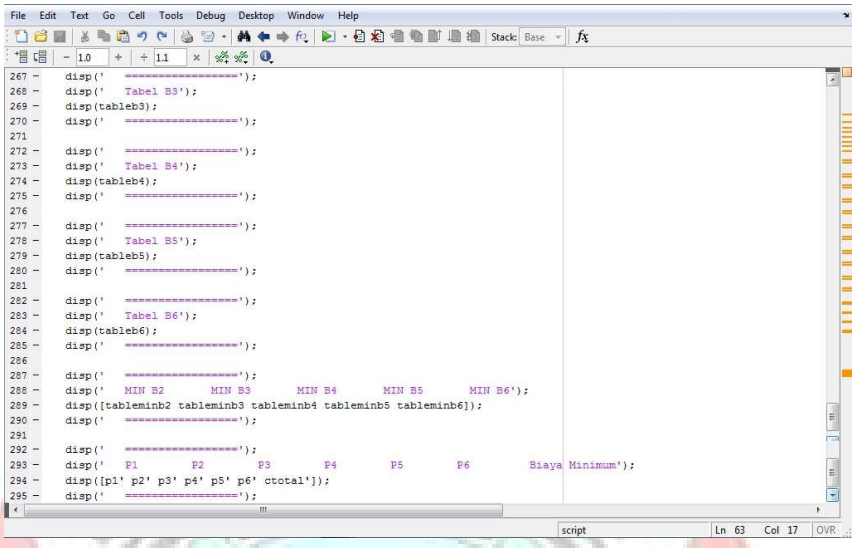
    if (p1 > p1max)
        p1x = p1 - p1max;
        p2 = p2 + p1x;
        p1 = p1max;
    end
    if (p2 > p2max)
        p2x = p2 - p2max;
        p3 = p3 + p2x;
        p2 = p2max;
    end
    if (p3 > p3max)
        p3x = p3 - p3max;
        p4 = p4 + p3x;
        p3 = p3max;
    end
    if (p4 > p4max)
        p4x = p4 - p4max;
        p5 = p5 + p4x;
        p4 = p4max;
    end
    if (p5 > p5max)
        p5x = p5 - p5max;
        p6 = p6 + p5x;
        p5 = p5max;
    end
    c1 = a1 + ( b1.*p1) + (y1.*p1^2)
    c2 = a2 + ( b2.*p2) + (y2.*p2^2)
    c3 = a3 + ( b3.*p3) + (y3.*p3^2)
    c4 = a4 + ( b4.*p4) + (y4.*p4^2)
    c5 = a5 + ( b5.*p5) + (y5.*p5^2)
    c6 = a6 + ( b6.*p6) + (y6.*p6^2)
    ctotal = a1 + (b1.*p1) + (y1.*p1.^2) + a2 + (b2.*p2) + (y2.*p2.^2) + a3 + (b3.*p3) + (y3.*p3.^2) + a4 + (b4.*p4) +
    disp('   ==================');
    disp('   C1          C2          C3          C4          C5          C6');
    disp([tablec1 tablec2 tablec3 tablec4 tablec5 tablec6] );
    disp('   ==================');

    disp('   ==================');
    disp('   X          Y');
    disp([tablex1 tablex2]);
    disp('   ==================');

    disp('   ==================');
    disp('   Tabel B2');
    disp(tableb2);
    disp('   ==================');

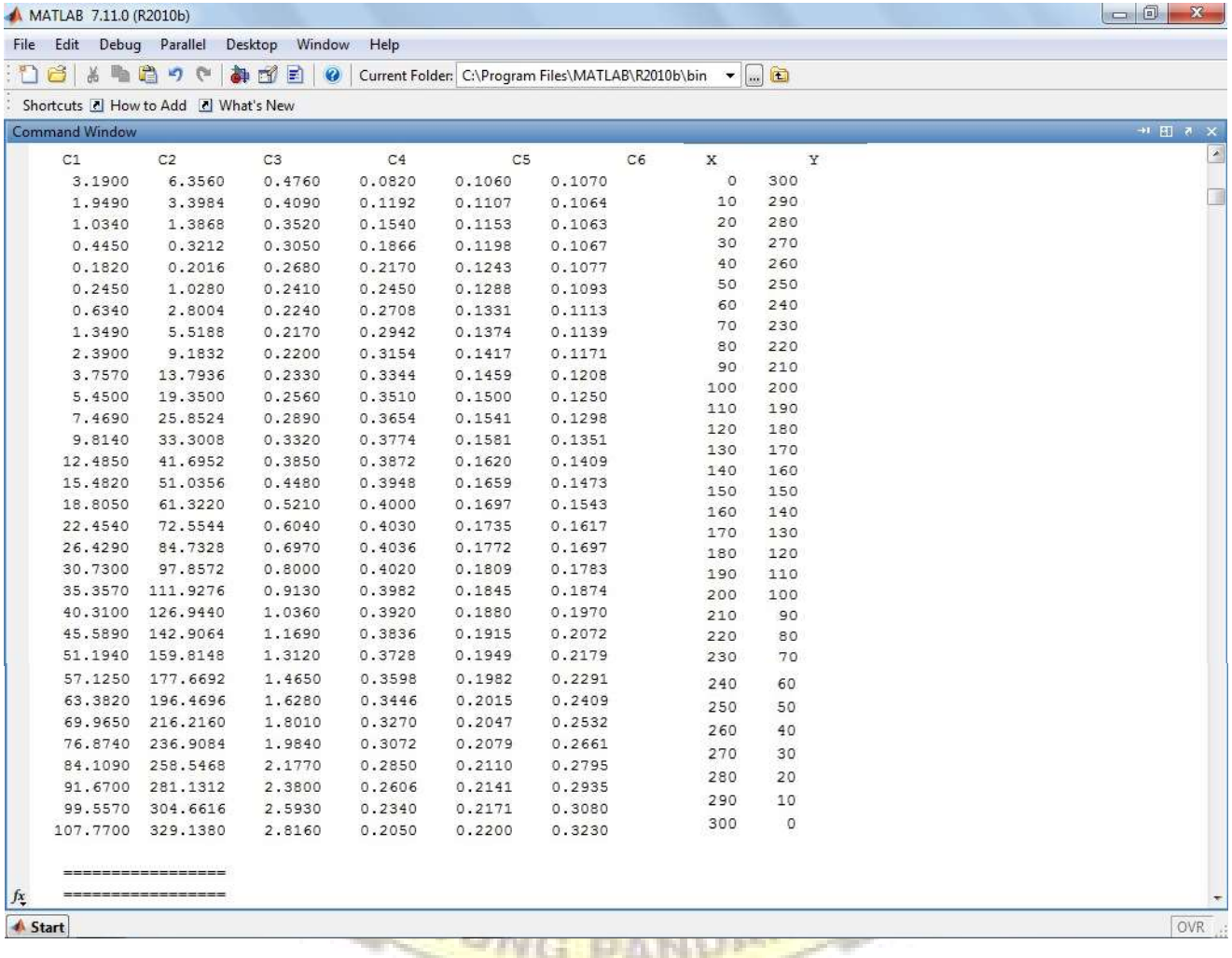
    disp('   ==================');
    disp('   Tabel B3');
    disp(tableb3);
```

Gambar 4.14 Tampilan Program Perhitungan Penjadwalan Unit-Unit Pembangkit (Lanjutan)

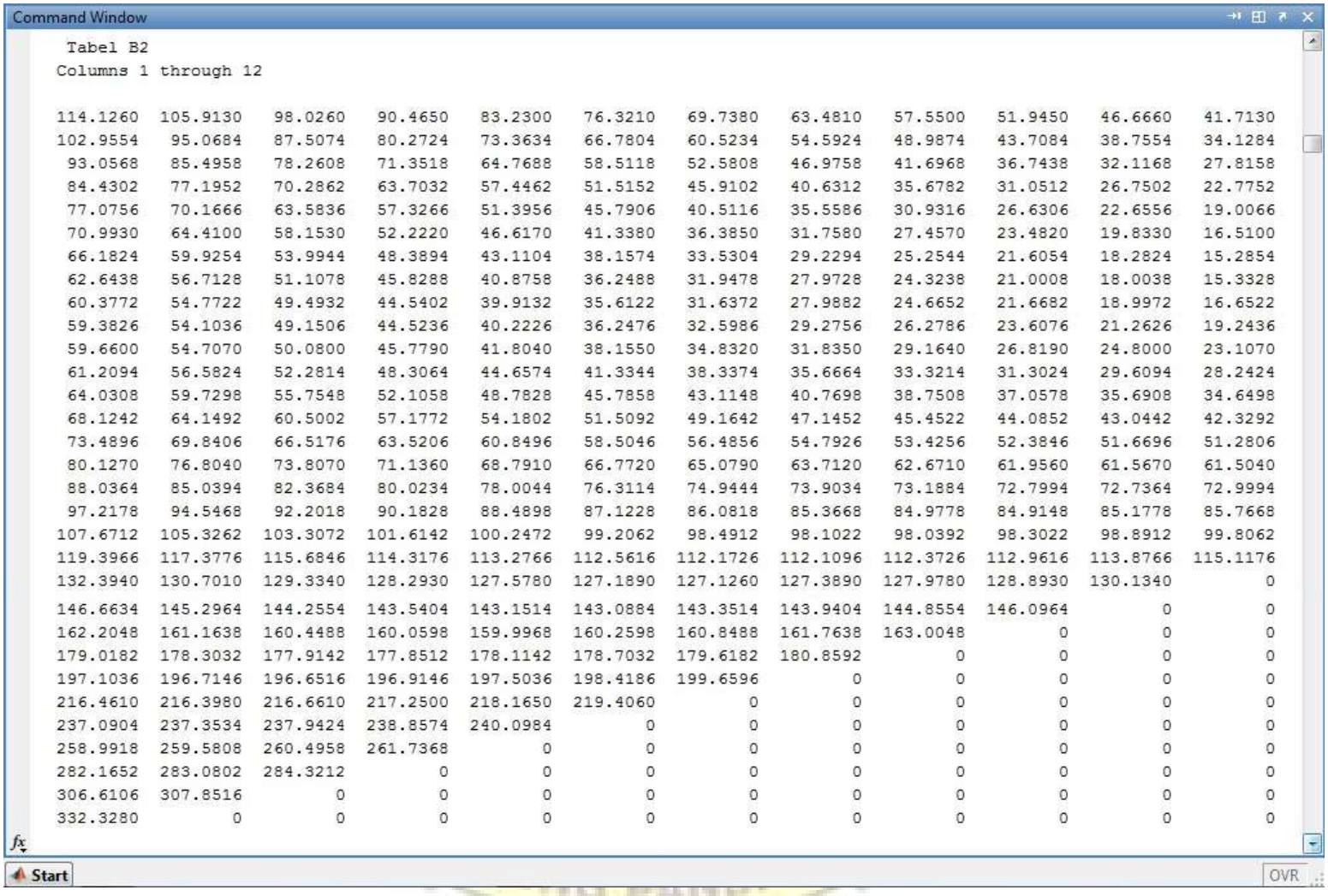


Gambar 4.14 Tampilan Program Perhitungan Penjadwalan Unit-Unit Pembangkit (Lanjutan)

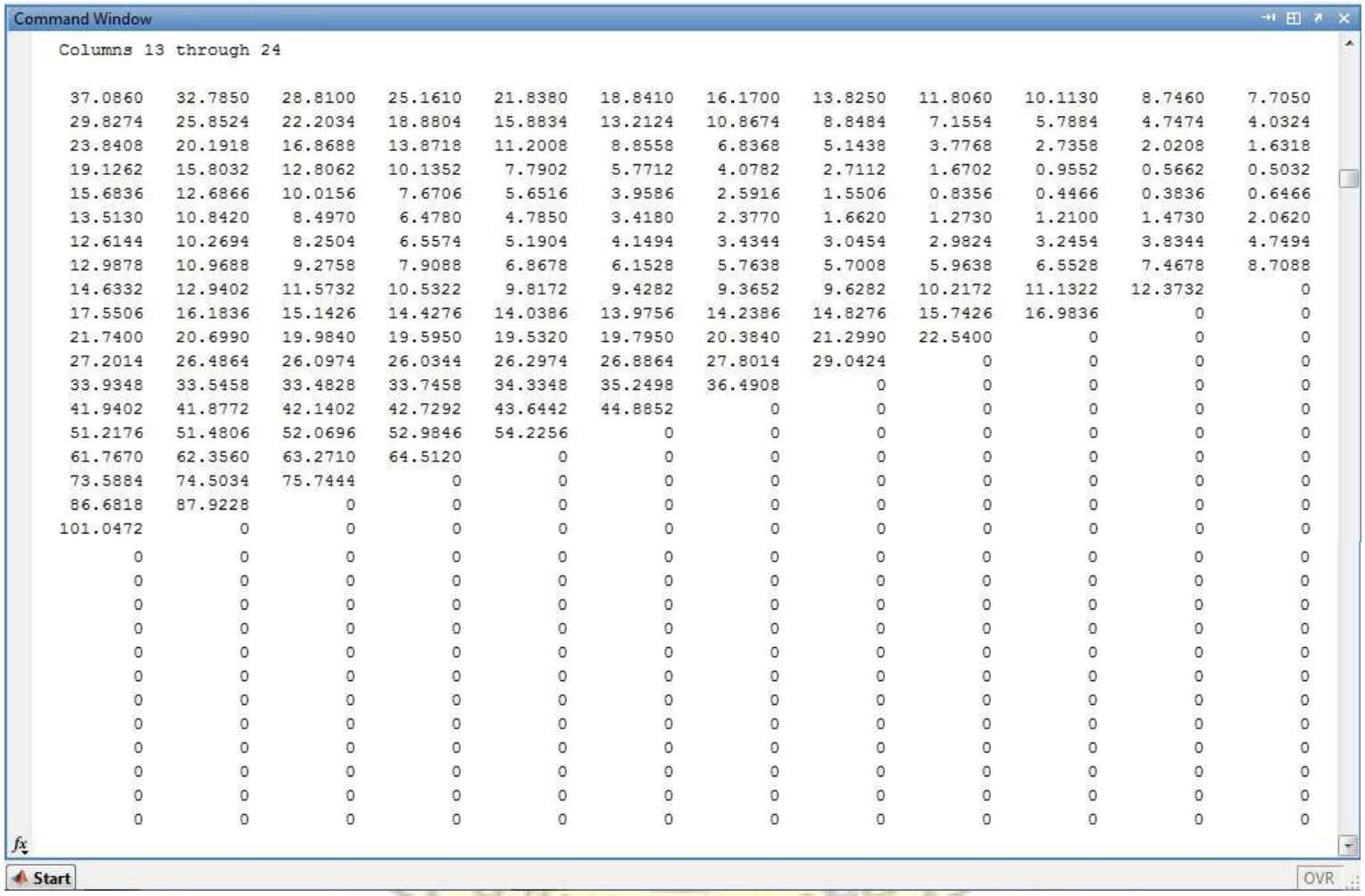
5) Klik Run atau F5 agar hasil akhir program perhitungan penjadwalan pembangkit, sehingga pada lembaran kerja baru (*Command Window*) akan di tampilkan hasil akhir program tersebut, seperti dibawah ini:



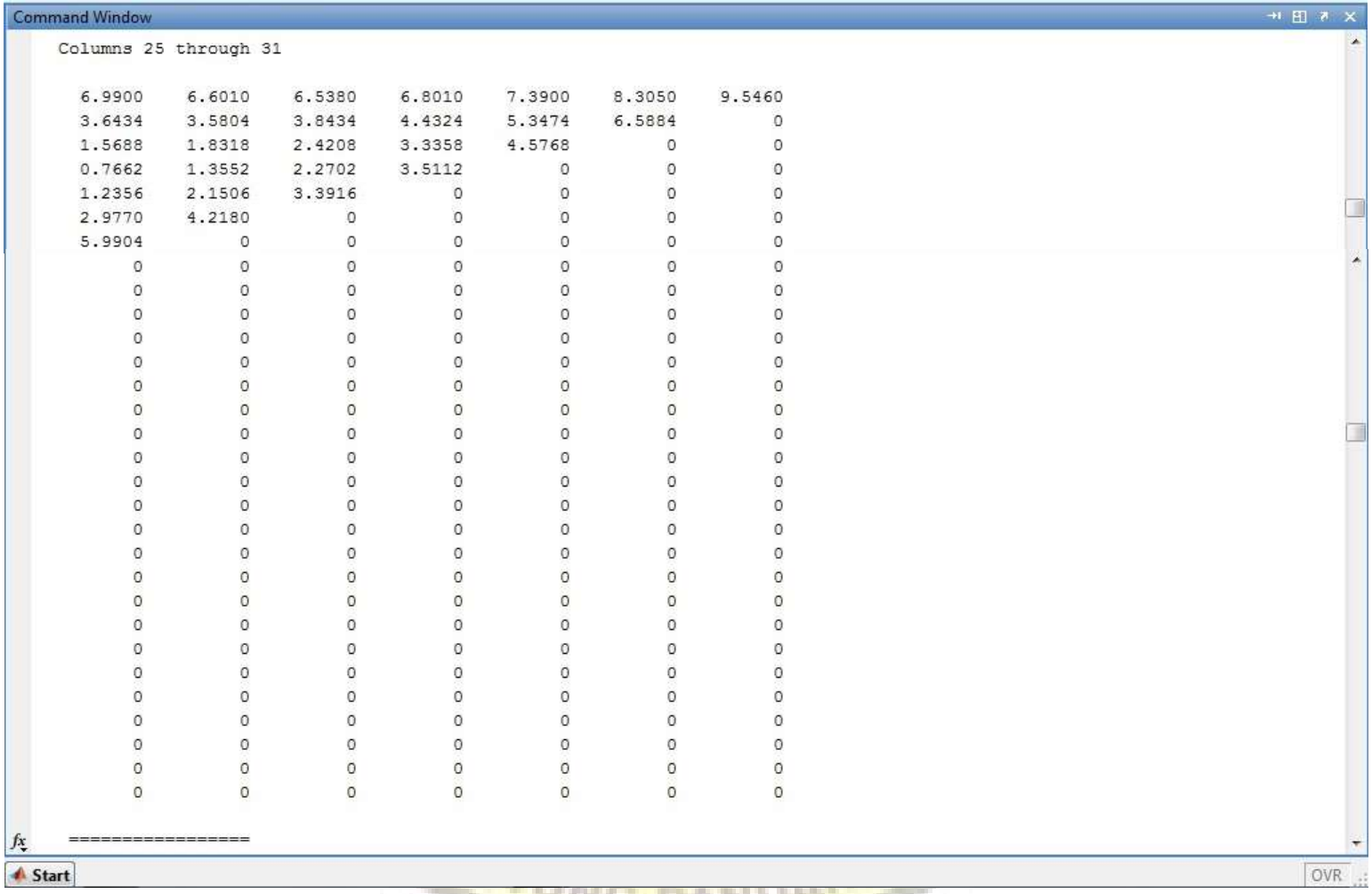
Gambar 4.15 Hasil Akhir Penjadwalan Pembangkit



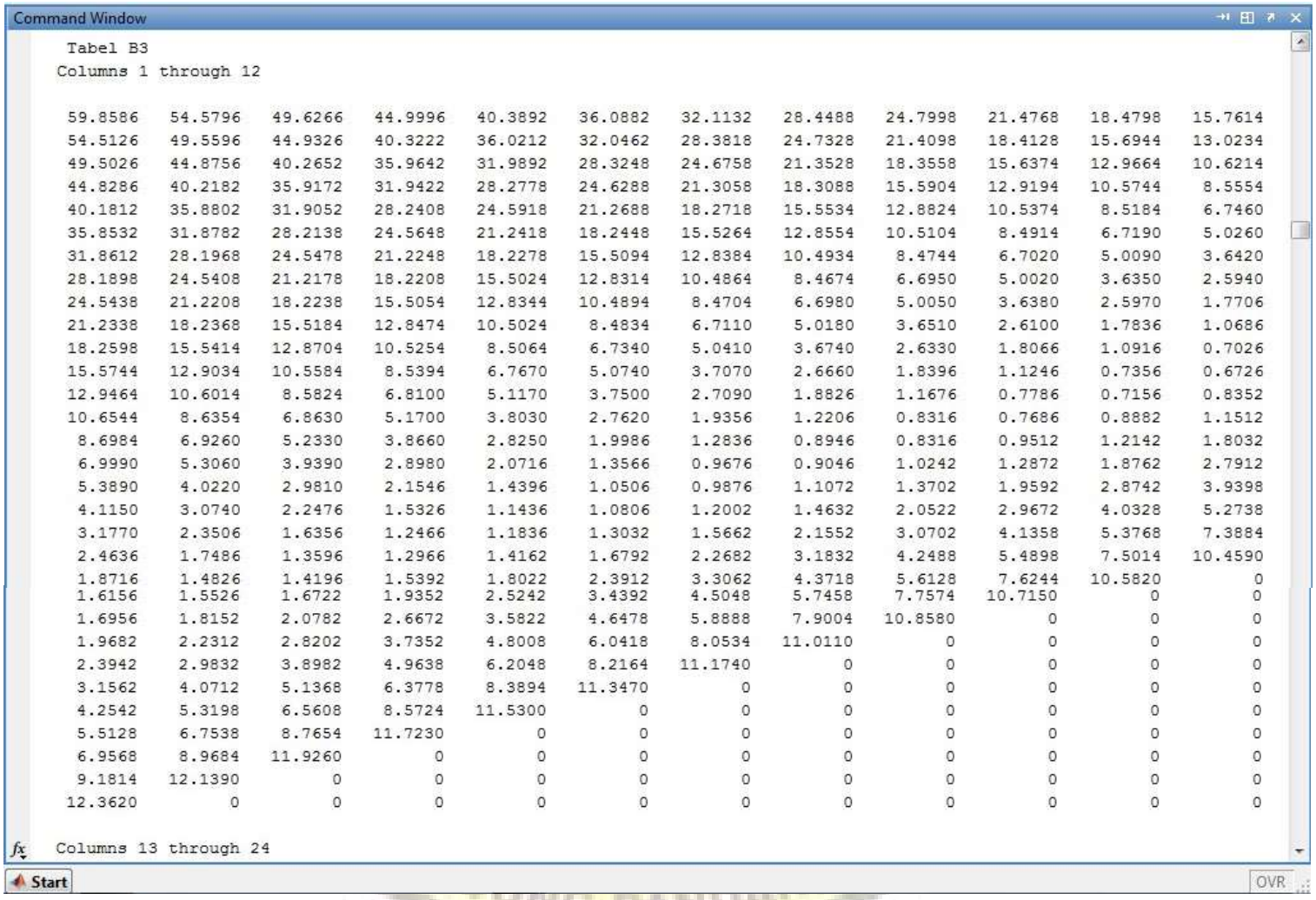
Gambar 4.15 Hasil Akhir Penjadwalan Pembangkit (Lanjutan)



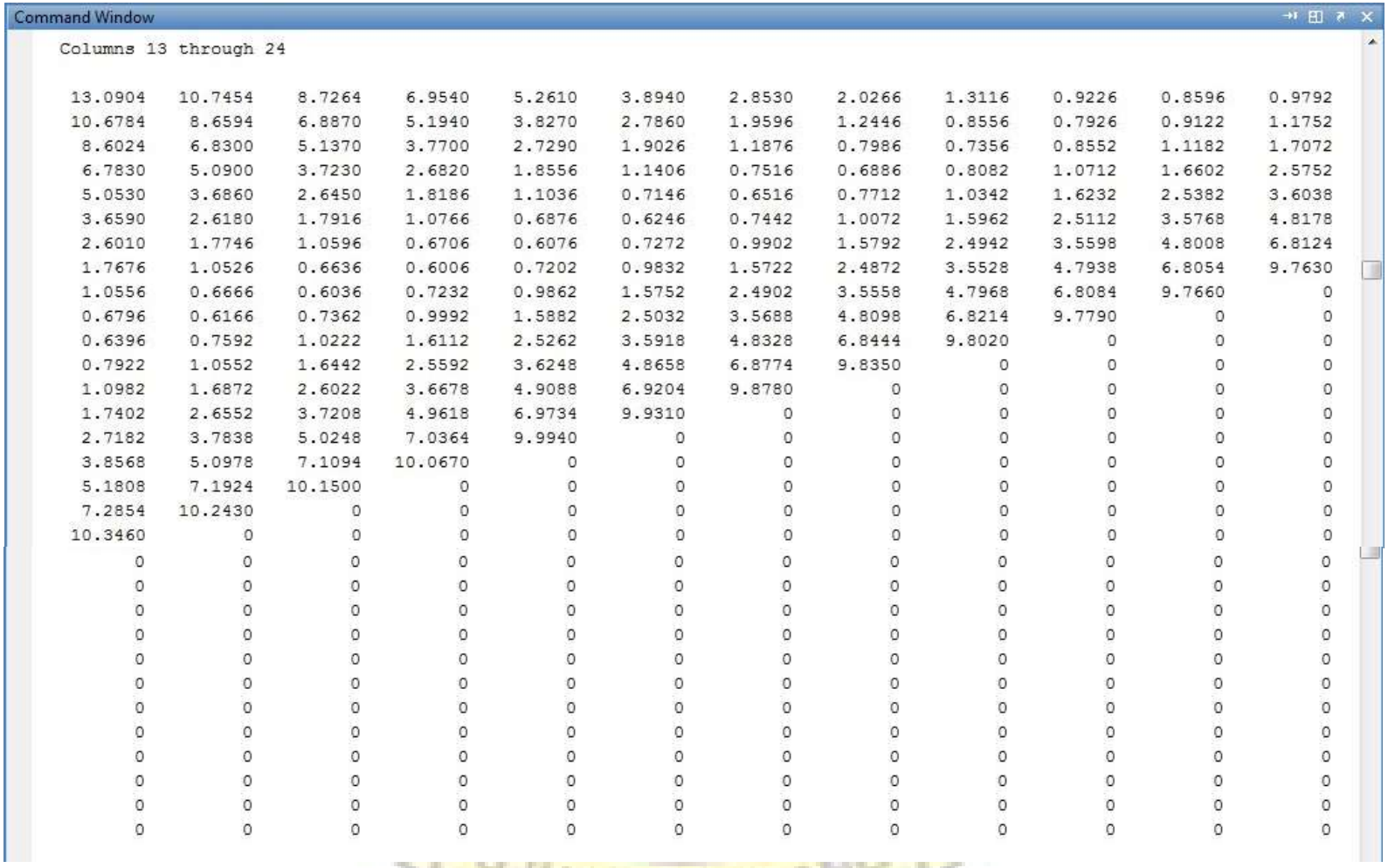
Gambar 4.15 Hasil Akhir Penjadwalan Pembangkit (Lanjutan)



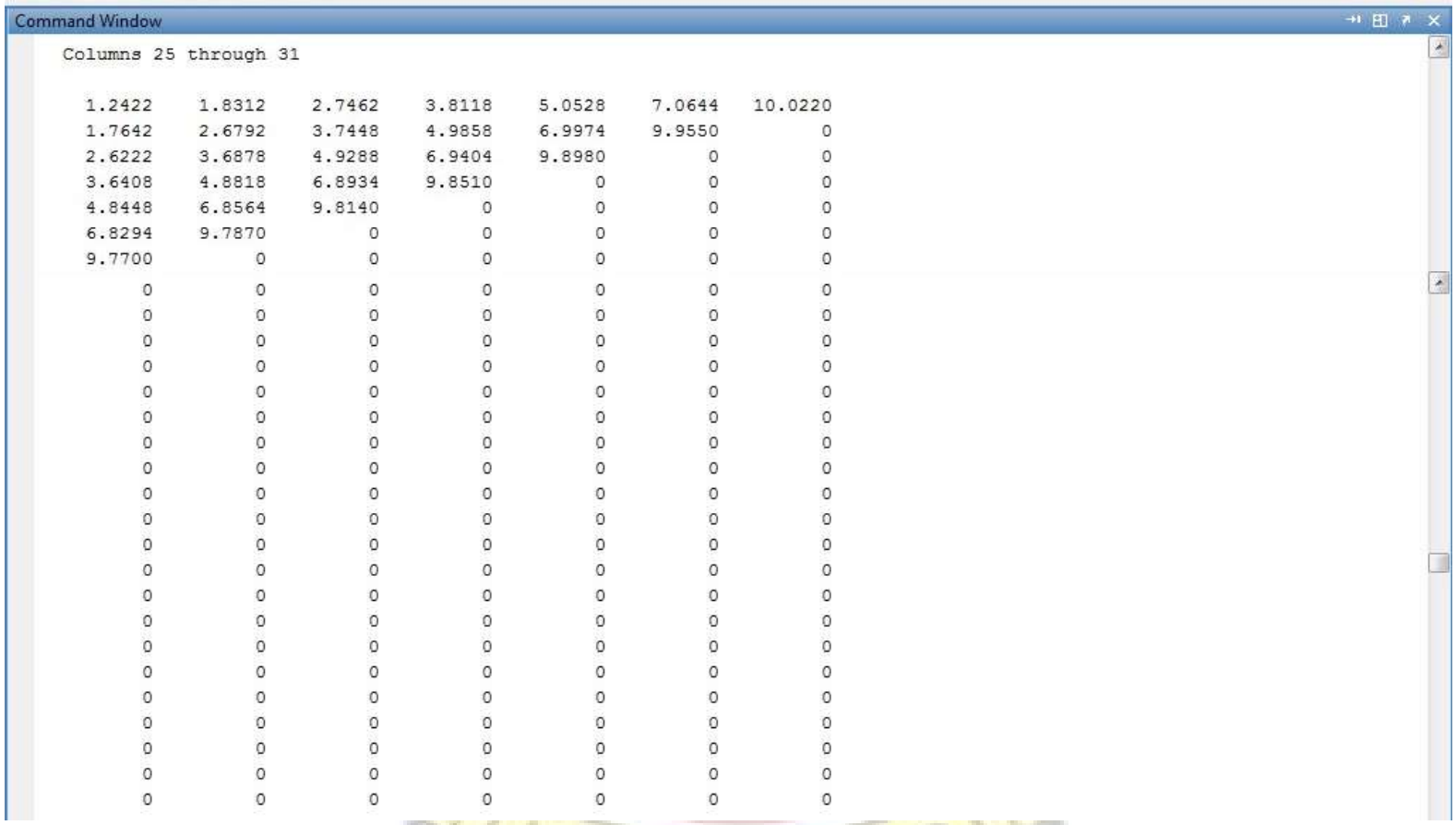
Gambar 4.15 Hasil Akhir Penjadwalan Pembangkit (Lanjutan)



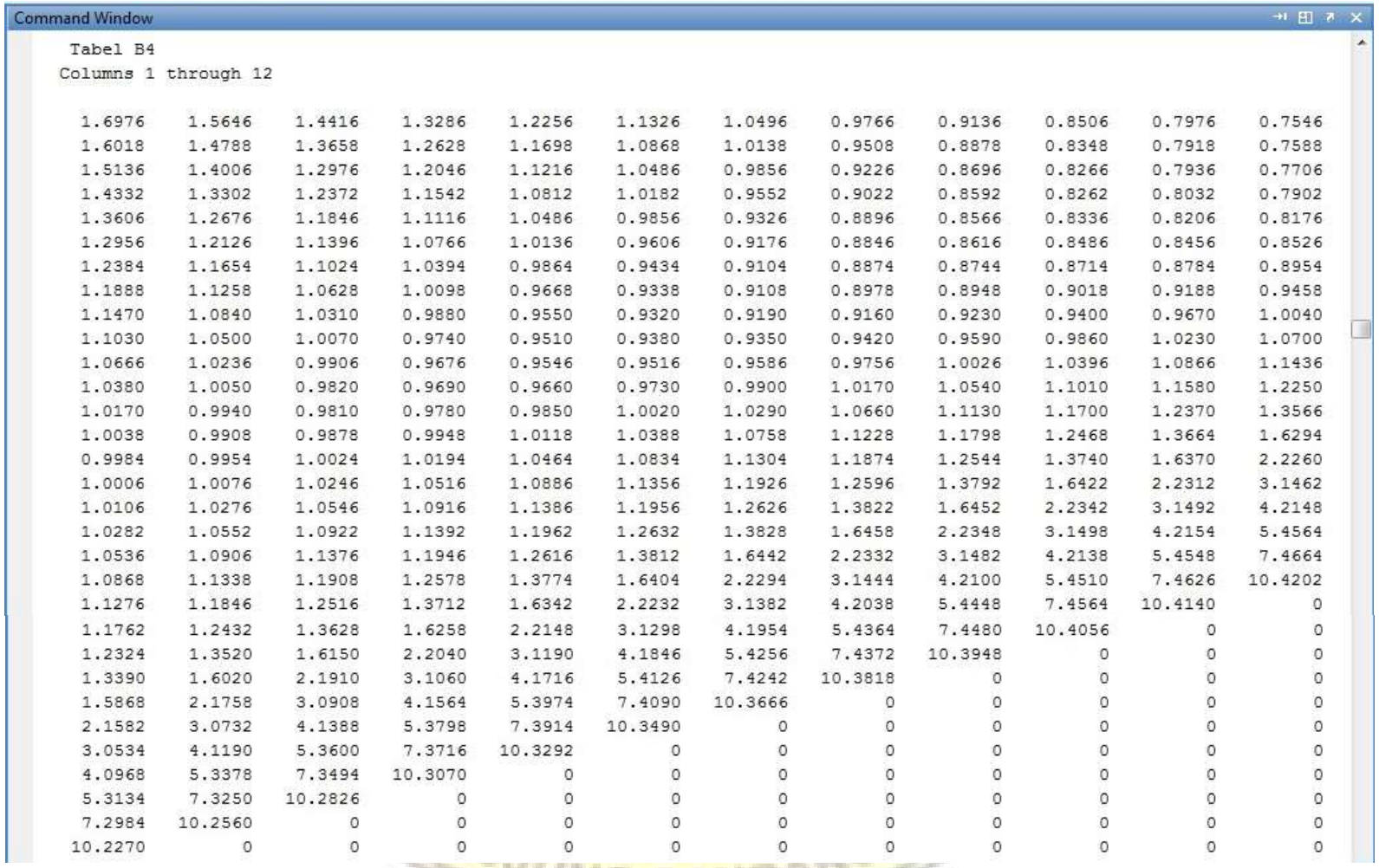
Gambar 4.15 Hasil Akhir Penjadwalan Pembangkit (Lanjutan)



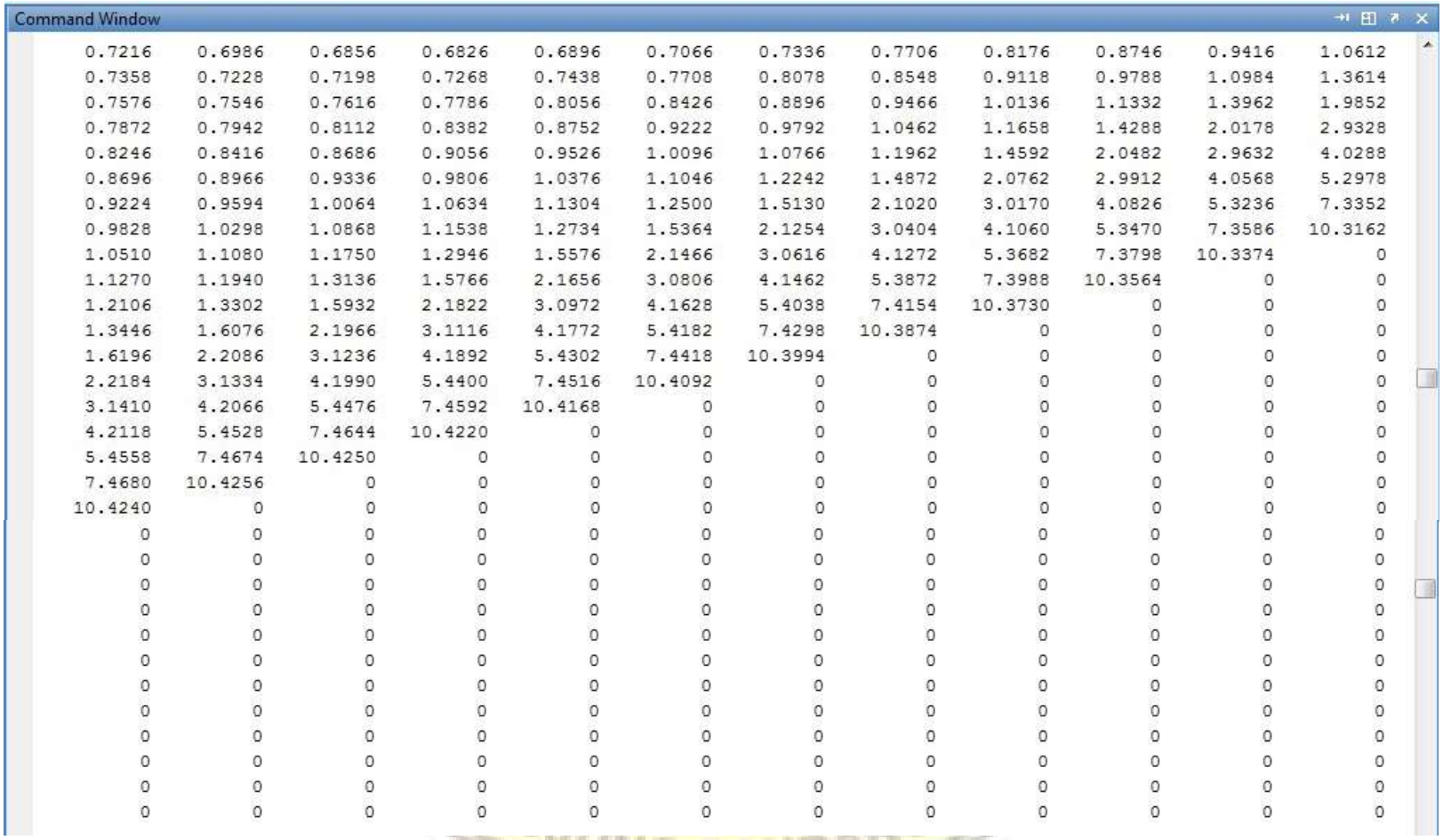
Gambar 4.15 Hasil Akhir Penjadwalan Pembangkit (Lanjutan)



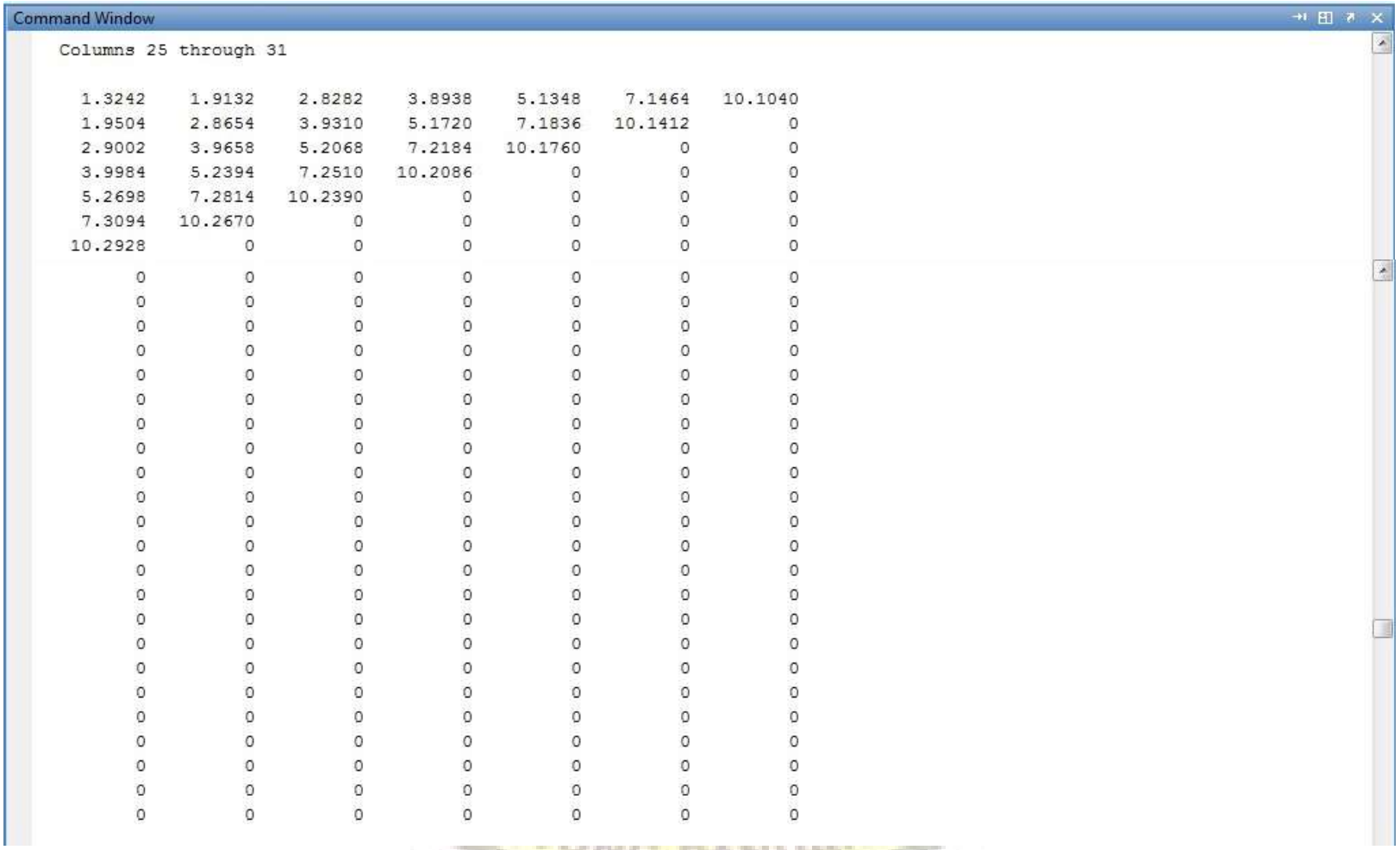
Gambar 4.15 Hasil Akhir Penjadwalan Pembangkit (Lanjutan)



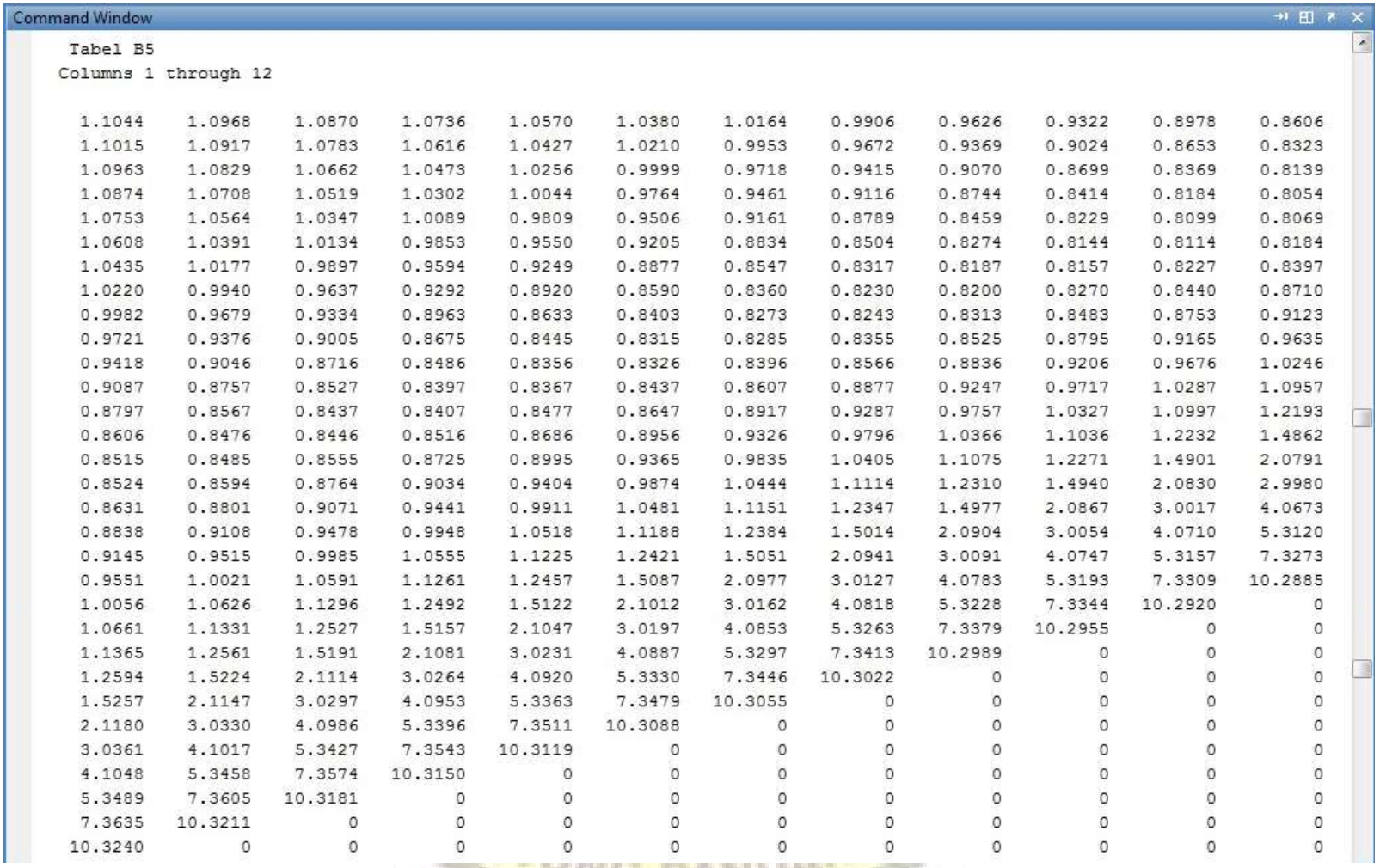
Gambar 4.15 Hasil Akhir Penjadwalan Pembangkit (Lanjutan)



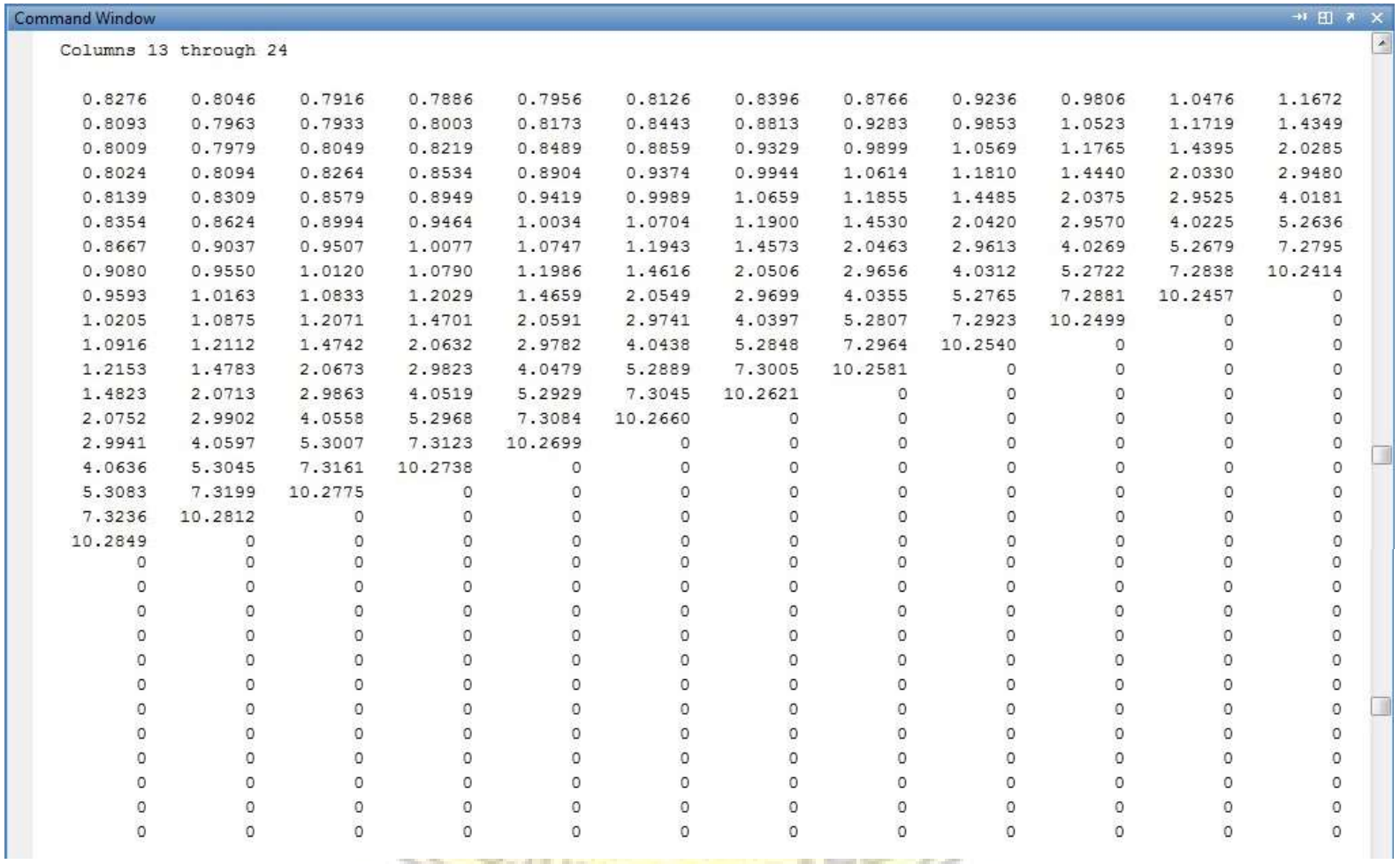
Gambar 4.15 Hasil Akhir Penjadwalan Pembangkit (Lanjutan)



Gambar 4.15 Hasil Akhir Penjadwalan Pembangkit (Lanjutan)



Gambar 4.15 Hasil Akhir Penjadwalan Pembangkit (Lanjutan)



Gambar 4.15 Hasil Akhir Penjadwalan Pembangkit (Lanjutan)

Command Window

```
  Columns 25 through 31

    1.4302    2.0192    2.9342    3.9998    5.2408    7.2524   10.2100
    2.0239    2.9389    4.0045    5.2455    7.2571   10.2147         0
    2.9435    4.0091    5.2501    7.2617   10.2193         0         0
    4.0136    5.2546    7.2662   10.2238         0         0         0
    5.2591    7.2707   10.2283         0         0         0         0
    7.2752   10.2327         0         0         0         0         0
   10.2371         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
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         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
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         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0

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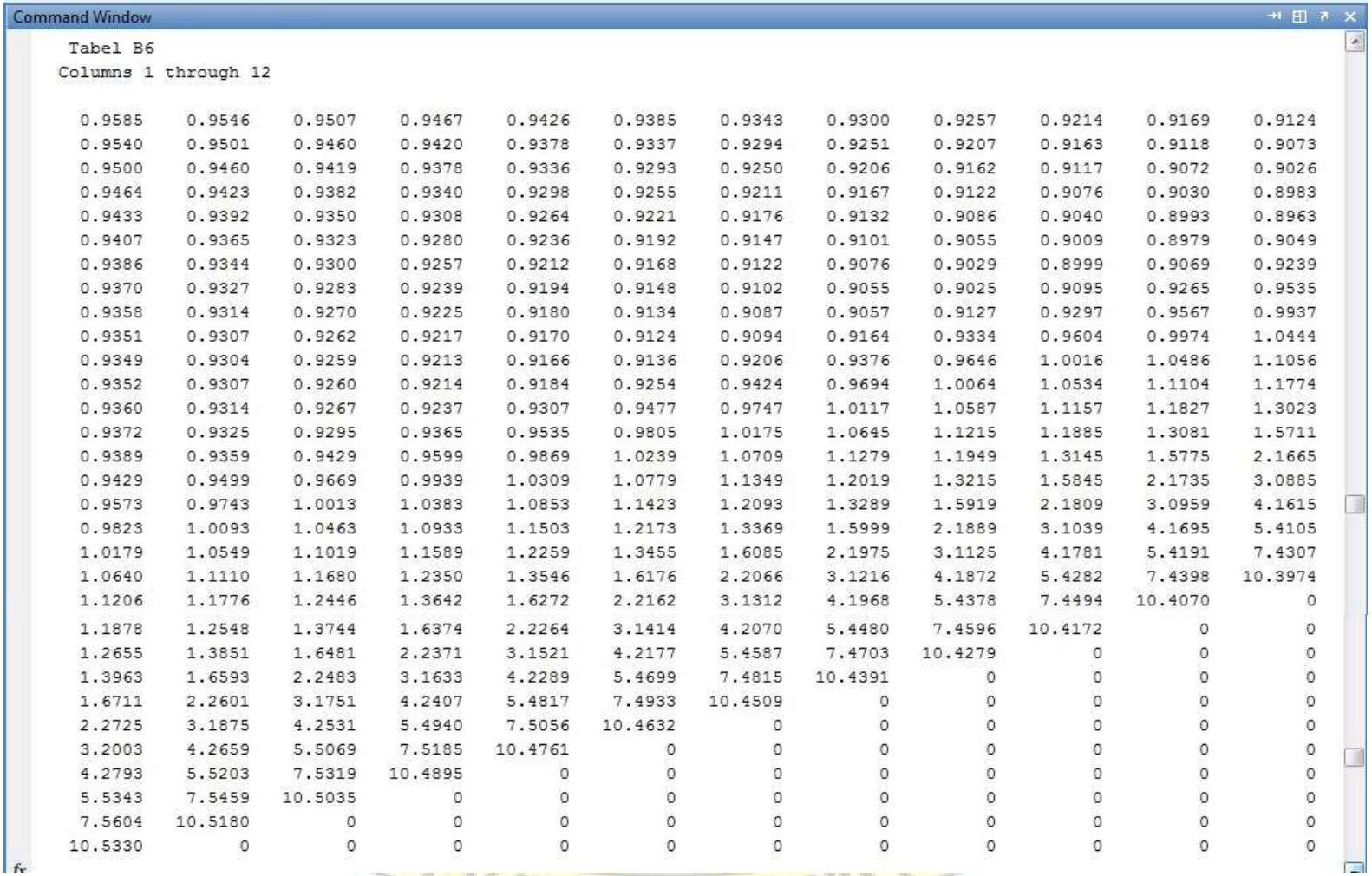
```

Gambar 4.15 Hasil Akhir Penjadwalan Pembangkit (Lanjutan)



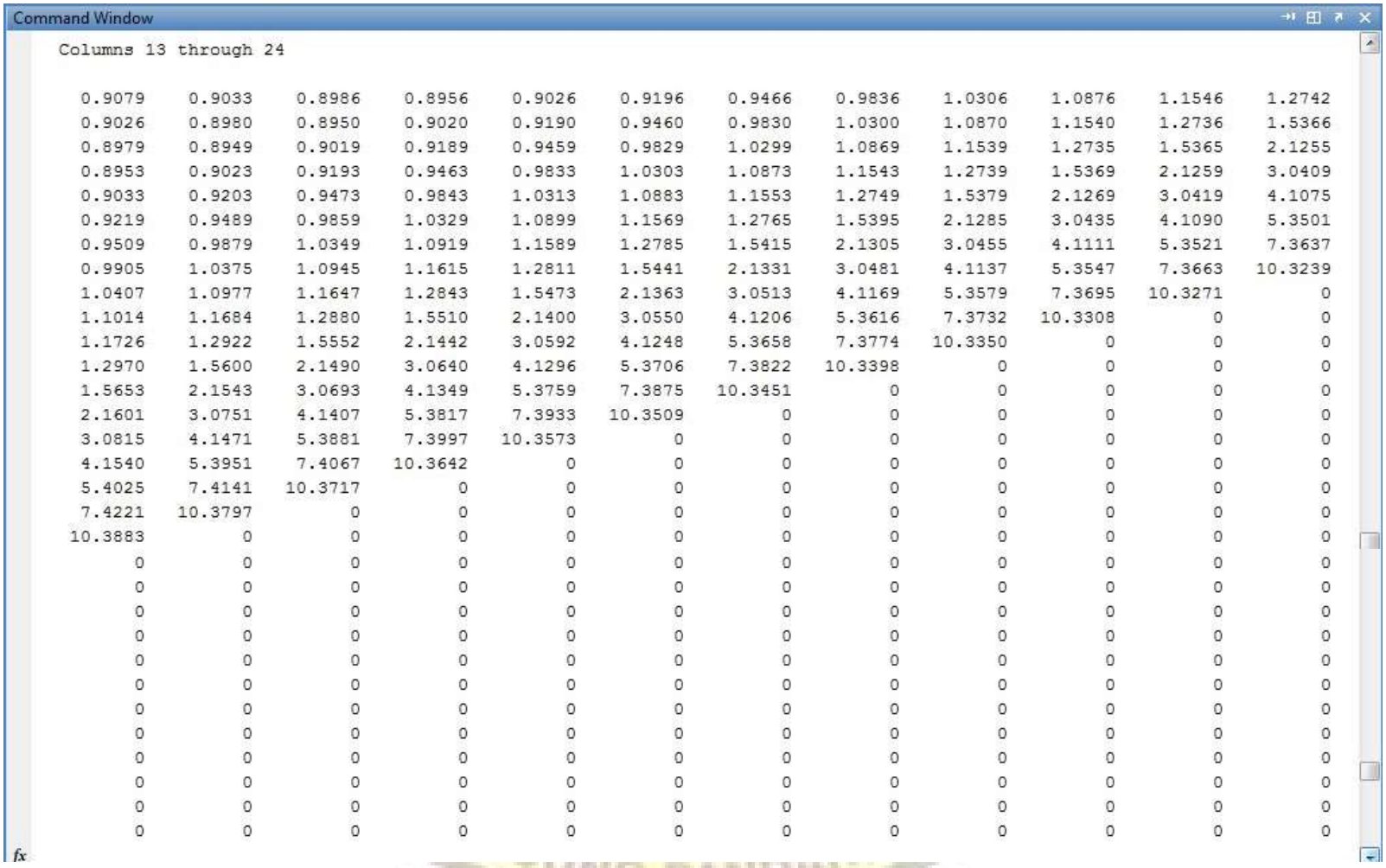
Command Window

Tabel B6

Columns 1 through 12

0.9585	0.9546	0.9507	0.9467	0.9426	0.9385	0.9343	0.9300	0.9257	0.9214	0.9169	0.9124
0.9540	0.9501	0.9460	0.9420	0.9378	0.9337	0.9294	0.9251	0.9207	0.9163	0.9118	0.9073
0.9500	0.9460	0.9419	0.9378	0.9336	0.9293	0.9250	0.9206	0.9162	0.9117	0.9072	0.9026
0.9464	0.9423	0.9382	0.9340	0.9298	0.9255	0.9211	0.9167	0.9122	0.9076	0.9030	0.8983
0.9433	0.9392	0.9350	0.9308	0.9264	0.9221	0.9176	0.9132	0.9086	0.9040	0.8993	0.8963
0.9407	0.9365	0.9323	0.9280	0.9236	0.9192	0.9147	0.9101	0.9055	0.9009	0.8979	0.9049
0.9386	0.9344	0.9300	0.9257	0.9212	0.9168	0.9122	0.9076	0.9029	0.8999	0.9069	0.9239
0.9370	0.9327	0.9283	0.9239	0.9194	0.9148	0.9102	0.9055	0.9025	0.9095	0.9265	0.9535
0.9358	0.9314	0.9270	0.9225	0.9180	0.9134	0.9087	0.9057	0.9127	0.9297	0.9567	0.9937
0.9351	0.9307	0.9262	0.9217	0.9170	0.9124	0.9094	0.9164	0.9334	0.9604	0.9974	1.0444
0.9349	0.9304	0.9259	0.9213	0.9166	0.9136	0.9206	0.9376	0.9646	1.0016	1.0486	1.1056
0.9352	0.9307	0.9260	0.9214	0.9184	0.9254	0.9424	0.9694	1.0064	1.0534	1.1104	1.1774
0.9360	0.9314	0.9267	0.9237	0.9307	0.9477	0.9747	1.0117	1.0587	1.1157	1.1827	1.3023
0.9372	0.9325	0.9295	0.9365	0.9535	0.9805	1.0175	1.0645	1.1215	1.1885	1.3081	1.5711
0.9389	0.9359	0.9429	0.9599	0.9869	1.0239	1.0709	1.1279	1.1949	1.3145	1.5775	2.1665
0.9429	0.9499	0.9669	0.9939	1.0309	1.0779	1.1349	1.2019	1.3215	1.5845	2.1735	3.0885
0.9573	0.9743	1.0013	1.0383	1.0853	1.1423	1.2093	1.3289	1.5919	2.1809	3.0959	4.1615
0.9823	1.0093	1.0463	1.0933	1.1503	1.2173	1.3369	1.5999	2.1889	3.1039	4.1695	5.4105
1.0179	1.0549	1.1019	1.1589	1.2259	1.3455	1.6085	2.1975	3.1125	4.1781	5.4191	7.4307
1.0640	1.1110	1.1680	1.2350	1.3546	1.6176	2.2066	3.1216	4.1872	5.4282	7.4398	10.3974
1.1206	1.1776	1.2446	1.3642	1.6272	2.2162	3.1312	4.1968	5.4378	7.4494	10.4070	0
1.1878	1.2548	1.3744	1.6374	2.2264	3.1414	4.2070	5.4480	7.4596	10.4172	0	0
1.2655	1.3851	1.6481	2.2371	3.1521	4.2177	5.4587	7.4703	10.4279	0	0	0
1.3963	1.6593	2.2483	3.1633	4.2289	5.4699	7.4815	10.4391	0	0	0	0
1.6711	2.2601	3.1751	4.2407	5.4817	7.4933	10.4509	0	0	0	0	0
2.2725	3.1875	4.2531	5.4940	7.5056	10.4632	0	0	0	0	0	0
3.2003	4.2659	5.5069	7.5185	10.4761	0	0	0	0	0	0	0
4.2793	5.5203	7.5319	10.4895	0	0	0	0	0	0	0	0
5.5343	7.5459	10.5035	0	0	0	0	0	0	0	0	0
7.5604	10.5180	0	0	0	0	0	0	0	0	0	0
10.5330	0	0	0	0	0	0	0	0	0	0	0

Gambar 4.15 Hasil Akhir Penjadwalan Pembangkit (Lanjutan)



Gambar 4.15 Hasil Akhir Penjadwalan Pembangkit (Lanjutan)

```
Command Window

  Columns 25 through 31

    1.5372    2.1262    3.0412    4.1068    5.3478    7.3594   10.3170
    2.1256    3.0406    4.1062    5.3472    7.3588   10.3164         0
    3.0405    4.1061    5.3471    7.3587   10.3163         0         0
    4.1065    5.3475    7.3591   10.3167         0         0         0
    5.3485    7.3601   10.3177         0         0         0         0
    7.3617   10.3192         0         0         0         0         0
   10.3213         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0
         0         0         0         0         0         0         0

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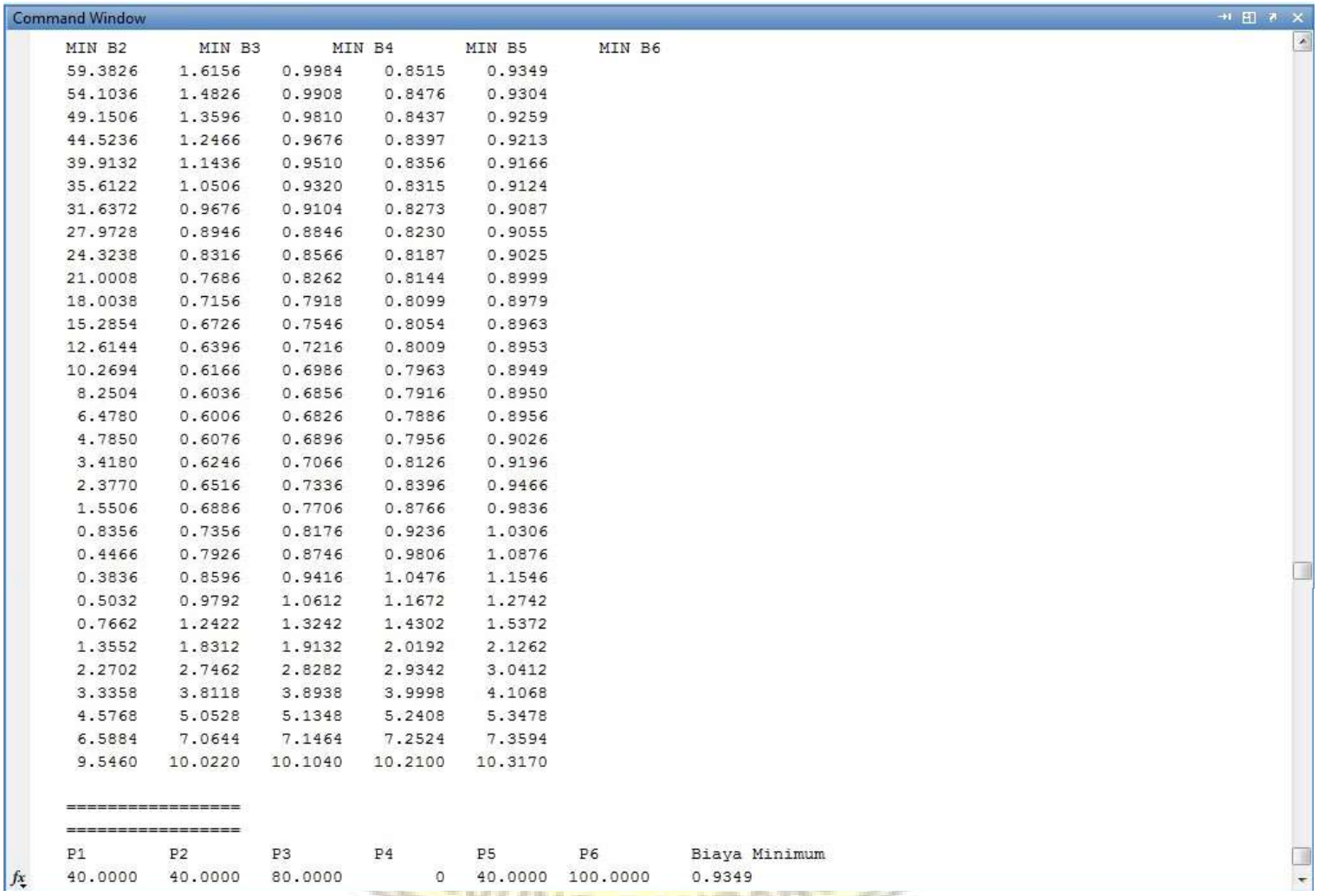
Gambar 4.15 Hasil Akhir Penjadwalan Pembangkit (Lanjutan)



Gambar 4.15 Hasil Akhir Penjadwalan Pembangkit (Lanjutan)

Maka dengan melakukan perhitungan biaya minimum pada tiap-tiap unit pembangkit dimana tiap-tiap unit divariasikan bebannya, sehingga diperoleh hasil akhir perhitungan yang menghasilkan biaya minimum, yaitu P1 = 40 MW, P2 = 40 MW, P3 = 80 MW, P4 = 0 MW, P5 = 40 MW, P6 = 100 MW dengan biaya minimum sebesar 0,9349 x 10^8 Rp/h.

Data selanjutnya dapat dilihat pada Tabel berikut:

Tabel 4.27 Hasil Perhitungan Penjadwalan Pembangkit Termal Harian Sistem Sulselbar pada Bulan Agustus 2016

01 Agustus 2016								
Jam	Beban	P1	P2	P3	P4	P5	P6	Biaya Minimum (x 10^8 Rp/h)
00.00	328	43	36	77	0	61	111	0,8687
01.00	311	43	36	77	0	46	109	0,8602
02.00	281	43	36	77	0	19	106	0,8455
03.00	247	43	36	76	0	0	92	0,8298
04.00	253	43	36	76	0	0	98	0,8323
05.00	267	43	36	77	0	7	104	0,8388
06.00	300	43	36	77	0	36	108	0,8547
07.00	265	43	36	77	0	5	104	0,8378
08.00	317	43	36	77	0	52	109	0,8632
09.00	360	43	36	77	0	90	114	0,8852
10.00	386	43	36	77	0	114	116	0,899
11.00	398	43	36	77	0	124	118	0,9055
12.00	408	43	36	77	0	133	119	0,911
13.00	420	43	36	78	0	135	128	0,9178
14.00	431	43	36	78	0	135	139	0,9248
15.00	407	43	36	77	0	133	118	0,9104
16.00	412	43	36	78	0	135	120	0,9132
17.00	429	43	36	78	0	135	137	0,9235
18.00	632	50	50	100	100	135	197	2,249
19.00	613	50	50	98	100	135	180	2,2278
20.00	595	50	50	80	100	135	180	2,1972
21.00	544	50	50	29	100	135	180	2,2864
22.00	444	42	36	35	100	135	96	1,2389
23.00	387	43	36	77	0	115	116	0,8995

Tabel 4.27 Hasil Perhitungan Penjadwalan Pembangkit Termal Harian Sistem Sulselbar pada Bulan Agustus 2016 (Lanjutan)

02 Agustus 2016								
Jam	Beban	P1	P2	P3	P4	P5	P6	Biaya Minimum (x 10^8 Rp/h)
00.00	340	37	14	38	50	21	180	0,9481
01.00	323	31	14	37	49	17	175	0,9287
02.00	292	31	14	36	49	9	153	0,9114
03.00	276	31	14	35	48	5	143	0,9033
04.00	273	31	14	35	48	5	140	0,9018
05.00	346	42	14	38	50	22	180	0,9753
06.00	294	31	14	36	49	10	154	0,9125
07.00	296	31	14	36	49	10	156	0,9136
08.00	311	31	14	37	49	14	166	0,9218
09.00	357	48	15	39	50	25	180	1,0294
10.00	378	50	28	40	50	30	180	1,0809
11.00	390	50	35	41	51	33	180	1,1119
12.00	372	50	23	40	50	29	180	1,0664
13.00	379	50	28	40	50	31	180	1,0816
14.00	382	50	31	40	50	31	180	1,0922
15.00	374	50	25	40	50	29	180	1,0714
16.00	372	50	23	40	50	29	180	1,0664
17.00	381	50	30	40	50	31	180	1,0885
18.00	605	50	50	100	100	125	180	1,5768
19.00	602	50	50	100	100	122	180	1,5724
20.00	601	50	50	100	100	121	180	1,5710
21.00	549	50	50	100	97	72	180	1,4933
22.00	458	50	50	76	52	50	180	1,2647
23.00	381	50	30	40	50	31	180	1,0885

03 Agustus 2016								
Jam	Beban	P1	P2	P3	P4	P5	P6	Biaya Minimum (x 10^8 Rp/h)
00.00	345	43	38	33	73	47	111	1,0845
01.00	323	43	38	32	73	30	107	1,0713
02.00	311	43	38	32	73	20	105	1,0644
03.00	293	43	38	31	73	6	102	1,0545
04.00	272	43	38	28	73	0	90	1,0443
05.00	283	43	38	30	73	0	99	1,0493
06.00	302	43	38	31	73	13	104	1,0594
07.00	279	43	38	29	73	0	96	1,0473
08.00	322	43	38	32	73	29	107	1,0707
09.00	378	43	38	34	73	73	117	1,106
10.00	398	43	38	35	73	89	120	1,12
11.00	421	43	38	36	73	107	124	1,1369
12.00	410	43	38	36	73	98	122	1,1287
13.00	430	43	38	37	73	113	126	1,1437
14.00	443	43	38	37	73	124	128	1,1539
15.00	450	43	38	38	73	129	129	1,1594
16.00	435	43	38	37	73	117	127	1,1476
17.00	423	43	38	36	73	108	125	1,1384
18.00	621	50	50	100	100	135	186	2,1491
19.00	595	50	50	100	80	135	180	1,733
20.00	597	50	50	100	82	135	180	1,7530
21.00	538	50	50	50	73	135	180	1,5849
22.00	449	43	38	38	73	128	129	1,1586
23.00	389	43	38	35	73	81	119	1,1136

Tabel 4.27 Hasil Perhitungan Penjadwalan Pembangkit Termal Harian Sistem Sulselbar pada Bulan Agustus 2016 (Lanjutan)

04 Agustus 2016								
Jam	Beban	P1	P2	P3	P4	P5	P6	Biaya Minimum (x 10^8 Rp/h)
00.00	324	39	36	71	65	36	77	1,0486
01.00	310	39	36	71	64	26	74	1,0434
02.00	301	39	36	70	64	20	72	1,0402
03.00	278	39	36	70	64	3	66	1,0327
04.00	271	39	36	70	64	0	62	1,0306
05.00	280	39	36	70	64	5	66	1,0333
06.00	314	39	36	71	65	28	75	1,0449
07.00	292	39	36	70	64	14	69	1,0371
08.00	332	39	36	71	65	42	79	1,0518
09.00	404	40	37	72	66	92	97	1,0849
10.00	393	40	37	72	66	84	94	1,0793
11.00	427	40	37	73	66	108	103	1,0973
12.00	419	40	37	72	66	103	101	1,0929
13.00	458	40	37	73	67	130	111	1,1155
14.00	470	40	37	73	67	135	118	1,1231
15.00	465	40	37	73	67	135	113	1,1198
16.00	428	40	37	73	66	109	103	1,0979
17.00	420	40	37	72	66	104	101	1,0935
18.00	640	50	50	100	100	135	205	1,4088
19.00	611	50	50	100	96	135	180	1,3626
20.00	622	50	50	100	100	135	187	1,3873
21.00	541	45	38	75	68	135	180	1,1906
22.00	477	40	37	73	67	135	125	1,1279
23.00	403	40	37	72	66	91	97	1,0844

07 Agustus 2016								
Jam	Beban	P1	P2	P3	P4	P5	P6	Biaya Minimum (x 10^8 Rp/h)
00.00	339	17	39	0	74	105	104	0,8978
01.00	313	16	39	0	74	87	97	0,8839
02.00	286	15	39	0	74	69	89	0,8713
03.00	266	15	39	0	73	56	83	0,8631
04.00	265	15	39	0	73	55	83	0,8627
05.00	293	15	39	0	74	74	91	0,8744
06.00	317	16	39	0	74	90	98	0,8859
07.00	302	16	39	0	74	80	93	0,8755
08.00	354	17	39	0	74	115	109	0,9066
09.00	389	18	39	0	75	135	122	0,9295
10.00	416	19	39	0	75	135	148	0,952
11.00	442	19	39	0	75	135	174	0,9797
12.00	428	19	39	0	75	135	160	0,9641
13.00	458	29	39	0	75	135	180	1
14.00	449	20	39	0	75	135	180	0,9878
15.00	445	19	39	0	75	135	177	0,9833
16.00	423	19	39	0	75	135	155	0,9589
17.00	426	19	39	0	75	135	158	0,9620
18.00	616	50	50	100	100	135	181	1,6134
19.00	605	50	50	100	90	135	180	1,5596
20.00	599	50	50	100	84	135	180	1,5389
21.00	522	50	50	31	76	135	180	1,3634
22.00	450	21	39	0	75	135	180	0,9888
23.00	386	18	39	0	75	135	119	0,9273

Tabel 4.27 Hasil Perhitungan Penjadwalan Pembangkit Termal Harian Sistem Sulselbar pada Bulan Agustus 2016 (Lanjutan)

08 Agustus 2016								
Jam	Beban	P1	P2	P3	P4	P5	P6	Biaya Minimum (x 10^8 Rp/h)
00.00	331	43	38	13	0	131	106	1,0057
01.00	305	43	38	12	0	109	103	0,9913
02.00	279	43	38	10	0	88	100	0,9779
03.00	261	43	38	9	0	73	98	0,9691
04.00	266	43	38	9	0	77	99	0,9715
05.00	298	43	38	11	0	104	102	0,9876
06.00	303	43	38	12	0	107	103	0,9903
07.00	275	43	38	10	0	84	100	0,9759
08.00	299	43	38	11	0	105	102	0,9882
09.00	347	43	38	14	0	135	117	1,0155
10.00	368	43	38	16	0	135	136	1,0318
11.00	396	43	39	18	0	135	161	1,0598
12.00	391	43	38	17	0	135	158	1,055
13.00	424	50	40	19	0	135	180	1,2383
14.00	420	47	39	19	0	135	180	1,137
15.00	412	43	39	19	0	135	176	1,0795
16.00	391	43	38	17	0	135	158	1,055
17.00	391	43	38	17	0	135	158	1,055
18.00	599	50	50	100	84	135	180	1,6751
19.00	600	50	50	100	85	135	180	1,6773
20.00	574	50	50	100	59	135	180	1,6273
21.00	520	50	50	100	5	135	180	1,5581
22.00	443	50	50	28	0	135	180	1,4403
23.00	389	43	38	17	0	135	156	1,0527

09 Agustus 2016								
Jam	Beban	P1	P2	P3	P4	P5	P6	Biaya Minimum (x 10^8 Rp/h)
00.00	346	44	39	0	63	96	104	1,0666
01.00	307	44	39	0	61	68	95	1,0472
02.00	291	44	39	0	60	57	91	1,0404
03.00	266	44	39	0	59	40	84	1,031
04.00	259	44	39	0	59	35	82	1,0287
05.00	281	44	39	0	60	50	88	1,0365
06.00	297	44	39	0	60	62	92	1,0429
07.00	288	44	39	0	60	55	90	1,0392
08.00	286	44	39	0	60	54	89	1,0384
09.00	336	44	39	0	62	89	102	1,0612
10.00	355	44	39	0	63	102	107	1,0716
11.00	385	44	39	0	64	123	115	1,0897
12.00	372	44	39	0	64	114	111	1,0816
13.00	383	44	39	0	64	122	114	1,0884
14.00	389	44	39	0	65	126	115	1,0923
15.00	386	44	39	0	65	123	115	1,0904
16.00	373	44	39	0	64	115	111	1,0822
17.00	388	44	39	0	65	125	115	1,0917
18.00	618	50	50	100	100	135	183	1,8296
19.00	599	50	50	100	84	135	180	1,7916
20.00	591	50	50	100	76	135	180	1,7798
21.00	540	50	50	53	72	135	180	1,6922
22.00	456	44	39	0	68	135	170	1,151
23.00	404	44	39	0	65	135	121	1,1024

Tabel 4.27 Hasil Perhitungan Penjadwalan Pembangkit Termal Harian Sistem Sulselbar pada Bulan Agustus 2016 (Lanjutan)

10 Agustus 2016								
Jam	Beban	P1	P2	P3	P4	P5	P6	Biaya Minimum (x 10^8 Rp/h)
00.00	356	36	50	100	100	70	0	1,0239
01.00	326	35	50	100	100	41	0	1,0098
02.00	303	34	50	100	100	19	0	1,0003
03.00	287	33	50	100	100	4	0	0,9947
04.00	286	33	50	100	100	3	0	0,9943
05.00	308	34	50	100	100	24	0	1,0027
06.00	349	36	50	100	100	63	0	1,0203
07.00	319	35	50	100	100	34	0	1,0064
08.00	368	37	50	100	100	75	6	1,0253
09.00	422	37	50	100	100	89	46	1,0326
10.00	439	38	50	100	100	93	58	1,0371
11.00	452	38	50	100	100	96	68	1,0414
12.00	442	38	50	100	100	94	60	1,0381
13.00	489	38	50	100	100	110	91	1,0579
14.00	496	38	50	100	100	116	92	1,0617
15.00	500	38	50	100	100	120	92	1,064
16.00	464	38	50	100	100	99	77	1,046
17.00	454	38	50	100	100	96	70	1,042
18.00	650	50	50	100	100	135	215	1,2197
19.00	657	50	50	100	100	135	222	1,2294
20.00	627	50	50	100	100	135	192	1,1903
21.00	570	38	50	100	100	135	147	1,1094
22.00	485	38	50	100	100	106	91	1,0557
23.00	423	37	50	100	100	89	47	1,0327
11 Agustus 2016								
Jam	Beban	P1	P2	P3	P4	P5	P6	Biaya Minimum (x 10^8 Rp/h)
00.00	372	31	36	39	0	135	131	0,913
01.00	356	31	36	38	0	135	116	0,902
02.00	321	31	36	37	0	113	104	0,8822
03.00	310	31	36	37	0	103	103	0,8764
04.00	299	31	36	36	0	95	101	0,8707
05.00	333	31	36	38	0	122	106	0,8888
06.00	346	31	36	38	0	133	108	0,896
07.00	348	31	36	38	0	135	108	0,8972
08.00	398	31	36	40	0	135	156	0,9353
09.00	412	31	36	40	0	135	170	0,9497
10.00	457	50	49	41	2	135	180	1,1621
11.00	458	50	49	42	2	135	180	1,1628
12.00	460	50	50	43	2	135	180	1,1817
13.00	495	50	50	77	3	135	180	1,2286
14.00	522	50	50	100	7	135	180	1,2867
15.00	512	50	50	93	4	135	180	1,2655
16.00	494	50	50	76	3	135	180	1,2267
17.00	475	50	50	58	2	135	180	1,1969
18.00	683	50	50	100	100	135	248	1,5856
19.00	679	50	50	100	100	135	244	1,5786
20.00	670	50	50	100	100	135	235	1,5636
21.00	641	50	50	100	100	135	206	1,5197
22.00	509	50	50	90	4	135	180	1,2581
23.00	396	31	36	40	0	135	154	0,9334

Tabel 4.27 Hasil Perhitungan Penjadwalan Pembangkit Termal Harian Sistem Sulselbar pada Bulan Agustus 2016 (Lanjutan)

12 Agustus 2016								
Jam	Beban	P1	P2	P3	P4	P5	P6	Biaya Minimum (x 10^8 Rp/h)
00.00	390	45	41	52	32	109	111	1,0622
01.00	364	45	41	50	29	99	100	1,0477
02.00	347	45	41	49	28	91	93	1,0393
03.00	330	45	40	48	27	84	86	1,0319
04.00	309	45	40	47	25	75	77	1,0239
05.00	345	45	41	49	28	90	92	1,0384
06.00	364	45	41	50	29	99	100	1,0477
07.00	345	45	41	49	28	90	92	1,0384
08.00	385	45	41	52	31	107	109	1,0593
09.00	458	45	41	57	37	135	143	1,1105
10.00	458	45	41	57	37	135	143	1,1105
11.00	484	45	41	59	39	135	165	1,1344
12.00	479	45	41	59	39	135	160	1,1294
13.00	526	50	50	68	43	135	180	1,2585
14.00	527	50	50	69	43	135	180	1,2598
15.00	514	50	46	61	42	135	180	1,2201
16.00	503	46	41	60	41	135	180	1,1561
17.00	501	45	41	60	41	135	179	1,1521
18.00	690	50	50	100	100	135	255	1,5490
19.00	689	50	50	100	100	135	254	1,5473
20.00	683	50	50	100	100	135	248	1,5373
21.00	617	50	50	100	100	135	182	1,4453
22.00	536	50	50	77	44	135	180	1,2729
23.00	467	45	41	58	38	135	150	1,1183

13 Agustus 2016								
Jam	Beban	P1	P2	P3	P4	P5	P6	Biaya Minimum (x 10^8 Rp/h)
00.00	418	42	31	0	74	135	136	1,0083
01.00	391	42	31	0	73	125	120	0,9879
02.00	357	42	30	0	71	104	110	0,9654
03.00	355	42	30	0	71	103	109	0,9642
04.00	336	42	30	0	70	90	104	0,9531
05.00	343	42	30	0	71	95	105	0,9571
06.00	375	42	31	0	72	115	115	0,977
07.00	360	42	30	0	71	106	111	0,9673
08.00	412	42	31	0	73	135	131	1,0034
09.00	453	42	31	0	75	135	170	1,043
10.00	523	50	50	30	78	135	180	1,2876
11.00	482	50	41	0	76	135	180	1,1663
12.00	467	45	31	0	76	135	180	1,0673
13.00	513	50	50	20	78	135	180	1,2681
14.00	510	50	50	18	77	135	180	1,2632
15.00	507	50	50	15	77	135	180	1,2575
16.00	475	50	34	0	76	135	180	1,1411
17.00	460	42	31	0	75	135	177	1,0512
18.00	672	50	50	100	100	135	237	1,5641
19.00	645	50	50	100	100	135	210	1,5205
20.00	623	50	50	100	100	135	188	1,4897
21.00	603	50	50	100	88	135	180	1,4546
22.00	511	50	50	19	77	135	180	1,2651
23.00	439	42	31	0	75	135	156	1,0278

Tabel 4.27 Hasil Perhitungan Penjadwalan Pembangkit Termal Harian Sistem Sulselbar pada Bulan Agustus 2016 (Lanjutan)

15 Agustus 2016								
Jam	Beban	P1	P2	P3	P4	P5	P6	Biaya Minimum (x 10^8 Rp/h)
00.00	385	41	36	0	13	135	160	1,0085
01.00	359	40	36	0	5	135	143	0,9839
02.00	316	40	36	0	0	125	115	0,9505
03.00	305	40	36	0	0	117	112	0,9432
04.00	307	40	36	0	0	118	113	0,9445
05.00	321	40	36	0	0	129	116	0,9539
06.00	332	40	36	0	0	135	121	0,9616
07.00	308	40	36	0	0	119	113	0,9452
08.00	359	40	36	0	5	135	143	0,9839
09.00	375	40	36	0	10	135	154	0,9988
10.00	390	41	36	0	14	135	164	1,0139
11.00	403	41	36	0	18	135	173	1,0279
12.00	403	41	36	0	18	135	173	1,0279
13.00	429	50	38	0	26	135	180	1,1421
14.00	425	49	36	0	25	135	180	1,1158
15.00	427	50	36	0	26	135	180	1,134
16.00	409	41	36	0	20	135	177	1,0347
17.00	394	41	36	0	15	135	167	1,0182
18.00	586	50	50	96	75	135	180	1,7383
19.00	568	50	50	83	70	135	180	1,7020
20.00	543	50	50	66	62	135	180	1,6546
21.00	507	50	50	41	51	135	180	1,5896
22.00	433	50	40	0	28	135	180	1,1661
23.00	386	41	36	0	13	135	161	1,0097
16 Agustus 2016								
Jam	Beban	P1	P2	P3	P4	P5	P6	Biaya Minimum (x 10^8 Rp/h)
00.00	332	44	39	0	67	84	98	1,032
01.00	302	44	39	0	67	64	88	1,0177
02.00	283	44	39	0	67	51	82	1,0097
03.00	257	44	39	0	67	34	73	0,9999
04.00	247	44	39	0	66	28	70	0,9965
05.00	263	44	39	0	67	38	75	1,002
06.00	263	44	39	0	67	38	75	1,002
07.00	263	44	39	0	67	38	75	1,002
08.00	304	44	39	0	67	65	89	1,0186
09.00	321	44	39	0	67	76	95	1,0265
10.00	327	45	40	0	68	78	96	1,03
11.00	356	45	39	0	68	99	105	1,0448
12.00	351	45	40	0	68	94	104	1,0424
13.00	360	45	39	0	68	101	107	1,047
14.00	264	44	40	0	66	38	76	1,0029
15.00	373	45	39	0	68	110	111	1,0545
16.00	356	45	39	0	68	99	105	1,0448
17.00	369	45	39	0	68	107	110	1,0522
18.00	572	50	50	87	70	135	180	1,4575
19.00	573	50	50	88	70	135	180	1,4594
20.00	566	50	50	81	70	135	180	1,4464
21.00	538	50	50	53	70	135	180	1,3997
22.00	425	45	40	0	68	135	137	1,0887
23.00	354	45	39	0	68	97	105	1,0437

Tabel 4.27 Hasil Perhitungan Penjadwalan Pembangkit Termal Harian Sistem Sulselbar pada Bulan Agustus 2016 (Lanjutan)

17 Agustus 2016								
Jam	Beban	P1	P2	P3	P4	P5	P6	Biaya Minimum (x 10^8 Rp/h)
00.00	301	44	40	0	36	76	105	0,8615
01.00	265	44	40	0	35	49	97	0,845
02.00	239	44	40	0	35	28	92	0,8345
03.00	238	44	40	0	35	28	91	0,8341
04.00	240	44	40	0	35	29	92	0,8349
05.00	284	44	40	0	36	63	101	0,8534
06.00	271	44	40	0	36	53	98	0,8476
07.00	260	44	40	0	35	45	96	0,8429
08.00	272	44	40	0	36	54	98	0,8481
09.00	305	44	40	0	37	79	105	0,8635
10.00	338	44	40	0	38	104	112	0,8807
11.00	352	44	40	0	38	115	115	0,8885
12.00	356	44	40	0	38	118	116	0,8908
13.00	357	44	40	0	38	119	116	0,8914
14.00	344	44	40	0	38	108	114	0,884
15.00	356	44	40	0	38	118	116	0,8908
16.00	346	44	40	0	38	110	114	0,8851
17.00	371	44	40	0	39	129	119	0,8997
18.00	590	50	50	100	75	135	180	1,9472
19.00	578	50	50	100	63	135	180	1,9197
20.00	585	50	50	100	70	135	180	1,9348
21.00	505	50	50	47	43	135	180	1,7413
22.00	414	45	40	0	40	135	154	0,9306
23.00	363	44	40	0	38	123	118	0,8949

18 Agustus 2016								
Jam	Beban	P1	P2	P3	P4	P5	P6	Biaya Minimum (x 10^8 Rp/h)
00.00	302	44	39	20	32	55	112	0,9882
01.00	297	44	39	20	32	49	113	0,9858
02.00	256	44	39	21	32	4	116	0,9658
03.00	253	44	39	21	32	1	116	0,9643
04.00	238	44	39	19	31	0	105	0,9572
05.00	280	44	39	20	32	31	114	0,9776
06.00	288	44	39	20	32	40	113	0,9815
07.00	279	44	39	20	32	30	114	0,9771
08.00	330	44	39	20	32	85	110	1,0015
09.00	379	44	39	19	31	135	111	1,0238
10.00	417	44	39	18	31	135	150	1,046
11.00	426	44	39	18	31	135	159	1,0525
12.00	431	44	39	18	31	135	164	1,0562
13.00	438	44	39	18	31	135	171	1,0617
14.00	448	45	39	18	31	135	180	1,0713
15.00	454	50	41	18	30	135	180	1,1704
16.00	447	44	39	18	31	135	180	1,0692
17.00	435	44	39	18	31	135	168	1,0593
18.00	663	50	50	100	100	135	228	1,7582
19.00	643	50	50	100	100	135	208	1,7368
20.00	634	50	50	100	100	135	199	1,7279
21.00	577	50	50	100	62	135	180	1,5978
22.00	480	50	50	35	30	135	180	1,4233
23.00	416	44	39	18	31	135	149	1,0453

Tabel 4.27 Hasil Perhitungan Penjadwalan Pembangkit Termal Harian Sistem Sulselbar pada Bulan Agustus 2016 (Lanjutan)

19 Agustus 2016								
Jam	Beban	P1	P2	P3	P4	P5	P6	Biaya Minimum (x 10^8 Rp/h)
00.00	359	44	39	0	0	135	141	0,8858
01.00	334	44	39	0	0	135	116	0,871
02.00	311	44	39	0	0	116	112	0,8594
03.00	303	44	39	0	0	109	111	0,8554
04.00	306	44	39	0	0	111	112	0,8569
05.00	333	44	39	0	0	135	115	0,8705
06.00	335	44	39	0	0	135	117	0,8716
07.00	352	44	39	0	0	135	134	0,8813
08.00	377	44	39	0	0	135	159	0,8984
09.00	416	50	50	1	0	135	180	1,0254
10.00	447	50	50	32	0	135	180	1,0967
11.00	463	50	50	48	0	135	180	1,1357
12.00	454	50	50	39	0	135	180	1,1136
13.00	470	50	50	55	0	135	180	1,1533
14.00	496	50	50	81	0	135	180	1,2211
15.00	493	50	50	78	0	135	180	1,2131
16.00	466	50	50	51	0	135	180	1,1432
17.00	519	50	50	100	4	135	180	1,2771
18.00	654	50	50	100	100	135	219	1,5326
19.00	623	50	50	100	100	135	188	1,5022
20.00	600	50	50	100	85	135	180	1,4453
21.00	550	50	50	100	35	135	180	1,3213
22.00	470	50	50	55	0	135	180	1,1533
23.00	393	44	39	0	0	135	175	0,911
20 Agustus 2016								
Jam	Beban	P1	P2	P3	P4	P5	P6	Biaya Minimum (x 10^8 Rp/h)
00.00	349	39	26	0	62	71	151	0,886
01.00	311	39	26	0	62	36	148	0,8678
02.00	298	39	26	0	62	24	147	0,8616
03.00	293	39	26	0	62	19	147	0,8593
04.00	289	39	26	0	62	16	146	0,8574
05.00	322	39	26	0	62	46	149	0,8731
06.00	335	39	26	0	62	58	150	0,8793
07.00	309	39	26	0	62	34	148	0,8669
08.00	383	39	26	0	62	103	153	0,9025
09.00	404	39	26	0	62	122	155	0,9127
10.00	449	46	26	0	62	135	180	0,9443
11.00	459	50	32	0	62	135	180	0,9672
12.00	442	39	26	0	62	135	180	0,932
13.00	477	50	49	0	63	135	180	1,0343
14.00	491	50	50	13	63	135	180	1,0693
15.00	474	50	47	0	62	135	180	1,0224
16.00	442	39	26	0	62	135	180	0,932
17.00	447	44	26	0	62	135	180	0,9388
18.00	634	50	50	100	100	135	199	1,3798
19.00	618	50	50	100	100	135	183	1,3708
20.00	604	50	50	100	89	135	180	1,3285
21.00	537	50	50	59	63	135	180	1,1772
22.00	450	47	26	0	62	135	180	0,9477
23.00	380	39	26	0	62	100	153	0,901

Tabel 4.27 Hasil Perhitungan Penjadwalan Pembangkit Termal Harian Sistem Sulselbar pada Bulan Agustus 2016 (Lanjutan)

21 Agustus 2016								
Jam	Beban	P1	P2	P3	P4	P5	P6	Biaya Minimum (x 10^8 Rp/h)
00.00	341	45	36	30	68	58	104	1,0296
01.00	307	45	36	29	68	34	95	1,0146
02.00	297	45	36	29	68	27	92	1,0104
03.00	281	45	36	28	68	16	88	1,004
04.00	277	45	36	28	68	13	87	1,0024
05.00	319	45	36	29	68	43	98	1,0198
06.00	311	45	36	29	68	37	96	1,0163
07.00	312	45	36	29	68	38	96	1,0167
08.00	349	45	36	30	68	64	106	1,0334
09.00	378	45	36	31	68	84	114	1,0475
10.00	427	45	36	32	68	119	127	1,0735
11.00	457	45	36	33	68	135	140	1,0908
12.00	435	45	36	33	68	124	129	1,078
13.00	468	45	36	33	68	135	151	1,0978
14.00	473	45	36	34	68	135	155	1,1011
15.00	469	45	36	33	68	135	152	1,0984
16.00	453	45	36	33	68	135	136	1,0884
17.00	431	45	36	32	68	122	128	1,0757
18.00	625	50	50	100	100	135	190	1,5349
19.00	630	50	50	100	100	135	195	1,5391
20.00	627	50	50	100	100	135	192	1,5366
21.00	549	50	50	65	69	135	180	1,283
22.00	477	45	36	34	68	135	159	1,1038
23.00	414	45	36	32	68	110	123	1,0663

22 Agustus 2016								
Jam	Beban	P1	P2	P3	P4	P5	P6	Biaya Minimum (x 10^8 Rp/h)
00.00	356	25	50	100	100	81	0	-2,3932
01.00	331	19	50	100	100	62	0	-2,2611
02.00	332	20	50	100	100	62	0	-2,2877
03.00	296	12	50	100	100	34	0	-2,0538
04.00	289	10	50	100	100	29	0	-1,9822
05.00	325	18	50	100	100	57	0	-2,2356
06.00	321	17	50	100	100	54	0	-2,208
07.00	295	11	50	100	100	34	0	-2,0176
08.00	327	19	50	100	100	58	0	-2,263
09.00	376	29	50	100	100	97	0	-2,4551
10.00	401	35	50	100	100	116	0	-2,5138
11.00	403	35	50	100	100	118	0	-2,5126
12.00	412	37	50	100	100	125	0	-2,5219
13.00	437	41	50	100	100	135	11	-2,5283
14.00	448	41	50	100	100	135	22	-2,5274
15.00	437	41	50	100	100	135	11	-2,5283
16.00	422	40	50	100	100	132	0	-2,529
17.00	445	41	50	100	100	135	19	-2,5277
18.00	620	50	50	100	100	135	185	-2,3911
19.00	610	45	50	100	100	135	180	-2,4313
20.00	595	42	50	100	100	135	168	-2,4498
21.00	551	42	50	100	100	135	124	-2,4863
22.00	480	42	50	100	100	135	53	-2,5215
23.00	411	37	50	100	100	124	0	-2,5225

Tabel 4.27 Hasil Perhitungan Penjadwalan Pembangkit Termal Harian Sistem Sulselbar pada Bulan Agustus 2016 (Lanjutan)

23 Agustus 2016								
Jam	Beban	P1	P2	P3	P4	P5	P6	Biaya Minimum (x 10^8 Rp/h)
00.00	370	45	34	73	6	107	105	0,9802
01.00	319	45	34	72	1	71	96	0,9533
02.00	311	45	34	72	0	65	95	0,9494
03.00	313	45	34	72	0	67	95	0,9504
04.00	295	45	34	71	0	53	92	0,9419
05.00	307	45	34	72	0	62	94	0,9475
06.00	305	45	34	72	0	60	94	0,9466
07.00	299	45	34	71	0	56	93	0,9438
08.00	300	45	34	72	0	56	93	0,9442
09.00	339	45	34	72	3	85	100	0,9634
10.00	388	45	34	73	7	120	109	0,9906
11.00	400	45	34	73	8	129	111	0,9978
12.00	390	45	34	73	8	121	109	0,9918
13.00	400	45	34	73	8	129	111	0,9978
14.00	385	45	34	73	7	118	108	0,9889
15.00	386	45	34	73	7	119	108	0,9894
16.00	382	45	34	73	7	115	108	0,9871
17.00	394	45	34	73	8	124	110	0,9942
18.00	616	50	50	100	100	135	181	1,3398
19.00	610	50	50	100	95	135	180	1,329
20.00	610	50	50	100	95	135	180	1,329
21.00	558	50	50	100	43	135	180	1,2502
22.00	476	45	34	75	16	135	171	1,059
23.00	396	45	34	73	8	126	110	0,9954

24 Agustus 2016								
Jam	Beban	P1	P2	P3	P4	P5	P6	Biaya Minimum (x 10^8 Rp/h)
00.00	353	44	13	75	50	106	65	1,0236
01.00	325	44	13	75	49	100	44	1,0086
02.00	309	44	13	75	49	97	31	1,0002
03.00	294	44	13	75	49	94	19	0,9923
04.00	287	44	13	75	49	92	14	0,9887
05.00	324	44	13	75	49	100	43	1,0081
06.00	349	44	13	75	49	106	62	1,0214
07.00	320	44	13	75	49	99	40	1,0059
08.00	369	44	13	75	50	110	77	1,0323
09.00	423	44	13	75	50	121	120	1,0624
10.00	457	44	13	75	51	128	146	1,0819
11.00	465	44	14	75	51	129	152	1,0866
12.00	450	44	13	75	50	127	141	1,0779
13.00	500	45	14	75	51	135	180	1,1087
14.00	501	46	14	75	51	135	180	1,117
15.00	492	44	14	75	51	135	173	1,1025
16.00	471	44	14	75	51	131	156	1,0901
17.00	455	44	13	75	50	128	145	1,0808
18.00	667	50	50	100	100	135	232	1,4574
19.00	630	50	50	100	100	135	195	1,4347
20.00	634	50	50	100	100	135	199	1,4371
21.00	578	50	50	100	63	135	180	1,3584
22.00	498	44	14	75	51	135	179	1,106
23.00	415	44	13	75	50	119	114	1,0579

Tabel 4.27 Hasil Perhitungan Penjadwalan Pembangkit Termal Harian Sistem Sulselbar pada Bulan Agustus 2016 (Lanjutan)

25 Agustus 2016								
Jam	Beban	P1	P2	P3	P4	P5	P6	Biaya Minimum (x 10^8 Rp/h)
00.00	389	45	30	0	58	115	141	1,0111
01.00	359	45	30	0	57	99	128	0,9946
02.00	334	45	30	0	57	84	118	0,9814
03.00	326	45	30	0	57	80	114	0,9774
04.00	317	45	30	0	57	75	110	0,9729
05.00	343	45	30	0	57	90	121	0,9861
06.00	328	45	30	0	57	81	115	0,9784
07.00	328	45	30	0	57	81	115	0,9784
08.00	401	45	30	0	58	122	146	1,018
09.00	440	45	31	0	58	135	171	1,0416
10.00	467	50	44	0	58	135	180	1,1357
11.00	479	50	50	5	59	135	180	1,1638
12.00	474	50	50	0	59	135	180	1,1577
13.00	510	50	50	36	59	135	180	1,2066
14.00	519	50	50	45	59	135	180	1,2206
15.00	513	50	50	39	59	135	180	1,2112
16.00	469	50	45	0	59	135	180	1,1395
17.00	460	50	37	0	58	135	180	1,119
18.00	679	50	50	100	100	135	244	1,4886
19.00	669	50	50	100	100	135	234	1,4805
20.00	664	50	50	100	100	135	229	1,4766
21.00	600	50	50	100	85	135	180	1,3765
22.00	525	50	50	51	59	135	180	1,2304
23.00	446	45	31	0	58	135	177	1,0454
27 Agustus 2016								
Jam	Beban	P1	P2	P3	P4	P5	P6	Biaya Minimum (x 10^8 Rp/h)
00.00	388	45	13	12	55	135	128	0,8869
01.00	336	45	9	9	55	109	109	0,8527
02.00	329	45	9	8	54	106	107	0,8485
03.00	315	45	8	8	54	96	104	0,8405
04.00	304	45	7	7	54	89	102	0,8345
05.00	343	45	10	9	55	114	110	0,8569
06.00	360	45	11	10	55	125	114	0,8676
07.00	340	45	10	9	55	112	109	0,8551
08.00	386	45	12	12	55	135	127	0,8854
09.00	411	45	14	13	56	135	148	0,9065
10.00	464	50	27	16	56	135	180	1,008
11.00	474	50	36	17	56	135	180	1,0206
12.00	461	50	24	16	56	135	180	1,0047
13.00	480	50	41	17	57	135	180	1,0292
14.00	498	50	50	26	57	135	180	1,0542
15.00	495	50	50	23	57	135	180	1,0508
16.00	470	50	32	17	56	135	180	1,0151
17.00	446	45	16	15	56	135	179	0,9438
18.00	640	50	50	100	100	135	205	1,4411
19.00	637	50	50	100	100	135	202	1,4367
20.00	632	50	50	100	100	135	197	1,4295
21.00	574	50	50	100	59	135	180	1,2371
22.00	486	50	47	17	57	135	180	1,0394
23.00	432	45	15	14	56	135	167	0,9279

Sehingga dengan cara yang sama untuk penjadwalan operasi pembangkit harian, maka penjadwalan pengoperasian pembangkit untuk mingguan dan bulanan dapat dilihat pada tabel berikut:

Tabel 4.28 Hasil Perhitungan Penjadwalan Pembangkit Termal Mingguan Sistem Sulselbar pada Bulan Agustus 2016

Minggu Pertama								
Hari	Beban	P1	P2	P3	P4	P5	P6	Biaya Minimum (x 10^8 Rp/h)
1	393	44	38	90	73	135	13	0.9489
2	388	44	38	89	73	135	9	0.925
3	404	44	38	91	73	135	23	1.0015
4	411	44	38	92	74	135	28	1.0312
5	413	44	38	92	74	135	30	1.04
6	407	44	38	92	74	135	24	1.013
7	407	44	38	92	74	135	24	1.013

Minggu Kedua								
Hari	Beban	P1	P2	P3	P4	P5	P6	Biaya Minimum (x 10^8 Rp/h)
8	386	45	39	97	81	38	86	1.1
9	383	45	39	97	81	36	85	1.1016
10	436	45	39	99	84	81	88	1.0939
11	456	45	39	100	85	98	89	1.1025
12	471	45	39	100	86	112	89	1.1129
13	467	45	39	100	85	109	89	1.1097
14	452	45	39	99	85	96	88	1.1002

Minggu Ketiga								
Hari	Beban	P1	P2	P3	P4	P5	P6	Biaya Minimum (x 10^8 Rp/h)
15	402	50	41	84	62	94	71	1.1075
16	363	49	41	82	51	74	66	1.0893
17	355	49	41	82	49	69	65	1.0896
18	408	50	40	84	64	98	72	1.112
19	438	50	41	86	72	113	76	1.1342
20	424	50	41	85	68	105	75	1.1227
21	421	50	41	85	67	104	74	1.1204

Minggu Keempat								
Hari	Beban	P1	P2	P3	P4	P5	P6	Biaya Minimum (x 10^8 Rp/h)
22	413	44	38	47	74	131	79	1.0721
23	397	44	38	49	74	112	80	1.0661
24	440	44	37	45	74	135	105	1.2869
25	459	44	37	43	74	135	126	1.7718
26	447	44	37	44	74	135	113	1.4387
27	445	44	37	44	74	135	111	1.3969
28	443	44	37	45	74	135	108	1.3391

Tabel 4.29 Hasil Perhitungan Penjadwalan Pembangkit Termal Bulanan Sistem Sulselbar pada Bulan Agustus 2016

Hari	Beban	P1	P2	P3	P4	P5	P6	Biaya Minimum (x 10^8 Rp/h)
1	393	42	37	0	0	135	179	0.937
2	388	42	37	0	0	135	174	0.9165
3	404	50	39	0	0	135	180	0.9757
4	411	0	33	100	100	135	43	1.3202
5	413	0	33	100	100	135	45	1.3183
6	407	0	33	100	100	135	39	1.3244
7	407	0	33	100	100	135	39	1.3244
8	386	42	37	0	0	135	172	0.9085
9	383	41	37	0	0	135	170	0.898
10	436	0	32	100	100	135	69	1.311
11	456	0	32	100	100	135	89	1.3191
12	471	0	32	100	100	135	104	1.3351
13	467	0	32	100	100	135	100	1.33
14	452	0	32	100	100	135	85	1.3162
15	402	50	37	0	0	135	180	0.9676
16	363	39	37	0	0	135	152	0.8296
17	355	38	37	0	0	135	145	0.806
18	408	0	33	100	100	135	40	1.3233
19	438	0	32	100	100	135	71	1.3111
20	424	0	33	100	100	135	56	1.3109
21	421	0	33	100	100	135	53	1.3124
22	413	0	33	100	100	135	45	1.3183
23	397	45	37	0	0	135	180	0.9502
24	440	0	32	100	100	135	73	1.3114
25	459	0	32	100	100	135	92	1.3216
26	447	0	32	100	100	135	80	1.3136
27	445	0	32	100	100	135	78	1.3127
28	443	0	32	100	100	135	76	1.3121
29	400	48	37	0	0	135	180	0.9603
30	393	42	37	0	0	135	179	0.937
31	434	0	32	100	100	135	67	1.311

Pada data-data Tabel 4.27, Tabel 4.28, dan Tabel 29 dapat dilihat bahwa kombinasi-kombinasi pembangkit mana yang akan beroperasi dan tidak beroperasi. Salah satu contoh, bisa dilihat pada Tabel 4.27 untuk penjadwalan pengoperasian pembangkit harian pada tanggal 1 pukul 06.00 dimana diantara 6 unit pembangkit yang dijadwalkan hanya 5 unit pembangkit yang beroperasi yaitu unit pembangkit 1 (PLTU Barru Unit 1) sebesar 40 MW, unit pembangkit 2 (PLTU Barru Unit 2) sebesar 40 MW, unit pembangkit 3 (PLTU Jeneponto Unit 1) sebesar 80 MW, unit pembangkit 5 (PLTGU Sengkang Blok I) sebesar 40 MW, unit pembangkit 6 (PLTGU Sengkang Blok II) sebesar 100 MW serta 1 unit pembangkit lainnya tidak beroperasi yaitu PLTU Jeneponto 2, dimana menghasilkan biaya minimum sebesar Rp 0,9349 x 10^8 per jamnya dari berbagai skenario penjadwalan.

Besar biaya dihitung dari pemakain bahan bakar unit-unit pembangkit sehingga bahan bakar merupakan salah satu penentu dari penjadwalan yang baik.

Dari hasil pengolahan data tersebut maka dapat diketahui bahwa optimasi operasi unit-unit pembangkit dengan menggunakan Dynamic Programming patut untuk diaplikasikan pada penjadwalan pembangkit Sulselbar karena Kelebihan dari metode ini adalah perhitungan dalam mencari pengoperasian unit yang optimal dilakukan setahap demi setahap. untuk setiap unit pembangkit akan dihitung secara detail variasi dayanya dengan menghasilkan biaya sekian, sehingga diperoleh hasil yang paling minumim dari beberapa unit pembangkit dengan beban yang bervariasi.

BAB V KESIMPULAN DAN SARAN

5.1 Kesimpulan

1) Biaya pengopersian pembangkit dihitung dengan menggunakan matlab dimana dalam perhitungan ini akan menentukan unit-unit pembangkit mana yang beroperasi dan tidak beroperasi, sehingga dalam mengatur beban yang bervariasi dengan kombinasi unit-unit pembangkit akan memperoleh biaya pengoperasian yang minimum.
2) Hasil dari metode Dynamic Progamming ini ialah menentukan pengoperasian unit pembangkit secara optimal dengan kapasitas yang berbeda dari beberapa pilihan pada tiap step kenaikan daya. Untuk setiap unit pembangkit dihitung secara detail variasi dayanya, sehingga dapat diperoleh nilai biaya yang minimum. Maka dari hasil pembahasan itu diperoleh nilai biaya sebesar 0,9349 x 10^8 Rp/h dalam melayani beban 300 MW.

5.2 Saran

Diharapkan dalam penjadwalan dengan metode *dynamic programming* berikutnya, agar diperhitungkan rugi-rugi jaringan, waktu pemanasan, serta kinerja dari pembangkit-pembangkit termal yang ada di Sulselbar.

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Lampiran 1a. Data Input-Output PLTU Barru Unit 1 Bulan Juni 2016

01 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	50,45	4,65	45,20	4,16	36,78	0,729	0,814
02:00	49,59	4,74	44,30	3,45	36,81	0,742	0,831
03:00	50,39	4,81	45,41	2,18	36,36	0,722	0,801
04:00	49,32	4,71	44,04	2,21	35,10	0,712	0,797
05:00	50,00	4,60	44,70	2,43	34,50	0,690	0,772
06:00	50,40	4,70	45,13	2,74	35,71	0,709	0,791
07:00	50,90	4,77	45,60	2,57	36,30	0,713	0,796
08:00	50,00	4,65	44,90	3,91	35,20	0,704	0,784
09:00	49,30	4,58	44,10	5,23	35,70	0,724	0,810
10:00	50,40	4,59	45,30	6,62	35,70	0,708	0,788
11:00	50,20	4,7	44,90	7,30	35,50	0,707	0,791
12:00	50,10	4,60	44,90	7,60	35,40	0,707	0,788
13:00	49,90	4,70	44,70	6,70	35,00	0,701	0,783
14:00	51,10	4,60	45,90	7,10	34,80	0,681	0,758
15:00	50,50	4,7	45,12	7,10	35,33	0,700	0,783
16:00	50,19	4,7	44,87	6,89	34,81	0,690	0,771
17:00	49,80	4,7	44,52	5,91	33,86	0,680	0,761
18:00	50,60	4,7	45,30	6,02	34,03	0,674	0,751
19:00	50,39	4,69	45,09	7,28	34,67	0,688	0,769
20:00	48,93	4,66	43,72	7,72	33,16	0,678	0,758
21:00	51,85	4,56	46,69	7,06	34,9	0,673	0,747
22:00	50,5	4,80	45,16	4,20	33,9	0,672	0,751
23:00	50,9	4,73	45,5	2,59	33,6	0,660	0,738
24:00	49,9	4,68	44,6	1,8	34,3	0,687	0,768
average	50,23	4,68	44,99	5,02	35,05	0,70	0,78

02 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	50,90	4,73	45,58	0,92	34,37	0,675	0,754
02:00	50,90	4,71	45,67	0,02	34,49	0,678	0,755
03:00	49,90	4,65	44,74	0,15	34,76	0,697	0,777
04:00	*43,97*	*4,56*	*38,90*	*0,68*	*30,78*	*0,700*	*0,791*
05:00	40,30	4,62	35,20	1,45	27,23	0,676	0,774
06:00	45,80	4,69	40,60	1,01	31,10	0,679	0,766
07:00	46,60	4,60	41,50	1,59	33,40	0,717	0,805
08:00	49,70	4,66	44,50	3,14	33,70	0,678	0,757
09:00	48,00	4,62	42,90	6,50	35,20	0,733	0,821
10:00	50,60	4,60	45,40	8,10	33,10	0,654	0,729
11:00	50,60	4,6	45,50	8,60	34,90	0,690	0,767
12:00	50,30	4,56	45,10	8,64	33,40	0,664	0,741
13:00	49,60	4,58	44,50	8,60	32,80	0,661	0,737
14:00	50,00	4,50	45,00	10,30	34,70	0,694	0,771
15:00	50,81	4,6	45,63	10,03	35,08	0,690	0,769
16:00	50,09	4,6	44,74	9,92	35,36	0,706	0,790
17:00	48,12	4,5	43,09	8,57	33,85	0,703	0,786
18:00	50,63	4,6	45,51	6,31	34,06	0,673	0,748
19:00	49,93	4,63	44,81	6,56	33,32	0,667	0,744
20:00	49,51	4,59	44,37	6,84	35,41	0,715	0,798
21:00	51,10	4,51	46,04	6,01	36,2	0,708	0,786
22:00	50,0	4,50	44,80	5,50	34,4	0,688	0,768
23:00	48,5	4,60	43,4	4,10	34,1	0,703	0,786
24:00	50,0	4,50	43,5	2,6	32,1	0,642	0,738
average	48,99	4,59	43,79	5,28	33,66	0,69	0,77

Lampiran 1a. Data Input-Output PLTU Barru Unit 1 Bulan Juni 2016 (Lanjutan)

03 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD GT NETTO	ACTUAL LOAD REAKTIF	Coal Flow	SFC	SFC (Netl)
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	49,90	4,60	44,64	2,20	34,00	0,681	0,758
02:00	49,90	4,50	44,90	1,80	33,70	0,675	0,751
03:00	49,00	4,60	44,80	1,00	33,70	0,675	0,752
04:00	50,50	4,60	45,40	0,30	34,90	0,691	0,769
05:00	48,90	4,40	44,00	1,20	33,70	0,689	0,766
06:00	50,30	4,60	45,20	0,70	34,00	0,676	0,752
07:00	49,60	4,60	44,72	1,20	34,22	0,007	0,765
08:00	50,03	4,60	44,90	5,40	33,84	0,676	0,754
09:00	49,60	4,40	44,76	6,60	34,73	0,700	0,776
10:00	48,60	4,60	43,53	8,80	32,95	0,679	0,756
11:00	50,50	4,5	45,30	9,40	34,71	0,687	0,766
12:00	49,60	4,00	44,50	0,20	35,00	0,706	0,787
13:00	50,30	4,50	45,10	8,20	34,90	0,694	0,774
14:00	49,60	4,50	44,80	9,60	33,20	0,667	0,741
15:00	50,50	4,5	45,30	9,30	34,20	0,677	0,755
16:00	49,50	4,4	44,60	9,30	33,20	0,711	0,709
17:00	49,10	4,5	44,00	7,80	34,30	0,699	0,780
18:00	49,90	4,4	44,80	8,10	34,30	0,687	0,766
19:00	49,80	4,40	44,80	7,90	34,20	0,687	0,763
20:00	48,70	4,50	43,60	8,60	33,20	0,682	0,761
21:00	50,90	4,50	45,70	8,10	34,1	0,670	0,746
22:00	50,7	4,50	45,70	7,80	35,5	0,700	0,777
23:00	46,9	4,50	44,5	5,90	34,8	0,742	0,782
24:00	50,1	4,50	45,0	4,9	33,8	0,675	0,751
average	49,74	4,51	44,78	5,93	34,22	0,69	0,76

04 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD GT NETTO	ACTUAL LOAD REAKTIF	Coal Flow	SFC	SFC (Netl)
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	51,20	4,40	46,10	4,40	34,30	0,670	0,744
02:00	50,00	4,50	44,90	3,60	33,50	0,670	0,746
03:00	49,70	4,50	44,70	2,80	34,60	0,694	0,772
04:00	49,20	4,50	44,20	2,40	33,90	0,680	0,767
05:00	49,70	4,50	44,70	2,40	34,50	0,694	0,772
06:00	49,10	4,50	44,20	2,70	33,80	0,685	0,765
07:00	50,28	4,50	45,18	4,93	34,10	0,676	0,755
08:00	50,60	4,50	45,30	3,40	33,60	0,664	0,741
09:00	50,60	4,60	45,60	4,00	35,52	0,698	0,778
10:00	50,01	4,40	44,96	6,66	35,00	0,700	0,778
11:00	50,90	4,5	45,81	6,79	34,66	0,681	0,757
12:00	51,20	4,60	46,10	6,48	34,53	0,674	0,749
13:00	49,90	4,61	44,68	7,49	34,35	0,688	0,769
14:00	50,41	4,69	45,21	8,47	33,78	0,670	0,747
15:00	49,00	4,6	43,90	7,00	33,30	0,680	0,759
16:00	48,10	4,5	43,00	7,00	32,80	0,682	0,763
17:00	51,20	4,5	46,10	5,10	34,90	0,682	0,757
18:00	49,50	4,6	44,30	5,50	34,10	0,689	0,770
19:00	49,60	4,50	44,80	8,00	33,30	0,671	0,747
20:00	50,20	4,60	45,10	8,30	33,80	0,673	0,749
21:00	50,70	4,50	45,60	7,50	34,6	0,682	0,759
22:00	50,3	4,62	45,20	5,70	34,2	0,680	0,757
23:00	50,4	4,01	46,3	4,55	34,3	0,681	0,757
24:00	49,4	4,59	44,3	4,8	33,1	0,670	0,747
average	50,05	4,53	44,96	5,36	34,09	0,68	0,76

Lampiran 1a. Data Input-Output PLTU Barru Unit 1 Bulan Juni 2016 (Lanjutan)

07 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	48,90	4,54	43,80	2,70	33,20	0,679	0,758
02:00	49,50	4,59	44,40	1,85	33,70	0,681	0,759
03:00	47,70	4,40	42,70	3,00	33,00	0,692	0,773
04:00	47,00	4,40	42,00	3,70	32,00	0,681	0,762
05:00	50,10	4,50	45,00	2,10	35,00	0,699	0,778
06:00	50,90	4,50	45,70	0,70	35,40	0,695	0,775
07:00	51,10	4,59	45,90	1,07	35,4	0,693	0,771
08:00	50,70	4,51	45,90	3,24	31,10	0,613	0,678
09:00	49,20	4,40	44,20	6,06	34,90	0,709	0,790
10:00	49,60	4,34	44,70	6,83	33,10	0,667	0,740
11:00	50,30	4,37	45,30	6,81	35,00	0,696	0,773
12:00	50,60	4,42	45,60	6,47	35,40	0,700	0,776
13:00	49,60	4,36	44,70	7,30	34,10	0,686	0,763
14:00	50,20	4,42	45,26	8,61	36,90	0,735	0,815
15:00	49,50	4,5	44,60	8,47	34,80	0,703	0,780
16:00	49,30	4,4	44,30	8,58	36,40	0,738	0,822
17:00	48,50	4,5	43,50	7,97	33,60	0,693	0,772
18:00	48,00	4,4	43,00	8,70	35,30	0,735	0,821
19:00	49,80	4,40	44,80	9,50	35,40	0,711	0,790
20:00	49,90	4,40	44,80	8,50	34,10	0,683	0,761
21:00	48,00	4,46	42,90	10,50	35,5	0,740	0,828
22:00	51,0	4,50	45,90	7,21	35,8	0,702	0,780
23:00	49,7	4,53	44,7	5,26	35,6	0,716	0,797
24:00	51,6	4,50	46,5	3,9	36,5	0,707	0,785
average	49,61	4,45	44,59	5,80	34,63	0,698	0,777

08 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	49,34	4,46	44,39	3,55	35,26	0,715	0,794
02:00	49,20	4,45	44,18	2,99	35,62	0,724	0,806
03:00	50,41	4,38	45,56	2,72	35,80	0,710	0,786
04:00	51,33	4,47	46,34	2,85	35,03	0,682	0,756
05:00	49,78	4,55	44,67	2,15	34,36	0,691	0,770
06:00	49,40	4,49	44,40	1,02	33,20	0,672	0,748
07:00	49,80	4,43	44,00	0,08	35,9	0,721	0,800
08:00	50,50	4,40	46,50	2,06	34,20	0,677	0,752
09:00	49,40	4,45	44,40	4,71	34,30	0,694	0,773
10:00	49,60	4,40	44,60	8,79	35,40	0,714	0,794
11:00	50,70	4,40	45,70	9,05	35,50	0,700	0,777
12:00	50,40	4,46	45,30	9,15	37,60	0,746	0,830
13:00	50,20	4,42	45,30	8,78	36,40	0,725	0,804
14:00	50,70	4,38	45,70	10,50	35,90	0,708	0,786
15:00	50,10	4,5	45,10	11,50	34,80	0,695	0,772
16:00	49,70	4,4	44,70	11,60	33,90	0,682	0,758
17:00	48,70	4,4	43,80	9,92	32,90	0,676	0,751
18:00	49,70	4,5	44,70	9,50	34,40	0,692	0,770
19:00	50,60	4,43	45,60	10,00	34,80	0,688	0,763
20:00	48,70	4,41	43,80	9,93	33,80	0,694	0,772
21:00	50,20	4,33	45,30	9,20	35,0	0,697	0,773
22:00	49,9	4,40	44,90	8,18	34,6	0,693	0,771
23:00	50,1	4,44	45,1	6,40	32,1	0,641	0,712
24:00	49,6	4,43	44,0	5,3	34,5	0,696	0,773
average	49,92	4,44	44,94	6,70	34,80	0,697	0,774

Lampiran 1a. Data Input-Output PLTU Barru Unit 1 Bulan Juni 2016 (Lanjutan)

09 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD GT NETTO	ACTUAL LOAD REAKTIF	Coal Flow	SFC	SFC (Nett)
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	49,68	4,38	44,80	4,86	34,63	0,697	0,773
02:00	49,77	4,52	44,69	3,82	33,89	0,681	0,758
03:00	50,05	4,43	45,12	3,50	34,38	0,687	0,762
04:00	51,77	4,44	46,78	4,06	35,36	0,683	0,756
05:00	50,45	4,54	45,44	2,77	35,46	0,703	0,780
06:00	52,16	4,55	47,07	1,54	34,17	0,655	0,726
07:00	48,77	4,50	43,80	2,06	34,28	0,703	0,783
08:00	51,32	4,39	46,40	3,70	35,82	0,698	0,772
09:00	50,20	4,51	45,20	6,84	35,10	0,699	0,777
10:00	49,00	4,44	44,00	8,72	34,10	0,696	0,775
11:00	49,66	4,40	44,71	9,25	34,89	0,702	0,780
12:00	50,31	4,45	45,32	6,93	36,93	0,734	0,815
13:00	51,34	4,46	46,37	8,54	37,96	0,739	0,819
14:00	49,57	4,49	44,57	10,94	35,06	0,707	0,787
15:00	49,70	4,4	44,70	11,10	36,40	0,732	0,814
16:00	50,86	4,4	45,80	9,80	35,70	0,702	0,779
17:00	50,55	4,5	45,50	8,70	36,05	0,713	0,792
18:00	50,00	4,5	45,00	9,45	35,20	0,704	0,782
19:00	49,82	4,40	44,90	8,50	35,20	0,707	0,784
20:00	49,68	44,63	44,45	8,47	34,26	0,690	0,771
21:00	50,18	45,11	44,11	6,82	33,7	0,672	0,765
22:00	50,3	4,50	45,30	7,60	35,2	0,700	0,777
23:00	50,3	4,50	45,3	6,20	34,3	0,682	0,757
24:00	49,4	4,40	44,4	5,0	33,9	0,686	0,764
average	50,20	7,83	45,16	6,80	35,08	0,699	0,777

10 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD GT NETTO	ACTUAL LOAD REAKTIF	Coal Flow	SFC	SFC (Nett)
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	50,40	4,40	45,50	3,80	35,90	0,712	0,789
02:00	50,30	4,40	45,40	3,40	35,00	0,714	0,791
03:00	50,80	4,40	46,00	2,60	34,80	0,685	0,758
04:00	50,50	4,40	45,00	2,30	34,30	0,679	0,762
05:00	50,70	4,40	46,70	0,70	35,10	0,692	0,768
06:00	48,62	4,52	43,48	1,32	34,36	0,708	0,790
07:00	48,89	4,50	43,92	0,97	35,93	0,735	0,818
08:00	50,90	4,49	45,90	2,64	36,40	0,715	0,793
09:00	50,70	4,41	45,00	6,66	35,70	0,704	0,779
10:00	48,10	4,45	43,10	8,47	33,40	0,694	0,775
11:00	47,40	4,40	42,20	9,90	34,00	0,717	0,806
12:00	51,02	4,45	46,04	7,20	35,89	0,703	0,780
13:00	50,02	4,44	45,07	9,47	36,88	0,737	0,818
14:00	50,90	4,51	45,90	10,00	35,20	0,692	0,767
15:00	49,80	4,4	44,85	10,36	35,10	0,705	0,783
16:00	49,80	4,6	44,67	9,41	33,70	0,677	0,754
17:00	50,70	4,6	45,63	7,75	36,40	0,718	0,798
18:00	48,60	4,4	43,56	8,96	34,80	0,716	0,799
19:00	49,80	4,52	44,80	7,14	35,00	0,703	0,781
20:00	50,97	4,53	45,84	0,30	35,71	0,701	0,779
21:00	50,09	4,39	45,04	7,94	35,2	0,702	0,781
22:00	50,2	4,40	45,10	6,00	35,1	0,699	0,778
23:00	50,0	4,40	45,0	5,50	35,8	0,716	0,796
24:00	49,4	4,40	44,4	4,6	33,6	0,678	0,755
average	49,94	4,45	44,91	6,06	35,17	0,704	0,783

Lampiran 1a. Data Input-Output PLTU Barru Unit 1 Bulan Juni 2016 (Lanjutan)

11 Juni 2016

JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	49,20	4,40	44,30	4,20	35,00	0,711	0,790
02:00	49,40	4,40	44,60	3,80	36,20	0,733	0,813
03:00	49,60	4,40	44,60	3,60	36,00	0,726	0,807
04:00	40,90	4,40	44,90	4,00	37,10	0,745	0,928
05:00	49,60	4,40	44,60	3,70	34,50	0,696	0,774
06:00	49,90	4,40	44,90	2,90	36,00	0,721	0,802
07:00	48,00	4,44	44,03	2,59	35,7	0,730	0,811
08:00	50,00	4,47	45,07	3,64	35,90	0,718	0,797
09:00	50,00	4,42	45,40	5,82	36,90	0,738	0,813
10:00	49,80	4,36	44,94	6,94	36,60	0,735	0,814
11:00	49,23	4,35	44,32	7,72	36,57	0,743	0,825
12:00	50,10	4,45	45,16	6,53	36,50	0,729	0,808
13:00	39,20	4,32	34,48	7,02	26,50	0,676	0,760
14:00	49,80	4,40	44,80	6,80	37,20	0,747	0,830
15:00	51,10	4,4	46,10	6,70	36,70	0,718	0,796
16:00	50,10	4,4	45,10	7,80	34,60	0,691	0,767
17:00	50,90	4,5	45,80	6,90	35,80	0,703	0,782
18:00	49,50	4,4	44,60	7,10	36,50	0,737	0,818
19:00	40,90	4,40	40,90	0,40	35,20	0,720	0,902
20:00	50,30	4,40	45,30	8,30	34,20	0,680	0,755
21:00	49,40	4,40	44,40	0,10	34,2	0,602	0,770
22:00	49,8	4,40	44,90	7,60	34,2	0,687	0,762
23:00	50,8	4,40	45,8	4,60	36,4	0,717	0,795
24:00	49,6	4,50	44,6	5,2	36,1	0,728	0,809
average	49,37	4,41	44,43	5,87	35,44	0,718	0,798

12 Juni 2016

JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	50,80	4,50	45,70	4,30	36,90	0,726	0,807
02:00	48,90	4,40	43,80	3,80	36,00	0,756	0,842
03:00	50,90	4,40	45,00	4,00	35,70	0,701	0,778
04:00	50,30	4,40	45,30	4,60	36,70	0,730	0,810
05:00	50,30	4,50	45,20	3,20	36,20	0,720	0,801
06:00	49,50	4,40	44,50	2,30	36,00	0,727	0,809
07:00	49,80	4,40	44,90	1,30	36,1	0,725	0,804
08:00	50,70	4,40	45,70	1,80	36,20	0,714	0,792
09:00	50,80	4,40	45,70	2,90	36,20	0,713	0,792
10:00	50,40	4,40	45,40	4,50	35,20	0,698	0,775
11:00	49,90	4,40	44,90	4,70	36,80	0,737	0,820
12:00	49,60	4,40	44,60	4,10	36,60	0,738	0,821
13:00	51,30	4,40	46,40	4,20	36,70	0,715	0,791
14:00	48,90	4,50	43,90	5,00	35,50	0,726	0,809
15:00	50,30	4,4	45,30	4,90	34,10	0,678	0,753
16:00	49,90	4,4	44,90	5,00	32,80	0,657	0,731
17:00	50,70	4,4	45,80	5,10	33,90	0,669	0,740
18:00	50,90	4,4	45,80	5,70	34,40	0,676	0,751
19:00	51,10	4,40	46,10	7,30	34,10	0,667	0,740
20:00	49,60	4,40	44,60	7,10	32,70	0,659	0,733
21:00	49,80	4,40	44,60	7,20	32,7	0,659	0,733
22:00	50,6	4,40	45,70	5,60	34,3	0,678	0,751
23:00	49,6	4,30	44,8	5,10	32,3	0,651	0,721
24:00	48,9	4,40	43,6	4,3	33,8	0,691	0,775
average	50,14	4,41	45,13	4,50	35,12	0,700	0,778

Lampiran 1a. Data Input-Output PLTU Barru Unit 1 Bulan Juni 2016 (Lanjutan)

13 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD GT NETTO	ACTUAL LOAD REAKTIF	Coal Flow	SFC	SFC (Nett)
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	50,20	4,40	45,10	3,70	33,10	0,659	0,734
02:00	49,30	4,40	44,40	3,30	34,60	0,702	0,779
03:00	50,10	4,40	45,10	2,90	32,50	0,649	0,721
04:00	50,30	4,30	46,40	4,60	33,10	0,658	0,729
05:00	49,70	4,50	44,70	3,20	33,50	0,674	0,749
06:00	50,70	4,50	45,70	1,90	33,30	0,657	0,720
07:00	49,60	4,40	44,70	2,30	32,3	0,651	0,723
08:00	50,10	4,30	45,20	4,30	32,50	0,640	0,710
09:00	50,00	4,30	45,00	7,40	32,60	0,652	0,724
10:00	49,70	4,40	44,70	8,50	32,60	0,656	0,720
11:00	48,00	4,30	44,00	9,20	33,20	0,680	0,755
12:00	49,30	4,30	44,40	9,20	32,20	0,653	0,725
13:00	50,20	4,40	45,20	8,80	32,80	0,653	0,726
14:00	49,30	4,40	44,30	9,10	33,00	0,669	0,745
15:00	50,40	4,3	45,37	8,84	33,70	0,669	0,743
16:00	49,80	4,5	44,70	9,20	34,20	0,687	0,765
17:00	49,40	4,6	44,20	7,04	31,90	0,646	0,722
18:00	50,90	4,5	45,70	6,97	34,70	0,682	0,759
19:00	50,90	4,50	45,70	9,26	32,70	0,642	0,716
20:00	49,80	4,55	44,70	8,57	33,30	0,669	0,745
21:00	49,90	4,63	44,70	8,06	32,8	0,657	0,734
22:00	50,0	4,60	44,90	7,00	33,3	0,666	0,742
23:00	50,4	4,50	45,4	5,10	33,1	0,657	0,729
24:00	49,9	4,60	44,8	3,9	33,1	0,663	0,739
average	49,95	4,44	44,92	6,30	33,09	0,662	0,737

15 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD GT NETTO	ACTUAL LOAD REAKTIF	Coal Flow	SFC	SFC (Nett)
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	48,50	4,58	43,50	2,15	31,40	0,647	0,722
02:00	49,80	4,62	44,60	1,18	33,20	0,667	0,744
03:00	49,80	4,57	44,57	1,41	32,50	0,655	0,729
04:00	49,67	4,67	44,36	2,16	33,89	0,684	0,764
05:00	50,26	4,69	44,96	2,60	32,00	0,637	0,711
06:00	50,68	4,40	45,67	1,65	34,81	0,687	0,762
07:00	50,20	4,66	45,00	0,54	31,6	0,629	0,702
08:00	45,40	4,56	40,40	3,12	35,20	0,775	0,871
09:00	47,20	4,77	41,90	4,10	38,60	0,818	0,921
10:00	45,30	4,66	40,10	5,67	41,00	0,905	1,022
11:00	47,10	4,59	42,00	6,21	41,40	0,879	0,986
12:00	45,10	4,60	39,40	6,44	39,60	0,878	1,005
13:00	46,80	4,66	41,50	6,14	41,20	0,880	0,993
14:00	48,70	4,67	43,50	6,78	42,90	0,881	0,986
15:00	48,67	4,7	43,47	6,62	41,60	0,855	0,957
16:00	49,04	4,7	44,66	6,62	32,32	0,648	0,724
17:00	51,63	4,8	46,83	5,26	32,30	0,626	0,705
18:00	40,07	4,6	41,81	6,63	32,47	0,650	0,725
19:00	51,13	4,64	46,83	7,94	32,81	0,642	0,716
20:00	49,86	4,68	44,65	8,03	32,62	0,654	0,731
21:00	50,28	4,69	45,03	7,79	31,9	0,634	0,700
22:00	50,0	4,75	44,97	8,03	32,6	0,652	0,725
23:00	50,5	4,69	45,2	7,79	31,9	0,632	0,706
24:00	50,3	4,71	45,0	3,2	33,1	0,658	0,735
average	49,01	4,65	43,79	4,93	35,12	0,717	0,802

Lampiran 1a. Data Input-Output PLTU Barru Unit 1 Bulan Juni 2016 (Lanjutan)

16 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD GT NETTO	ACTUAL LOAD REAKTIF	Coal Flow	SFC	SFC (Nett)
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	51,00	4,70	46,25	2,16	32,70	0,634	0,707
02:00	50,70	4,70	45,47	2,15	31,80	0,627	0,699
03:00	49,80	4,68	44,47	2,61	31,40	0,633	0,706
04:00	50,10	4,68	44,91	3,00	31,00	0,619	0,690
05:00	49,40	4,74	44,15	1,54	31,90	0,646	0,723
06:00	50,70	4,70	45,59	0,62	33,30	0,657	0,730
07:00	50,70	4,74	45,40	0,89	32	0,631	0,705
08:00	50,20	4,73	45,00	2,26	32,80	0,653	0,729
09:00	48,30	4,61	43,20	5,63	32,90	0,681	0,702
10:00	50,70	4,62	45,50	6,04	32,50	0,641	0,714
11:00	51,10	4,70	46,00	6,14	32,50	0,636	0,710
12:00	50,40	4,76	45,10	6,51	32,50	0,645	0,721
13:00	50,00	4,68	44,70	6,53	32,30	0,646	0,723
14:00	50,20	4,67	44,90	7,61	33,00	0,657	0,735
15:00	50,04	4,7	44,72	8,17	32,79	0,655	0,733
16:00	50,16	4,7	44,94	8,37	32,52	0,648	0,724
17:00	50,02	4,7	44,72	5,69	32,97	0,659	0,737
18:00	50,46	4,7	45,19	5,94	33,56	0,665	0,743
19:00	50,38	4,67	45,14	7,54	33,66	0,668	0,746
20:00	50,64	4,76	45,26	7,52	33,04	0,652	0,730
21:00	49,95	4,72	44,71	6,87	33,0	0,660	0,738
22:00	50,1	4,69	44,85	5,57	31,8	0,635	0,708
23:00	49,9	4,60	44,8	3,31	33,7	0,676	0,754
24:00	50,3	4,71	45,0	2,6	33,3	0,661	0,739
average	50,24	4,70	44,99	4,64	32,62	0,649	0,725

17 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD GT NETTO	ACTUAL LOAD REAKTIF	Coal Flow	SFC	SFC (Nett)
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	50,80	4,70	45,51	1,84	33,50	0,659	0,736
02:00	50,80	4,70	45,55	1,41	31,30	0,616	0,687
03:00	50,60	4,70	45,02	2,07	32,60	0,642	0,715
04:00	50,30	4,70	45,10	2,08	32,30	0,642	0,716
05:00	50,40	4,60	45,27	1,90	33,40	0,663	0,738
06:00	51,10	4,70	45,76	0,47	33,50	0,656	0,732
07:00	51,10	4,70	45,86	0,88	34,9	0,682	0,761
08:00	49,81	4,70	44,50	2,38	32,85	0,655	0,734
09:00	50,20	4,76	45,00	4,64	34,31	0,682	0,762
10:00	50,41	4,65	45,22	5,86	32,54	0,646	0,720
11:00	50,40	4,70	45,07	6,07	33,20	0,659	0,737
12:00	50,92	4,74	45,56	6,25	33,09	0,650	0,726
13:00	50,50	4,69	45,35	5,24	32,30	0,640	0,712
14:00	50,51	4,70	45,09	7,59	32,66	0,640	0,724
15:00	50,51	4,75	45,27	7,70	33,33	0,660	0,736
16:00	49,88	4,69	44,64	8,13	32,81	0,658	0,735
17:00	50,16	4,73	44,89	6,86	33,63	0,670	0,749
18:00	49,68	4,60	44,43	8,14	31,28	0,630	0,704
19:00	50,55	4,72	45,31	8,14	33,86	0,670	0,747
20:00	49,80	4,72	44,60	7,83	33,45	0,671	0,750
21:00	49,90	4,74	44,57	7,87	33,5	0,672	0,753
22:00	50,7	4,70	45,30	5,10	33,1	0,653	0,731
23:00	50,5	4,60	45,3	3,70	33,6	0,665	0,742
24:00	48,7	4,70	45,5	3,9	30,0	0,602	0,677
average	50,35	4,70	45,18	4,84	32,99	0,655	0,730

Lampiran 1a. Data Input-Output PLTU Barru Unit 1 Bulan Juni 2016 (Lanjutan)

18 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	49,30	4,70	44,10	2,80	30,60	0,621	0,694
02:00	51,00	4,70	45,70	2,20	32,30	0,633	0,707
03:00	50,80	4,60	45,60	2,50	31,80	0,626	0,697
04:00	50,60	4,70	45,20	3,00	31,90	0,626	0,706
05:00	50,30	4,70	45,00	2,10	32,50	0,646	0,722
06:00	50,40	4,70	45,10	1,00	31,20	0,610	0,682
07:00	49,40	4,70	44,10	1,30	31,6	0,640	0,717
08:00	50,50	4,00	45,30	2,30	32,60	0,646	0,720
09:00	50,90	4,60	45,80	4,00	34,00	0,668	0,742
10:00	50,00	4,60	44,80	5,80	29,40	0,588	0,656
11:00	50,70	4,70	45,30	5,30	32,90	0,649	0,726
12:00	49,00	4,60	43,70	5,50	32,50	0,663	0,744
13:00	50,70	4,60	45,50	5,70	33,70	0,665	0,741
14:00	49,30	4,60	44,10	6,50	32,50	0,659	0,737
15:00	50,10	4,70	44,80	6,29	33,30	0,665	0,743
16:00	50,50	4,60	45,30	7,03	35,20	0,697	0,777
17:00	49,80	4,60	44,60	8,45	34,10	0,685	0,765
18:00	49,50	4,70	44,20	7,13	33,50	0,677	0,758
19:00	49,50	4,60	44,30	8,17	32,60	0,003	0,740
20:00	48,90	4,60	43,70	8,05	32,80	0,671	0,751
21:00							
22:00							
23:00							
24:00							
average	50,07	4,65	44,81	4,69	32,56	0,650	0,727

19 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	50,20	4,60	45,10	3,30	32,30	0,643	0,716
02:00	50,40	4,60	45,10	2,90	32,00	0,635	0,710
03:00	50,40	4,60	45,00	2,70	32,50	0,645	0,722
04:00	51,20	4,70	45,90	3,20	32,10	0,627	0,699
05:00	50,40	4,60	45,30	3,10	32,30	0,641	0,713
06:00	50,90	4,70	45,50	1,70	33,40	0,656	0,734
07:00	51,82	4,73	46,55	0,73	34,04	0,657	0,731
08:00	50,80	4,69	45,57	1,26	33,50	0,660	0,736
09:00	49,90	9,65	44,66	2,63	32,24	0,646	0,722
10:00	50,34	4,64	45,14	3,10	32,15	0,639	0,712
11:00	50,09	4,64	44,90	3,82	33,09	0,661	0,737
12:00	49,83	4,73	44,60	4,26	32,35	0,649	0,725
13:00	49,35	4,62	44,15	4,89	31,82	0,645	0,721
14:00	49,08	4,68	44,42	4,75	34,05	0,686	0,767
15:00	50,00	4,60	44,70	5,20	33,10	0,662	0,740
16:00	50,10	4,70	44,70	4,90	32,80	0,651	0,729
17:00	50,10	4,60	44,80	4,70	32,80	0,655	0,732
18:00	49,50	4,90	44,20	5,60	32,60	0,659	0,738
19:00	48,00	4,00	43,00	7,30	33,60	0,691	0,781
20:00	49,60	4,70	44,50	6,00	33,10	0,665	0,744
21:00	49,50	4,70	44,30	4,00	33,4	0,676	0,754
22:00	48,0	4,60	43,40	6,01	32,7	0,687	0,753
23:00	49,7	4,70	44,4	4,40	32,0	0,644	0,721
24:00	50,7	4,70	45,4	3,6	33,4	0,659	0,736
average	50,10	4,87	44,80	3,90	32,80	0,655	0,732

Lampiran 1a. Data Input-Output PLTU Barru Unit 1 Bulan Juni 2016 (Lanjutan)

20 Juni 2016

JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	49,80	4,68	44,60	2,42	33,80	0,679	0,758
02:00	49,20	4,68	44,00	2,01	32,80	0,667	0,745
03:00	49,60	4,67	44,40	1,81	33,90	0,683	0,764
04:00	50,80	4,66	45,60	2,11	34,30	0,675	0,752
05:00	49,50	4,71	44,20	1,77	32,90	0,665	0,744
06:00	49,70	4,79	44,40	0,81	31,40	0,632	0,707
07:00	50,59	4,63	45,40	1,64	33,72	0,667	0,743
08:00	49,81	4,77	44,55	2,66	33,44	0,671	0,751
09:00	50,74	4,71	45,45	5,50	32,89	0,648	0,724
10:00	49,66	4,67	44,42	7,00	35,75	0,720	0,805
11:00	45,98	4,64	40,87	7,88	31,85	0,693	0,779
12:00	50,59	4,75	45,30	6,57	33,90	0,670	0,748
13:00	50,23	4,69	45,00	6,40	34,00	0,677	0,756
14:00	50,20	4,60	45,00	6,70	34,90	0,695	0,776
15:00	49,80	4,70	44,80	7,30	33,60	0,675	0,753
16:00	49,60	4,60	44,50	7,60	34,30	0,692	0,771
17:00	49,50	4,60	44,30	7,10	32,60	0,659	0,736
18:00	49,20	4,60	44,00	6,10	34,20	0,695	0,777
19:00	50,20	4,70	45,00	6,50	35,00	0,697	0,778
20:00	49,90	4,70	44,60	6,30	34,60	0,693	0,776
21:00	49,50	4,70	44,20	6,40	34,5	0,697	0,781
22:00	49,4	4,70	44,60	5,40	35,1	0,711	0,787
23:00	50,2	4,80	44,8	4,40	35,3	0,703	0,786
24:00	50,1	4,70	44,9	3,1	34,3	0,685	0,764
average	49,74	4,69	44,53	4,81	33,88	0,681	0,761

21 Juni 2016

JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	50,50	4,70	45,30	2,00	35,40	0,701	0,781
02:00	48,80	4,60	43,60	1,90	35,20	0,721	0,807
03:00	50,40	4,70	45,10	1,20	35,00	0,694	0,776
04:00	50,90	4,70	45,60	2,60	35,70	0,701	0,783
05:00	50,40	4,70	45,00	1,30	34,20	0,679	0,760
06:00	51,10	4,80	45,70	0,30	34,20	0,669	0,748
07:00	49,80	4,70	44,40	0,40	34,0	0,701	0,786
08:00	49,40	4,90	43,90	2,30	34,30	0,694	0,781
09:00	48,60	4,90	43,20	6,40	34,80	0,716	0,806
10:00	50,50	4,80	45,10	7,50	34,00	0,673	0,754
11:00	50,40	4,60	45,10	8,40	34,20	0,679	0,758
12:00	49,80	4,60	44,60	7,50	34,10	0,685	0,765
13:00	47,80	4,60	42,60	8,80	33,50	0,701	0,786
14:00	48,40	4,80	42,90	9,30	34,70	0,717	0,809
15:00	49,80	4,75	44,30	8,70	34,00	0,683	0,767
16:00	49,60	4,90	44,10	8,20	34,60	0,699	0,785
17:00	50,20	4,60	45,00	6,90	35,30	0,703	0,784
18:00	49,90	4,70	44,60	8,30	34,40	0,689	0,771
19:00	49,70	4,70	44,40	8,50	35,60	0,716	0,802
20.00	49,10	4,60	43,90	8,90	35,50	0,723	0,809
21:00	50,00	4,60	44,90	9,30	35,0	0,700	0,780
22.00	50,5	4,69	45,30	7,40	35,0	0,693	0,773
23:00	48,9	4,00	43,7	6,60	35,2	0,720	0,805
24:00	48,0	4,50	42,9	5,8	34,9	0,727	0,814
average	49,68	4,69	44,38	5,77	34,74	0,699	0,783

Lampiran 1a. Data Input-Output PLTU Barru Unit 1 Bulan Juni 2016 (Lanjutan)

22 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD GT NETTO	ACTUAL LOAD REAKTIF	Coal Flow	SFC	SFC (Nett)
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	50,30	4,65	45,10	6,41	34,80	0,692	0,772
02:00	50,80	4,66	45,60	3,84	33,50	0,659	0,735
03:00	50,90	4,82	45,60	4,70	36,00	0,707	0,789
04:00	49,70	4,63	44,50	5,94	35,70	0,716	0,802
05:00	50,60	4,60	45,30	4,93	34,60	0,684	0,764
06:00	50,10	4,68	44,90	3,74	33,90	0,677	0,755
07:00	50,70	4,50	45,50	3,70	35,4	0,698	0,778
08:00	50,00	4,60	44,70	6,10	34,10	0,682	0,763
09:00	49,00	4,70	43,80	8,60	31,00	0,633	0,708
10:00	46,90	4,60	41,70	9,90	32,90	0,701	0,789
11:00	50,80	4,70	45,50	10,80	34,30	0,675	0,754
12:00	48,90	4,70	43,60	0,20	34,60	0,708	0,794
13:00	48,50	4,50	43,40	10,30	35,60	0,734	0,820
14:00	42,60	4,70	37,50	13,40	34,50	0,810	0,920
15:00	49,40	4,73	44,20	11,50	28,80	0,583	0,652
16:00	48,70	4,72	43,50	11,80	34,50	0,708	0,793
17:00	49,60	4,71	44,40	10,40	34,60	0,698	0,779
18:00	46,60	4,67	41,50	11,00	30,40	0,652	0,733
19:00	49,30	4,67	44,00	10,50	33,40	0,677	0,759
20:00	47,60	4,75	42,30	10,74	33,80	0,710	0,799
21:00	47,90	4,80	42,30	10,30	31,6	0,660	0,747
22:00	51,1	4,80	45,60	6,90	34,8	0,681	0,763
23:00	49,3	4,80	43,9	4,90	34,1	0,692	0,777
24:00	48,9	4,60	43,7	4,2	34,6	0,708	0,792
average	49,09	4,68	43,84	7,70	33,81	0,689	0,771

23 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD GT NETTO	ACTUAL LOAD REAKTIF	Coal Flow	SFC	SFC (Nett)
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	49,16	4,80	43,82	3,08	34,19	0,695	0,780
02:00	49,51	4,88	44,06	2,59	32,87	0,664	0,746
03:00	48,63	4,76	43,32	2,70	32,70	0,672	0,755
04:00	51,10	4,70	45,80	2,80	34,20	0,669	0,747
05:00	50,60	4,70	45,40	2,10	35,20	0,696	0,775
06:00	50,40	4,90	45,00	1,90	33,40	0,663	0,742
07:00	51,30	4,78	46,00	1,56	33	0,643	0,717
08:00	50,70	4,62	45,50	3,89	35,70	0,704	0,785
09:00	51,30	4,84	45,90	5,36	34,70	0,676	0,756
10:00	49,60	4,77	44,30	7,31	32,70	0,659	0,738
11:00	50,60	4,66	45,30	7,41	32,90	0,650	0,726
12:00	50,20	4,71	44,90	6,98	33,20	0,661	0,739
13:00	50,70	4,70	45,50	7,02	34,60	0,682	0,760
14:00	50,70	4,74	45,50	8,15	35,30	0,696	0,776
15:00	49,01	4,87	43,58	8,78	32,77	0,669	0,752
16:00	50,29	4,82	44,92	8,40	33,51	0,666	0,746
17:00	50,36	4,91	44,90	7,88	33,29	0,661	0,741
18:00	50,08	4,74	44,76	8,70	32,82	0,655	0,733
19:00	50,23	4,75	44,93	9,52	33,24	0,662	0,740
20:00	50,36	4,75	45,03	8,58	33,54	0,666	0,745
21:00	50,54	4,68	45,34	8,92	33,3	0,658	0,734
22:00	50,7	4,67	45,45	6,63	33,6	0,664	0,740
23:00	48,3	4,85	43,0	5,39	34,8	0,722	0,811
24:00	49,8	4,87	44,4	4,2	34,3	0,688	0,772
average	50,17	4,77	44,86	5,83	33,74	0,673	0,752

Lampiran 1a. Data Input-Output PLTU Barru Unit 1 Bulan Juni 2016 (Lanjutan)

24 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	49,90	4,80	44,50	3,60	32,20	0,645	0,724
02:00	50,00	4,70	44,25	3,20	34,90	0,698	0,789
03:00	48,60	4,80	43,30	3,60	32,60	0,671	0,753
04:00	*49,10*	*4,60*	*44,00*	*2,70*	*32,60*	*0,664*	*0,741*
05:00	51,00	4,80	45,70	2,00	36,80	0,722	0,805
06:00	50,80	4,90	45,40	1,70	33,20	0,654	0,731
07:00	49,90	4,70	44,70	2,33	33,3	0,667	0,745
08:00	49,20	4,81	43,80	4,26	33,20	0,675	0,758
09:00	50,80	4,79	45,50	6,00	33,10	0,652	0,727
10:00	50,00	4,78	44,70	8,25	34,10	0,682	0,763
11:00	49,70	4,60	44,50	8,78	33,00	0,664	0,742
12:00	50,80	4,69	45,50	7,81	34,60	0,681	0,760
13:00	50,20	4,62	45,00	7,30	33,00	0,657	0,733
14:00	50,40	4,58	45,30	9,13	33,60	0,667	0,742
15:00	49,30	4,68	44,10	9,92	33,72	0,684	0,765
16:00	48,92	4,82	43,56	10,12	33,22	0,679	0,763
17:00	49,79	4,71	44,54	10,12	32,76	0,658	0,736
18:00	50,83	4,60	45,69	9,50	34,17	0,672	0,748
19:00	51,07	4,65	45,85	8,78	34,86	0,683	0,760
20:00	47,84	4,47	42,82	9,19	35,27	0,737	0,824
21:00	49,96	4,74	44,72	9,03	35,7	0,714	0,798
22:00	50,5	4,63	45,31	7,58	35,9	0,712	0,793
23:00	50,3	4,81	45,0	4,87	32,8	0,653	0,730
24:00	49,5	4,76	44,3	3,9	34,4	0,695	0,778
average	49,93	4,71	44,67	6,40	33,88	0,678	0,758

25 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	50,50	4,60	45,30	3,30	33,70	0,667	0,744
02:00	49,30	4,80	44,00	2,85	34,10	0,692	0,775
03:00	49,00	4,60	43,80	2,75	34,70	0,708	0,792
04:00	*50,60*	*4,50*	*45,50*	*2,69*	*35,10*	*0,694*	*0,771*
05:00	49,80	4,70	44,60	2,08	33,50	0,673	0,751
06:00	51,60	4,80	46,20	1,04	34,30	0,665	0,742
07:00	50,08	4,70	45,50	1,28	33,6	0,671	0,738
08:00	50,08	4,50	44,90	2,36	33,04	0,660	0,736
09:00	50,40	4,70	45,07	3,41	33,86	0,672	0,751
10:00	50,90	4,60	45,70	3,91	34,27	0,673	0,750
11:00	51,10	4,60	45,96	4,09	35,88	0,702	0,781
12:00	50,55	4,76	45,25	4,11	34,24	0,677	0,757
13:00	51,66	4,65	46,46	3,86	35,36	0,684	0,761
14:00	50,98	4,91	45,50	4,79	34,43	0,675	0,757
15:00	50,23	4,80	44,88	6,03	33,00	0,657	0,735
16:00	47,70	4,81	42,51	7,55	36,31	0,761	0,854
17:00	48,64	4,75	43,36	6,98	34,24	0,704	0,790
18:00	50,62	4,78	45,33	6,93	34,43	0,680	0,760
19:00	48,90	4,60	43,84	7,74	35,87	0,734	0,818
20:00	51,12	4,75	45,84	6,92	33,89	0,663	0,739
21:00	50,84	4,61	45,71	6,62	34,7	0,682	0,759
22:00	49,9	4,70	44,60	5,70	34,1	0,683	0,765
23:00	49,1	4,60	43,9	3,80	34,4	0,701	0,784
24:00	50,3	4,50	45,3	2,6	35,2	0,700	0,777
average	50,16	4,68	44,96	4,31	34,42	0,686	0,766

Lampiran 1a. Data Input-Output PLTU Barru Unit 1 Bulan Juni 2016 (Lanjutan)

26 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	50,20	4,70	44,90	2,00	33,50	0,667	0,746
02:00	51,30	4,60	46,10	1,40	34,70	0,676	0,753
03:00	50,70	4,50	45,70	2,00	33,30	0,657	0,729
04:00	51,00	4,50	45,10	2,20	35,50	0,696	0,787
05:00	50,90	4,60	45,80	1,60	34,70	0,682	0,758
06:00	51,30	4,60	46,20	0,30	34,00	0,663	0,736
07:00	51,50	4,60	46,30	-0,09	35	0,680	0,756
08:00	51,90	4,60	46,60	0,90	34,60	0,667	0,742
09:00	50,00	4,60	44,90	2,90	32,40	0,648	0,722
10:00	50,80	4,54	45,70	3,80	33,60	0,661	0,735
11:00	50,10	4,55	45,00	4,60	33,63	0,671	0,747
12:00	50,30	4,50	45,20	4,20	34,50	0,686	0,763
13:00	49,30	4,50	44,20	4,90	33,00	0,669	0,747
14:00	49,50	4,60	44,30	5,30	34,20	0,691	0,772
15:00	49,90	4,62	44,80	5,70	33,61	0,674	0,750
16:00	51,43	4,63	46,24	5,83	35,64	0,693	0,771
17:00	50,41	4,75	45,11	5,67	33,61	0,667	0,745
18:00	50,49	4,57	45,38	6,91	34,77	0,689	0,766
19:00	50,16	4,53	45,07	8,70	33,17	0,661	0,736
20:00	50,31	4,59	45,14	7,58	33,70	0,670	0,747
21:00	50,47	4,71	45,29	7,15	34,3	0,680	0,757
22:00	49,2	4,70	44,00	6,80	33,3	0,677	0,757
23:00	50,0	4,60	44,9	5,20	33,2	0,664	0,739
24:00	49,4	4,60	44,4	3,6	33,7	0,682	0,759
average	50,44	4,60	45,26	4,13	33,98	0,674	0,751

27 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	49,60	4,50	44,50	3,50	35,70	0,720	0,802
02:00	49,60	4,50	44,50	3,20	34,60	0,698	0,778
03:00	49,40	4,50	44,30	3,00	34,50	0,698	0,779
04:00	*49,30*	*4,50*	*44,20*	*2,80*	*34,10*	*0,692*	*0,771*
05:00	50,12	4,65	44,92	1,99	34,88	0,696	0,776
06:00	50,16	4,66	44,96	0,94	33,21	0,662	0,739
07:00	50,70	4,56	45,56	1,13	34,99	0,690	0,768
08:00	50,86	4,82	45,47	3,70	34,34	0,675	0,755
09:00	50,30	4,61	45,13	6,20	33,96	0,675	0,752
10:00	50,54	4,60	45,32	7,81	33,34	0,660	0,736
11:00	48,82	4,65	44,59	8,64	33,84	0,693	0,759
12:00	50,67	4,76	45,33	7,09	33,76	0,666	0,745
13:00	50,68	4,62	45,49	7,71	34,37	0,678	0,756
14:00	50,22	4,73	44,93	8,36	34,65	0,690	0,771
15:00	49,50	4,50	44,40	9,10	34,30	0,693	0,773
16:00	49,30	4,50	44,20	8,80	35,70	0,724	0,808
17:00	49,90	4,60	44,80	7,70	34,90	0,699	0,779
18:00	49,80	4,40	44,80	9,40	33,70	0,677	0,752
19:00	49,70	4,50	44,60	9,20	33,50	0,674	0,751
20:00	50,10	4,50	45,10	8,80	34,50	0,689	0,765
21:00	49,20	4,70	44,00	8,40	34,9	0,709	0,793
22:00	49,1	4,68	43,90	9,57	34,2	0,697	0,779
23:00	50,0	4,57	44,8	6,95	34,0	0,680	0,759
24:00	49,7	4,67	44,4	5,4	34,5	0,694	0,777
average	49,89	4,60	44,76	6,22	34,35	0,689	0,767

Lampiran 1a. Data Input-Output PLTU Barru Unit 1 Bulan Juni 2016 (Lanjutan)

28 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	49,40	4,60	44,30	5,20	33,30	0,674	0,752
02:00	49,50	4,50	44,50	5,90	33,40	0,675	0,751
03:00	49,10	4,40	44,00	5,20	34,90	0,711	0,793
04:00	50,40	4,50	45,30	4,90	36,80	0,730	0,812
05:00	51,80	4,50	46,60	3,90	35,80	0,691	0,768
06:00	51,60	4,60	46,30	3,50	34,60	0,671	0,747
07:00	51,63	4,61	46,48	3,20	35,83	0,694	0,771
08:00	51,26	4,55	46,16	5,37	34,75	0,678	0,753
09:00	50,89	4,57	45,68	8,35	34,45	0,677	0,754
10:00	49,40	4,63	44,23	10,42	32,59	0,660	0,737
11:00	50,28	4,64	45,07	10,62	33,51	0,666	0,744
12:00	49,64	4,70	44,40	10,69	34,41	0,693	0,775
13:00	50,00	4,66	44,75	10,63	34,04	0,681	0,761
14:00	50,13	4,60	44,94	12,20	35,18	0,702	0,783
15:00	48,40	4,60	43,20	11,60	34,60	0,715	0,801
16:00	49,20	4,70	44,00	10,40	34,80	0,707	0,791
17:00	49,20	4,50	44,00	7,10	33,00	0,671	0,750
18:00	49,00	4,60	43,90	8,00	34,60	0,706	0,788
19:00	49,80	4,60	44,80	9,00	35,40	0,711	0,790
20:00	49,60	4,60	44,30	7,40	33,50	0,675	0,756
21:00	50,10	4,60	44,90	7,30	35,0	0,699	0,780
22:00	48,6	4,80	43,30	5,70	34,1	0,702	0,788
23:00	50,4	4,73	45,6	3,74	33,4	0,662	0,732
24:00	50,3	4,73	45,0	3,2	35,3	0,702	0,784
average	49,99	4,61	44,82	7,24	34,47	0,690	0,769

29 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	50,30	4,60	45,10	3,20	34,20	0,680	0,758
02:00	49,20	4,40	44,20	3,50	34,50	0,701	0,781
03:00	50,10	4,50	45,00	3,90	34,30	0,685	0,762
04:00	50,40	4,50	45,30	4,40	35,70	0,708	0,788
05:00	50,00	4,70	44,70	3,40	33,20	0,664	0,743
06:00	51,00	4,70	45,60	2,60	34,70	0,680	0,761
07:00	49,60	4,60	44,40	2,00	33,4	0,673	0,752
08:00	49,30	4,50	44,20	3,60	33,90	0,688	0,767
09:00	49,00	4,50	44,00	6,40	33,30	0,680	0,757
10:00	49,00	4,70	43,80	6,80	33,40	0,682	0,763
11:00	48,60	4,60	43,50	7,00	35,10	0,722	0,807
12:00	48,40	4,60	43,30	6,90	34,10	0,705	0,788
13:00	48,80	4,60	43,60	6,70	34,80	0,713	0,796
14:00	50,40	4,70	45,20	7,30	34,70	0,688	0,768
15:00	50,10	4,52	45,10	7,13	36,60	0,731	0,812
16:00	48,10	4,55	43,10	7,60	33,90	0,705	0,787
17:00	45,70	4,57	40,60	7,09	32,50	0,711	0,800
18:00	45,30	4,63	40,20	8,07	32,00	0,706	0,796
19:00	42,10	4,44	37,20	9,51	29,50	0,701	0,793
20:00	41,60	4,54	36,63	9,25	28,90	0,695	0,789
21:00	41,60	4,41	36,70	9,31	30,6	0,736	0,834
22:00	42,3	4,36	37,50	7,97	29,5	0,697	0,787
23:00	43,3	4,50	38,4	5,40	31,5	0,727	0,820
24:00	42,2	4,30	37,4	4,1	29,5	0,699	0,789
average	47,35	4,54	42,28	5,96	33,08	0,699	0,782

Lampiran 1a. Data Input-Output PLTU Barru Unit 1 Bulan Juni 2016 (Lanjutan)

30 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	43,00	4,40	38,20	3,75	30,70	0,714	0,804
02:00	40,40	4,28	35,60	3,66	28,60	0,708	0,803
03:00	39,90	4,30	35,10	3,40	29,60	0,742	0,843
04:00	40,50	4,20	35,80	3,80	29,70	0,733	0,830
05:00	42,40	4,50	37,40	5,20	31,60	0,745	0,845
06:00	42,10	4,50	37,30	3,40	29,90	0,710	0,802
07:00	42,90	4,30	38,00	3,60	30,9	0,720	0,813
08:00	43,70	4,40	38,80	5,30	31,70	0,725	0,817
09:00	44,80	4,40	39,90	8,60	32,40	0,723	0,812
10:00	48,00	4,40	42,90	9,30	32,10	0,669	0,748
11:00	48,90	4,60	43,70	10,00	33,90	0,693	0,776
12:00	49,40	4,60	44,20	10,70	35,20	0,713	0,796
13:00	50,10	4,40	45,00	11,20	35,40	0,707	0,787
14:00	50,20	4,60	45,00	13,00	35,10	0,699	0,780
15:00	49,50	4,60	44,20	14,10	35,80	0,723	0,810
16:00	46,70	4,50	41,60	15,60	32,10	0,687	0,772
17:00	45,40	4,40	40,50	12,60	32,90	0,725	0,812
18:00	45,90	4,40	40,90	12,50	31,90	0,695	0,780
19:00	44,90	4,60	39,80	15,20	31,70	0,706	0,796
20:00	45,30	4,50	40,20	14,50	32,40	0,715	0,806
21:00	45,10	4,66	39,90	12,10	32,1	0,712	0,805
22:00	44,4	4,70	39,20	10,50	31,6	0,712	0,806
23:00	44,3	4,50	39,4	6,60	31,2	0,704	0,792
24:00	44,9	4,50	39,8	5,2	32,0	0,713	0,804
average	45,11	4,47	40,10	8,91	32,10	0,712	0,801

Menyatakan bahwa data tersebut benar diperoleh dari PT. Indonesia Power, PLTU Barru 2x50 MW.

Barru, 21 November 2016

SABAR SANJAYA
Staff Engineering

Lampiran 1b. Data Input-Output PLTU Barru Unit 2 Bulan Juni 2016

01 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	44,81	4,56	38,99	2,98	35,80	0,803	0,918
02:00	44,10	4,62	38,99	2,31	36,20	0,821	0,928
03:00	44,70	4,84	39,34	0,95	36,37	0,814	0,925
04:00	44,63	4,71	39,40	0,94	37,52	0,841	0,952
05:00	44,71	4,87	39,37	1,00	35,60	0,796	0,904
06:00	44,41	4,91	39,05	1,66	37,24	0,839	0,954
07:00	45,3	4,70	40,00	1,85	36,50	0,806	0,913
08:00	46,0	4,70	39,70	2,86	36,70	0,816	0,924
09:00	44,90	5,00	39,40	4,07	36,10	0,804	0,916
10:00	44,70	5,10	39,00	5,59	36,40	0,814	0,933
11:00	44,5	4,70	39,10	6,40	35,80	0,804	0,916
12:00	44,30	4,60	39,00	6,70	36,70	0,828	0,941
13:00	44,50	4,80	39,20	5,80	36,20	0,813	0,923
14:00	44,80	5,00	39,30	6,30	37,60	0,839	0,957
15:00	45,30	4,91	39,93	5,94	35,79	0,790	0,896
16:00	44,37	4,84	38,97	5,19	34,87	0,786	0,895
17:00	45,32	5,04	39,69	4,45	36,46	0,805	0,919
18:00	45,70	4,69	40,46	4,73	34,57	0,756	0,854
19:00	46,17	4,69	40,79	5,84	33,46	0,725	0,820
20:00	44,69	4,99	39,03	6,28	34,79	0,778	0,891
21:00	44,28	5,31	38,67	6,12	33,71	0,761	0,872
average	44,81	4,84	39,40	4,19	35,92	0,80	0,91

02 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	43,92	5,10	38,44	0,09	33,62	0,765	0,875
02:00	45,66	4,97	40,09	-0,42	35,33	0,774	0,881
03:00	30,49	4,70	33,22	0,10	34,50	0,090	1,039
04:00	41,18	4,75	39,90	-0,34	32,21	0,782	0,907
05:00	34,20	4,72	29,11	0,57	26,42	0,773	0,908
06:00	39,90	4,72	34,81	0,37	30,50	0,764	0,876
07:00	40,0	4,60	35,00	1,09	31,70	0,793	0,906
08:00	43,8	4,60	38,60	2,35	35,80	0,817	0,927
09:00	44,90	4,70	39,60	4,93	36,80	0,820	0,929
10:00	44,80	4,90	39,40	7,28	34,80	0,777	0,883
11:00	44,8	4,70	39,40	7,70	35,40	0,790	0,898
12:00	44,50	4,80	39,10	7,50	35,80	0,804	0,916
13:00	44,70	4,90	39,30	7,70	35,00	0,803	0,913
14:00	44,50	4,90	39,20	0,00	33,10	0,744	0,844
15:00	44,35	4,77	39,01	9,30	35,70	0,805	0,916
16:00	44,09	4,85	38,70	9,16	34,58	0,784	0,893
17:00	44,47	5,10	38,89	7,13	35,28	0,793	0,907
18:00	44,49	4,91	39,07	5,40	36,91	0,830	0,945
19:00	44,42	4,88	39,05	5,62	34,60	0,779	0,886
20:00	44,26	5,00	38,75	5,57	33,47	0,756	0,864
21:00	43,55	4,78	38,25	6,24	34,19	0,785	0,894
22:00	45,00	4,90	39,50	4,90	36,50	0,811	0,924
23:00	44,20	4,80	38,80	3,00	35,00	0,792	0,902
24:00	43,20	5,10	37,70	1,80	34,00	0,787	0,902
average	43,22	4,83	38,04	4,44	34,25	0,79	0,90

Lampiran 1b. Data Input-Output PLTU Barru Unit 2 Bulan Juni 2016 (Lanjutan)

03 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD GT NETTO	ACTUAL LOAD REAKTIF	Coal Flow	SFC	SFC (Nett)
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	43,10	5,10	37,50	1,30	34,70	0,805	0,925
02:00	43,20	4,80	37,80	1,00	34,90	0,808	0,923
03:00	43,30	4,80	37,90	0,30	34,70	0,801	0,916
04:00	42,00	4,80	37,60	0,00	34,20	0,797	0,910
05:00	43,00	4,90	37,60	0,10	33,30	0,774	0,886
06:00	42,80	4,90	37,20	0,60	35,00	0,818	0,941
07:00	44,3	4,70	38,60	1,58	33,50	0,756	0,863
08:00	44,4	4,71	39,16	4,76	36,31	0,818	0,927
09:00	44,55	5,00	38,98	5,40	34,20	0,768	0,877
10:00	45,70	5,00	40,16	7,43	35,02	0,766	0,804
11:00	44,72	4,89	39,30	8,44	35,02	0,783	0,891
12:00	45,20	4,80	39,70	7,30	34,60	0,765	0,872
13:00	44,60	4,80	39,20	7,50	35,20	0,780	0,808
14:00	44,40	5,10	38,80	8,60	34,90	0,786	0,899
15:00	44,90	4,90	39,40	8,70	34,60	0,771	0,878
16:00	44,80	4,80	39,30	8,10	35,70	0,797	0,908
17:00	44,30	4,90	38,80	6,80	33,40	0,754	0,861
18:00	43,60	4,90	38,20	7,20	34,20	0,784	0,895
19:00	44,30	4,80	38,80	7,50	34,50	0,779	0,889
20:00	44,20	4,80	38,60	7,60	34,20	0,774	0,886
21:00	44,20	5,00	38,60	7,50	33,90	0,767	0,878
22:00							
23:00							
24:00							
average	44,12	4,87	38,64	5,14	34,62	0,78	0,90

04 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD GT NETTO	ACTUAL LOAD REAKTIF	Coal Flow	SFC	SFC (Nett)
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	44,80	5,00	39,20	3,80	34,40	0,780	0,870
02:00	44,30	4,80	39,50	2,70	32,70	0,738	0,828
03:00	44,40	4,80	39,60	1,90	34,90	0,786	0,895
04:00	44,30	4,70	39,60	1,80	34,80	0,780	0,882
05:00	45,70	4,90	40,20	1,50	34,70	0,758	0,863
06:00	44,80	5,00	39,10	1,00	33,50	0,748	0,857
07:00	43,4	5,01	37,00	2,01	35,00	0,800	0,920
08:00	43,7	4,90	38,22	2,69	35,45	0,811	0,928
09:00	43,90	4,90	38,45	4,63	33,98	0,773	0,884
10:00	44,50	5,05	38,70	5,80	33,78	0,758	0,873
11:00	44,79	5,03	39,19	6,28	34,27	0,766	0,875
12:00	45,01	4,91	40,23	5,77	34,44	0,766	0,856
13:00	44,54	4,87	39,50	6,00	33,10	0,742	0,838
14:00	44,41	4,92	39,04	8,07	34,64	0,778	0,886
15:00	43,90	4,90	37,80	6,50	33,00	0,752	0,873
16:00	43,40	4,80	37,00	5,90	33,80	0,782	0,908
17:00	43,00	5,00	37,50	4,80	34,20	0,795	0,912
18:00	43,40	5,00	37,00	4,00	33,00	0,774	0,894
19:00	45,10	4,80	39,80	6,70	35,10	0,778	0,882
20:00	42,50	4,00	37,10	7,50	34,00	0,821	0,941
21:00	43,40	5,00	37,00	7,00	33,40	0,770	0,884
22:00	42,90	4,90	37,50	5,60	34,50	0,804	0,920
23:00	38,80	4,80	33,50	4,90	33,90	0,874	1,012
24:00	44,60	5,00	39,30	5,60	35,30	0,788	0,898
average	43,88	4,91	38,35	4,71	34,30	0,782	0,894

Lampiran 1b. Data Input-Output PLTU Barru Unit 2 Bulan Juni 2016 (Lanjutan)

07 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD GT NETTO	ACTUAL LOAD REAKTIF	Coal Flow	SFC	SFC (Nett)
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	45.00	4.04	39.60	1,60	35,80	0,796	0,904
02:00	46,40	5,16	39,70	0,80	35,90	0,791	0,904
03:00	44,30	5,00	38,70	1,90	35,60	0,804	0,920
04:00	45,00	4,80	39,60	2.40	35,90	0,790	0,907
05:00	45,70	5,10	40,10	0,90	36,80	0,805	0,918
06:00	42.70	4.90	37.30	0.32	36,90	0,864	0,989
07:00	46,70	4,80	40,30	0,30	35,40	0,775	0,878
08:00	46,00	5,10	40,40	1,00	35,60	0,774	0,881
09:00	46,30	5,20	39,30	4,70	35,30	0,770	0,903
10:00	45,30	5,20	39,00	5,70	36,00	0,804	0,920
11:00	46,80	5,00	40,20	5,60	35,70	0,766	0,873
12:00	45,40	4,90	39,00	5,80	35,70	0,786	0,897
13:00	46,20	5,10	40,40	6,20	37,70	0,816	0,933
14:00	45,00	5,10	39,40	7,50	35,20	0,782	0,893
15:00	44,50	4,90	38,90	7,90	34,80	0,782	0,895
16:00	44,40	5,10	38,80	7,50	35,80	0,806	0,923
17:00	44,00	5,00	38,50	7,10	35,50	0,807	0,922
18:00	44,10	4,90	38,60	7,30	35,10	0,796	0,909
19:00	45,00	5,00	39,40	6,70	36,00	0,800	0,914
20:00	44,70	5,20	38,90	6,10	35,00	0,783	0,900
21:00	44,70	5,10	38,40	6,30	37,00	0,838	0,964
22:00	44,70	5,10	39,10	6,50	37,00	0,828	0,946
23:00	45,60	5,19	39,92	4,18	35,00	0,771	0,880
24:00	44,40	5,26	38,54	4,06	34,60	0,779	0,898
average	44,97	5,04	39,32	4,84	35,82	0,796	0,911

08 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD GT NETTO	ACTUAL LOAD REAKTIF	Coal Flow	SFC	SFC (Nett)
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	44,18	5,26	38,91	5,68	34,00	0,770	0,897
02:00	44,34	5,25	38,08	2,88	36,22	0,817	0,951
03:00	45,17	4,98	39,70	3,05	34,39	0,761	0,866
04:00	45,21	5,10	39,61	2,77	36,36	0,805	0,916
05:00	44,74	5,28	38,04	2,21	35,85	0,801	0,921
06:00	43,00	5,23	37,73	0,77	37,40	0,851	0,950
07:00	44,00	5,00	38,80	1,40	35,40	0,805	0,919
08:00	46,50	5,00	41,00	2,10	38,70	0,832	0,944
09:00	45,70	5,20	39,80	0,50	34,40	0,757	0,866
10:00	44,30	5,00	38,70	8,80	36,90	0,833	0,953
11:00	43,40	4,10	37,00	9,00	37,00	0,850	0,970
12:00	45,10	4,90	39,90	9,00	37,00	0,834	0,942
13:00	46,30	5,00	40,70	0,00	39,20	0,847	0,963
14:00	45,20	5,00	39,00	11,45	38,90	0,861	0,982
15:00	46,10	5,10	40,60	11,20	36,00	0,780	0,884
16:00	44,40	5,00	39,00	11,40	35,30	0,791	0,897
17:00	44,30	5,10	38,70	9,80	37,10	0,837	0,959
18:00	45,00	5,00	40,00	9,50	36,70	0,805	0,918
19:00	45,60	5,00	39,90	9,70	36,60	0,791	0,902
20:00	43,00	5,00	38,10	9,60	36,60	0,832	0,958
21:00	44,30	5,00	38,00	9,30	36,00	0,833	0,953
22:00	43,40	4,90	37,90	8,50	35,90	0,827	0,947
23:00	45,60	5,00	40,07	6,41	36,54	0,801	0,912
24:00	44,00	5,21	38,37	5,48	36,18	0,822	0,943
average	44.76	5.07	39.13	6.77	36.15	0.814	0.931

Lampiran 1b. Data Input-Output PLTU Barru Unit 2 Bulan Juni 2016 (Lanjutan)

09 Juni 2016							
JAM WITA	GT	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
	GROSS		GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	45,09	5,18	39,41	4,29	35,19	0,780	0,893
02:00	44,34	5,16	38,72	4,18	34,70	0,783	0,896
03:00	43,48	5,06	37,86	3,97	36,64	0,843	0,968
04:00	44,89	4,93	39,42	4,45	35,71	0,796	0,906
05:00	45,56	5,21	39,84	2,72	35,39	0,777	0,888
06:00	44,40	5,14	38,86	1,70	35,53	0,799	0,914
07:00	44,91	5,08	39,25	1,70	36,51	0,813	0,930
08:00	44,40	5,11	39,00	5,80	36,00	0,810	0,925
09:00	44,82	5,09	38,93	5,99	35,00	0,781	0,899
10:00	44,99	5,20	39,29	7,74	34,71	0,772	0,885
11:00	45,71	5,18	40,02	9,14	36,30	0,796	0,909
12:00	45,25	4,99	39,37	9,07	37,92	0,838	0,963
13:00	45,70	5,24	40,00	8,58	36,83	0,806	0,921
14:00	43,63	5,08	38,02	11,05	36,30	0,832	0,955
15:00	44,00	4,91	39,38	11,30	36,36	0,810	0,923
16:00	45,25	5,05	39,67	16,12	37,56	0,830	0,947
17:00	44,77	[illegible]	[illegible]	[illegible]	36,75	0,822	0,920
18:00	45,61	5,16	39,65	[illegible]	37,99	0,833	0,954
19:00	44,17	4,97	39,74	8,67	36,86	0,834	0,952
20:00	44,74	5,17	39,58	8,64	35,10	0,785	0,912
21:00	45,50	5,01	39,19	8,69	36,81	0,804	0,920
22:00	44,50	5,00	39,90	7,70	36,70	0,825	0,943
23:00	44,60	5,20	38,90	5,90	36,40	0,816	0,936
24:00	45,40	5,40	39,70	6,00	36,40	0,790	0,902
average	44,78	5,10	39,13	7,11	36,14	0,807	0,923

10 Juni 2016							
JAM WITA	GT	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
	GROSS		GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	45,10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
02:00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
03:00	46,00	6,10	39,30	2,60	36,70	0,819	0,931
04:00	44,40	[illegible]	[illegible]	[illegible]	[illegible]	0,787	0,910
05:00	44,60	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
06:00	44,01	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
07:00	43,85	4,87	37,88	4,30	36,44	0,854	0,958
08:00	44,00	5,04	39,00	3,07	37,00	0,834	0,964
09:00	45,00	5,14	39,90	6,72	35,30	0,774	0,885
10:00	43,10	5,11	38,50	8,73	35,20	0,836	0,964
11:00	42,60	4,90	37,20	9,94	35,40	0,831	0,952
12:00	43,00	5,16	38,20	8,11	36,83	0,815	0,936
13:00	44,80	5,10	38,97	7,71	38,35	0,815	0,933
14:00	44,60	5,07	39,00	10,10	36,00	0,800	0,930
15:00	44,70	4,06	[illegible]	10,36	[illegible]	[illegible]	[illegible]
16:00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17:00	45,40	5,08	39,79	7,80	35,70	0,786	0,897
18:00	44,85	5,04	38,85	8,79	38,00	0,859	0,917
19:00	43,70	5,17	[illegible]	5,50	36,71	0,812	0,961
20:00	44,72	5,20	39,00	6,66	36,40	0,816	0,936
21:00	44,90	5,11	38,96	6,24	[illegible]	0,808	0,925
22:00							
23:00							
24:00							
average	44,47	6,00	38,83	6,02	38,16	0,813	0,931

Lampiran 1b. Data Input-Output PLTU Barru Unit 2 Bulan Juni 2016
(Lanjutan)

11 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	43,30	4,90	37,80	4,50	34,10	0,788	0,902
02:00	43,90	5,00	38,10	3,90	35,10	0,800	0,921
03:00	44,30	5,10	38,00	3,80	38,80	0,876	1,021
04:00	43,70	5,00	36,10	4,50	37,00	0,847	0,971
05:00	45,30	5,10	39,60	3,80	38,00	0,839	0,960
06:00	40,90	5,00	30,20	3,00	36,70	0,836	0,961
07:00	42,60	4,94	37,12	3,16	35,80	0,842	0,964
08:00	45,80	4,07	40,37	3,37	39,20	0,856	0,971
09:00	43,60	5,08	38,01	5,95	37,60	0,862	0,989
10:00	44,90	5,05	39,38	6,99	38,90	0,866	0,988
11:00	43,79	5,01	38,22	7,42	36,49	0,833	0,955
12:00	44,50	5,03	39,03	5,98	35,40	0,796	0,907
13:00	43,70	5,03	38,22	6,71	37,90	0,867	0,992
14:00	45,10	5,00	39,40	7,00	38,60	0,856	0,980
15:00	45,30	5,00	39,90	6,90	36,60	0,808	0,920
16:00	45,90	4,90	40,40	7,70	39,20	0,854	0,970
17:00	45,00	5,10	40,10	8,00	38,00	0,000	0,948
18:00	45,30	5,00	38,70	8,90	37,10	0,819	0,935
19:00	43,20	5,00	37,80	8,80	17,80	0,870	0,998
20:00	45,10	5,00	39,50	8,00	37,60	0,834	0,952
21.00	44,30	5.10	38.70	8.50	35,00	0,800	0,905
22:00	43,00	5,00	37,40	7,40	36,60	0,851	0,979
23:00	[illegible]	5,00	39,90	5,20	39,10	0,903	0,900
24:00	45,60	5,00	40,00	8,10	37,70	0,877	0,943
average	44,43	5,01	38,82	5,92	37,20	0,839	0,900

12 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	46,00	5,00	41,00	4,30	37,20	0,798	0,907
02:00	46,20	5,00	40,60	3,60	36,30	0,786	0,896
03:00	44,80	6,00	38,80	4,00	36,30	0,813	0,931
04:00	45,40	4,90	39,90	5,00	36,60	0,806	0,917
05:00	45,70	5,10	40,00	4,20	37,10	0,812	0,928
06:00	44,98	5,18	39,80	2,18	37,20	0,864	0,977
07:00	46,00	4,50	41,00	0,00	36,40	0,821	0,900
08:00	44,30	5,30	38,60	2,20	37,30	0,843	0,964
09:00	44,60	5,10	39,00	3,20	36,80	0,825	0,944
10:00	44,50	5,00	38,90	4,60	36,10	0,811	0.928
11:00	44,00	5,10	39,90	4,50	36,20	0,808	0,931
12:00	43,70	4,90	39,00	4,40	38,70	0,005	0,914
13:00	45,50	5,10	39,90	4,40	36,00	0,791	0,902
14:00	43,30	5,10	37,00	5,00	30,10	0,034	0,960
15:00	44,60	5,00	39,00	5,20	34,60	0,776	0,887
16:00	46,80	5,10	41,70	4,70	35,80	0.765	0.869
17:00	44,20	5,20	38,60	6,60	35,60	0,805	0,925
18:00	46,70	5.10	41 10	5.40	34.50	0.739	0.839
19:00	46,90	4,80	40,50	7,00	33,60	0,716	0,865
20:00	46,60	6,20	40,70	7,00	34,60	0,742	0,848
21.00	45,50	5,50	33,40	7,40	35,00	0,760	0,886
22.00	45,00	5,00	40,10	5,00	35,00	0,788	0,878
23:00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24.00	43,00	5,20	30,10	4,30	36,70	0,761	0,898
average	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0,700	[illegible]

Lampiran 1b. Data Input-Output PLTU Barru Unit 2 Bulan Juni 2016
(Lanjutan)

13 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD GT NETTO	ACTUAL LOAD REAKTIF	Coal Flow	SFC	SFC (Nett)
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	46.90	5.20	41.10	3,50	33,90	0,723	0,825
02:00	45,10	5,10	39,40	3,40	32,90	0,729	0,835
03:00	46,20	6,20	39,50	2,80	34,50	0,763	0,873
04:00	45,90	4,90	40,40	4,20	34,20	0,745	0,847
05:00	44,80	5,70	38,90	3,30	34,70	0,775	0,882
06:00	45,00	5,00	39.40	1,90	35,00	0,778	0,888
07:00	47,30	5,00	41,80	1,00	34.30	0,726	0,821
08:00	46,10	4,00	39,60	46,00	33,80	0,749	0,856
09:00	45,00	5,20	39,70	7,60	33,50	0,744	0,844
10:00	40,90	5,40	34,90	9,10	30,20	0,738	0,865
11:00	42,90	5,30	37,10	9,00	34,10	0,795	0,919
12:00	44,00	4,90	38,60	9,30	33,70	0,766	0,873
13:00	45,40	5,00	39,70	6,70	33,70	0,744	0,848
14:00	43,70	5,50	37,70	9,10	33,90	0,776	0,899
15:00	43,30	5,10	37,70	9,20	34,00	0,799	0,910
16:00	46,30	5,00	40,60	8,70	34,70	0,749	0,855
17:00	46,60	5,20	40,70	6,80	35,10	0,753	0,862
18:00	45,40	5,00	39,80	7,60	34,80	0,767	0,874
19:00	46,00	5,10	40,20	8,40	33,10	0,720	0,823
20:00	47.80	5.00	39,10	9,60	34,10	0,716	0,872
21:00	46,40	5,20	40,00	8,80	34,70	0,748	0,866
22:00	46,00	5,40	39,99	7,20	34,60	0,754	0,867
23:00	45,70	5,10	39,90	4,70	34,20	0,748	0,857
24:00	45,60	5,10	39,90	3,50	32,70	0.719	0,828
average	45,24	5,13	39,42	6,07	33,90	0,751	0,861

15 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD GT NETTO	ACTUAL LOAD REAKTIF	Coal Flow	SFC	SFC (Nett)
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	43,60	5,23	37,90	2,07	32,80	0,752	0,865
02:00	43,90	5,49	37,00	1,24	33,10	0,754	0,873
03:00	42,40	5,16	36,83	2,11	31,50	0,743	0,855
04:00	44,38	5,07	38,79	2,33	32,75	0,738	0,844
05:00	45,30	5,12	39,67	3,80	38,06	0,840	0,959
06:00	43,93	5,08	38,26	2,84	36,78	0,837	0,961
07:00	44,50	5,00	39,00	0,60	34,60	0,778	0,887
08:00	45,30	5,10	39,70	2,00	34,30	0,757	0,864
09:00	46,90	0,10	41,20	3,70	34,80	0,742	0,845
10:00	42,40	4,80	37,00	5,70	33,00	0,778	0,892
11:00	43,70	4,90	38,20	6,00	32,20	0,737	0,843
12:00	45,60	4,80	41,20	5,10	35,90	0,770	0,871
13:00	45,40	5,00	39,80	5,40	32,70	0,720	0,822
14:00	44,60	5,20	38,80	6,50	34,50	0,774	0,889
15:00	46,20	6,01	39,60	6,03	37,60	0,832	0,949
16:00	46,20	5,12	40,50	6,17	33,70	0.729	0,832
17:00	45,00	5,40	39,80	5,51	32,40	0,707	0,814
18:00	46,00	4,91	40,50	6,19	33,10	0,720	0,817
19:00	46,40	4,91	40.80	8.31	34,60	0,746	0,848
20:00	45,70	5,41	40,50	9,72	36,00	0,777	0,886
21:00	45,40	5,59	39,50	8,57	34,9	0,769	0,884
22:00	45,9	5,18	40,41	6,44	34,0	0,741	0,843
23:00	46,2	5,13	40,6	4,92	33,0	0,715	0,818
24:00	46,2	5,00	40,0	6,0	31,0	0,760	0,866
average	45,10	4,92	39,44	4,82	34,21	0,759	0,867

Lampiran 1b. Data Input-Output PLTU Barru Unit 2 Bulan Juni 2016 (Lanjutan)

16 Juni 2016

JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	46,30	5,46	40,42	2,60	34,20	0,739	0,846
02:00	46,80	5,40	40,66	1,84	33,50	0,716	0,820
03:00	45,70	5,02	40,25	1,00	33,70	0,737	0,837
04:00	46,10	5,03	40,02	2,74	33,30	0,722	0,820
05:00	45,50	5,30	39,29	1,75	32,60	0,716	0,830
06:00	46,00	5,24	40,05	0,48	33,20	0,722	0,829
07:00	45,50	5,00	40,10	1,00	32,50	0,714	0,810
08:00	45,20	5,10	39,60	2,40	32,30	0,710	0,811
09:00	45,60	5,20	39,90	5,10	33,10	0,726	0,830
10:00	46,20	5,20	39,99	6,09	33,20	0,712	0,807
11:00	44,80	5,00	39,20	6,70	33,10	0,739	0,844
12:00	45,50	4,99	39,60	5,30	33,90	0,745	0,850
13:00	46,40	4,90	40,90	6,20	34,80	0,750	0,851
14:00	46,30	5,24	40,60	7,46	34,80	0,752	0,857
15:00	46,20	5,07	40,60	5,98	32,00	0,693	0,788
16:00	45,70	5,12	40,10	6,30	33,90	0,733	0,835
17:00	45,00	5,33	39,20	5,67	34,00	0,756	0,867
18:00	45,20	5,03	39,80	8,17	33,00	0,730	0,833
19:00	45,70	4,97	39,70	7,66	33,80	0,741	0,844
20:00	45,50	5,23	39,70	7,23	34,70	0,763	0,874
21:00	45,40	5,21	39,80	7,12	32,9	0,722	0,830
22:00	45,2	4,98	39,70	6,86	32,9	0,728	0,829
23:00	45,7	5,06	40,1	3,47	34,3	0,751	0,856
24:00	45,8	5,22	40,0	2,5	33,9	0,740	0,847
average	45,66	5,13	39,99	4,59	33,40	0,732	0,835

17 Juni 2016

JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	46,30	5,20	40,61	1,62	34,00	0,734	0,837
02:00	46,40	4,90	40,89	1,42	35,50	0,765	0,868
03:00	46,00	4,90	40,56	1,73	33,10	0,720	0,816
04:00	45,70	5,00	40,14	1,90	34,60	0,757	0,862
05:00	46,00	5,20	40,25	1,41	34,30	0,747	0,852
06:00	46,30	5,10	40,69	0,67	34,20	0,739	0,841
07:00	45,50	5,01	40,14	1,01	32,60	0,716	0,812
08:00	45,20	5,03	39,60	2,45	32,10	0,710	0,811
09:00	45,50	5,21	39,80	5,13	33,10	0,727	0,832
10:00	45,20	5,20	39,40	6,09	33,90	0,750	0,860
11:00	45,10	5,20	39,30	5,80	35,70	0,792	0,908
12:00	45,50	4,90	39,90	6,40	33,90	0,745	0,850
13:00	46,40	4,90	40,80	6,30	34,80	0,750	0,853
14:00	46,40	5,20	40,80	7,40	34,80	0,750	0,857
15:00	45,68	4,91	40,18	7,89	33,56	0,735	0,835
16:00	45,44	5,03	39,90	7,78	35,08	0,772	0,879
17:00	45,99	5,20	40,21	6,73	34,77	0,756	0,865
18:00	46,59	4,91	41,13	7,40	35,76	0,768	0,869
19:00	46,02	4,95	40,55	8,30	35,23	0,766	0,869
20:00	46,06	5,32	40,35	7,07	35,22	0,765	0,873
21:00	46,10	5,20	40,32	7,53	34,9	0,757	0,866
22:00	46,1	5,00	40,50	6,40	34,5	0,748	0,852
23:00	45,0	5,00	39,4	4,90	35,3	0,784	0,896
24:00	45,9	5,00	40,3	3,0	35,6	0,775	0,885
average	45,85	5,05	40,23	4,86	34,43	0,751	0,856

Lampiran 1b. Data Input-Output PLTU Barru Unit 2 Bulan Juni 2016 (Lanjutan)

18 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD GT NETTO	ACTUAL LOAD REAKTIF	Coal Flow	SFC	SFC (Nett)
Satuan	MW	MW	MW	MVAR	t/h	Kg/kwh	Kg/kwh
01:00	46,50	5,10	39,80	2,30	36,00	0,791	0,905
02:00	44,10	4,90	38,60	3,00	34,70	0,787	0,899
03:00	44,80	5,10	39,20	1,90	34,40	0,768	0,878
04:00	44,80	4,90	39,30	3,40	34,80	0,777	0,885
05:00	44,50	5,00	38,80	2,10	34,70	0,780	0,894
06:00	44,70	5,10	39,10	1,70	34,10	0,763	0,872
07:00	44,00	5,00	38,20	1,20	33,10	0,742	0,844
08:00	44,70	4,80	39,20	2,40	33,00	0,738	0,905
09:00	46,20	4,80	40,90	4,00	34,80	0,753	0,851
10:00	46,00	5,10	40,30	5,30	34,80	0,767	0,884
11:00	45,40	4,80	39,70	5,60	33,80	0,744	0,851
12:00	44,40	4,80	38,80	5,00	34,90	0,700	0,897
13:00	45,00	5,00	39,40	5,40	34,40	0,764	0,873
14:00	45,10	5,10	39,50	6,00	34,00	0,764	0,861
15:00	43,20	4,80	37,90	6,70	35,90	0,831	0,947
16:00	45,20	5,00	39,60	6,59	35,60	0,785	0,896
17:00	45,30	5,00	39,60	6,13	36,60	0,808	0,924
18:00	45,20	4,90	39,70	7,28	35,70	0,790	0,899
19:00	46,20	5,00	40,60	7,56	35,90	0,777	0,884
20:00	45,30	5,20	39,80	7,26	36,40	0,804	0,919
21:00	45,90	5,20	40,10	6,90	36,6	0,797	0,913
22:00	45,3	5,00	39,70	8,80	32,9	0,726	0,829
23:00	44,5	5,00	38,9	4,70	34,3	0,771	0,882
24:00	44,8	5,10	39,2	3,5	33,1	0,739	0,844
average	45,03	5,00	39,45	4,71	34,80	0,773	0,882

19 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD GT NETTO	ACTUAL LOAD REAKTIF	Coal Flow	SFC	SFC (Nett)
Satuan	MW	MW	MW	MVAR	t/h	Kg/kwh	Kg/kwh
01:00	45,10	5,20	39,30	3,00	32,90	0,729	0,837
02:00	43,90	5,20	38,20	2,90	34,20	0,779	0,895
03:00	44,90	5,10	39,20	2,60	33,30	0,742	0,849
04:00	44,70	4,90	39,20	3,30	33,60	0,752	0,857
05:00	45,10	4,90	39,60	2,90	35,00	0,776	0,884
06:00	45,80	5,20	40,00	1,30	34,10	0,745	0,853
07:00	43,30	4,90	37,84	1,50	36,01	0,832	0,952
08:00	46,23	4,89	40,80	0,90	34,56	0,748	0,847
09:00	46,21	5,14	40,52	2,00	34,83	0,754	0,860
10:00	46,49	5,18	40,77	2,89	34,46	0,741	0,845
11:00	45,96	4,96	40,52	3,63	36,37	0,791	0,898
12:00	45,66	4,97	40,13	4,08	33,87	0,742	0,844
13:00	45,80	4,90	40,36	4,25	34,11	0,745	0,845
14:00	45,96	5,14	40,29	4,34	34,24	0,745	0,850
15:00	45,90	4,93	40,31	5,07	34,52	0,752	0,856
16:00	45,60	5,12	40,03	4,73	34,16	0,749	0,853
17:00	45,50	5,17	39,79	4,84	34,01	0,747	0,855
18:00	45,10	5,10	39,57	5,68	34,05	0,755	0,861
19:00	42,90	5,00	37,47	7,41	34,11	0,795	0,910
20:00	42,34	5,18	36,70	6,98	33,56	0,793	0,914
21:00	44,40	5,23	37,76	6,90	34,5	0,778	0,915
22:00	44,9	5,13	39,34	5,36	35,2	0,783	0,893
23:00	44,5	5,00	38,9	4,16	34,4	0,773	0,884
24:00	45,0	5,00	39,4	3,5	34,7	0,771	0,881
average	45,03	5,06	39,42	3,93	34,30	0,703	0,872

Lampiran 1b. Data Input-Output PLTU Barru Unit 2 Bulan Juni 2016 (Lanjutan)

20 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD GT NETTO	ACTUAL LOAD REAKTIF	Coal Flow	SFC	SFC (Nett)
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	45,50	5,30	39,70	1,90	34,60	0,760	0,872
02:00	45,70	5,20	40,00	1,40	34,30	0,751	0,858
03:00	45,60	5,00	40,00	1,40	33,20	0,728	0,830
04:00	44,80	4,90	39,40	2,50	34,10	0,761	0,865
05:00	45,50	5,10	39,70	1,50	35,50	0,780	0,894
06:00	46,50	5,20	40,70	0,60	35,00	0,753	0,860
07:00	45,80	4,96	40,41	1,75	35,00	0,764	0,866
08:00	44,95	5,24	39,20	2,48	34,43	0,766	0,878
09:00	44,92	5,18	39,20	5,38	34,10	0,759	0,870
10:00	44,69	5,07	39,06	6,88	34,57	0,774	0,885
11:00	39,88	5,26	34,12	7,80	32,36	0,811	0,948
12:00	44,32	5,30	38,45	6,73	34,23	0,677	0,890
13:00	44,58	5,13	38,92	0,40	34,70	0,691	0,892
14:00	45,30	5,30	39,40	6,80	34,30	0,757	0,871
15:00	45,30	5,10	39,60	37,50	35,70	0,788	0,902
16:00	44,50	5,20	38,80	7,80	35,50	0,798	0,915
17:00	44,60	5,50	38,50	7,20	34,80	0,780	0,904
18:00	43,90	5,00	38,40	6,00	33,90	0,772	0,883
19:00	44,10	5,00	38,60	7,00	36,80	0,834	0,953
20:00	43,40	5,10	37,80	6,80	34,40	0,793	0,910
21:00	43,10	5,30	37,30	6,70	34,7	0,805	0,930
22:00	44,6	5,00	39,00	5,60	35,6	0,798	0,913
23:00	44,7	5,00	39,2	4,40	36,0	0,805	0,918
24:00	44,8	5,10	39,2	3,2	36,8	0,821	0,939
average	44,63	5,14	38,94	6,08	34,77	0,779	0,893

21 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD GT NETTO	ACTUAL LOAD REAKTIF	Coal Flow	SFC	SFC (Nett)
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	45,10	5,60	38,80	2,10	36,10	0,800	0,930
02:00	46,10	5,30	40,20	1,10	35,00	0,759	0,871
03:00	43,60	4,90	38,20	2,00	35,10	0,805	0,919
04:00	44,90	5,00	39,30	2,60	35,50	0,791	0,903
05:00	47,00	5,40	41,10	9,00	38,40	0,817	0,934
06:00	46,20	5,20	40,40	0,30	36,60	0,792	0,906
07:00	45,60	5,00	40,10	0,40	37,00	0,811	0,923
08:00	45,30	5,00	39,70	2,10	36,70	0,810	0,924
09:00	44,50	5,20	38,60	6,20	35,50	0,798	0,920
10:00	45,30	5,20	39,50	7,10	36,40	0,804	0,922
11:00	44,80	5,20	39,10	8,40	35,60	0,795	0,910
12:00	43,30	5,00	37,80	7,80	35,40	0,711	0,937
13:00	43,90	4,80	38,40	8,90	35,40	0,741	0,922
14:00	45,10	5,30	39,20	8,70	35,40	0,785	0,903
15:00	42,70	5,00	37,10	9,00	34,70	0,813	0,935
16:00	45,10	5,10	39,40	7,80	36,50	0,809	0,926
17:00	44,40	5,60	38,50	7,10	37,30	0,840	0,969
18:00	45,20	5,00	39,60	8,40	37,50	0,830	0,947
19:00	43,70	5,00	38,96	8,40	37,20	0,851	0,955
20:00	45,90	5,40	39,90	8,80	36,80	0,802	0,922
21:00	45,70	5,50	39,60	8,80	36,9	0,807	0,932
22:00	44,9	5,30	38,90	7,40	37,4	0,833	0,961
23:00	45,8	5,20	40,0	6,00	35,8	0,782	0,895
24:00	46,0	5,00	39,6	5,0	38,0	0,823	0,960
averaye	44,99	5,19	38,20	5,90	36,34	0,000	0,926

Lampiran 1b. Data Input-Output PLTU Barru Unit 2 Bulan Juni 2016 (Lanjutan)

22 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	45,50	5,40	39,60	5,90	37,00	0,813	0,934
02:00	45,00	5,23	30,30	3,70	37,50	0,833	0,954
03:00	44,70	5,08	39,20	4,78	36,60	0,819	0,934
04:00	44,70	5,10	39,10	6,06	37,80	0,846	0,967
05:00	46,00	5,25	40,20	4,75	36,10	0,785	0,898
06:00	46,20	5,34	40,40	3,60	37,80	0,818	0,936
07:00	46,10	5,20	40,30	3,50	36,60	0,794	0,908
08:00	46,10	5,40	40,20	5,80	37,30	0,809	0,928
09:00	44,50	5,40	38,60	8,30	37,20	0,836	0,964
10:00	45,40	5,30	39,50	9,20	37,20	0,819	0,942
11:00	45,90	5,10	40,20	10,70	36,40	0,793	0,905
12:00	46,40	5,10	40,70	9,40	37,10	0,759	0,912
13:00	45,90	5,10	40,20	9,60	34,80	0,718	0,866
14:00	45,60	5,40	39,80	11,50	36,80	0,807	0,925
15:00	45,90	5,10	40,30	9,70	36,20	0,789	0,898
16:00	45,60	4,90	40,00	11,20	35,20	0,772	0,880
17:00	44,00	5,20	38,20	10,10	33,00	0,750	0,864
18:00	45,70	5,00	40,00	10,00	34,50	0,755	0,863
19:00	45,90	5,10	40,30	10,30	36,00	0,784	0,893
20:00	44,90	5,20	39,10	10,30	32,70	0,728	0,836
21:00	46,80	5,40	40,70	9,30	38,5	0,823	0,946
22:00	45,0	5,30	39,20	8,30	37,5	0,833	0,957
23:00	43,8	5,30	37,9	4,80	34,0	0,776	0,897
24:00	43,4	5,10	37,7	4,3	35,6	0,820	0,944
average	45,4	5,2	39,6	7,7	36,2	0,798	0,914

23 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	45,37	5,27	39,56	2,69	35,04	0,772	0,886
02:00	43,08	5,37	37,22	2,19	32,97	0,765	0,886
03:00	43,37	5,28	37,62	2,60	35,64	0,822	0,947
04:00	45,90	5,00	40,30	2,60	33,90	0,739	0,841
05:00	45,00	5,30	39,20	2,40	35,10	0,780	0,895
06:00	43,60	5,30	37,70	2,10	32,30	0,741	0,857
07:00	45,40	5,30	39,60	1,70	36,30	0,800	0,917
08:00	45,00	5,10	39,40	3,70	35,20	0,782	0,893
09:00	46,80	5,30	40,90	5,10	36,40	0,778	0,890
10:00	46,60	5,30	40,70	6,40	35,30	0,758	0,867
11:00	45,30	5,40	39,30	7,20	35,70	0,788	0,908
12:00	42,30	4,90	36,80	7,60	35,70	0,711	0,970
13:00	47,50	4,90	41,90	6,60	37,10	0,732	0,885
14:00	46,50	5,20	40,80	7,90	36,70	0,789	0,900
15:00	44,80	5,40	38,70	8,30	35,10	0,783	0,907
16:00	43,90	5,40	37,90	8,60	35,50	0,809	0,937
17:00	45,60	5,30	39,70	7,60	36,20	0,794	0,912
18:00	44,70	5,00	39,10	9,00	35,20	0,787	0,900
19:00	45,20	5,00	39,70	9,50	34,90	0,772	0,879
20:00	45,80	5,30	40,00	8,40	35,80	0,782	0,895
21:00	46,20	5,20	40,30	8,60	43,5	0,942	1,079
22:00	44,1	5,30	38,30	6,80	36,5	0,828	0,953
23:00	42,2	5,30	36,3	5,43	34,1	0,808	0,939
24:00	45,5	5,40	39,5	4,1	34,9	0,766	0,882
average	44,99	5,23	39,19	5,71	35,62	0,792	0,909

Lampiran 1b. Data Input-Output PLTU Barru Unit 2 Bulan Juni 2016
(Lanjutan)

24 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	46,39	5,44	40,37	3,18	36,64	0,790	0,908
02:00	45,45	5,32	39,63	2,96	36,44	0,802	0,920
03:00	46,30	5,36	40,43	3,12	36,71	0,793	0,908
04:00	45,27	5,02	39,69	2,87	34,45	0,761	0,868
05:00	44,95	5,19	39,25	2,00	34,62	0,770	0,882
06:00	44,38	5,29	38,60	2,10	35,82	0,807	0,928
07:00	44,70	5,00	39,10	2,40	34,00	0,761	0,870
08:00	45,70	5,10	40,10	4,20	36,90	0,807	0,920
09:00	46,10	5,20	40,30	6,30	34,40	0,746	0,854
10:00	46,60	5,30	40,90	7,90	37,20	0,798	0,910
11:00	44,50	5,10	38,90	8,90	33,80	0,760	0,869
12:00	46,00	5,00	41,20	7,60	36,30	0,715	0,881
13:00	45,30	4,90	39,80	7,40	32,00	0,637	0,804
14:00	46,30	5,10	40,60	8,70	35,00	0,756	0,882
15:00	45,30	5,00	39,80	9,50	34,10	0,753	0,857
16:00	43,60	5,10	37,90	10,10	32,60	0,748	0,860
17:00	44,90	5,10	38,70	9,00	36,60	0,815	0,946
18:00	45,30	4,90	39,70	8,80	34,10	0,753	0,859
19:00	45,80	5,00	40,20	8,80	37,30	0,814	0,928
20:00	44,60	5,10	38,90	9,30	35,00	0,785	0,900
21:00	45,20	5,10	39,50	8,50	36,1	0,799	0,914
22:00	44,4	5,00	38,90	7,60	36,8	0,829	0,946
23:00	44,8	5,35	39,0	4,85	33,2	0,741	0,851
24:00	44,6	5,28	39,0	4,1	37,8	0,848	0,969
average	45,27	5,14	39,60	6,26	35,33	0,780	0,892

25 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	45,50	5,20	39,70	3,40	33,10	0,727	0,834
02:00	44,70	5,10	39,00	2,80	35,70	0,799	0,915
03:00	45,60	5,00	40,10	2,50	36,00	0,789	0,898
04:00	46,50	5,00	40,90	2,70	33,00	0,710	0,807
05:00	45,80	5,10	40,10	2,00	38,30	0,836	0,955
06:00	47,20	5,10	41,50	0,70	36,90	0,782	0,889
07:00	45,50	5,20	39,80	1,20	34,90	0,767	0,877
08:00	42,50	4,90	37,00	3,00	36,60	0,861	0,989
09:00	45,70	5,40	39,80	3,10	36,00	0,788	0,905
10:00	42,60	5,20	36,90	4,30	30,30	0,711	0,821
11:00	47,70	5,00	42,10	3,70	36,00	0,755	0,855
12:00	44,90	5,00	39,30	3,80	35,70	0,796	0,909
13:00	44,80	4,90	39,20	4,20	36,50	0,707	0,931
14:00	45,30	5,20	39,50	4,70	36,20	0,799	0,916
15:00	45,00	5,00	39,40	6,00	34,80	0,773	0,883
16:00	40,70	5,00	35,20	7,98	34,19	0,840	0,971
17:00	42,20	5,00	36,58	7,17	33,51	0,794	0,916
18:00	41,20	4,99	35,71	7,79	33,24	0,807	0,931
19:00	44,36	5,04	38,76	8,01	33,50	0,755	0,864
20:00	44,75	5,27	39,07	7,23	35,11	0,785	0,899
21:00	44,20	5,19	38,49	6,96	35,5	0,802	0,921
22:00	44,4	5,10	38,60	5,50	33,8	0,761	0,878
23:00	43,3	5,00	37,8	3,90	34,0	0,804	0,921
24:00	44,7	4,90	39,2	2,8	35,4	0,792	0,903
average	44,55	5,07	38,90	4,39	34,96	0,785	0,899

Lampiran 1b. Data Input-Output PLTU Barru Unit 2 Bulan Juni 2016 (Lanjutan)

26 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Netl)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	45,20	5,20	39,50	2,10	36,10	0,799	0,914
02:00	45,40	5,20	39,00	1,70	24,00	0,529	0,606
03:00	43,00	5,10	38,20	2,30	33,00	0,774	0,887
04:00	43,20	5,00	37,60	2,50	32,70	0,757	0,870
05:00	44,80	5,20	39,00	1,70	35,70	0,797	0,915
06:00	45,20	5,20	39,40	0,80	34,70	0,768	0,881
07:00	45,40	5,10	39,83	0,11	34,70	0,764	0,871
08:00	45,30	5,00	39,84	1,24	34,00	0,751	0,853
09:00	45,40	5,20	39,70	2,73	36,90	0,813	0,929
10:00	44,30	5,00	38,72	3,90	35,90	0,810	0,927
11:00	45,00	5,00	38,39	4,30	34,70	0,771	0,904
12:00	44,10	5,00	38,60	4,10	35,00	0,696	0,907
13:00	44,70	5,10	39,00	4,40	35,30	0,716	0,905
14:00	43,80	5,10	38,20	5,20	35,20	0,804	0,921
15:00	44,00	4,90	38,50	5,60	36,45	0,828	0,947
16:00	44,78	4,96	39,30	5,96	35,75	0,798	0,910
17:00	44,70	5,18	39,05	5,69	37,24	0,833	0,954
18:00	44,60	4,94	39,12	7,14	36,27	0,813	0,927
19:00	45,29	4,90	39,87	8,81	36,40	0,804	0,913
20:00	45,43	5,10	39,71	7,22	37,06	0,816	0,933
21:00	44,54	5,29	38,70	7,26	36,2	0,812	0,934
22:00	44,1	5,00	38,80	6,80	35,6	0,802	0,918
23:00	44,7	5,00	39,0	5,40	36,5	0,817	0,936
24:00	44,6	5,20	38,8	3,5	35,6	0,798	0,918
average	44,69	5,08	39,02	4,19	35,08	0,785	0,899

Lampiran 1b. Data Input-Output PLTU Barru Unit 2 Bulan Juni 2016 (Lanjutan)

30 Juni 2016							
JAM WITA	GT GROSS	UAT	ACTUAL LOAD		Coal Flow	SFC	SFC (Nett)
			GT NETTO	REAKTIF			
Satuan	MW	MW	MW	MVAR	T/h	Kg/kwh	Kg/kwh
01:00	43,00	4,40	38,20	3,75	30,70	0,714	0,804
02:00	40,40	4,28	35,60	3,66	28,60	0,708	0,803
03:00	39,90	4,30	35,10	3,40	29,60	0,742	0,843
04:00	40,50	4,20	35,80	3,80	29,70	0,733	0,830
05:00	42,40	4,50	37,40	5,20	31,60	0,745	0,845
06:00	42,10	4,50	37,30	3,40	29,90	0,710	0,802
07:00	42,90	4,30	38,00	3,60	30,9	0,720	0,813
08:00	43,70	4,40	38,80	5,30	31,70	0,725	0,817
09:00	44,80	4,40	39,90	8,60	32,40	0,723	0,812
10:00	48,00	4,40	42,90	9,30	32,10	0,669	0,748
11:00	48,90	4,60	43,70	10,00	33,90	0,693	0,776
12:00	49,40	4,60	44,20	10,70	35,20	0,713	0,796
13:00	50,10	4,40	45,00	11,20	35,40	0,707	0,787
14:00	50,20	4,60	45,00	13,00	35,10	0,699	0,780
15:00	49,50	4,60	44,20	14,10	35,80	0,723	0,810
16:00	46,70	4,50	41,60	15,60	32,10	0,687	0,772
17:00	45,40	4,40	40,50	12,60	32,90	0,725	0,812
18:00	45,90	4,40	40,90	12,50	31,90	0,695	0,780
19:00	44,90	4,60	39,80	15,20	31,70	0,706	0,796
20:00	45,30	4,50	40,20	14,50	32,40	0,715	0,806
21:00	45,10	4,66	39,90	12,10	32,1	0,712	0,805
22:00	44,4	4,70	39,20	10,50	31,6	0,712	0,806
23:00	44,3	4,50	39,4	6,60	31,2	0,704	0,792
24:00	44,9	4,50	39,8	5,2	32,0	0,713	0,804
average	45,11	4,47	40,10	8,91	32,10	0,712	0,801

Menyatakan bahwa data tersebut benar diperoleh dari PT. Indonesia Power, PLTU Barru 2x50 MW.

Barru, 21 November 2016

SABAR SANJAYA
Staff Engineering

Lampiran 1c. Data Input-Output PLTU Jene'ponto Unit 1 Bulan Juni 2016

Wednesday, June 01, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	47.28	70.29
02.00	48.64	72.10
03.00	48.69	72.65
04.00	48.98	71.20
05.00	50.62	72.70
06.00	50.78	72.71
07.00	50.39	70.61
08.00	48.85	75.56
09.00	53.20	85.06
10.00	52.74	89.97
11.00	68.13	109.45
12.00	67.66	109.50
13.00	68.98	108.69
14.00	70.55	108.19
15.00	70.53	112.19
16.00	69.82	110.08
17.00	70.00	108.69
18.00	70.03	109.97
19.00	69.74	110.77
20.00	69.45	109.94
21.00	69.05	108.97
22.00	67.64	108.89
23.00	69.28	108.07
24.00	46.72	71.49
Total	1,447.750	2,247.740
Average	60.32	93.66

Thursday, June 02, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	49.22	72.15
02.00	49.43	70.61
03.00	49.37	71.78
04.00	49.47	71.83
05.00	49.31	70.88
06.00	49.84	70.76
07.00	50.19	71.40
08.00	50.17	71.83
09.00	51.42	100.44
10.00	73.85	109.29
11.00	73.72	108.40
12.00	73.19	108.58
13.00	74.36	106.33
14.00	73.06	105.12
15.00	72.93	104.82
16.00	73.17	107.79
17.00	70.77	112.19
18.00	70.01	110.80
19.00	66.49	113.71
20.00	63.10	114.80
21.00	61.58	113.12
22.00	62.17	111.24
23.00	64.79	109.23
24.00	50.28	77.23
Total	1,471.890	2,284.330
Average	61.33	95.18

PT. BOSOWA ENERGI

Lampiran 1c. Data Input-Output PLTU Jene'ponto Unit 1 Bulan Juni 2016 (Lanjutan)

Friday, June 03, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	46.46	72.71
02.00	48.36	69.72
03.00	48.92	72.22
04.00	50.40	72.30
05.00	48.17	73.81
06.00	47.34	72.86
07.00	47.18	74.30
08.00	53.19	83.24
09.00	52.82	87.04
10.00	65.56	100.18
11.00	67.00	101.50
12.00	68.75	104.33
13.00	67.46	105.27
14.00	67.71	110.10
15.00	66.70	106.88
16.00	66.85	107.52
17.00	64.32	105.84
18.00	66.32	111.18
19.00	64.31	109.84
20.00	65.06	111.97
21.00	63.56	112.20
22.00	63.93	112.4
23.00	61.55	110.93
24.00	66.62	105.96
Total	1,428.540	2,294.300
Average	59.52	95.60

Saturday, June 04, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	43.56	85.38
02.00	45.39	72.60
03.00	45.18	73.23
04.00	45.00	71.60
05.00	45.58	72.01
06.00	46.92	71.55
07.00	48.35	72.86
08.00	46.42	72.26
09.00	55.57	85.38
10.00	55.89	88.61
11.00	55.91	89.11
12.00	44.71	73.92
13.00	44.69	75.34
14.00	45.77	77.62
15.00	48.72	88.06
16.00	48.70	88.55
17.00	43.32	84.74
18.00	65.95	111.94
19.00	69.94	110.78
20.00	64.94	109.42
21.00	65.73	107.81
22.00	65.73	109.56
23.00	60.88	107.81
24.00	61.21	105.56
Total	1,264.060	2,105.700
Average	52.67	87.74

PT BOSOWA ENERGI

Lampiran 1c. Data Input-Output PLTU Jene'ponto Unit 1 Bulan Juni 2016 (Lanjutan)

Sunday, June 05, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	50.39	71.70
02.00	50.38	70.94
03.00	50.81	72.86
04.00	50.82	70.21
05.00	50.91	72.07
06.00	50.85	69.69
07.00	50.75	67.31
08.00	48.21	77.01
09.00	51.08	81.45
10.00	42.71	79.64
11.00	43.35	73.21
12.00	45.58	73.96
13.00	45.49	73.58
14.00	45.58	71.38
15.00	44.73	69.93
16.00	43.93	70.19
17.00	43.43	71.46
18.00	55.38	90.61
19.00	58.85	97.57
20.00	62.61	106.01
21.00	62.84	108.40
22.00	62.45	109.41
23.00	47.85	94.82
24.00	48.96	71.48
Total	1,207.940	1,914.890
Average	50.33	79.79

Monday, June 06, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	40.55	72.71
02.00	40.59	73.81
03.00	40.69	73.03
04.00	41.31	73.70
05.00	41.22	73.75
06.00	40.59	74.85
07.00	41.02	73.44
08.00		
09.00		
10.00		
11.00		
12.00		
13.00		
14.00		
15.00		
16.00	61.02	110.48
17.00	60.86	110.39
18.00	62.34	112.28
19.00	61.88	111.51
20.00	60.26	111.75
21.00	59.83	112.99
22.00	59.00	112.28
23.00	58.53	112.64
24.00	40.21	72.45
Total	809.910	1,482.070
Average	50.62	92.63

PT BOSOWA ENERGI

Lampiran 1c. Data Input-Output PLTU Jene'ponto Unit 1 Bulan Juni 2016 (Lanjutan)

Tuesday, June 07, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	40.79	73.76
02.00	40.57	71.15
03.00	40.65	72.73
04.00	40.97	72.18
05.00	40.71	72.13
06.00	41.91	72.79
07.00	41.71	73.05
08.00	41.77	75.56
09.00	46.25	83.68
10.00	61.50	110.55
11.00	60.73	110.92
12.00	60.67	110.89
13.00	60.13	109.79
14.00	60.60	110.02
15.00	60.31	111.93
16.00	59.75	111.77
17.00	59.62	110.95
18.00	59.76	110.51
19.00	60.19	112.69
20.00	60.55	110.08
21.00	60.77	109.32
22.00	59.35	110.17
23.00	59.16	112.89
24.00	40.98	77.72
Total	1,259.400	2,297.230
Average	52.48	95.72

Wednesday, June 08, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	47.39	83.55
02.00	41.70	70.80
03.00	41.54	72.31
04.00	45.82	83.03
05.00	45.52	83.90
06.00	40.25	71.80
07.00	40.15	74.74
08.00	59.27	106.34
09.00	59.28	110.37
10.00	58.06	111.33
11.00	58.00	110.61
12.00	57.80	112.11
13.00	57.21	111.77
14.00	57.71	108.74
15.00	58.34	109.39
16.00	59.13	111.93
17.00	59.24	112.70
18.00	58.25	110.78
19.00	58.24	111.61
20.00	58.09	112.55
21.00	58.29	111.16
22.00	58.47	111.48
23.00	58.28	111.19
24.00	56.01	100.44
Total	1.292.040	2.414.630
Average	53.84	100.61

PT BOSOWA ENERGI

Lampiran 1c. Data Input-Output PLTU Jene'ponto Unit 1 Bulan Juni 2016 (Lanjutan)

Thursday, June 09, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	58.46	99.95
02.00	58.66	101.31
03.00	59.06	100.80
04.00	58.63	101.80
05.00	61.48	104.45
06.00	61.86	107.41
07.00	56.82	96.64
08.00	62.86	110.84
09.00	60.87	113.12
10.00	61.28	112.05
11.00	62.06	111.83
12.00	60.84	113.80
13.00	60.56	112.63
14.00	60.23	112.38
15.00	60.34	111.56
16.00	60.08	110.43
17.00	60.43	110.74
18.00	60.20	112.75
19.00	58.88	111.32
20.00	59.40	110.10
21.00	59.80	111.32
22.00	59.70	110.68
23.00	59.86	110.78
24.00	59.68	109.82
Total	1,442.040	2,608.510
Average	60.09	108.69

Friday, June 10, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	60.07	109.97
02.00	60.86	111.70
03.00	61.20	109.93
04.00	61.01	110.34
05.00	59.20	104.57
06.00	41.75	72.68
07.00	42.37	72.85
08.00	42.20	73.21
09.00	57.83	101.17
10.00	62.85	114.83
11.00	62.88	112.55
12.00	62.20	111.38
13.00	64.22	111.93
14.00	65.25	111.91
15.00	64.63	113.68
16.00	64.23	112.29
17.00	64.12	112.63
18.00	63.89	112.17
19.00	63.63	113.82
20.00	51.09	112.28
21.00	60.17	113.74
22.00	59.29	113.36
23.00	59.56	112.25
24.00	59.78	111.59
Total	1,424.100	2,556.830
Average	59.34	106.53

PT BOSOWA ENERGI

Lampiran 1c. Data Input-Output PLTU Jene'ponto Unit 1 Bulan Juni 2016 (Lanjutan)

Saturday, June 11, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	42.45	81.91
02.00	40.90	72.89
03.00	40.50	72.59
04.00	50.03	93.11
05.00	49.25	93.36
06.00	49.25	92.90
07.00	40.45	73.37
08.00	40.40	74.36
09.00	46.39	73.37
10.00	47.52	87.91
11.00	62.16	108.15
12.00	61.16	111.79
13.00	61.19	112.57
14.00	60.85	112.65
15.00	61.11	111.61
16.00	61.26	111.04
17.00	61.00	114.18
18.00	60.41	113.94
19.00	59.69	112.34
20.00	59.82	113.33
21.00	60.71	113.79
22.00	60.77	112.99
23.00	59.31	110.45
24.00	57.71	110.37
Total	1,294.290	2,384.980
Average	53.93	99.37

Sunday, June 12, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	44.51	72.16
02.00	45.41	70.73
03.00	46.63	72.01
04.00	46.81	72.92
05.00	46.69	70.97
06.00	47.54	72.56
07.00	47.90	70.58
08.00	47.60	72.56
09.00	49.14	75.89
10.00	50.23	85.16
11.00	64.67	108.39
12.00	65.80	107.70
13.00	66.89	108.97
14.00	66.92	109.94
15.00	66.94	111.07
16.00	67.19	111.85
17.00	66.52	113.99
18.00	65.68	111.39
19.00	65.52	110.80
20.00	65.62	112.23
21.00	64.42	113.70
22.00	64.37	112.81
23.00	64.40	110.28
24.00	46.50	81.84
Total	1,373.900	2,260.600
Average	57.25	94.19

Lampiran 1c. Data Input-Output PLTU Jene'ponto Unit 1 Bulan Juni 2016 (Lanjutan)

Monday, June 13, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	46.29	71.15
02.00	46.91	72.16
03.00	46.81	71.49
04.00	47.16	71.26
05.00	49.21	72.22
06.00	48.74	71.90
07.00	48.72	72.48
08.00	48.76	73.60
09.00	47.17	75.90
10.00	62.25	96.45
11.00	61.58	101.02
12.00	61.42	103.47
13.00	65.88	111.40
14.00	65.32	112.86
15.00	62.65	113.38
16.00	62.04	110.51
17.00	62.64	110.25
18.00	63.46	110.23
19.00	62.74	111.10
20.00	64.02	108.04
21.00	66.24	110.68
22.00	65.30	111.22
23.00	66.94	107.90
24.00	56.86	90.85
Total	1,379.110	2,261.520
Average	57.46	94.23

Tuesday, June 14, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	59.45	94.24
02.00	45.90	72.80
03.00	46.66	70.47
04.00	55.92	86.12
05.00	59.82	93.92
06.00	60.10	92.35
07.00	59.89	92.94
08.00	60.04	95.94
09.00	65.69	109.99
10.00	63.97	111.24
11.00	63.14	111.61
12.00	63.78	111.61
13.00	63.37	112.83
14.00	63.37	112.03
15.00	63.91	109.52
16.00	66.33	110.97
17.00	65.35	112.90
18.00	65.35	113.10
19.00	65.75	114.23
20.00	66.32	112.40
21.00	66.71	113.38
22.00	64.14	113.68
23.00	65.40	109.64
24.00	51.87	100.15
Total	1,483.250	2,478.060
Average	61.80	103.25

Lampiran 1c. Data Input-Output PLTU Jene'ponto Unit 1 Bulan Juni 2016 (Lanjutan)

Wednesday, June 15, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	46.30	71.55
02.00	46.74	69.89
03.00	46.77	73.47
04.00	58.50	89.51
05.00	58.86	91.25
06.00	58.90	94.04
07.00	51.40	84.87
08.00	49.08	84.93
09.00	60.47	108.36
10.00	63.95	108.72
11.00	64.05	112.84
12.00	64.61	110.87
13.00	65.06	111.36
14.00	63.53	114.67
15.00	62.79	113.73
15.00	62.81	113.06
17.00	62.85	111.04
18.00	63.71	110.95
19.00	63.75	111.03
20.00	63.79	113.57
21.00	63.71	109.55
22.00	65.63	108.83
23.00	68.67	110.84
24.00	43.23	75.26
Total	1,419.160	2,404.190
Average	59.13	100.17

Thursday, June 16, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	48.94	79.95
02.00	46.58	71.80
03.00	48.45	72.22
04.00	48.07	72.89
05.00	47.75	72.48
06.00	48.02	71.43
07.00	48.04	71.60
08.00	65.77	101.06
09.00	65.83	101.26
10.00	65.14	102.25
11.00	63.39	101.78
12.00	67.02	110.71
13.00	62.94	111.32
14.00	61.45	112.95
15.00	60.60	109.82
16.00	61.46	109.84
17.00	62.45	109.84
18.00	64.13	109.65
19.00	63.45	113.28
20.00	63.39	109.77
21.00	63.45	112.14
22.00	63.41	110.91
23.00	65.23	112.87
24.00	63.14	107.58
Total	1,418.100	2,359.200
Average	59.09	98.30

Lampiran 1c. Data Input-Output PLTU Jene'ponto Unit 1 Bulan Juni 2016 (Lanjutan)

Friday, June 17, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	50.21	84.64
02.00	43.78	73.00
03.00	43.85	73.18
04.00	61.35	97.45
05.00	61.40	101.32
06.00	56.55	91.66
07.00	45.81	72.13
08.00	52.61	87.18
09.00	68.05	109.90
10.00	66.31	112.84
11.00	65.43	113.22
12.00	65.44	114.51
13.00	63.88	112.09
14.00	62.96	112.67
15.00	63.94	110.43
16.00	63.46	111.44
17.00	66.26	109.07
18.00	68.07	109.91
19.00	68.25	108 77
20.00	67.27	107 39
21.00	66.56	109 64
22.00	65.75	108 40
23.00	67.30	109 82
24.00	53.51	90.08
Total	1,458.000	2,430.740
Average	60.75	101 28

Saturday, June 18, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	55.4<	93.91
02.00	55.0<	92.15
03.00	48.9<	82.97
04.00	48.91	82.97
05.00	48.79	81.68
06.00	42.67	72.65
07.00	43.2<	72.71
08.00	43.90	70.58
09.00	46.36	72.57
10.00	45.19	73.43
11.00	50.8<	81.58
12.00	50.70	82.97
13.00	50.72	82.64
14.00	49.6<	84.19
15.00	49.58	85.01
16.00	49.6<	84.75
17.00	49.5<	85.35
18.00	67.28	111.73
19.00	64.47	111.21
20.00	65.52	111 29
21.00	66.30	108.55
22.00	68.27	109 71
23.00	68.77	112 23
24.00	67.07	111 29
Total	1,296.780	2,158.020
Average	54.0<	89 92

PT BOSOWA ENERGI

Lampiran 1c. Data Input-Output PLTU Jene'ponto Unit 1 Bulan Juni 2016 (Lanjutan)

Sunday, June 19, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	50.42	96.80
02.00	54.02	86.14
03.00	50.49	86.22
04.00	50.74	86.43
05.00	52.18	84.26
06.00	44.90	72.65
07.00	45.75	72.19
08.00	45.64	73.61
09.00	44.78	75.38
10.00	44.13	73.93
11.00	44.31	71.29
12.00	45.00	72.71
13.00	45.05	73.58
14.00	42.25	71.67
15.00	45.11	71.98
16.00	49.84	82.00
17.00	58.85	83.10
18.00	68.92	107.26
19.00	69.47	111.88
20.00	66.75	110.95
21.00	66.71	112.08
22.00	66.63	110.29
23.00	57.54	93.37
24.00	64.94	112.34
Total	1,274.420	2,092.110
Average	53.10	87.17

Monday, June 20, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	46.27	71.54
02.00	46.27	71.87
03.00	46.22	72.41
04.00	46.26	70.93
05.00	46.20	71.09
06.00	46.35	72.07
07.00	46.55	72.15
08.00	46.80	74.27
09.00	46.87	72.45
10.00	49.85	83.76
11.00	60.69	101.54
12.00	60.78	101.35
13.00	60.68	101.69
14.00	65.84	111.03
15.00	65.42	109.71
16.00	64.94	111.88
17.00	64.75	112.69
18.00	66.08	111.42
19.00	67.75	110.01
20.00	68.39	109.10
21.00	69.08	108.91
22.00	69.78	107.94
23.00	59.70	95.11
24.00	45.96	71.31
Total	1,355.480	2,196.230
Average	56.48	91.51

Lampiran 1c. Data Input-Output PLTU Jene'ponto Unit 1 Bulan Juni 2016 (Lanjutan)

Tuesday, June 21, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	43.56	72.90
02.00	43.11	73.10
03.00	42.37	72.50
04.00	43.41	71.50
05.00	45.03	71.80
06.00	45.17	71.27
07.00	45.51	70.53
08.00	47.04	71.98
09.00	50.58	72.77
10.00	52.41	72.22
11.00	58.55	79.72
12.00	58.23	82.45
13.00	58.31	83.30
14.00	56.04	82.58
15.00	55.96	81.50
16.00	64.76	96.90
17.00	66.76	107.62
18.00	68.52	110.02
19.00	67.35	112.09
20.00	66.21	109.35
21.00	67.29	109.30
22.00	67.57	109.23
23.00	68.28	109.19
24.00	45.44	73.31
Total	1,327.860	2,067.130
Average	55.33	86.13

Wednesday, June 22, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	45.62	74.25
02.00	45.37	74.74
03.00	44.53	73.04
04.00	44.33	73.86
05.00	44.18	74.41
06.00	43.25	73.52
07.00	43.07	72.83
08.00	42.87	72.92
09.00	56.84	92.62
10.00	64.95	112.89
11.00	64.52	112.20
12.00	63.48	111.85
13.00	61.94	111.77
14.00	61.05	111.90
15.00	61.10	110.63
16.00	60.98	110.77
17.00	61.40	110.72
18.00	61.17	109.59
19.00	62.51	111.01
20.00	63.07	111.44
21.00	62.97	111.27
22.00	62.90	112.20
23.00	63.00	110.58
24.00	46.50	74.15
Total	1,331.600	2,315.160
Average	55.48	96.47

Lampiran 1c. Data Input-Output PLTU Jene'ponto Unit 1 Bulan Juni 2016 (Lanjutan)

Thursday, June 23, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	67.70	103.85
02.00	58.57	93.20
03.00	57.14	94.79
04.00	57.23	91.04
05.00	58.57	92.15
06.00	48.10	73.54
07.00	46.30	74.74
08.00	46.25	75.66
09.00	44.88	75.03
10.00	52.20	93.57
11.00	66.71	111.59
12.00	65.54	111.65
13.00	65.03	113.19
14.00	64.71	114.02
15.00	63.50	112.46
16.00	62.45	112.31
17.00	62.48	110.93
18.00	63.03	110.63
19.00	63.09	112.46
20.00	63.24	111.77
21.00	62.60	112.05
22.00	61.59	111.85
23.00	61.61	110.40
24.00	55.89	105.33
Total	1,428.410	2,428.210
Average	59.52	101.18

Friday, June 24, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	44.56	73.09
02.00	45.51	70.48
03.00	53.00	73.15
04.00	60.28	99.73
05.00	47.29	96.93
06.00	40.45	73.49
07.00	39.90	73.50
08.00	40.44	73.61
09.00	48.60	87.44
10.00	49.44	87.22
11.00	49.45	86.58
12.00	48.31	89.11
13.00	47.86	87.70
14.00	47.79	87.45
15.00	47.74	86.92
16.00	42.89	87.92
17.00	52.44	97.58
18.00	67.82	111.19
19.00	62.88	111.24
20.00	61.52	112.17
21.00	61.40	111.07
22.00	61.13	111.03
23.00	61.68	109.48
24.00	45.82	89.92
Total	1,228.200	2,188.000
Average	51.18	91.17

PT BOSOWA ENERGI

Lampiran 1c. Data Input-Output PLTU Jene'ponto Unit 1 Bulan Juni 2016 (Lanjutan)

Saturday, June 25, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	43.76	70.94
02.00	44.81	72.94
03.00	44.94	70.99
04.00	52.37	78.72
05.00	52.71	85.51
06.00	51.53	71.60
07.00	53.06	72.41
08.00	52.96	77.25
09.00	61.56	79.70
10.00	55.32	86.41
11.00	55.38	86.23
12.00	52.56	86.16
13.00	52.40	90.14
14.00	52.11	92.12
15.00	52.10	91.43
16.00	52.28	87.86
17.00	54.08	84.75
18.00	60.46	101.92
19.00	66.51	109.99
20.00	64.57	110.49
21.00	64.71	109.30
22.00	63.55	110.69
23.00	62.54	110.02
24.00	42.47	70.94
Total	1,309.040	2,108.510
Average	54.54	87.85

Sunday, June 26, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	55.94	91.53
02.00	49.95	85.28
03.00	44.68	74.91
04.00	43.88	75.27
05.00	43.28	74.63
06.00	43.22	75.53
07.00	42.15	72.60
08.00		
09.00		
10.00		
11.00		
12.00		
13.00		
14.00		
15.00		
16.00		
17.00		
18.00		
19.00		
20.00		
21.00		
22.00		
23.00		
24.00	63.80	108.14
Total	386.900	657.890
Average	48.36	82.24

Lampiran 1c. Data Input-Output PLTU Jene'ponto Unit 1 Bulan Juni 2016 (Lanjutan)

Monday, June 27, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	51.60	88.73
02.00	47.24	71.05
03.00	45.57	72.02
04.00	44.01	72.38
05.00	43.89	73.25
06.00	43.98	73.05
07.00	43.92	72.89
08.00	42.59	74.62
09.00	47.28	82.78
10.00	50.31	85.83
11.00	55.66	88.31
12.00	66.73	107.70
13.00	68.14	108.42
14.00	66.98	103.49
15.00	67.13	103.03
16.00	64.22	103.31
17.00	69.47	106.91
18.00	70.55	109.47
19.00	70.20	109.97
20.00	68.40	106.11
21.00	67.72	103.38
22.00	65.47	103.75
23.00	65.65	98.28
24.00	64.81	108.98
Total	1,391.520	2,227.710
Average	57.98	92.82

Tuesday, June 28, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	51.47	73.64
02.00	50.66	71.46
03.00	50.08	71.17
04.00	50.57	70.18
05.00	50.34	71.90
06.00	50.29	71.28
07.00	50.61	71.29
08.00	58.72	86.23
09.00	70.47	106.05
10.00	69.33	109.79
11.00	70.75	109.26
12.00	70.04	110.43
13.00	67.34	110.39
14.00	66.61	110.71
15.00	67.73	109.30
16.00	68.02	109.67
17.00	66.98	108.84
18.00	67.18	109.73
19.00	66.76	111.09
20.00	66.18	109.10
21.00	66.02	110.10
22.00	66.05	109.70
23.00	66.15	108.34
24.00	59.13	98.18
Total	1,487.480	2,327.830
Average	61.98	96.99

PT BOSOWA ENERGI

Lampiran 1c. Data Input-Output PLTU Jene'ponto Unit 1 Bulan Juni 2016 (Lanjutan)

Wednesday, June 29, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	47.38	72.04
02.00	48.80	69.25
03.00	51.27	70.77
04.00	49.69	71.25
05.00	51.04	71.14
06.00	51.04	71.37
07.00	51.24	69.90
08.00	51.19	68.18
09.00	47.82	66.50
10.00	49.48	71.48
11.00	55.27	85.16
12.00	55.25	83.73
13.00	55.44	85.44
14.00	60.85	92.64
15.00	59.45	94.65
16.00	59.72	94.62
17.00	56.66	91.17
18.00	65.44	100.15
19.00	66.70	104.14
20.00	66.06	103.24
21.00	65.91	103.90
22.00	65.88	101.79
23.00	66.13	103.73
24.00	58.59	92.50
Total	1.356.400	2.038.740
Average	56.52	84.95

Thursday, June 30, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	C -> Ton	P -> MW
01.00	49.04	71.03
02.00	49.80	69.81
03.00	49.96	69.48
04.00	50.48	69.25
05.00		
06.00		
07.00		
08.00		
09.00		
10.00		
11.00		
12.00		
13.00		
14.00		
15.00		
16.00		
17.00		
18.00		
19.00		
20.00		
21.00		
22.00		
23.00		
24.00	50.10	82.49
Total	249.380	362.060
Average	49.88	72.41

Lampiran 1d. Data Input-Output PLTU Jene'ponto Unit 2 Bulan Juni 2016

Wednesday, June 01, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	59.37	70.74
02.00	58.37	69.50
03.00	59.20	70.23
04.00	60.22	70.20
05.00	62.45	70.10
06.00	60.50	72.08
07.00	62.70	69.32
08.00	63.13	74.20
09.00	67.40	82.87
10.00	65.92	86.26
11.00	67.44	86.26
12.00	67.09	84.47
13.00	67.48	87.11
14.00	68.09	84.90
15.00	65.78	86.04
16.00	65.12	84.14
17.00	63.99	81.21
18.00	63.69	79.10
19.00	63.96	79.83
20.00	67.94	76.19
21.00	61.74	77.41
22.00	62.02	79.21
23.00	64.46	78.09
24.00	58.50	70.94
Total	1,527.660	1,870.400
Average	63.65	77.93

Thursday, June 02, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	63.45	71.49
02.00	61.68	70.86
03.00	61.94	71.73
04.00	61.00	70.04
05.00	62.45	70.43
06.00	62.42	71.79
07.00	61.89	71.15
08.00	63.14	74.20
09.00	62.00	70.70
10.00	67.18	74.93
11.00	70.18	81.22
12.00	70.70	81.19
13.00	69.13	81.56
14.00	69.49	80.02
15.00	67.07	81.13
16.00	68.62	79.21
17.00	66.93	82.08
18.00	64.98	83.89
19.00	65.09	84.68
20.00	64.43	87.42
21.00	60.83	82.79
22.00	61.28	87.03
23.00	60.42	75.61
24.00	61.31	71.65
Total	1,547.610	1,856.800
Average	64.48	77.37

Lampiran 1d. Data Input-Output PLTU Jene'ponto Unit 2 Bulan Juni 2016 (Lanjutan)

Friday, June 03, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	59.87	70.78
02.00	60.53	73.70
03.00	58.17	72.87
04.00	59.47	72.52
05.00	58.58	72.39
06.00	58.78	72.89
07.00	59.50	72.39
08.00	58.74	72.72
09.00	63.20	78.37
10.00	62.16	76.84
11.00	62.88	76.29
12.00	61.90	76.51
13.00	59.99	73.45
14.00	59.11	73.18
15.00	59.51	73.90
16.00	57.64	75.76
17.00	58.74	77.53
18.00	58.93	81.42
19.00	61.43	82.50
20.00	60.37	81.13
21.00	57.10	82.58
22.00	57.16	81.59
23.00	58.62	82.55
24.00	64.14	78.78
Total	1,436.520	1,832.643
Average	59.86	76.36

Saturday, June 04, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	54.98	74.86
02.00	54.81	71.44
03.00	55.54	72.52
04.00	57.78	74.88
05.00	57.23	72.68
06.00	58.89	71.84
07.00	57.71	73.19
08.00	57.93	70.94
09.00	63.38	80.40
10.00	64.43	80.72
11.00	63.33	79.25
12.00	56.32	72.40
13.00	55.73	74.81
14.00	56.65	74.54
15.00	59.23	83.27
16.00	57.63	81.83
17.00	57.32	80.44
18.00	59.35	85.04
19.00	58.61	81.65
20.00	58.75	79.22
21.00	59.79	81.01
22.00	59.44	81.47
23.00	59.55	79.21
24.00	57.72	79.47
Total	1,402.100	1,857.080
Average	58.42	77.38

Lampiran 1d. Data Input-Output PLTU Jene'ponto Unit 2 Bulan Juni 2016 (Lanjutan)

Sunday, June 05, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	53.88	59.76
02.00	55.19	70.36
03.00	56.49	70.52
04.00	58.47	72.95
05.00	57.58	72.04
06.00	58.57	68.92
07.00	55.18	69.58
08.00	54.47	68.43
09.00	53.81	71.82
10.00	52.48	74.69
11.00	51.24	69.76
12.00	53.36	67.87
13.00	54.32	67.41
14.00	52.43	65.98
15.00	53.36	64.80
16.00	54.42	66.28
17.00	53.97	68.43
18.00	53.28	69.96
19.00	54.61	74.92
20.00	56.68	78.75
21.00	59.02	84.67
22.00	59.62	82.38
23.00	57.95	83.25
24.00	54.55	71.47
Total	1,324.930	1,715.000
Average	55.21	71.46

Monday, June 06, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	50.27	71.82
02.00	49.55	71.17
03.00	49.50	72.63
04.00	50.65	71.27
05.00	49.50	71.55
06.00	48.27	70.60
07.00	49.13	70.43
08.00	0.00	0.00
09.00	0.00	0.00
10.00	0.00	0.00
11.00	0.00	0.00
12.00	0.00	0.00
13.00	0.00	0.00
14.00	0.00	0.00
15.00	0.00	0.00
16.00	60.63	91.25
17.00	63.08	90.15
18.00	63.04	91.80
19.00	64.22	95.56
20.00	63.39	92.28
21.00	63.37	94.34
22.00	62.60	94.24
23.00	61.63	94.56
24.00	50.93	71.35
Total	899.760	1,315.000
Average	37.49	54.79

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PLTU JENEPONTO

Lampiran 1d. Data Input-Output PLTU Jene'ponto Unit 2 Bulan Juni 2016 (Lanjutan)

Tuesday, June 07, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	50.41	72.37
02.00	53.65	73.12
03.00	51.11	75.09
04.00	52.32	74.69
05.00	57.51	72.63
06.00	52.75	73.04
07.00	52.17	73.76
08.00	52.25	72.80
09.00	58.38	80.90
10.00	62.23	87.89
11.00	62.48	90.04
12.00	62.10	89.70
13.00	62.44	89.14
14.00	61.61	89.89
15.00	61.26	91.03
16.00	61.20	92.36
17.00	60.23	90.86
18.00	61.76	91.96
19.00	62.16	91.66
20.00	62.55	90.42
21.00	63.34	92.63
22.00	62.32	93.03
23.00	61.40	90.30
24.00	51.38	74.13
Total	1,399.010	2,013.440
Average	58.29	83.89

Wednesday, June 08, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	56.63	79.01
02.00	51.36	69.82
03.00	52.20	71.50
04.00	58.16	81.45
05.00	54.94	78.89
06.00	51.90	73.16
07.00	50.87	74.87
08.00	63.84	95.78
09.00	62.89	97.93
10.00	63.54	98.39
11.00	63.85	100.08
12.00	63.21	99.03
13.00	63.80	99.00
14.00	62.88	95.73
15.00	61.18	92.24
16.00	61.00	90.91
17.00	58.04	98.75
18.00	58.53	90.99
19.00	61.01	90.54
20.00	59.85	89.84
21.00	59.31	91.32
22.00	58.54	89.16
23.00	60.41	88.80
24.00	56.62	83.37
Total	1,414.560	2,120.560
Average	58.94	88.36

Lampiran 1d. Data Input-Output PLTU Jene'ponto Unit 2 Bulan Juni 2016 (Lanjutan)

Thursday, June 09, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	58.83	80.00
02.00	61.05	80.31
03.00	60.22	81.82
04.00	60.00	80.40
05.00	61.57	87.68
06.00	60.59	83.08
07.00	60.79	81.97
08.00	65.33	88.16
09.00	65.24	93.58
10.00	65.15	91.84
11.00	65.41	93.17
12.00	65.98	93.05
13.00	65.40	94.50
14.00	63.86	92.74
15.00	64.43	90.82
16.00	61.96	89.80
17.00	64.42	92.74
18.00	62.92	94.42
19.00	64.38	95.82
20.00	61.57	95.58
21.00	63.23	95.64
22.00	63.34	93.95
23.00	63.97	95.32
24.00	62.02	87.45
Total	1,511.660	2,153.840
average	62.99	89.74

Friday, June 10, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	63.41	89.07
02.00	63.38	86.58
03.00	62.59	89.83
04.00	61.09	88.21
05.00	51.60	79.37
06.00	50.92	70.04
07.00	50.75	71.12
08.00	50.72	70.00
09.00	59.78	82.43
10.00	62.27	86.89
11.00	64.00	89.50
12.00	63.57	88.92
13.00	65.03	87.91
14.00	64.82	88.93
15.00	65.36	88.95
16.00	64.90	88.56
17.00	63.97	88.81
18.00	63.69	90.52
19.00	61.17	88.81
20.00	61.99	90.61
21.00	62.32	92.49
22.00	61.09	91.49
23.00	62.09	91.49
24.00	62.99	91.63
Tota.	1,463.500	2,072.160
Average	60.98	86.34

Lampiran 1d. Data Input-Output PLTU Jene'ponto Unit 2 Bulan Juni 2016 (Lanjutan)

Saturday, June 11, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	56.16	86.64
02.00	50.78	72.62
03.00	50.82	73.73
04.00	49.59	73.61
05.00	50.77	74.10
06.00	50.27	74.24
07.00	51.61	73.34
08.00	51.33	74.73
09.00	50.72	74.53
10.00	61.83	86.47
11.00	62.73	91.95
12.00	62.48	88.08
13.00	59.96	86.70
14.00	59.27	85.88
15.00	60.21	87.66
16.00	60.94	89.04
17.00	60.76	88.38
18.00	62.34	91.97
19.00	62.56	93.25
20.00	64.06	96.54
21.00	65.19	95.68
22.00	63.66	94.97
23.00	61.13	89.07
24.00	60.28	89.53
Total	1,389.450	2,032.710
Average	57.89	84.70

Sunday, June 12, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	50.94	73.06
02.00	56.37	69.57
03.00	58.36	73.59
04.00	58.75	72.41
05.00	58.33	71.51
06.00	57.52	68.48
07.00	59.96	71.40
08.00	59.44	71.43
09.00	57.91	72.14
10.00	62.71	82.17
11.00	63.65	84.00
12.00	63.64	85.15
13.00	63.79	82.74
14.00	62.81	84.20
15.00	61.70	82.08
16.00	60.77	79.72
17.00	60.70	79.91
18.00	60.93	80.94
19.00	61.11	80.48
20.00	61.85	78.31
21.00	61.33	79.85
22.00	60.95	78.31
23.00	61.01	77.04
24.00	61.24	80.49
Total	1,445.770	1,852.980
Average	60.24	77.21

Lampiran 1d. Data Input-Output PLTU Jene'ponto Unit 2 Bulan Juni 2016 (Lanjutan)

Monday, June 13, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	59.80	71.96
02.00	58.99	70.96
03.00	58.96	71.38
04.00	57.89	69.34
05.00	58.63	70.10
06.00	57.93	70.33
07.00	59.33	72.12
08.00	59.83	73.52
09.00	57.74	75.08
10.00	62.08	79.41
11.00	63.77	79.01
12.00	62.17	82.86
13.00	61.08	84.34
14.00	60.37	85.60
15.00	59.28	85.06
16.00	61.78	83.85
17.00	63.85	87.39
18.00	62.49	88.32
19.00	63.31	86.98
20.00	62.38	85.88
21.00	63.69	85.38
22.00	62.89	83.96
23.00	63.89	82.48
24.00	57.70	71.73
Total	1,459.830	1,897.040
Average	60.83	79.04

Tuesday, June 14, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	59.48	75.27
02.00	58.10	70.39
03.00	68.43	71.12
04.00	58.07	71.99
05.00	57.87	71.02
06.00	58.42	71.31
07.00	57.93	70.16
08.00	57.56	74.33
09.00	63.29	82.22
10.00	65.28	86.02
11.00	63.83	88.46
12.00	64.17	89.71
13.00	65.19	90.85
14.00	63.39	90.58
15.00	65.05	89.97
16.00	63.45	88.37
17.00	64.20	88.35
18.00	64.43	89.50
19.00	63.74	87.73
20.00	64.08	85.24
21.00	63.84	82.80
22.00	63.25	84.26
23.00	64.10	84.96
24.00	63.57	79.97
Total	1,500.720	1,964.580
Average	62.53	81.86

Lampiran 1d. Data Input-Output PLTU Jene'ponto Unit 2 Bulan Juni 2016 (Lanjutan)

Wednesday, June 15, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	59.34	71.77
02.00	57.40	69.46
03.00	58.29	72.24
04.00	57.59	73.26
05.00	59.67	71.80
06.00	59.84	73.32
07.00	56.68	74.30
08.00	55.61	73.66
09.00	55.31	81.09
10.00	60.73	87.10
11.00	61.89	85.89
12.00	62.89	87.34
13.00	61.54	89.14
14.00	63.22	89.76
15.00	62.05	90.35
16.00	63.42	89.53
17.00	61.48	89.42
18.00	62.91	88.95
19.00	62.84	90.14
20.00	62.80	91.43
21.00	62.16	85.74
22.00	64.50	84.04
23.00	64.34	82.71
24.00	59.69	78.46
Total	1,456.190	1,970.900
Average	60.67	82.12

Thursday, June 16, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	61.55	76.72
02.00	59.40	71.57
03.00	59.13	72.42
04.00	59.03	72.73
05.00	59.31	71.75
06.00	59.21	71.52
07.00	60.73	70.41
08.00	63.07	75.55
09.00	64.11	76.66
10.00	63.53	77.35
11.00	63.39	81.16
12.00	63.98	80.91
13.00	62.30	85.28
14.00	59.42	86.18
15.00	60.01	87.51
16.00	58.27	83.01
17.00	60.15	83.76
18.00	60.45	84.06
19.00	60.46	83.58
20.00	59.06	80.34
21.00	58.37	81.59
22.00	59.19	80.62
23.00	60.20	80.74
24.00	64.73	80.91
Total	1,459.050	1,896.330
Average	60.79	79.01

Lampiran 1d. Data Input-Output PLTU Jene'ponto Unit 2 Bulan Juni 2016 (Lanjutan)

Friday, June 17, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	54.91	73.29
02.00	54.95	72.89
03.00	54.76	72.82
04.00	60.07	73.01
05.00	61.89	81.62
06.00	57.10	73.34
07.00	57.23	72.12
08.00	56.85	74.77
09.00	66.52	87.66
10.00	65.61	88.99
11.00	64.97	90.40
12.00	65.77	91.56
13.00	64.73	91.95
14.00	65.75	90.99
15.00	64.81	90.92
16.00	65.33	91.01
17.00	66.26	87.68
18.00	61.25	77.75
19.00	56.29	71.70
20.00	63.58	81.15
21.00	64.11	85.44
22.00	62.29	85.06
23.00	62.72	84.34
24.00	59.85	79.90
Total	1,477.600	1,970.360
Average	61.57	82.10

Saturday, June 18, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	59.67	80.45
02.00	55.76	78.13
03.00	53.25	72.05
04.00	53.94	71.55
05.00	53.24	72.41
06.00	54.43	71.64
07.00	54.21	72.15
08.00	54.71	70.29
09.00	55.45	70.25
10.00	55.46	69.37
11.00	56.11	73.43
12.00	57.13	72.92
13.00	58.14	73.40
14.00	61.91	82.40
15.00	61.56	82.20
16.00	61.20	84.22
17.00	60.75	85.21
18.00	64.98	86.63
19.00	65.63	92.12
20.00	65.87	90.35
21.00	65.34	87.89
22.00	65.89	86.32
23.00	65.19	86.76
24.00	64.63	86.20
Total	1,424.450	1,899.360
Average	59.35	79.14

Lampiran 1d. Data Input-Output PLTU Jene'ponto Unit 2 Bulan Juni 2016 (Lanjutan)

Sunday, June 19, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	54.92	78.68
02.00	53.59	71.83
03.00	53.60	70.68
04.00	55.42	73.18
05.00	56.41	71.90
06.00	55.27	71.84
07.00	55.64	71.61
08.00	57.04	70.90
09.00	56.33	74.59
10.00	56.92	70.85
11.00	57.72	69.45
12.00	55.86	73.40
13.00	56.43	71.73
14.00	57.28	70.35
15.00	57.29	73.29
16.00	62.08	77.96
17.00	67.15	81.88
18.00	68.71	86.02
19.00	68.96	88.02
20.00	67.90	92.21
21.00	67.35	91.16
22.00	66.05	89.45
23.00	57.56	73.18
24.00	61.37	85.03
Total	1,426.850	1,849.190
Average	59.45	77.05

Monday, June 20, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	58.09	72.45
02.00	57.71	73.83
03.00	57.47	70.83
04.00	57.81	70.70
05.00	58.07	71.14
06.00	57.17	70.83
07.00	58.08	71.37
08.00	57.19	73.05
09.00	57.22	74.77
10.00	60.83	78.34
11.00	61.88	82.95
12.00	61.89	82.02
13.00	62.45	81.74
14.00	66.78	90.01
15.00	65.56	89.98
16.00	67.39	91.22
17.00	66.56	91.01
18.00	66.94	88.60
19.00	67.63	85.22
20.00	65.78	85.42
21.00	67.15	82.43
22.00	65.77	83.15
23.00	57.88	74.77
24.00	57.50	73.14
Total	1,480.800	1,906.970
Average	61.70	79.46

Lampiran 1d. Data Input-Output PLTU Jene'ponto Unit 2 Bulan Juni 2016 (Lanjutan)

Tuesday, June 21, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	54.26	73.60
02.00	52.27	71.40
03.00	54.65	71.34
04.00	53.54	68.20
05.00	56.66	68.70
06.00	57.69	70.70
07.00	58.70	70.15
08.00	58.42	70.45
09.00	59.05	69.96
10.00	58.78	70.39
11.00	58.85	70.16
12.00	58.48	70.45
13.00	58.64	72.52
14.00	62.57	82.26
15.00	63.12	80.78
16.00	64.21	81.94
17.00	66.10	83.45
18.00	64.88	84.17
19.00	66.01	85.15
20.00	66.52	86.01
21.00	64.62	85.21
22.00	64.73	83.5
23.00	65.24	82.97
24.00	56.60	71.78
Total	1,444.590	1,825 240
Average	60.19	76.05

Wednesday, June 22, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	54.87	71.44
02.00	54.83	72.06
03.00	52.72	70.79
04.00	53.62	69.98
05.00	52.83	71.52
06.00	53.50	72.15
07.00	52.37	73.55
08.00	51.83	72.54
09.00	62.37	89.54
10.00	64.92	91.57
11.00	64.59	92.58
12.00	64.55	93.77
13.00	64.65	94.96
14.00	65.63	95.22
15.00	65.53	98.36
16.00	65.48	99.15
17.00	65.63	98.01
18.00	65.15	94.70
19.00	64.39	95.58
20.00	64.72	93.74
21.00	64.52	94.65
22.00	64.73	95.92
23.00	64.10	92.32
24.00	58.75	77.93
Total	1,455 350	2,072 050
Average	60.68	86.33

Lampiran 1d. Data Input-Output PLTU Jene'ponto Unit 2 Bulan Juni 2016 (Lanjutan)

Thursday, June 23, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	60.64	75.87
02.00	58.12	72.35
03.00	55.98	75.08
04.00	55.60	72.53
05.00	57.48	72.59
06.00	57.08	71.32
07.00	54.98	72.44
08.00	55.09	72.01
09.00	55.38	71.96
10.00	61.86	82.72
11.00	62.54	85.03
12.00	62.34	83.58
13.00	61.30	86.58
14.00	59.31	86.67
15.00	60.43	86.23
16.00	61.95	89.56
17.00	62.15	87.66
18.00	62.34	87.47
19.00	63.43	88.20
20.00	61.32	89.60
21.00	62.88	88.98
22.00	62.08	91.92
23.00	62.29	89.31
24.00	62.94	83.55
Total	1,439.510	1,963.210
Average	59.98	81.80

Friday, June 24, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	52.92	71.00
02.00	54.20	70.27
03.00	55.84	70.19
04.00	56.46	71.44
05.00	53.74	72.99
06.00	52.41	73.98
07.00	51.36	71.51
08.00	54.50	70.47
09.00	54.76	75.98
10.00	59.20	83.96
11.00	61.01	85.73
12.00	60.11	80.89
13.00	58.31	87.07
14.00	59.88	86.93
15.00	60.75	86.81
16.00	59.61	86.40
17.00	59.69	87.37
18.00	61.39	90.18
19.00	61.74	92.26
20.00	60.12	86.60
21.00	59.47	90.01
22.00	58.12	85.21
23.00	58.93	86.12
24.00	55.20	80.89
Total	1,379.720	1,944.250
Average	57.49	81.01

Lampiran 1d. Data Input-Output PLTU Jene'ponto Unit 2 Bulan Juni 2016 (Lanjutan)

Saturday, June 25, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	53.52	68.93
02.00	55.07	69.06
03.00	55.27	70.21
04.00	60.95	75.63
05.00	61.38	71.67
06.00	62.03	70.16
07.00	61.96	70.13
08.00	60.55	72.86
09.00	61.60	76.46
10.00	64.86	81.01
11.00	64.18	81.73
12.00	64.91	85.85
13.00	62.82	85.47
14.00	62.32	86.47
15.00	62.18	85.80
16.00	62.86	82.84
17.00	62.27	81.79
18.00	62.86	82.05
19.00	62.21	84.32
20.00	62.00	83.29
21.00	62.45	84.16
22.00	61.19	85.86
23.00	62.65	86.99
24.00	52.01	77.09
Total	1,464.100	1,899.830
Average	61.00	79.16

Sunday, June 26, 2015		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	60 17	78.98
02.00	56 51	73 84
03.00	55 93	73.57
04.00	54 01	72 74
05.00	52 45	71.06
06.00	53 35	71.63
07.00	53 06	71.49
08.00	0 00	0 00
09.00	0 00	0 00
10.00	0 00	0 00
11.00	0 00	0 00
12.00	0 00	0 00
13.00	0 00	0 00
14.00	0 00	0 00
15.00	0 00	0 00
16.00	0 00	0 00
17.00	0 00	0 00
18.00	0 00	0 00
19.00	0 00	0 00
20.00	0 00	0 00
21.00	0 00	0 00
22.00	0 00	0 00
23.00	0 00	0 00
24.00	61 49	83.68
Total	446 970	596.990
Average	18 62	24.87

Lampiran 1d. Data Input-Output PLTU Jene'ponto Unit 2 Bulan Juni 2016 (Lanjutan)

Monday, June 27, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	59.14	80.25
02.00	58.23	72.44
03.00	58.21	72.80
04.00	55.70	73.60
05.00	56.44	71.57
06.00	55.84	73.86
07.00	55.70	72.01
08.00	54.10	74.30
09.00	60.00	81.82
10.00	63.93	85.47
11.00	65.30	84.93
12.00	67.73	86.31
13.00	67.94	84.26
14.00	67.72	83.42
15.00	67.81	82.95
16.00	67.00	86.28
17.00	67.72	84.66
18.00	68.07	86.12
19.00	67.84	84.12
20.00	67.33	82.35
21.00	67.80	80.94
22.00	67.90	79.58
23.00	68.14	79.32
24.00	64.25	85.71
Total	1,519.840	1,929.070
Average	63.33	80.38

Tuesday, June 28, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	61.10	73.67
02.00	59.88	69.48
03.00	60.89	70.96
04.00	59.59	70.97
05.00	60.87	71.28
06.00	60.84	70.97
07.00	61.34	70.91
08.00	59.98	72.68
09.00	67.12	83.35
10.00	65.32	83.36
11.00	66.41	84.58
12.00	66.16	86.23
13.00	63.98	84.89
14.00	63.91	85.82
15.00	64.85	87.99
16.00	64.94	87.82
17.00	65.37	87.70
18.00	64.90	86.80
19.00	65.38	86.67
20.00	65.11	86.64
21.00	65.86	84.03
22.00	65.15	80.22
23.00	65.57	80.89
24.00	66.09	77.96
Total	1,530.610	1,925.870
Average	63.78	80.24

Lampiran 1d. Data Input-Output PLTU Jene'ponto Unit 2 Bulan Juni 2016 (Lanjutan)

Wednesday, June 29, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	61.07	68.13
02.00	63.41	70.22
03.00	63.20	71.32
04.00	62.47	71.32
05.00	63.03	70.70
06.00	63.05	71.08
07.00	64.74	69.51
08.00	62.22	72.86
09.00	61.20	73.90
10.00	65.63	75.56
11.00	68.60	86.25
12.00	65.56	82.23
13.00	65.37	81.55
14.00	65.31	85.94
15.00	66.62	87.56
16.00	63.90	85.71
17.00	62.24	82.17
18.00	62.29	82.17
19.00	62.22	83.65
20.00	62.59	80.95
21.00	62.05	80.40
22.00	63.41	80.94
23.00	62.88	78.16
24.00	77.98	70.58
Total	1,541.040	1,862.860
Average	64.21	77.62

Thursday, June 30, 2016		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan
	H -> Ton	P -> MW
01.00	52.02	70.62
02.00	52.34	69.98
03.00	51.69	69.48
04.00	52.73	69.17
05.00	54.77	69.13
06.00	57.76	73.93
07.00	57.05	73.86
08.00	70.61	79.65
09.00	58.09	83.62
10.00	54.42	84.49
11.00	54.96	84.55
12.00	55.06	84.63
13.00	54.78	80.42
14.00	54.71	81.78
15.00	54.09	83.58
16.00	53.31	82.98
17.00	53.20	81.41
18.00	53.47	78.23
19.00	54.65	81.39
20.00	55.55	79.85
21.00	55.52	78.19
22.00	55.81	76.16
23.00	55.81	75.06
24.00	59.65	75.27
Total	1,552.050	1,867.430
Average	64.67	77.81

Menyatakan bahwa data tersebut benar diperoleh dari PT. Bosowa Energi, PLTU Jeneponto 2x100 MW.

Jene'ponto, 8 November 2016

PT BOSOWA ENERGI
PLTU JENEPONTO

Lampiran 1e. Data Input-Output PLGU Sengkang Blok I Bulan Juni 2016

Waktu	01 Juni 2016								
	Daya (MW)				BB (Kg/s)			GD (Kg/m³)	BB (m³/h)
	GT11	GT12	ST18	Total	GT11	GT12	Total		
01.00	16,43	16,42	26,55	59,40	2,38	1,72	4,10	16,378	900,400
02.00	16,22	16,19	25,96	58,37	2,38	1,71	4,09	16,378	898,576
03.00	16,22	16,18	25,98	58,39	2,38	1,71	4,09	16,378	898,825
04.00	16,21	16,18	25,97	58,37	2,38	1,71	4,09	16,378	898,472
05.00	16,22	16,22	25,91	58,34	2,38	1,71	4,09	16,378	898,227
06.00	16,19	16,22	25,90	58,31	2,38	1,71	4,09	16,378	897,963
07.00	16,21	16,17	25,98	58,37	2,38	1,71	4,09	16,378	898,898
08.00	16,21	16,18	25,98	58,37	2,38	1,71	4,09	16,378	899,066
09.00	16,91	16,87	26,36	60,13	2,38	1,74	4,12	16,378	904,692
10.00	18,59	18,62	27,87	65,07	2,38	1,81	4,19	16,378	920,347
11.00	31,27	31,25	35,43	97,94	2,38	2,33	4,71	16,378	1035,096
12.00	36,64	36,62	38,93	112,19	2,38	2,55	4,93	16,378	1082,581
13.00	36,67	36,62	38,92	112,22	2,38	2,55	4,92	16,378	1082,517
14.00	36,66	36,60	38,95	112,22	2,38	2,54	4,92	16,378	1082,203
15.00	34,18	34,17	38,02	106,36	2,38	2,44	4,82	16,378	1059,604
16.00	25,40	25,36	33,43	84,20	2,38	2,08	4,46	16,378	980,191
17.00	25,41	25,37	33,40	84,18	2,38	2,08	4,46	16,378	980,598
18.00	27,49	27,47	34,30	89,26	2,38	2,17	4,55	16,378	999,894
19.00	41,84	40,72	44,13	126,69	2,38	2,73	5,11	16,378	1122,725
20.00	42,99	41,05	45,82	129,87	2,38	2,79	5,17	16,378	1136,036
21.00	42,99	41,06	45,88	129,93	2,38	2,93	5,31	16,378	1167,846
22.00	42,20	41,06	45,81	129,07	2,38	2,86	5,24	16,378	1151,355
23.00	28,67	39,76	40,23	108,66	2,38	2,68	5,06	16,378	1111,309
24.00	11,13	34,37	31,02	76,51	2,38	2,44	4,82	16,378	1059,978
Average				87,18					1002,806

Waktu	02 Juni 2016								
	Daya (MW)				BB (Kg/s)			GD (Kg/m³)	BB (m³/h)
	GT11	GT12	ST18	Total	GT11	GT12	Total		
01.00	0,38	42,21	24,09	66,30	2,38	2,80	5,18	16,378	1.137,690
02.00	-0,03	31,41	17,84	49,25	2,38	2,34	4,72	16,378	1.037,710
03.00	0,01	26,82	16,41	43,23	2,38	2,15	4,53	16,378	996,332
04.00	0,00	22,36	14,92	37,29	2,38	1,98	4,36	16,378	957,279
05.00	0,00	22,42	14,86	37,28	2,38	1,97	4,35	16,378	956,770
06.00	0,01	22,40	14,88	37,27	2,38	1,97	4,35	16,378	956,740
07.00	0,00	22,34	14,93	37,28	2,38	1,98	4,35	16,378	957,109
08.00	0,01	22,33	14,93	37,26	2,38	1,97	4,35	16,378	956,834
09.00	0,01	25,95	16,01	41,97	2,38	2,12	4,50	16,378	989,850
10.00	0,00	40,32	21,30	61,62	2,38	2,72	5,10	16,378	1.121,150
11.00	0,00	40,60	21,67	62,28	2,38	2,73	5,11	16,378	1.122,991
12.00	0,00	40,42	21,84	62,26	2,38	2,72	5,10	16,378	1.121,421
13.00	0,00	41,66	23,78	65,43	2,38	2,78	5,16	16,378	1.135,102
14.00	0,00	42,33	24,71	67,04	2,38	2,82	5,20	16,378	1.142,298
15.00	0,00	42,36	24,68	67,04	2,38	2,82	5,20	16,378	1.142,107
16.00	0,00	42,36	24,68	67,04	2,38	2,82	5,19	16,378	1.141,818
17.00	0,00	42,36	24,67	67,03	2,38	2,81	5,19	16,378	1.141,254
18.00	0,00	42,37	24,66	67,04	2,38	2,81	5,19	16,378	1.140,593
19.00	0,00	42,37	24,67	67,04	2,38	2,81	5,19	16,378	1.141,117
20.00	0,00	42,37	24,66	67,03	2,38	2,81	5,19	16,378	1.141,213
21.00	0,00	42,45	24,65	67,09	2,38	2,82	5,19	16,378	1.141,824
22.00	0,00	42,48	24,52	67,00	2,38	2,82	5,20	16,378	1.141,932
23.00	4,24	39,66	21,50	61,16	2,38	2,68	5,06	16,378	1.111,568
24.00	17,17	19,79	27,30	64,96	2,38	1,84	4,22	16,378	926,957
average				56,97					1.073,319

Lampiran 1e. Data Input-Output PLGU Sengkang Blok I Bulan Juni 2016 (Lanjutan)

Waktu	03 Juni 2016								
	Daya (MW)				BB (Kg/s)				BB (m³/h)
	GT11	GT12	ST18	Total	GT11	GT12	Total	GD (Kg/m³)	
01.00	18,08	18,09	27,60	63,78	2,38	1,78	4,16	16,378	915,115
02.00	18,05	18,11	27,57	63,73	2,38	1,79	4,17	16,378	915,574
03.00	18,08	18,11	27,56	63,75	2,38	1,79	4,17	16,378	915,646
04.00	19,27	19,29	28,65	67,41	2,38	1,84	4,22	16,378	926,649
05.00	18,51	18,49	27,78	64,78	2,38	1,80	4,18	16,378	919,283
06.00	19,83	19,83	28,94	68,60	2,38	1,85	4,23	16,378	930,424
07.00	19,32	19,31	28,58	67,21	2,38	1,84	4,21	16,378	926,474
08.00	19,33	19,31	28,59	67,23	2,38	1,84	4,22	16,378	926,524
09.00	19,30	19,31	28,62	67,23	2,38	1,83	4,21	16,378	925,873
10.00	20,15	20,17	29,31	69,62	2,38	1,87	4,25	16,378	933,813
11.00	25,45	25,46	32,83	83,74	2,38	2,09	4,47	16,378	981,689
12.00	36,21	36,22	38,47	110,90	2,38	2,54	4,92	16,378	1.080,847
13.00	41,13	41,21	40,74	123,08	2,38	2,75	5,13	16,378	1.126,810
14.00	41,87	41,30	41,39	124,56	2,38	2,75	5,13	16,378	1.127,667
15.00	43,67	41,32	44,46	129,45	2,38	2,75	5,13	16,378	1.127,790
16.00	43,59	41,31	45,50	130,41	2,38	2,75	5,13	16,378	1.128,044
17.00	43,94	41,32	45,68	130,94	2,38	2,75	5,13	16,378	1.127,730
18.00	44,12	41,32	45,73	131,16	2,38	2,75	5,13	16,378	1.127,411
19.00	44,26	41,31	45,68	131,26	2,38	2,77	5,15	16,378	1.132,117
20.00	44,31	41,31	45,66	131,29	2,38	2,95	5,33	16,378	1.170,731
21.00	44,31	41,31	45,61	131,24	2,38	2,91	5,29	16,378	1.161,701
22.00	44,31	41,32	45,93	131,56	2,38	3,03	5,41	16,378	1.189,881
23.00	40,65	39,54	43,66	123,85	2,38	2,78	5,15	16,378	1.132,817
24.00	23,15	23,17	32,26	78,58	2,38	1,99	4,37	16,378	960,170
Average				98,14					1.033,782

Waktu	04 Juni 2016								
	Daya (MW)				BB (Kg/s)				BB (m³/jam)
	GT11	GT12	ST18	Total	GT11	GT12	Total	GD (Kg/m³)	Hasil
01.00	16,78	16,81	26,48	60,07	2,38	1,73	4,11	16,378	903,886
02.00	16,83	16,85	26,40	60,08	2,38	1,73	4,11	16,378	903,980
03.00	16,83	16,87	26,35	60,05	2,38	1,74	4,11	16,378	904,303
04.00	16,83	16,88	26,34	60,05	2,38	1,74	4,11	16,378	904,463
05.00	16,94	16,94	26,36	60,24	2,38	1,74	4,12	16,378	905,082
06.00	19,81	19,80	28,48	68,09	2,38	1,86	4,24	16,378	930,997
07.00	21,67	21,69	30,59	73,95	2,38	1,94	4,32	16,378	948,611
08.00	19,08	19,10	28,71	66,89	2,38	1,83	4,21	16,378	924,333
09.00	17,88	17,80	27,20	63,06	2,38	1,78	4,16	16,378	913,751
10.00	19,06	19,06	28,03	66,15	2,38	1,83	4,20	16,378	924,281
11.00	23,01	22,98	31,41	77,40	2,38	1,99	4,37	16,378	959,646
12.00	24,83	24,79	33,13	82,75	2,38	2,06	4,44	16,378	975,333
13.00	24,79	24,78	33,15	82,73	2,38	2,06	4,44	16,378	975,131
14.00	26,92	26,94	34,19	88,05	2,38	2,15	4,52	16,378	994,406
15.00	28,50	28,73	35,20	92,43	2,38	2,22	4,60	16,378	1.010,698
16.00	28,69	28,74	35,23	92,66	2,38	2,22	4,60	16,378	1.010,365
17.00	28,59	28,74	35,15	92,48	2,38	2,22	4,60	16,378	1.010,233
18.00	28,91	28,94	35,21	93,06	2,38	2,23	4,60	16,378	1.012,704
19.00	43,02	40,81	44,87	128,70	2,38	2,74	5,12	16,378	1.124,369
20.00	43,57	40,04	47,23	130,84	2,38	2,79	5,17	16,378	1.135,833
21.00	42,12	40,62	46,97	129,71	2,38	2,95	5,33	16,378	1.172,344
22.00	42,32	41,20	47,07	130,58	2,38	2,96	5,34	16,378	1.173,645
23.00	34,61	34,17	39,75	108,54	2,38	2,46	4,84	16,378	1.062,965
24.00	19,96	20,00	29,73	69,68	2,38	1,86	4,24	16,378	937,175
Average				84,94					988,044

Lampiran 1e. Data Input-Output PLGU Sengkang Blok I Bulan Juni 2016 (Lanjutan)

05 Juni 2016									
Waktu	Daya (MW)				BB (Kg/s)				BB (m³/h)
	GT11	GT12	ST18	Total	GT11	GT12	Total	GD (Kg/m³)	
01.00	18,07	18,08	27,53	63,68	2,38	1,79	4,17	16,378	915,787
02.00	17,02	17,05	26,70	60,77	2,38	1,74	4,12	16,378	906,403
03.00	16,85	16,90	26,45	60,20	2,38	1,74	4,12	16,378	905,684
04.00	16,84	16,91	26,43	60,19	2,38	1,74	4,12	16,378	905,197
05.00	19,05	19,05	27,81	65,91	2,38	1,83	4,21	16,378	924,612
06.00	24,76	24,80	32,33	81,89	2,38	2,06	4,44	16,378	976,505
07.00	28,77	28,82	35,21	92,80	2,38	2,23	4,61	16,378	1.012,253
08.00	22,51	22,51	31,79	76,81	2,38	1,97	4,34	16,378	954,837
09.00	22,01	22,00	30,40	74,41	2,38	1,95	4,33	16,378	951,098
10.00	23,05	23,04	32,13	78,22	2,38	1,99	4,37	16,378	960,469
11.00	22,90	22,89	31,97	77,76	2,38	1,98	4,36	16,378	958,937
12.00	22,87	22,86	32,03	77,76	2,38	1,98	4,36	16,378	958,694
13.00	22,86	22,86	32,04	77,76	2,38	1,98	4,36	16,378	958,601
14.00	22,85	22,86	32,04	77,76	2,38	1,98	4,36	16,378	958,579
15.00	22,81	22,82	32,12	77,75	2,38	1,98	4,36	16,378	958,232
16.00	22,78	22,81	32,14	77,72	2,38	1,98	4,36	16,378	958.004
17.00	19,25	19,27	29,24	67,76	2,38	1,83	4,21	16,378	925,368
18.00	23,06	23,07	30,97	78,09	2,38	2,02	4,40	16,378	967,690
19.00	42,30	42,30	45,80	130,39	2,38	2,85	5,23	16,378	1.149,246
20.00	42,18	40,21	44,72	127,11	2,38	2,98	5,35	16,378	1.176,984
21.00	42,16	40,25	44,00	126,42	2,38	3,01	5,39	16,378	1.183,779
22.00	42,12	40,25	44,01	126,38	2,38	2,90	5,28	16,378	1.160,641
23.00	36,45	36,02	39,88	112,35	2,38	2,54	4,92	16,378	1.080,993
24.00	29,23	29,20	35,35	93,77	2,38	2,24	4,62	16,378	1.014,960
Average				85,18					992,620

Waktu	Daya (MW)				BB (Kg/s)				BB (m³/h)
	GT11	GT12	ST18	Total	GT11	GT12	Total	GD (Kg/m³)	
01.00	22,33	22,35	31,56	76,24	2,38	1,96	4,34	16,378	953,606
02.00	16,10	16,14	26,04	58,28	2,38	1,71	4,08	16,378	897,705
03.00	18,25	18,27	27,06	63,58	2,38	1,79	4,17	16,378	917,760
04.00	21,24	21,22	30,09	72,55	2,38	1,91	4,29	16,378	943,607
05.00	21,19	21,18	30,18	72,54	2,38	1,92	4,30	16,378	944,107
06.00	21,18	21,18	30,18	72,54	2,38	1,92	4,30	16,378	944,077
07.00	19,05	19,06	28,63	66,74	2,38	1,83	4,21	16,378	924,894
08.00	19,69	19,66	28,50	67,86	2,38	1,85	4,23	16,378	929,856
09.00	21,40	21,47	30,33	73,16	2,38	1,97	4,30	16,378	945,868
10.00	21,85	21,83	30,72	74,40	2,38	1,94	4,32	16,378	949,601
11.00	27,40	27,39	34,26	89,05	2,38	2,17	4,55	16,378	999,058
12.00	34,82	34,80	37,90	107,52	2,38	2,47	4,85	16,378	1.066,548
13.00	37,31	37,35	39,23	113,89	2,38	2,58	4,96	16,378	1.089,385
14.00	38,53	38,74	39,93	118,20	2,38	2,64	5,02	16,378	1.102,723
15.00	42,84	39,34	40,67	122,85	2,38	2,66	5,04	16,378	1.108,547
16.00	42,86	39,34	40,63	122,83	2,38	2,66	5,04	16,378	1.108,417
17.00	36,18	35,36	38,47	110,01	2,38	2,49	4,87	16,378	1.070,585
18.00	35,85	35,81	38,57	110,23	2,38	2,51	4,89	16,378	1.075,496
19.00	45,08	40,95	47,06	133,09	2,38	2,76	5,14	16,378	1.129,170
20.00	44,07	40,75	47,36	132,18	2,38	2,93	5,31	16,378	1.167,773
21.00	44,11	40,75	47,30	132,16	2,38	2,85	5,23	16,378	1.149,408
22.00	44,07	40,75	47,25	132,07	2,38	2,88	5,26	16,378	1.155,419
23.00	39,26	37,93	42,83	120,03	2,38	2,73	5,11	16,378	1.123,387
24.00	20,69	20,71	30,29	71,69	2,38	1,89	4,27	16,378	938,080
Average				96,32					1.026,436

Lampiran 1e. Data Input-Output PLGU Sengkang Blok I Bulan Juni 2016 (Lanjutan)

07 Juni 2016

Waktu	Daya (MW)				BB (Kg/s)				BB (m³/h)
	GT11	GT12	ST18	Total	GT11	GT12	Total	GD (Kg/m³)	
01.00	17,83	17,82	27,26	62,91	2,38	1,77	4,15	16,378	913,009
02.00	17,04	17,05	26,78	60,88	2,38	1,74	4,12	16,378	906,203
03.00	16,10	16,13	25,79	58,02	2,38	1,71	4,08	16,378	897,851
04.00	20,81	20,81	29,28	70,89	2,38	1,90	4,28	16,378	939,789
05.00	22,50	22,51	31,11	76,13	2,38	1,97	4,35	16,378	956,170
06.00	22,02	22,05	31,27	75,34	2,38	1,95	4,33	16,378	951,839
07.00	22,09	22,11	31,18	75,38	2,38	1,95	4,33	16,378	952,516
08.00	21.53	21.53	30.59	73.65	2.38	1.93	4.30	16.378	946.214
09.00	22,72	22,72	31,33	76,77	2,38	1,98	4,35	16,378	957,127
10.00	26,17	26,10	33,88	86,15	2,38	2,11	4,49	16,378	987,403
11.00	31,39	31,41	36,45	99,24	2,38	2,33	4,71	16,378	1.035,575
12.00	35,60	35,54	38,63	109,76	2,38	2,50	4,88	16,378	1.073,131
13.00	37,37	37,35	39,38	114,10	2,38	2,58	4,96	16,378	1.089,602
14.00	37,34	37,36	39,37	114,07	2,38	2,58	4,96	16,378	1.089,688
15.00	37,34	37,37	39,34	114,05	2,38	2,58	4,96	16,378	1.089,607
16.00	39,19	38,64	39,84	117,67	2,38	2,63	5,01	16,378	1.101,869
17.00	43,12	39,55	40,70	123,36	2,38	2,67	5,05	16,378	1.110,711
18.00	43,30	40,28	41,55	125,13	2,38	2,71	5,09	16,378	1.118,400
19.00	43,77	40,70	47,24	131,71	2,38	2,81	5,19	16,378	1.140,470
20.00	44,13	40,55	47,37	132,04	2,38	2,90	5,28	16,378	1.161,101
21.00	43,32	40,55	46,69	130,56	2,38	3,02	5,40	16,378	1.186,923
22.00	42,44	40,55	46,32	129,30	2,38	3,04	5,42	16,378	1.191,531
23.00	42.08	40.55	46.31	128.95	2.38	2.89	5.27	16.378	1.158.234
24.00	31,74	31,68	37,96	101,38	2,38	2,34	4,72	16,378	1.036,990
Average				99,48					1.041,331

08 Juni 2016

Waktu	Daya (MW)				BB (Kg/s)				BB (m³/h)
	GT11	GT12	ST18	Total	GT11	GT12	Total	GD (Kg/m³)	
01.00	24,36	24,34	32,83	81,54	2,38	2,04	4,42	16,378	971,379
02.00	18,56	18,53	28,74	65,47	2,38	1,80	4,18	16,378	919,819
03.00	17,03	17,03	27,21	63,15	2,38	1,78	4,16	16,378	912,812
04.00	20.83	20.85	29.52	71.20	2.38	1.90	4.28	16.378	940.795
05.00	21,31	21,37	30,40	73,09	2,38	1,92	4,30	16,378	945,979
06.00	18,11	18,12	28,00	64,24	2,38	1,79	4,17	16,378	916,281
07.00	16,25	16,25	26,28	58,77	2,38	1,72	4,09	16,378	900,011
08.00	19,45	19,44	28,23	67,12	2,38	1,84	4,22	16,378	928,361
09.00	24,94	24,94	32,52	82,39	2,38	2,07	4,44	16,378	977,027
10.00	32.85	32.86	36.96	102.67	2.38	2.40	4.77	16.378	1.049.274
11.00	41,93	40,15	43,25	125,33	2,38	2,70	5,08	16,378	1.116,780
12.00	43,12	40,60	45,07	128,79	2,38	2,72	5,10	16,378	1.121,226
13.00	43,03	40,60	45,20	128,83	2,38	2,72	5,10	16,378	1.121,197
14.00	43,01	40,60	45,33	128,94	2,38	2,72	5,10	16,378	1.121,286
15.00	43,02	40,60	45,25	128,87	2,38	2,72	5,10	16,378	1.121,106
16.00	43,04	40,60	45,24	128,88	2,38	2,72	5,10	16,378	1.121,262
17.00	43,07	40,60	45,34	129,01	2,38	2,72	5,10	16,378	1.120,880
18.00	43,16	40,60	45,51	129,27	2,38	2,72	5,10	16,378	1.120,438
19.00	43,30	40,59	45,45	129,35	2,38	2,80	5,18	16,378	1.137,700
20.00	43,39	40,60	45,80	129,79	2,38	2,90	5,28	16,378	1.160,616
21.00	43,38	40,60	45,39	129,37	2,38	3,01	5,39	16,378	1.184,974
22.00	43,34	40,57	45,40	129,32	2,38	3,02	5,40	16,378	1.185,898
23.00	43,44	40,60	45,49	129,54	2,38	2,97	5,35	16,378	1.176,560
24.00	39.72	38.31	42.92	120.95	2.38	2.66	5.04	16.378	1.107.355
Average				105,72					1.057,484

Lampiran 1e. Data Input-Output PLGU Sengkang Blok I Bulan Juni 2016 (Lanjutan)

09 Juni 2016									
Waktu	Daya (MW)				BB (Kg/s)				BB (m^3/h)
	GT11	GT12	ST18	Total	GT11	GT12	Total	GD (Kg/m^3)	
01.00	26,62	26,63	34,17	87,43	2,38	2,13	4,51	16,378	991,666
02.00	30,17	30,14	35,89	96,20	2,38	2,28	4,66	16,378	1.023,890
03.00	22,98	22,95	31,96	77,88	2,38	1,98	4,36	16,378	958,826
04.00	28,67	28,66	34,32	91,66	2,38	2,22	4,60	16,378	1.011,056
05.00	35,92	35,90	38,77	110,59	2,38	2,52	4,89	16,378	1.075,698
06.00	19,96	19,98	29,91	69,85	2,38	1,86	4,24	16,378	931,988
07.00	17,08	17,09	26,81	60,98	2,38	1,75	4,13	16,378	906,931
08.00	18,86	18,85	27,50	65,20	2,38	1,82	4,20	16,378	922,886
09.00	29,57	29,65	35,11	94,33	2,38	2,26	4,64	16,378	1.020,516
10.00	42.80	40,23	41.92	124.95	2,38	2,71	5,09	16,378	1.118.050
11.00	43,40	40,86	45,47	129,73	2,38	2,74	5,11	16,378	1.124,301
12.00	43,38	40,85	45,58	129,81	2,38	2,77	5,15	16,378	1.131,025
13.00	43,34	40.86	45.55	129.74	2.38	2.80	5,18	16.378	1.139.216
14.00	43,35	40,86	45,59	129,80	2,38	2,84	5,21	16,378	1.146,260
15.00	43,30	40,86	45,55	129,71	2.38	2,97	5,35	16.378	1.175,104
16.00	43,23	40,86	45,54	129,63	2.38	2,98	5,36	16.378	1.178,732
17.00	43,35	40,86	45,62	129,83	2,38	3,00	5,38	16,378	1.181,705
18.00	44,48	44,73	44,57	173,78	2,38	2,74	5,12	16,378	1.174,846
19.00	43,41	40,77	45,52	129,70	2,38	2,81	5,19	16,378	1.139,912
20.00	43,00	40,55	45,00	129,55	2,38	2,97	5,35	16,378	1.175,595
21.00	42,65	40,69	46,06	129,40	2,38	2,98	5,35	16,378	1.176,804
22.00	42,63	40,69	46,03	129,35	2,38	2,96	5,33	16,378	1.172,565
23.00	42,69	40,69	45,99	129,37	2,38	2,95	5,33	16,378	1.171,868
24.00	35,73	35,41	41,58	112,72	2,38	2,53	4,91	16,378	1.079,241
Average				111,28					1.086,605

10 Juni 2016									
Waktu	Daya (MW)				BB (Kg/s)				BB (m^3/h)
	GT11	GT12	ST18	Total	GT11	GT12	Total	GD (Kg/m^3)	
01.00	29,55	29,53	35,76	94,84	2,38	2,25	4,63	16,378	1.017,898
02.00	24,85	24,86	33,25	82,97	2,38	2,06	4,44	16,378	976,078
03.00	22,83	22,83	[illegible]	[illegible]	2,38	[illegible]	[illegible]	16,378	958,384
04.00	23,27	23,30	31,78	78,36	2,38	2,00	4,38	16,378	962,417
05.00	26,50	26,54	34,05	87,09	2,38	2,13	4,51	16,378	991,555
06.00	22,88	22,90	31,90	77,69	2,38	1,98	4,36	16,378	959,006
07.00	24.15	24.18	32.73	81.06	2.38	2.04	4.42	16.378	971.498
08.00	25,01	24,98	32,94	82,93	2,38	2,07	4,45	16,378	978,095
09.00	32,36	32,46	37,02	101,86	2,38	2,38	4,75	16,378	1.045,117
10.00	38,99	38,98	39,15	115,11	2,38	2,57	4,94	16,378	1.086,929
11.00	43,71	42,01	47,10	132,82	2,38	2,78	5,16	16,378	1.134,323
12.00	43,70	41,75	47,93	133,38	2,38	2,77	5,15	16,378	1.131,927
13.00	43,65	41,75	48,04	133,44	2,38	2,79	5,17	16,378	1.136,042
14.00	43.63	41.48	48.02	133.13	2.38	2,82	5.20	16.378	1.143,114
15.00	44,07	40,05	47,94	132,05	2,38	2,85	5,23	16,378	1.149,340
16.00	44,40	38,83	47,80	131,03	2,38	2,92	5,30	16,378	1.165,399
17.00	44,29	38,83	47,80	130,92	2.38	2,92	5,30	16.378	1.165,534
18.00	44,16	38,83	47,81	130,81	2,38	2,80	5,18	16,378	1.137,544
19.00	41,96	39,30	47,48	128,73	2,38	2,84	5,22	16,378	1.146,728
20.00	40,00	39,48	47,16	126,63	2,38	2,86	5,24	16,378	1.152,333
21.00	39,04	39,03	42,95	121,02	2,38	2,70	5,08	16,378	1.116,646
22.00	43,02	41,98	45,06	130,07	2,38	2,96	5,34	16,378	1.173,957
23.00	42,49	41,51	44,92	128,92	2,38	2,86	5,24	16,378	1.152,489
24.00	20,96	20,96	36,23	94,15	2,38	2,23	4,61	16,378	1.012,947
Average				110,99					1.077,713

Lampiran 1e. Data Input-Output PLGU Sengkang Blok I Bulan Juni 2016 (Lanjutan)

11 Juni 2016									
Waktu	Daya (MW)				BB (Kg/s)				BB (m³/h)
	GT11	GT12	ST18	Total	GT11	GT12	Total	GD (Kg/m³)	Hasil
01.00	21,57	21,55	30,85	73,97	2,38	1,93	4,31	16,378	947,094
02.00	21,20	21,19	30,16	72,55	2,38	1,91	4,29	16,378	943,596
03.00	21,21	21,20	30,13	72,55	2,38	1,91	4,29	16,378	943,616
04.00	21,23	21,20	30,15	72,58	2,38	1,91	4,29	16,378	943,591
05.00	21,20	21,17	30,21	72,58	2,38	1,92	4,29	16,378	943,974
06.00	21,20	21,19	30,18	72,56	2,38	1,92	4,29	16,378	944,031
07.00	21,40	21,48	30,43	73,30	2,38	1,93	4,31	16,378	946,725
08.00	22,14	22,12	30,74	75,01	2,38	1,95	4,33	16,378	952,540
09.00	21.61	21.63	30.89	74,13	2,38	1,93	4,31	16,378	947,935
10.00	21,02	20,98	30,19	72,19	2,38	1,91	4,29	16,378	941,881
11.00	21,90	21,90	30,74	74,54	2,38	1,94	4,32	16,378	950,046
12.00	24,49	24,52	33,09	82,11	2,38	2,05	4,43	16,378	973,412
13.00	24,48	24,52	33,11	82,10	2,38	2,05	4,43	16,378	973,110
14.00	27,81	27,81	34,73	90,35	2,38	2,18	4,56	16,378	1.002,869
15.00	28,89	28,86	35,41	93,17	2,38	2,22	4,60	16,378	1.011,404
16.00	30,81	30,77	36,22	97,80	2,38	2,30	4,68	16,378	1.029,305
17.00	36,96	36,94	39,28	113,18	2,38	2,56	4,94	16,378	1.085,438
18.00	37,87	37,83	39,54	115,23	2,38	2,60	4,98	16,378	1.093,820
19.00	44,19	40,65	44,09	128,93	2,38	2,72	5,10	16,378	1.121,710
20.00	44,42	39,26	45,21	128,89	2,38	2,80	5,18	16,378	1.138,866
21.00	44,46	39,26	47,18	130,90	2,38	2,88	5,26	16,378	1.155,380
22.00	44,12	39,25	47,13	130,50	2,38	2,88	5,26	16,378	1.156,899
23.00	44,12	40,50	47,42	132,05	2,30	2,85	5,20	16,378	1.150,164
24.00	27,15	27,17	35,28	89,60	2,38	2,15	4,53	16,378	995,773
Average				92,54					1.012,286

12 Juni 2016									
Waktu	Daya (MW)				BB (Kg/s)				BB (m³/h)
	GT11	GT12	ST18	Total	GT11	GT12	Total	GD (Kg/m³)	Hasil
01.00	18,34	18,12	27,83	64,46	2,38	1,79	4,17	16,378	917,729
02.00	18,38	18,37	27,69	64,44	2,38	1,80	4,18	16,378	918,004
03.00	18,39	18,38	27,67	64,44	2,38	1,80	4,18	16,378	918,004
04.00	18,40	18,41	27,62	64,43	2,38	1,80	4,18	16,378	917,741
05.00	21,72	21,74	27,02	70,78	2,38	1,94	4,32	16,378	948,482
06.00	24,32	24,30	0,01	48,71	2,38	2,05	4,43	16,378	977,979
07.00	23,85	23,88	0,01	47,85	2,38	2,04	4,40	16,378	966,827
08.00	12,52	12,52	17,43	42,46	2,38	1,57	3,95	16,378	867,407
09.00	14,27	14,26	24,32	52,85	2,38	1,64	4,02	16,378	882,662
10.00	16,20	16,19	25,43	57,82	2,38	1,71	4,09	16,378	899,080
11.00	23,92	23,91	32,12	79,95	2,38	2,04	4,40	16,378	968,158
12.00	25,77	25,79	33,69	85,14	2,38	2,16	4,48	16,378	983,763
13.00	26,77	26,73	34,15	87,64	2,38	2,18	4,52	16,378	992,481
14.00	26,75	26,73	34,14	87,61	2,38	2,18	4,52	16,378	992,467
15.00	28,08	28,08	34,84	90,99	2,38	2,19	4,57	16,378	1.004,638
16.00	29,31	29,36	35,46	94,12	2,38	2,24	4,62	16,378	1.016,134
17.00	36,23	36,25	38,54	111,02	2,38	2,53	4,91	16,378	1.079,628
18.00	42,74	41,58	42,04	125,86	2,38	2,76	5,14	16,378	1.129,408
19.00	44,55	40,67	44,96	130,18	2,30	2,77	5,15	16,378	1.131,249
20.00	43,44	40,77	44,84	129,44	2,38	2,88	5,26	16,378	1.156,670
21.00	43,65	40,56	45,60	129,81	2,38	2,97	5,35	16,378	1.176,330
22.00	43,66	40,23	47,18	131,07	2,38	2,83	5,21	16,378	1.144,557
23.00	37,00	36,49	42,59	116,09	2,38	2,63	5,01	16,378	1.100,522
24.00	20,50	20,52	30,20	71,11	1,88	1,88	4,26	16,378	936,741
Average				85,28					1.000,874

Lampiran 1e. Data Input-Output PLGU Sengkang Blok I Bulan Juni 2016 (Lanjutan)

13 Juni 2016									
Waktu	Daya (MW)				BB (Kg/s)				BB (m^3/h)
	GT11	GT12	ST18	Total	GT11	GT12	Total	GD (Kg/m^3)	Hasil
01.00	18,30	18,26	27,61	64,17	2,38	1,80	4,17	16,378	917,463
02.00	16.95	16.99	26.65	60.59	2.38	1.74	4.12	16,378	905.996
03.00	16,78	16,81	26,31	59,90	2,38	1,73	4,11	16,378	904,173
04.00	17,46	16,48	26,29	60,24	2,38	1,72	4,10	16,378	900,678
05.00	21,30	21,11	29,64	72,06	2,38	1,91	4,29	16,378	943,416
06.00	21,41	21,44	30,28	73,13	2,38	1,92	4,30	16,378	945,951
07.00	22,79	22,81	31,32	76,93	2,38	1,98	4,36	16,378	958,754
08.00	24,20	24,24	32,61	81,04	2,38	2,04	4,42	16,378	971,104
09.00	26,38	26,39	33,53	86,31	2,38	2,13	4,51	16,378	990,522
10.00	28,96	28,96	35,11	93,03	2,38	2,23	4,61	16,378	1.013,199
11.00	30,71	30,70	36,04	97,45	2,38	2,30	4,68	16.378	1.028.963
12.00	30,71	30.69	36,06	97,46	2,38	2,30	4,68	16,378	1.028,556
13.00	30,68	30,67	36,11	97,45	2,38	2,30	4,68	16,378	1.028,221
14.00	30,63	30,67	36,09	97,39	2,38	2,30	4,68	16,378	1.028,123
15.00	30,62	30,68	36,07	97,38	2,38	2,30	4,68	16,378	1.028,000
16.00	33,17	33,24	37,24	103.65	2.38	2.41	4.78	16.378	1.051,568
17.00	37.64	37.71	39,25	114.60	2.38	2.59	4.97	16.378	1.092.869
18.00	40.92	39.96	41.59	122.47	2.38	2.69	5.07	16.378	1.114.141
19.00	44.42	40.09	46.30	130.81	2.38	2.72	5.09	16.378	1.119.854
20.00	[illegible]	[illegible]	45,85	[illegible]	2,38	[illegible]	[illegible]	16,378	[illegible]
21.00	43,13	40,92	42,18	126,23	2,38	3,04	5,42	16,378	1.191,759
22.00	43,83	40,92	40,91	125,65	2,38	3,03	5,41	16,378	1.188,888
23.00	43,52	40,78	40,86	125,16	2.38	2,94	5,32	16,378	1.169,489
24.00	28,69	28,72	35,21	92.63	2.38	2.22	4.60	16.378	1.011,927
Average				95,23					1.029,273

14 Juni 2016									
Waktu	Daya (MW)				BB (Kg/s)				BB (m^3/h)
	GT11	GT12	ST18	Total	GT11	GT12	Total	GD (Kg/m^3)	
01.00	21,29	21,28	30,49	73,06	2,38	1,92	4,30	16,378	944,911
02.00	16.50	16.53	26.64	59.67	2.38	1.72	4.10	16.378	901,107
03.00	16,13	16,17	25,82	58,11	2,38	1,71	4,09	16,378	[illegible]
04.00	17,80	17,80	26,54	62,14	2,38	1,78	4,16	16,378	913,332
05.00	23,02	23,01	31,63	77,66	2,38	1,99	4,37	16,378	960,900
06.00	23,81	23,78	32,17	79,76	2,38	2,02	4,40	16,378	967,606
07.00	22,53	22,54	31,83	76,90	2,38	1,97	4,35	16,378	956,119
08.00	18.80	18.80	27.79	65.39	2.38	1.81	4.19	16.378	921,706
09.00	21,62	21,72	30,55	73,94	2,38	1,93	4,32	16,378	942,985
10.00	22,64	22,79	31,21	76,64	2,38	1,98	4,36	16,378	958,767
11.00	30.32	30.36	35,90	96,59	2.38	2.29	4.67	16.378	1.025,772
12.00	33,53	33,50	37,42	104,45	2,38	2,42	4,80	16,378	1.054,571
13.00	39,30	39,32	40,10	118,72	2,38	2,66	5,04	16,378	1.108,074
14.00	42,04	39,89	43,66	125,59	2,38	2,69	5,07	16,378	1.114,558
15.00	43,25	38,56	47,34	130,05	2,38	2,68	5,06	16,378	1.111,471
16.00	43,48	39,57	47,40	130,45	2,38	2,68	5,06	16,378	1.111,620
17.00	44,21	39,63	47,53	131,36	2,38	2,68	5,06	16,378	1.111,860
18.00	44,19	40,44	47,67	132,30	2,38	2,71	5,09	16,378	1.119,665
19.00	44,19	40,54	47,56	132,30	2,38	2,81	5,19	16,378	1.141,099
20.00	44,23	40,55	47,52	132,30	2,38	2,87	5,25	16,378	1.153,794
21.00	44,27	40,55	47,12	131,93	2,38	2,93	5,31	16,378	1.166,888
22.00	44.25	40.55	46.75	131.55	2.38	2.97	5.35	16.378	1.175.217
23.00	43,67	40,40	46,60	130,67	2,38	2,76	5,14	16,378	1.129,828
24.00	31.59	31.60	37.04	100.22	2.38	2.34	4.71	16.378	1.036,403
Average				101,33					1.038,740

Lampiran 1e. Data Input-Output PLGU Sengkang Blok I Bulan Juni 2016 (Lanjutan)

15 Juni 2016									
Waktu	Daya (MW)				BB (Kg/s)			GD (Kg/m³)	BB (m³/h)
	GT11	GT12	ST18	Total	GT11	GT12	Total		
01.00	24,66	24,71	33,20	82,56	2,38	2,06	4,44	16,378	975,717
02.00	18,04	18,07	28,03	64,15	2,38	1,78	4,16	16,378	915,158
03.00	16,52	16,53	26,10	59,15	2,38	1,72	4,10	16,378	901,753
04.00	17,53	17,56	26,61	61,71	2,38	1,76	4,14	16,378	910,223
05.00	18,23	18,25	27,43	63,91	2,38	1,79	4,17	16,378	916,858
06.00	18,24	18,26	27,51	64,01	2,38	1,80	4,17	16,378	917,627
07.00	18,01	18,02	27,58	63,61	2,38	1,79	4,16	16,378	915,484
08.00	17,64	17,64	26,79	62,06	2,38	1,77	4,15	16,378	911,438
09.00	18,04	18,04	27,41	63,48	2,38	1,78	4,16	16,378	914,865
10.00	19,24	19,23	27,97	66,44	2,38	1,83	4,21	16,378	925,787
11.00	27,94	27,98	34,43	90,35	2,38	2,19	4,57	16,378	1.004,303
12.00	33,46	33,49	37,42	104,37	2,38	2,42	4,80	16,378	1.054,195
13.00	35,03	35,14	38,27	108,44	2,38	2,48	4,86	16,378	1.068,657
14.00	33,80	33,85	37,48	104,13	2,38	2,41	4,79	16,378	1.052,065
15.00	33,10	33,13	37,35	103,58	2,38	2,40	4,78	16,378	1.048,981
16.00	34,05	34,08	37,81	105,95	2,38	2,44	4,82	16,378	1.058,808
17.00	34,14	34,20	37,88	106,22	2,38	2,44	4,82	16,378	1.059,852
18.00	36,37	35,72	39,26	111,34	2,38	2,51	4,89	16,378	1.074,374
19.00	44,01	41,35	47,85	133,20	2,38	2,78	5,16	16,378	1.133,472
20.00	43,98	40,93	47,67	132,58	2,38	2,97	5,35	16,378	1.176,102
21.00	43,32	39,33	45,71	128,36	2,38	2,99	5,37	16,378	1.179,680
22.00	42,39	39,25	45,43	127,07	2,38	2,99	5,37	16,378	1.179,766
23.00	42,58	39,33	45,52	127,43	2,38	2,86	5,24	16,378	1.151,965
24.00	33,92	32,93	39,59	106,43	2,38	2,40	4,78	16,378	1.050,807
Average				93,36					1.007,66

16 Juni 2016									
Waktu	Daya (MW)				BB (Kg/s)			GD (Kg/m³)	BB (m³/h)
	GT11	GT12	ST18	Total	GT11	GT12	Total		
01.00	18,98	19,01	28,07	66,07	2,38	1,82	4,20	16,378	922,905
02.00	17,00	17,00	26,67	60,67	2,38	1,74	4,12	16,378	905,484
03.00	17,01	17,00	26,67	60,67	2,38	1,74	4,12	16,378	905,764
04.00	16,99	17,06	26,49	60,53	2,38	1,74	4,12	16,378	905,021
05.00	17,51	17,52	26,87	61,90	2,38	1,76	4,14	16,378	910,240
06.00	17,64	17,67	27,11	62,42	2,38	1,77	4,15	16,378	911,962
07.00	22,41	22,42	30,46	75,30	2,38	1,97	4,34	16,378	954,859
08.00	25,48	25,45	33,44	84,32	2,38	2,09	4,47	16,378	981,777
09.00	26,96	27,00	34,23	88,18	2,38	2,17	4,52	16,378	994,580
10.00	29,94	29,91	35,72	95,57	2,38	2,27	4,65	16,378	1021,274
11.00	36,42	36,39	38,80	111,61	2,38	2,54	4,92	16,378	1081,010
12.00	38,91	38,89	39,94	117,74	2,38	2,64	5,02	16,378	1108,599
13.00	38,91	38,92	39,86	117,70	2,38	2,64	5,02	16,378	1108,497
14.00	38,38	38,40	39,39	116,16	2,38	2,60	5,00	16,378	1.104,921
15.00	30,99	30,31	35,91	97,21	2,38	2,28	4,66	16,378	1024,568
16.00	25,61	25,68	33,40	84,64	2,38	2,09	4,47	16,378	982,338
17.00	32,40	32,45	36,04	101,00	2,38	2,37	4,75	16,378	1044,333
18.00	34,16	34,03	37,66	105,86	2,38	2,44	4,82	16,378	1058,467
19.00	41,34	40,41	47,34	129,08	2,38	2,72	5,10	16,378	1120,268
20.00	43,24	40,40	45,82	129,46	2,38	2,88	5,26	16,378	1155,805
21.00	43,31	40,41	45,81	129,53	2,38	2,91	5,29	16,378	1161,936
22.00	43,30	40,41	45,85	129,56	2,38	3,02	5,39	16,378	1185,740
23.00	43,15	40,40	47,83	129,38	2,38	2,86	5,24	16,378	1150,956
24.00	27,58	27,58	35,20	90,35	2,38	2,17	4,55	16,378	999,281
Average				96,276					1028,976

Lampiran 1e. Data Input-Output PLGU Sengkang Blok I Bulan Juni 2016 (Lanjutan)

17 Juni 2016									
Waktu	Daya (MW)				BB (Kg/s)				BB (m³/h)
	GT11	GT12	ST18	Total	GT11	GT12	Total	GD (Kg/m³)	
01.00	16,39	16,37	26,30	59,06	2,38	1,72	4,09	16,378	900,031
02.00	16,56	16,55	26,15	59,26	2,38	1,72	4,10	16,378	902,043
03.00	16,55	16,58	26,10	59,23	2,38	1,72	4,10	16,378	901,576
04.00	22,55	22,62	30,73	75,91	2,38	1,98	4,35	16,378	957,177
05.00	23,14	23,19	31,93	78,27	2,38	2,00	4,38	16,378	962,322
06.00	21,02	21,06	30,37	72,45	2,38	1,91	4,29	16,378	942,043
07.00	17,20	17,26	27,16	61,62	2,38	1,75	4,13	16,378	908,353
08.00	18,17	18,17	27,10	63,44	2,38	1,79	4,17	16,378	916,173
09.00	22,68	22,67	30,92	76,27	2,38	1,98	4,36	16,378	957,269
10.00	26,02	26,04	33,60	85,67	2,38	2,11	4,49	16,378	987,213
11.00	27,26	27,27	34,33	88,86	2,38	2,16	4,54	16,378	997,411
12.00	26,94	26,98	34,19	88,12	2,38	2,15	4,53	16,378	994,766
13.00	25,80	25,81	33,66	85,27	2,38	2,10	4,48	16,378	984,469
14.00	24,57	24,61	32,96	82,14	2,38	2,05	4,43	16,378	973,291
15.00	25,32	25,35	33,31	83,98	2,38	2,08	4,46	16,378	980,170
16.00	26,52	26,57	34,00	87,09	2,38	2,13	4,51	16,378	991,021
17.00	26,50	26,56	34,00	87,07	2,38	2,13	4,51	16,378	990,830
18.00	27,54	27,58	34,32	89,44	2,38	2,17	4,55	16,378	1.000,454
19.00	43,36	40,53	44,80	128,69	2,38	2,73	5,11	16,378	1.122,172
20.00	43,46	40,49	45,40	129,35	2,38	2,88	5,26	16,378	1.156,110
21.00	43,49	40,53	45,34	129,36	2,38	2,87	5,25	16,378	1.154,112
22.00	43,52	40,53	45,40	129,45	2,38	2,92	5,30	16,378	1.165,228
23.00	41,15	39,21	44,78	125,14	2,38	2,72	5,10	16,378	1.120,014
24.00	29,79	29,77	36,20	95,76	2,38	2,26	4,64	16,378	1.019,572
Average				88,371					999,320

18 Juni 2016									
Waktu	Daya (MW)				BB (Kg/s)				BB (m³/h)
	GT11	GT12	ST18	Total	GT11	GT12	Total	GD (Kg/m³)	
01.00	21,320	21,322	30,742	73,392	2,379	1,916	4,295	16,378	944,018
02.00	19,377	19,359	28,988	67,724	2,379	1,836	4,215	16,378	926,543
03.00	17,597	17,573	27,028	62,198	2,379	1,761	4,140	16,378	910,015
04.00	21,405	21,394	29,548	72,347	2,379	1,920	4,299	16,378	944,950
05.00	28,827	28,821	35,125	92,773	2,379	2,222	4,601	16,378	1.011,336
06.00	24,103	24,107	32,744	80,954	2,379	2,029	4,408	16,378	968,922
07.00	21,157	21,181	30,274	72,592	2,379	1,914	4,293	16,378	943,401
08.00	21,200	21,167	30,279	72,646	2,379	1,912	4,291	16,378	943,137
09.00	18,788	18,789	28,527	66,104	2,379	1,833	[illegible]	16,378	[illegible]
10.00	21,259	21,254	30,090	72,562	2,379	1,915	4,294	16,378	943,767
11.00	21,420	21,465	30,727	73,612	2,379	1,923	4,302	16,378	945,077
12.00	21,860	21,849	30,760	74,470	2,379	1,922	4,301	16,378	946,524
13.00	21,456	21,453	30,700	73,609	2,379	1,923	4,302	16,378	945,682
14.00	21,447	21,456	30,773	73,677	2,379	1,923	4,302	16,378	945,653
15.00	21,457	21,484	30,716	73,656	2,379	1,923	4,302	16,378	945,587
16.00	21,478	21,476	30,736	73,691	2,379	1,925	4,304	16,378	945,965
17.00	21,505	21,472	30,727	73,704	2,379	1,924	4,303	16,378	945,891
18.00	27,368	27,188	33,429	87,984	2,379	2,163	4,542	16,378	998,443
19.00	44,071	41,195	45,059	130,325	2,379	2,750	5,129	16,378	1.127,494
20.00	44,198	40,797	46,875	131,870	2,379	2,732	5,111	16,378	1.123,483
21.00	44,127	40,225	46,900	131,252	2,379	2,715	5,094	16,378	1.119,686
22.00	44,031	40,219	46,909	131,160	2,379	2,717	5,095	16,378	1.120,018
23.00	41,129	38,810	45,774	125,712	2,379	2,640	5,018	16,378	1.105,048
24.00	29,555	29,560	35,929	95,043	2,379	2,253	4,631	16,378	1.017,986
Average				86,763					986,905

Lampiran 1e. Data Input-Output PLGU Sengkang Blok I Bulan Juni 2016 (Lanjutan)

19 Juni 2016									
Waktu	Daya (MW)				BB (Kg/s)				BB (m^3/h)
	GT11	GT12	ST18	Total	GT11	GT12	Total	GD (Kg/m^3)	
01.00	21,41	21,39	30,62	73,42	2,38	1,92	4,30	16,378	944,875
02.00	21,14	21,12	30,07	72,34	2,38	1,91	4,29	16,378	942,582
03.00	21,16	21,12	30,08	72,36	2,38	1,91	4,29	16,378	942,691
04.00	22,28	22,26	30,69	75,24	2,38	1,96	4,33	16,378	952,788
05.00	28,75	28,74	35,07	92,56	2,38	2,22	4,60	16,378	1.011,177
06.00	26,08	26,08	33,91	86,07	2,38	2,11	4,49	16,378	986,965
07.00	21,18	21,16	30,75	73,10	2,38	1,91	4,29	16,378	943,237
08.00	17,69	17,78	27,23	62,70	2,38	1,77	4,15	16,378	912,563
09.00	18,63	18,61	27,60	64,85	2,38	1,81	4,19	16,378	920,147
10.00	27,50	27,50	33,85	88,85	2,38	2,17	4,55	16,378	1.000,319
11.00	32,18	32,15	37,06	101,39	2,38	2,36	4,74	16,378	1.041,321
12.00	24,89	24,83	33,25	82,97	2,38	2,06	4,44	16,378	974,882
13.00	24,85	24,81	33,28	82,95	2,38	2,06	4,44	16,378	975,238
14.00	24,77	24,80	33,27	82,84	2,38	2,06	4,44	16,378	975,033
15.00	24,84	24,82	33,29	82,95	2,38	2,06	4,44	16,378	974,854
16.00	26,28	26,23	33,84	86,35	2,38	2,11	4,49	16,378	987,763
17.00	28,78	28,77	35,27	92,82	2,38	2,22	4,60	16,378	1.010,426
18.00	30,05	30,12	35,70	95,88	2,38	2,28	4,65	16,378	1.023,164
19.00	44,10	42,70	45,23	132,03	2,38	2,83	5,20	16,378	1.143,960
20.00	44,05	40,26	46,35	130,66	2,38	2,83	5,21	16,378	1.145,360
21.00	44,14	40,79	47,05	131,98	2,38	2,85	5,23	16,378	1.149,401
22.00	44,12	40,94	47,35	132,40	2,38	2,73	5,11	16,378	1.123,706
23.00	36,65	35,31	41,69	113,65	2,38	2,49	4,87	16,378	1.070,111
24.00	20,90	20,91	30,60	72,42	2,38	1,90	4,28	16,378	939,731
Average				90,95					1.003,835

20 Juni 2016									
Waktu	Daya (MW)				BB (Kg/s)				BB (m^3/h)
	GT11	GT12	ST18	Total	GT11	GT12	Total	GD (Kg/m^3)	
01.00	17,642	17,667	17,227	62,535	2,379	1,767	4,146	16,378	911,370
02.00	17,692	17,759	27,135	62,586	2,379	1,773	4,152	16,378	912,576
03.00	17,751	17,796	27,057	62,603	2,379	1,773	4,152	16,378	912,608
04.00	19,278	19,280	27,933	66,491	2,379	1,834	4,213	16,378	926,104
05.00	24,178	24,168	32,361	80,707	2,379	2,037	4,416	16,378	970,600
06.00	18,586	18,569	28,360	65,515	2,379	1,807	4,186	16,378	920,073
07.00	18,043	18,063	27,532	63,638	2,379	1,787	4,166	16,378	915,695
08.00	20,545	20,540	29,106	70,191	2,379	1,888	4,267	16,378	937,958
09.00	21,550	21,562	30,589	73,701	2,379	1,927	4,306	16,378	946,470
10.00	21,230	21,237	30,518	72,985	2,379	1,915	4,293	16,378	943,743
11.00	19,443	19,455	28,866	67,764	2,379	1,842	4,220	16,378	927,610
12.00	19,479	19,470	28,848	67,746	2,379	1,844	4,223	16,378	928,247
13.00	19,342	19,433	28,885	67,660	2,379	1,842	4,221	16,378	927,878
14.00	[illegible]	[illegible]	[illegible]	[illegible]	2,379	[illegible]	4,218	16,378	[illegible]
15.00	19,465	19,448	28,886	67,798	2,379	1,838	4,217	16,378	926,913
16.00	19,802	19,785	29,093	68,681	2,379	1,854	4,233	16,378	930,389
17.00	21,147	21,128	30,397	72,671	2,379	1,908	4,287	16,378	942,234
18.00	26,600	26,607	33,229	86,436	2,379	2,135	4,513	16,378	992,091
19.00	41,429	41,094	42,265	124,788	2,379	2,749	5,128	16,378	1.127,185
20.00	44,090	42,274	44,446	130,810	2,379	2,793	5,172	16,378	1.136,764
21.00	43,994	42,126	45,330	131,450	2,379	2,791	5,170	16,378	1.136,412
22.00	44,363	41,333	46,883	132,601	2,379	2,765	5,144	16,378	1.130,660
23.00	34,380	33,258	40,349	107,996	2,379	2,405	4,783	16,378	1.051,442
24.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16,378	[illegible]
Average				80,768					970,603

Lampiran 1e. Data Input-Output PLGU Sengkang Blok I Bulan Juni 2016
(Lanjutan)

21 Juni 2016									
Waktu	Daya (MW)				BB (Kg/s)				BB (m^3/h)
	GT11	GT12	ST18	Total	GT11	GT12	Total	GD (Kg/m^3)	
01.00	17,235	17,272	26,815	61,322	2,379	1,752	4,130	16,378	907,891
02.00	17,252	17,257	26,812	61,321	2,379	1,751	4,130	16,378	907,726
03.00	17,305	17,270	26,788	61,364	2,379	1,749	4,128	16,378	907,454
04.00	22,514	22,501	29,935	74,950	2,379	1,966	4,345	16,378	954,962
05.00	31,953	31,972	36,737	100,662	2,379	2,355	4,734	16,378	1.040,544
06.00	20,063	20,094	29,702	69,860	2,379	1,865	4,243	16,378	932,733
07.00	18,353	18,324	27,582	64,259	2,379	1,795	4,174	16,378	917,549
08.00	19,516	19,563	28,508	67,587	2,379	1,846	4,225	16,378	928,610
09.00	18,443	18,448	27,648	64,539	2,379	1,798	4,176	16,378	918,022
10.00	19,733	19,729	28,800	68,262	2,378	1,853	4,231	16,378	930,036
11.00	19,699	19,698	28,867	68,263	2,378	1,852	4,230	16,378	929,760
12.00	21,209	21,201	29,999	72,409	2,378	1,915	4,294	16,378	943,784
13.00	21,560	21,554	30,833	73,946	2,379	1,927	4,306	16,378	946,484
14.00	21,122	21,144	30,368	72,633	2,379	1,911	4,290	16,378	942,959
15.00	21,227	21,186	30,362	72,774	2,379	1,913	4,291	16,378	943,304
16.00	23,072	23,041	31,512	77,626	2,379	1,988	4,367	16,378	959,897
17.00	24,802	24,769	33,173	82,745	2,379	2,060	4,438	16,378	975,569
18.00	32,914	32,737	37,456	103,108	2,379	2,395	4,774	16,378	1.049,403
19.00	44,017	42,301	44,531	130,844	2,379	2,796	5,175	16,378	1.137,436
20.00	43,926	41,850	44,409	130,186	2,379	2,838	5,217	16,378	1.146,757
21.00	[illegible]	[illegible]	[illegible]	[illegible]	2,379	[illegible]	[illegible]	16,378	1.166,[illegible]
22.00	[illegible]	40,030	44,066	128,084	2,379	2,760	5,138	16,378	1.120,442
23.00	39,712	38,017	41,548	119,277	2,379	2,606	4,985	16,378	1.085,640
24.00	25,556	25,557	33,938	85,050	2,379	2,099	4,478	16,378	984,274
Average				85,002					987,367

22 JUNI 2016									
Waktu	Daya (MW)				BB (Kg/s)				BB (m^3/h)
	GT11	GT12	ST18	Total	GT11	GT12	Total	GD (Kg/m^3)	
01.00	21,545	21,507	30,613	73,665	2,379	1,926	4,305	16,378	946,251
02.00	17,841	17,814	27,017	62,673	2,379	1,778	4,157	16,378	913,776
03.00	16,103	16,113	25,837	58,313	2,379	1,708	4,087	16,378	[illegible]
04.00	17,057	17,070	26,209	60,344	2,379	1,745	4,123	16,378	906,325
05.00	21,234	21,231	30,011	72,477	2,379	1,916	4,295	16,378	944,038
06.00	19,856	19,864	29,329	69,049	2,379	1,859	4,237	16,378	931,406
07.00	18,095	18,065	27,541	63,701	2,379	1,785	4,164	16,378	915,324
08.00	18,332	18,322	27,668	64,322	2,379	1,793	4,172	16,378	916,958
09.00	18,380	18,373	27,830	64,588	2,379	1,795	4,174	16,378	917,436
10.00	18.328	18.333	27.930	64.591	2.378	1.794	4.172	16.378	917.025
11.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1,794	[illegible]	16,378	[illegible]
12.00	[illegible]	[illegible]	[illegible]	[illegible]	2,378	[illegible]	4,201	16,378	[illegible]
13.00	19,771	19,643	29,213	68,627	2,379	1,851	4,229	16,378	929,577
14.00	[illegible]	[illegible]	[illegible]	[illegible]	2,378	2,009	4,387	16,378	[illegible]
15.00	29,029	29,080	35,374	93,483	2,379	2,233	4,611	16,378	1.013,631
16.00	30,064	30,095	35,851	96,010	2,379	2,275	4,653	16,378	1.022,833
17.00	33,008	33,076	37,324	103,407	2,379	2,396	4,775	16,378	1.049,595
18.00	37,338	37,116	40,479	114,934	2,379	2,574	4,953	16,378	1.088,738
19.00	[illegible]	[illegible]	[illegible]	[illegible]	2,379	2,763	5,142	16,378	[illegible]
20.00	[illegible]	[illegible]	[illegible]	[illegible]	2,379	[illegible]	[illegible]	16,378	[illegible]
21.00	47,409	40,378	47,073	[illegible]	2,379	3,044	5,423	16,378	1.191,974
22.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23.00	42,400	40,536	44,970	127,904	2,379	[illegible]	5,107	16,378	1.140,144
24.00	42,239	40,483	44,982	127,705	2,379	2,712	5,091	16,378	1.118,931
Average				[illegible]					1.002,18[illegible]

Lampiran 1e. Data Input-Output PLGU Sengkang Blok I Bulan Juni 2016 (Lanjutan)

23 Juni 2016									
Waktu	Daya (MW)				BB (Kg/s)				BB (m³/h)
	GT11	GT12	ST18	Total	GT11	GT12	Total	GD (Kg/m³)	
01.00	34,136	34,172	38,205	106,513	2,379	2,442	4,821	16,378	1.059.716
02.00	23,832	23,840	32,512	80,184	2,379	2,019	4,398	16,378	966,646
03.00	19,961	19,950	29,354	69,266	2,379	1,862	4,241	16,378	932,143
04.00	24,486	24,487	31,646	80,618	2,379	2,049	4,428	16,378	973,291
05.00	28,867	28,831	35,307	93,000	2,379	2,224	4,602	16,378	1.011,630
06.00	20,028	20,041	29,924	69,993	2,379	1,863	4,242	16,378	932,480
07.00	16,317	16,353	26,097	58,768	2,379	1,717	4,096	16,378	900,225
08.00	20,870	20,859	29,203	70,932	2,379	1,900	4,279	16,378	940,541
09.00	23,553	23,581	32,185	79,325	2,379	2,011	4,389	16,378	964,816
10.00	24,222	24,260	32,837	81,319	2,379	2,039	4,418	16,378	971,018
11.00	30,107	30,110	35,875	96,093	2,379	2,278	4,656	16,378	1.023,527
12.00	31,004	31,109	36,483	98,639	2,379	2,317	4,695	16,378	1.032,079
13.00	31,059	31,093	36,503	98,655	2,379	2.316	4.695	16.378	1.031.897
14.00	33,854	33,862	37,642	105,358	2,379	2,433	4,817	16,378	1.057,724
15.00	39,113	39,090	39,986	118,189	2,379	2,652	5,032	16,378	1.105,968
16.00	39,268	39,228	40,046	118,543	2,379	2,656	5,035	16,378	1.106,774
17.00	39,732	39,787	40,228	119,746	2,379	2,677	5,056	16,378	1.111,457
18.00	40,757	40,046	41,242	122,044	2,379	2,688	5,067	16,378	1.111,779
19.00	44,538	41,309	47,852	133,699	2,379	2,771	5,150	16,378	1.132,060
20.00	43,844	41,313	47,657	132,814	2,379	2,937	5,316	16,378	1.168,486
21.00	42,477	40,127	47,104	130,044	2,379	2,991	5,370	16,378	1.130,[illegible]
22.00	43,768	37,333	45,299	126,400	2,379	2,890	5,269	16,378	1.158,151
23.00	43,285	40,660	45,069	129,014	2,379	2,864	5,243	16,378	1.152,302
24.00	24,883	24,806	33,345	83,124	2,379	2,060	4,439	16,378	975,651
Average				100,134					1.041,[illegible]

24 Juni 2016									
Waktu	Daya (MW)				BB (Kg/s)				BB (m³/h)
	GT11	GT12	ST18	Total	GT11	GT12	Total	GD (Kg/m³)	
01.00	20,400	20,407	30,173	71,780	2,379	1,897	4,276	16,378	939,821
02.00	18,037	18,031	27,472	63,540	2,379	1,782	4,161	16,378	914,548
03.00	18,094	18,045	27,436	63,575	2,379	1,781	4,159	16,378	914,277
04.00	19,415	19,395	28,269	67,079	2,379	1,839	4,218	16,378	927,062
05.00	21,566	21,561	30,521	73,648	2,379	1,930	4,308	16,378	947,035
06.00	17.558	17.555	27.544	62.657	2.379	1,764	4,142	16,378	910,551
07.00	21,976	21,987	30,283	74,246	2,379	1,951	4,330	16,378	951,663
08.00	25,115	25,112	32,643	82,870	2,379	2,076	4,455	16,378	979,147
09.00	30,563	30,533	36,171	97,267	2,379	2,294	4,677	16,378	1.027,048
10.00	28,903	28,858	35,308	93,069	2,379	2,224	4,602	16,378	1.011,626
11.00	31,420	31,372	36,385	99,177	2,379	2,330	4,708	16,378	1.034,908
12.00	35,013	35,095	38,176	108,284	2,379	2,483	4,862	16,378	1.068,684
13.00	30,128	30,191	36,037	96,356	2,379	2,278	4,657	16,378	1.023,608
14.00	29,694	29,704	35,269	94,666	2,379	2,262	4,641	16.378	1.020,058
15.00	35,080	34,979	38,252	108,261	2,379	2,478	4,857	16,378	1.067,581
16.00	36,072	36,067	38,677	110,816	2,379	2,522	4,901	16,378	1.077,321
17.00	40,787	40,845	40,632	122,264	2,379	2,724	5,103	16,378	1.121,601
18.00	41,048	40,878	40,677	122,603	2,379	2,721	5,100	16,378	1.121,049
19.00	43.855	41.109	45.171	130.135	2.379	2.750	5.129	16.378	1.127.413
20.00	[illegible]	[illegible]	[illegible]	[illegible]	2,379	2,921	5,300	16,378	[illegible]
21.00	43.896	41.114	45.766	130.777	2.379	2.883	5.262	16.378	1.156,797
22.00	43.870	41.114	45.697	130,681	2,379	2,936	5,315	16,378	1.168,193
23.00	40,827	39,129	44,050	124,006	2,379	2,710	5,088	16,378	1.118,448
24.00	20.243	20.276	30.037	70.556	2.379	1.877	4.256	16.378	934.755
Average				97,041					1.030,31[illegible]

Lampiran 1e. Data Input-Output PLGU Sengkang Blok I Bulan Juni 2016 (Lanjutan)

25 Juni 2016									
Waktu	Daya (MW)				BB (Kg/s)				BB (m³/h)
	GT11	GT12	ST18	Total	GT11	GT12	Total	GD (Kg/m³)	
01.00	17,503	17,519	27,108	62,130	2,379	1,763	4,142	16,378	910,459
02.00	16,367	16,397	26,078	58,842	2,379	1,721	4,099	16,378	901,088
03.00	16,574	16,622	26,111	59,307	2,379	1,727	4,106	16,378	902,485
04.00	24,987	24,962	31,808	81,757	2,379	2,072	4,451	16,378	978,290
05.00	27,865	27,864	34,899	90,628	2,379	2,186	4,565	16,378	1.003,381
06.00	17,961	17,972	27,999	63,931	2,379	1,781	4,160	16,378	914,390
07.00	21,546	21,555	30,286	73,387	2,379	1,934	4,312	16.378	947.897
08.00	18,025	17,995	27,397	63,417	2,379	1,783	4,162	16,378	914,777
09.00	23,067	23,067	30,838	76,972	2,379	1,992	4,371	16,378	960,750
10.00	18,570	18,599	28,722	65,891	2,379	1,811	4,189	16,378	920,819
11.00	18,024	18,015	27,521	63,560	2,379	1,783	4,162	16,378	914,760
12.00	17,993	17,989	27,577	63.559	2,379	1,782	4,161	16,378	914,664
13.00	17,984	17,978	27,603	63,566	2,379	1,782	4,161	16,378	914,595
14.00	18,001	17,978	27,597	63,575	2,379	1,780	4,159	16,378	914,135
15.00	19,487	19,480	28,479	67,445	2,379	1,843	4,222	16,378	928,046
16.00	25,927	25,966	33,568	85,460	2,379	2,107	4,486	16,378	986,010
17.00	31,206	31,204	36,301	98,711	2,379	2,321	4,700	16,378	1.033,081
18.00	33,735	33,643	37,502	104,880	2,379	2,422	4,801	16,378	1.055,254
19.00	43,469	40,867	44,915	129,251	2,379	2,736	5,115	16,378	1.124,266
20.00	43,472	40,906	45,374	129,752	2,379	2,848	5,227	16,378	[illegible]
21.00	43,442	40,893	45,317	129,652	2,379	3,000	5,378	16,378	1.182,493
22.00	41,414	40,785	45,202	129,401	2,379	2,792	5,171	16,378	1.136,61
23.00	39,069	38,353	43,553	120,974	2,379	2,619	4,998	16,378	1.098,496
24.00	21,039	21,054	30,594	72,686	2,379	1,904	4,283	16,378	941,400
Average				84,114					985,7

26 Juni 2016									
Waktu	Daya (MW)				BB (Kg/s)				BB (m³/h)
	GT11	GT12	ST18	Total	GT11	GT12	Total	GD (Kg/m³)	
01.00	17,61	17,64	27,12	62,37	2,38	1,77	4,15	16,378	911,899
02.00	17,62	17,64	27,11	62,38	2,38	1,77	4,15	16,378	911,591
03.00	17,64	17,66	27,07	62,38	2,38	1,77	4,15	16,378	911,408
04.00	20,45	20,42	28,63	69,50	2,38	1,88	4,26	16,378	936,477
05.00	28,59	28,63	35,03	92,26	2,38	2,22	4,60	16,378	1.010,827
06.00	22,10	22,15	31,44	75,75	2,38	1,95	4,33	16,378	951,578
07.00	17,52	17,55	27,17	62,24	2,38	1,77	4,15	16,378	911,362
08.00	17,57	17,58	27,10	62,25	2,38	1,77	4,15	16,378	911,611
09.00	18,90	18,90	27,88	65,67	2,38	1,82	4,20	16,378	922,729
10.00	19,69	19,69	28,84	68,71	2,38	1,85	4,23	16,378	930,214
11.00	19,71	19,66	28,89	68,25	2,38	1,85	4,23	16,378	930,317
12.00	19,67	19,65	28,90	68,23	2,38	1,85	4,23	16,378	930,060
13.00	16,50	16,70	26,80	60,00	2,38	1,73	4,11	16,378	903,632
14.00	17,76	17,76	27,07	62,59	2,38	1,77	4,15	16,378	912,630
15.00	21,22	21,23	30,02	72,48	2,38	1,91	4,29	16,378	943,811
16.00	28,60	28,59	34,91	92,09	2,38	2,21	4,59	16,378	1.009,564
17.00	35,59	35,70	38,50	109,79	2,38	2,51	4,89	16,378	1.074,211
18.00	34,08	34,09	37,80	105,97	2,38	2,44	4,82	16,378	1.058,901
19.00	43,47	41,34	45,00	129,81	2,38	2,76	5,13	16,378	1.128,462
20.00	44,20	41,29	46,88	132,38	2,38	2,75	5,13	16,378	1.126,895
21.00	44,47	41,26	46,94	132,67	2,38	2,75	5,13	16,378	1.127,005
22.00	44,16	41,26	46,85	132,40	2,38	2,75	5,13	16,378	[illegible]
23.00	33,92	33,35	40,73	108,00	2,38	2,41	4,79	16,378	1.052,515
24.00	20,87	20,87	30,54	72,28	2,38	1,90	4,28	16,378	940,423
Average				94,601					982,240

Lampiran 1e. Data Input-Output PLGU Sengkang Blok I Bulan Juni 2016 (Lanjutan)

27 Juni 2016									
Waktu	Daya (MW)				BB (Kg/s)				BB (m³/jam)
	GT11	GT12	ST18	Total	GT11	GT12	Total	GD (Kg/m³)	
01.00	17,62	17,65	27,08	62,35	2,38	1,77	4,15	16,378	911,777
02.00	17,64	17,67	27,04	62,35	2,38	1,77	4,15	16,378	911,867
03.00	17,66	17,66	27,06	62,38	2,38	1,77	4,15	16,378	911,619
04.00	17,71	17,67	27,03	62,41	2,38	1,76	4,14	16,378	910,822
05.00	17,60	17,64	27,10	62,34	2,38	1,77	4,15	16,378	912,328
06.00	17,57	17,62	27,14	62,33	2,38	1,77	4,15	16,378	912,484
07.00	17,61	17,64	27,09	62,34	2,38	1,77	4,15	16,378	911,962
08.00	20,90	20,88	29,18	70,96	2,38	1,90	4,28	16,378	940,886
09.00	23,33	23,37	32,06	78,75	2,38	2,00	4,38	16,378	963,564
10.00	23,37	23,39	32,42	79,18	2,38	2,00	4,38	16,378	963,073
11.00	17,87	17,88	27,43	63,18	2,38	1,78	4,16	16,378	913,316
12.00	17,88	17,85	27,49	63,21	2,38	1,78	4,16	16,378	913,791
13.00	17,86	17,85	27,48	63,19	2,38	1,78	4,15	16,378	913,115
14.00	17,87	17,92	27,47	63,26	2,38	1,78	4,15	16,378	913,107
15.00	21,84	21,81	30,66	74,32	2,38	1,94	4,32	16,378	948,830
16.00	21,69	21,69	30,90	74,29	2,38	1,93	4,31	16,378	947,889
17.00	22,03	22,05	31,62	77,70	2,38	1,98	4,36	16,378	959,062
18.00	26,64	26,67	33,71	87,02	2,38	2,14	4,52	16,378	992,888
19.00	43,67	41,86	45,65	131,19	2,38	2,79	5,17	16,378	1.135,914
20.00	44,08	40,73	46,86	131,68	2,38	2,87	5,25	16,378	1.153,711
21.00	44,29	40,74	46,88	131,91	2,38	2,91	5,29	16,378	1.162,942
22.00	43,67	40,74	46,35	130,76	2,38	3,04	5,42	16,378	1.190,870
23.00	42,84	40,74	45,59	129,17	2,38	2,99	5,36	16,378	1.179,077
24.00	35,70	34,58	40,46	110,24	2,38	2,49	4,87	16,378	1.070,794
Average				84,78					985,235

28 Juni 2016									
Waktu	Daya (MW)				BB (Kg/s)				BB (m³/jam)
	GT11	GT12	ST18	Total	GT11	GT12	Total	GD (Kg/m³)	Hasil
01.00	19,59	19,67	29,31	68,57	2,38	1,85	4,23	16,378	928.905
02.00	20,99	20,96	29,87	71,82	2,38	1,90	4,28	16,378	941.443
03.00	21,71	21,74	30,38	73,83	2,38	1,94	4,32	16,378	948.601
04.00	27,70	27,77	34,27	89,69	2,38	2,18	4,56	16,378	1.002,049
05.00	37,28	37,35	39,14	113,77	2,38	2,58	4,96	16,378	1.089,325
06.00	37,27	37,35	39,15	113,76	2,38	2,58	4,95	16,378	1.088,914
07.00	34,48	34,52	38,02	107,02	2,38	2,46	4,84	16,378	1.067,907
08.00	29,54	29,59	35,61	94,74	2,38	2,25	4,64	16,378	1.018,033
09.00	31,55	31,55	36,92	99,62	2,38	2,34	4,72	16,378	1.036,488
10.00	37,35	37,36	39,33	115,04	2,38	2,60	4,98	16,378	1.094,619
11.00	41,07	41,01	41,98	124,06	2,38	2,74	5,12	16,378	1.124,840
12.00	41,16	41,01	42,17	124,34	2,38	2,74	5,12	16,378	1.124,738
13.00	41,20	40,99	42,19	124,38	2,38	2,74	5,12	16,378	1.125,028
14.00	41,20	40,99	42,10	124,27	2,38	2,74	5,12	16,378	1.124,227
15.00	41,59	40,99	42,35	124,93	2,38	2,74	5,12	16,378	1.126,188
16.00	41,61	40,99	42,27	124,71	2,38	2,74	5,12	16,378	1.124,070
17.00	41,11	40,99	42,19	124,19	2,38	2,74	5,12	16,378	1.125,006
18.00	41,36	40,90	42,28	124,54	2,38	2,73	5,11	16,378	1.123.564
19.00	41,82	40,99	42,29	125,01	2,38	2,74	5,12	16,378	1.126,008
20.00	41,80	40,98	42,23	124,96	2,38	2,81	5,18	16,378	1.139,523
21.00	41,81	40,99	42,27	125,06	2,38	2,81	5,19	16,378	1.141,278
22.00	41,84	40,99	42,27	125,13	2,38	3,03	5,41	16,378	1.188.211
23.00	42,02	40,72	46,93	131,48	2,38	2,82	5,20	16,378	1.142,350
24.00	28,08	28,08	33,33	91,15	2,38	2,19	4,57	16,378	1.004,643
Average				110,48					1.082,216

Lampiran 1e. Data Input-Output PLGU Sengkang Blok I Bulan Juni 2016 (Lanjutan)

29 Juni 2016									
Waktu	Daya (MW)				BB (Kg/s)				BB (m³/jam)
	GT11	GT12	ST18	Total	GT11	GT12	Total	GD (Kg/m³)	
01.00	23,24	23,27	32,10	78,61	2,38	2,00	4,38	16,378	962,622
02.00	21,58	21,59	30,82	73,99	2,38	1,93	4,31	16,378	947,148
03.00	22,62	22,60	30,75	75,97	2,38	1,97	4,35	16,378	956,707
04.00	33,43	33,44	37,09	103,96	2,38	2,42	4,80	16,378	1.054,631
05.00	41,07	41,10	44,91	127,08	2,38	2,73	5,11	16,378	1.123,717
06.00	30,36	30,40	37,19	97,95	2,38	2,20	4,66	16,378	1.025,362
07.00	18,60	18,63	28,85	66,08	2,38	1,81	4,19	16,378	920,256
08.00	17,76	17,75	26,86	62,36	2,38	1,77	4,15	16,378	912,629
09.00	21,65	21,64	29,57	72,86	2,38	1,93	4,31	16,378	947,967
10.00	34,45	34,47	37,74	106,66	2,38	2,46	4,84	16,378	1.063,559
11.00	36,78	36,81	39,11	112,69	2,38	2,55	4,93	16,378	1.084,466
12.00	36,78	36,80	39,11	112,70	2,38	2,55	4,93	16,378	1.084,286
13.00	36,79	36,82	39,09	112,70	2,38	2,55	4,93	16,378	1.084,456
14.00	38,40	38,52	39,64	116,65	2,38	2,63	5,01	16,378	1.100,418
15.00	41,04	41,02	40,68	122,74	2,38	2,73	5,11	16,378	1.123,932
16.00	41,09	41,02	40,68	122,79	2,38	2,73	5,11	16,378	1.123,587
17.00	47,51	40,97	47,98	176,46	2,38	2,73	5,11	16,378	1.123,250
18.00	44,21	40,83	47,40	132,44	2,38	2,73	5,11	16,378	1.122,793
19.00	44,57	40,82	47,48	132,88	2,38	2,77	5,15	16,378	1.132,203
20.00	44,35	40,83	46,47	131,64	2,38	2,92	5,30	16,378	1.165,755
21.00	43,62	40,83	47,04	176,49	2,38	3,04	5,47	16,378	1.191,366
22.00	43,63	40,83	41,03	125,50	2,38	3,04	5,42	16,378	1.191,357
23.00	43,34	40,84	40,97	125,15	2,38	2,83	5,21	16,378	1.145,642
24.00	27,25	27,26	34,67	89,18	2,38	2,16	4,54	16,378	997,199
Average				106,48					1.066,054

Lampiran 1e. Data Input-Output PLGU Sengkang Blok I Bulan Juni 2016 (Lanjutan)

30 Juni 2016									
Waktu	Daya (MW)				BB (Kg/s)				BB (m³/h)
	GT11	GT12	ST18	Total	GT11	GT12	Total	GD (Kg/m³)	
Tanggal 1	17,91	17,90	27,89	63,69	2,38	1,78	4,16	16,378	913,691
02.00	16,11	16,07	25,90	58,08	2,38	1,71	4,08	16,378	897,675
03.00	16,14	16,12	25,81	58,07	2,38	1,71	4,08	16,378	897,895
04.00	18,00	18,00	26,91	62,91	2,38	1,78	4,16	16,378	915,232
05.00	21,73	21,70	30,30	73,73	2,38	1,94	4,32	16,378	948,615
06.00	32,68	32,73	37,03	102,45	2,38	2,39	4,77	16,378	1048,217
07.00	30,75	30,77	36,41	97,93	2,38	2,30	4,68	16,378	1029,351
08.00	28,84	28,89	35,37	93,11	2,38	2,23	4,60	16,378	1012,186
09.00	36,70	36,68	39,65	113,03	2,38	2,56	4,94	16,378	1085,430
10.00	44,00	41,78	46,43	132,21	2,38	2,77	5,15	16,378	1132,360
11.00	44,24	41,24	46,64	132,12	2,38	2,75	5,13	16,378	1127,197
12.00	44,19	41,24	46,89	132,32	2,38	2,76	5,13	16,378	1128,682
13.00	44,11	41,24	47,35	132,70	2,38	2,81	5,18	16,378	1139,522
14.00	43,54	41,24	47,21	131,99	2,38	2,90	5,28	16,378	1160,473
15.00	42,72	40,74	46,37	129,83	2,38	2,95	5,33	16,378	1172,082
16.00	42,29	40,73	44,84	127,86	2,38	3,04	5,41	16,378	1190,025
17.00	42,32	41,14	44,89	128,35	2,38	3,06	5,44	16,378	1194,721
18.00	42,30	41,14	44,59	128,03	2,38	3,05	5,43	16,378	1194,202
19.00	41,97	41,28	44,31	127,56	2,38	3,07	5,45	16,378	1197,448
20.00	42,67	40,92	43,82	127,41	2,38	3,04	5,42	16,378	1191,958
21.00	43,05	40,96	43,91	127,92	2,38	3,04	5,42	16,378	1190,701
22.00	43,18	40,96	43,70	127,85	2,38	3,03	5,41	16,378	1189,646
23.00	43,93	40,96	40,99	125,88	2,38	2,89	5,27	16,378	1157,373
24.00	43,92	40,96	41,00	125,87	2,38	2,92	5,29	16,378	1163,647
Average				110,870					1094,930

Menyatakan bahwa data tersebut benar diperoleh dari PT. Consolidated Electric Power Asia, PLTGU Sengkang Blok I : 135 MW dan Blok II : 180 MW.

Sengkang, 14 November 2016

WETHINUS MARKAM.

Lampiran 1f. Data Input-Output PLGU Sengkang Blok II Bulan Juni 2016 (Lanjutan)

Waktu	01 Juni 2016						
	Daya (MW)				BB (m^3/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	22,573	22,571	28,559	73,703		342,367	
02.00	22,581	22,582	28,532	73,695		342,544	
03.00	22,589	22,585	28,529	73,703		342,580	
04.00	22,587	22,589	28,508	73,684		341,550	
05.00	22,607	22,599	28,463	73,669		341,407	
06.00	22,618	22,611	28,449	73,678		341,246	
07.00	22,591	22,586	28,482	73,659		342,203	
08.00	22,586	22,582	28,456	73,625		341,723	
09.00	22,598	22,582	28,450	73,629		341,624	
10.00	22,552	22,548	28,537	73,637		341,266	
11.00	22.653	22,655	28,673	73,981		340,604	
12.00	24,114	24,110	30,376	78,600	10.204,069	349,811	19.324,759
13.00	24,103	24,096	30,385	78,584		350,176	
14.00	25,555	25,555	31,494	82,604		358,230	
15.00	27,423	27,436	33,745	88,604		369,927	
16.00	24,010	24,008	30,870	78,889		349,447	
17.00	22,450	22,450	28,661	73,561		340,318	
18.00	27,621	27,644	32,808	88,074		374,660	
19.00	43,562	43,550	46,685	133,797		505,001	
20.00	47,120	47,114	49,436	143,670		555,460	
21.00	46,532	46,537	49,235	142,304		585,745	
22.00	38,999	38,996	45,171	123,167		504,880	
23.00	27,534	27,531	34,924	89,989		375,561	
24.00	22,437	22,431	28,684	73,552		342,361	
Average				86,919			805.198295

Waktu	02 Juni 2016						
	Daya (MW)				BB (m^3/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	22,527	22,528	28,522	73,577		343,048	
02.00	22,523	22,526	28,510	73,560		342,495	
03.00	22,540	22,538	28,475	73,554		342,249	
04.00	21,768	21,768	27,860	71,395		338,878	
05.00	21,371	21,379	27,185	69,934		336,446	
06.00	21.375	21.388	27,180	69,943		335,518	
07.00	21,357	21,349	27,221	69,928		335,774	
08.00	21,336	21,343	27,255	69,934		335,089	
09.00	24,960	24,966	30,385	80,311		354,557	
10.00	22,572	22,570	29,220	74,362		339,954	
11.00	22,602	22,610	28,966	74,178		330,628	
12.00	27,697	27,705	33,745	89,147	1403,715	371,602	11.393,308
13.00	28,932	28,918	35,791	93,641		379,979	
14.00	33,301	33,308	40,254	106,863		417,972	
15.00	37,054	37,039	44,580	118,673		448,974	
16.00	36,849	36,831	44,591	118,272		447,457	
17.00	30,652	30,648	38,667	99,966		393,651	
18.00	35,370	35,303	40,732	111,505		434,531	
19.00	53,608	53,602	54,146	161,357		588,860	
20.00	55,436	55,415	55,507	166,358		603,554	
21.00	55,740	55,748	55,664	167,152		607,720	
22.00	55,804	55,793	55,597	167,195		609,226	
23.00	48,633	48,634	51,047	148,302		545,122	
24.00	30,523	30,499	38,678	99,699		397,157	
Average				102,034			474.721150

Lampiran 1f. Data Input-Output PLGU Sengkang Blok II Bulan Juni 2016 (Lanjutan)

Waktu	03 Juni 2016						
	Daya (MW)				BB (m^3/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	22,064	22,065	28,420	72,549		339,068	
02.00	22,147	22,148	28,271	72,566		339,254	
03.00	22,138	22,125	28,294	72,557		338,749	
04.00	22,320	22,309	28,386	73,014		339,977	
05.00	24,042	24,051	29,716	77,809		349,889	
06.00	23,366	23,374	29,680	76,420		346,107	
07.00	22,168	22,162	28,215	72,545		339,822	
08.00	21,355	21,361	27,478	70,193		335,180	
09.00	21,155	21,152	27,223	69,530		333,498	
10.00	21,547	21,555	27,721	70,823		334,159	
11.00	22,346	22,347	28,883	73,575		337,803	
12.00	22,297	22,307	28,977	73,580	11497,639	337,170	20.799,543
13.00	22,299	22,292	29,003	73,593		337,149	
14.00	22,302	22,311	28,975	73,589		337,361	
15.00	22,298	22,317	28,946	73,560		337,528	
16.00	22,290	22,303	28,996	73,589		337,070	
17.00	22,328	22,332	28,927	73,587		337,627	
18.00	23,730	23,741	29,463	76,934		348,269	
19.00	43,531	43,525	46,587	133,642		515,151	
20.00	48,488	48,478	50,588	147,553		620,697	
21.00	48,788	48,796	50,903	148,487		664,483	
22.00	46,610	46,613	49,860	143,084		655,331	
23.00	27,138	27,131	35,399	89,668		401,194	
24.00	22,092	22,092	28,390	72,573		340,168	
Average				85,626			866,648

Waktu	04 Juni 2016						
	Daya (MW)				BB (m^3/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	22,126	22,133	28,308	72,568		340,057	
02.00	22,147	22,152	28,266	72,566		339,476	
03.00	22,161	22,163	28,239	72,562		339,991	
04.00	22,152	22,158	28,231	72,541		339,442	
05.00	22,213	22,214	28,111	72,537		340,178	
06.00	22,208	22,217	28,114	72,539		339,419	
07.00	22,187	22,201	28,144	72,532		340,725	
08.00	22,192	22,193	28,134	72,518		339,961	
09.00	22,182	22,189	28,164	72,535		339,857	
10.00	22,136	22,134	28,271	72,542		338,271	
11.00	22,064	22,057	28,427	72,548		336,987	
12.00	22,007	21,993	28,565	72,566	9894,415	335,086	18.892,295
13.00	21,958	21,944	28,663	72,566		334,567	
14.00	21,931	21,934	28,694	72,559		333,805	
15.00	21,921	21,900	28,761	72,582		334,089	
16.00	21,946	21,942	28,695	72,583		334,194	
17.00	22,288	22,286	28,860	73,434		337,254	
18.00	22,354	22,352	28,848	73,554		338,058	
19.00	34,844	34,837	39,609	109,289		433,534	
20.00	46,533	46,536	49,042	142,113		567,453	
21.00	50,791	50,766	51,865	153,422		696,061	
22.00	36,763	36,741	43,791	117,294		527,369	
23.00	22,654	22,662	29,251	74,567		346,077	
24.00	22,864	22,870	28,840	74,573		346,021	
Average				82,861			781,149

Lampiran 1f. Data Input-Output PLGU Sengkang Blok II Bulan Juni 2016 (Lanjutan)

05 Juni 2016							
Waktu	Daya (MW)				BB (m^3/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	22,726	22,715	28,726	74,167		345,763	
02.00	22,284	22,289	28,197	72,770		341,947	
03.00	22,301	22,301	28,152	72,754		342,390	
04.00	22,303	22,304	28,145	72,752		341,896	
05.00	22,305	22,307	28,126	72,738		342,035	
06.00	22,309	22,301	28,134	72,744		341,478	
07.00	22,287	22,277	28,179	72,743		342,226	
08.00	22,248	22,246	28,230	72,724		340,300	
09.00	22,207	22,205	28,311	72,718		340,220	
10.00	22,181	22,181	28,379	72,741		338,716	
11.00	22,148	22,151	28,432	72,731		338,305	
12.00	22,093	22,091	28,558	72,742	10.125,620	337,212	19.565,691
13.00	22,066	22,061	28,617	72,744		336,519	
14.00	22,049	22,048	28,654	72,747		335,899	
15.00	22,022	22,029	28,695	72,746		335,447	
16.00	22,030	22,013	28,703	72,746		336,144	
17.00	22,078	22,074	28,606	72,758		336,001	
18.00	22,909	22,920	28,833	74,662		342,146	
19.00	51,053	51,044	50,953	153,050		596,594	
20.00	54,136	54,135	54,527	162,799		746,654	
21.00	50,217	50,225	51,805	152,247		703,850	
22.00	40,547	40,551	46,271	127,369		551,168	
23.00	28,296	28,302	35,682	92,279		383,714	
24.00	22,408	22,397	29,297	74,103		342,446	
Average				86,440			815,237107

06 Juni 2016							
Waktu	Daya (MW)				BB (m^3/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	22,394	22,410	28,755	73,558		342,415	
02.00	22,439	22,435	28,676	73,550		341,209	
03.00	22,446	22,451	28,664	73,561		341,242	
04.00	22,464	22,458	28,645	73,547		342,066	
05.00	22,453	22,447	28,660	73,561		342,101	
06.00	22,450	22,456	28,651	73,557		342,198	
07.00	22,449	22,463	28,646	73,557		342,304	
08.00	22,861	22,877	29,026	74,759		344,626	
09.00	22,436	22,437	28,648	73,547		342,348	
10.00	22,358	22,350	28,862	73,569		339,426	
11.00	22,303	22,297	28,988	73,587		337,993	
12.00	22,250	22,254	29,087	73,591	11.590,363	337,054	21.036,459
13.00	22,202	22,213	29,166	73,581		336,585	
14.00	22,206	22,203	29,152	73,561		335,948	
15.00	22,197	22,199	29,177	73,573		336,776	
16.00	22,217	22,214	29,138	73,569		337,396	
17.00	21,941	21,942	28,831	72,714		336,077	
18.00	23,859	23,865	29,618	77,342		349,247	
19.00	44,936	44,933	47,539	137,196		530,082	
20.00	49,437	49,415	51,372	150,224		659,441	
21.00	46,524	46,526	49,406	142,457		640,611	
22.00	45,793	45,791	49,132	140,716		625,368	
23.00	35,169	35,133	47,741	117,043		473,908	
24.00	29,003	29,000	35,608	93,610		383,818	
Average				87,730			876,519

Lampiran 1f. Data Input-Output PLGU Sengkang Blok II Bulan Juni 2016 (Lanjutan)

07 Juni 2016							
Waktu	Daya (MW)				BB (m^3/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	28,113	28,127	34,954	91,194	12.228,102	378,015	27.253,633
02.00	23,011	23,013	29,589	75,612		345,940	
03.00	23,140	23,149	29,277	75,566		346,096	
04.00	23,161	23,146	29,238	75,545		345,481	
05.00	23,142	23,148	29,294	75,583		346,044	
06.00	23,137	23,132	29,293	75,563		346,119	
07.00	23,137	23,125	29,293	75,555		345,775	
08.00	23,998	24,003	29,973	77,974		349,843	
09.00	24,062	24,062	30,436	78,560		350,236	
10.00	26,912	26,910	33,054	86,875		367,177	
11.00	27,301	27,298	34,006	88,605		368,777	
12.00	27,242	27,234	34,119	88,596		368,014	
13.00	27,193	27,193	34,203	88,590		367,635	
14.00	27,183	27,182	34,256	88,621		367,341	
15.00	27,185	27,188	34,247	88,620		367,282	
16.00	27,210	27,215	34,214	88,639		368,106	
17.00	27,263	27,261	34,110	88,634		370,231	
18.00	29,304	29,308	35,040	93,651		387,271	
19.00	49,571	49,560	51,150	150,282		591,321	
20.00	51,302	51,297	52,618	155,214		683,685	
21.00	50,956	50,965	52,346	154,267		714,215	
22.00	51,080	51,074	52,337	154,491		722,251	
23.00	33,105	33,079	40,649	106,833		483,363	
24.00	22,870	22,875	29,261	75,007		345,313	
Average				95,753			927,234698

08 Juni 2016							
Waktu	Daya (MW)				BB (m^3/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	22,943	22,946	29,184	75,073	13.148,631	345,7180	23.201,652
02.00	22,944	22,951	29,164	75,059		344,7755	
03.00	22,972	22,973	29,101	75,047		345,6280	
04.00	22,989	22,988	29,101	75,077		345,0912	
05.00	22,974	22,971	29,125	75,070		344,5573	
06.00	22,951	22,955	29,160	75,067		344,0087	
07.00	22,807	22,811	28,984	74,602		343,7862	
08.00	22,786	22,784	28,979	74,548		342,9478	
09.00	23,607	23,598	29,764	76,969		347,7032	
10.00	23,978	23,989	30,623	78,586		348,7022	
11.00	24,112	24,104	30,717	78,929		349,3934	
12.00	27,380	27,385	33,869	88,634		369,5353	
13.00	27,251	27,250	34,118	88,619		368,6116	
14.00	27,245	27,235	34,137	88,618		367,9419	
15.00	27,225	27,229	34,168	88,623		369,3046	
16.00	27,258	27,257	34,107	88,623		368,6551	
17.00	27,287	27,264	34,067	88,618		369,8233	
18.00	30,369	30,362	36,435	97,166		396,1672	
19.00	47,488	47,515	49,910	144,913		573,1259	
20.00	50,937	50,933	52,338	154,208		684,6918	
21.00	50,407	50,385	51,849	152,641		701,2475	
22.00	50,329	50,332	51,748	152,409		702,0779	
23.00	44,157	44,130	48,432	136,719		619,6929	
24.00	25,861	25,851	31,260	78,974		359,8348	
Average				95,116			966,735518

Lampiran 1f. Data Input-Output PLGU Sengkang Blok II Bulan Juni 2016 (Lanjutan)

09 Juni 2016							
Waktu	Daya (MW)				BB (m³/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	22,517	22,521	28,519	73,557	14.460,770	342,517	25.339,736
02.00	22,544	22,546	28,456	73,546		343,545	
03.00	22,551	22,558	28,432	73,542		342,640	
04.00	22,562	22,569	28,413	73,544		342,058	
05.00	22,563	22,569	28,408	73,539		342,358	
06.00	22,554	22,560	28,443	73,557		341,445	
07.00	22,543	22,540	28,463	73,546		342,770	
08.00	22,562	22,556	28,413	73,531		342,153	
09.00	26,365	26,365	31,543	84,273		365,424	
10.00	31,248	31,238	37,874	100,361		401,415	
11.00	34,044	34,040	41,262	109,346		425,058	
12.00	35,896	35,895	43,859	115,650		453,844	
13.00	35,171	35,133	43,565	113,869		459,158	
14.00	38,809	38,812	45,680	123,301		506,325	
15.00	42,735	42,738	47,856	133,329		562,684	
16.00	42,887	42,879	47,941	133,707		571,125	
17.00	42,852	42,847	47,949	133,647		567,808	
18.00	33,354	33,339	41,064	107,756		437,605	
19.00	46,051	46,048	49,115	141,214		563,495	
20.00	46,881	46,890	49,703	143,473		596,745	
21.00	46,961	46,947	49,686	143,593		610,017	
22.00	46,935	46,938	49,521	143,394		616,757	
23.00	43,930	43,929	48,107	135,966		584,814	
24.00	32,052	32,058	39,654	103,763		416,957	
Average				106,459			1055,82235

10 Juni 2016							
Waktu	Daya (MW)				BB (m³/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	27,195	27,185	34,582	88,962	15.557,293	373,155	25.848,622
02.00	25,749	25,751	32,084	83,584		361,176	
03.00	22,509	22,504	29,223	74,235		341,786	
04.00	22,444	22,428	28,677	73,548		341,324	
05.00	22,439	22,428	28,702	73,569		342,020	
06.00	22,429	22,432	28,673	73,534		341,850	
07.00	22,423	22,415	28,706	73,544		341,642	
08.00	22,426	22,427	28,697	73,550		341,001	
09.00	22,397	22,393	28,757	73,547		340,352	
10.00	22,498	22,493	28,774	73,765		340,252	
11.00	27,124	27,128	32,740	86,992		370,794	
12.00	31,282	31,284	37,784	100,350		402,445	
13.00	29,793	29,776	37,080	96,649		395,283	
14.00	35,158	35,155	41,964	112,276		458,595	
15.00	38,073	38,075	44,747	120,894		505,291	
16.00	39,060	39,048	45,476	123,584		526,188	
17.00	39,031	39,030	45,459	123,519		525,003	
18.00	36,258	36,262	42,627	115,147		482,253	
19.00	51,522	51,525	52,327	155,374		675,162	
20.00	45,283	45,299	49,173	139,755		621,017	
21.00	38,241	38,243	44,387	120,872		478,721	
22.00	46,468	46,460	49,210	142,138		588,620	
23.00	31,402	31,391	38,993	101,786		428,649	
24.00	26,662	26,658	33,659	86,979		368,751	
Average				99,506			1077,0259

Lampiran 1f. Data Input-Output PLGU Sengkang Blok II Bulan Juni 2016 (Lanjutan)

11 Juni 2016							
Waktu	Daya (MW)				BB (m^3/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	22,786	22,807	28,959	74,552		346,024	
02.00	22,851	22,855	28,859	74,565		345,400	
03.00	22,869	22,850	28,820	74,538		344,496	
04.00	22,861	22,866	28,816	74,542		344,854	
05.00	22,864	22,855	28,850	74,569		344,844	
06.00	22,858	22,851	28,846	74,554		344,992	
07.00	22,843	22,851	28,844	74,538		344,498	
08.00	23,262	23,250	28,946	75,457		346,718	
09.00	27,240	27,231	33,114	87,585		369,251	
10.00	27,086	27,089	33,409	87,583		368,954	
11.00	27,030	27,026	33,551	87,607		366,533	
12.00	26,977	26,980	33,644	87,601	11.507,298	366,512	21.084,101
13.00	26,949	26,951	33,708	87,609		366,565	
14.00	26,944	26,937	33,733	87,614		365,810	
15.00	26,923	26,941	33,747	87,610		365,172	
16.00	26,936	26,947	33,752	87,635		365,126	
17.00	26,977	26,968	33,686	87,631		366,522	
18.00	27,308	27,310	33,700	88,318		368,837	
19.00	36,028	36,045	41,483	113,555		441,936	
20.00	50,676	50,670	51,850	153,196		624,751	
21.00	50,784	50,776	52,120	153,680		694,887	
22.00	44,186	44,472	48,456	137,414		618,911	
23.00	29,393	29,391	37,495	96,279		425,716	
24.00	27,046	27,044	28,865	72,555		339,497	
Average				91,700			878,504189

12 Juni 2016							
Waktu	Daya (MW)				BB (m^3/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	22,116	22,108	28,340	72,564		340,486	
02.00	22,109	22,111	28,337	72,557		339,009	
03.00	22,124	22,130	28,297	72,551		338,981	
04.00	22,151	22,157	28,230	72,538		338,582	
05.00	22,158	22,157	28,245	72,556		340,588	
06.00	22,160	22,160	28,229	72,558		340,997	
07.00	22,154	22,150	28,239	72,542		340,385	
08.00	22,131	22,134	28,257	72,522		340,657	
09.00	22,084	22,080	28,374	72,538		337,766	
10.00	22,049	22,054	28,433	72,536		337,617	
11.00	22,140	22,139	28,658	72,937		337,026	
12.00	22,259	22,269	29,030	73,558	10.842,008	336,841	20.249,200
13.00	22,261	22,233	29,036	73,530		336,773	
14.00	22,263	22,251	29,052	73,565		337,143	
15.00	22,259	22,246	29,049	73,555		336,886	
16.00	22,291	22,286	28,973	73,549		337,919	
17.00	22,422	22,425	28,695	73,542		341,111	
18.00	24,287	24,280	30,052	79,619		356,687	
19.00	45,798	45,804	47,911	139,513		546,956	
20.00	51,152	51,157	52,180	154,490		678,230	
21.00	49,372	49,333	51,131	149,836		681,735	
22.00	46,948	46,934	49,489	143,371		643,634	
23.00	26,773	26,760	34,684	88,217		400,453	
24.00	22,125	22,123	28,300	72,548		340,731	
Average				86,137			843,710671

Lampiran 1f. Data Input-Output PLGU Sengkang Blok II Bulan Juni 2016 (Lanjutan)

13 Juni 2016							
Waktu	Daya (MW)				BB (m^3/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	22,158	22,149	28,247	72,554	12.198,124	340,420	21.945,065
02.00	22,153	22,149	28,244	72,547		338,926	
03.00	22,187	22,189	28,172	72,548		339,180	
04.00	22,213	22,217	28,111	72,542		340,275	
05.00	22,211	22,217	28,133	72,561		340,011	
06.00	22,210	22,209	28,113	72,533		339,627	
07.00	22,224	22,211	28,090	72,525		340,080	
08.00	22,226	22,204	28,075	72,505		339,985	
09.00	22,244	22,237	28,054	72,534		339,583	
10.00	22,210	22,212	28,141	72,563		339,396	
11.00	22,130	22,115	28,304	72,549		338,663	
12.00	22,084	22,078	28,409	72,571		337,333	
13.00	22,023	22,029	28,521	72,573		335,979	
14.00	22,009	22,025	28,538	72,572		336,163	
15.00	22,039	22,037	28,515	72,591		336,383	
16.00	22,050	22,066	28,457	72,573		336,047	
17.00	22,059	22,061	28,460	72,579		336,485	
18.00	24,451	24,466	29,691	78,608		354,136	
19.00	42,857	42,846	46,448	132,151		511,240	
20.00	54,936	54,952	55,056	164,943		731,434	
21.00	52,041	52,017	52,851	156,910		724,168	
22.00	52,043	52,040	52,746	156,829		718,619	
23.00	41,024	41,025	46,445	128,494		565,203	
24.00	29,414	29,408	36,457	95,279		387,606	
Average				89,443			914,377698

14 Juni 2016							
Waktu	Daya (MW)				BB (m^3/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	24,709	24,693	31,811	81,212	12.422,432	356,49512	21.748,697
02.00	22,461	22,443	28,623	73,528		341,77698	
03.00	22,502	22,505	28,547	73,554		342,42456	
04.00	22,551	22,543	28,447	73,542		342,75757	
05.00	22,489	22,502	28,562	73,553		341,5973	
06.00	22,522	22,530	28,493	73,545		341,88474	
07.00	22,529	22,531	28,480	73,540		341,99628	
08.00	22,536	22,542	28,440	73,518		342,2217	
09.00	22,519	22,525	28,480	73,525		340,8135	
10.00	22,485	22,488	28,592	73,565		340,58555	
11.00	22,387	22,403	28,770	73,560		339,32907	
12.00	22,333	22,325	28,912	73,570		337,87115	
13.00	22,268	22,266	29,040	73,574		337,14026	
14.00	22,292	22,299	28,982	73,573		337,23425	
15.00	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	
16.00	23,598	23,591	30,395	77,584		346,18463	
17.00	23,634	23,636	30,290	77,560		346,79676	
18.00	28,351	28,365	33,780	90,496		382,12534	
19.00	44,048	44,045	47,717	135,810		547,6024	
20.00	48,458	48,466	50,670	147,594		657,3657	
21.00	45,345	45,361	48,882	139,588		637,55036	
22.00	40,497	40,487	46,141	127,125		548,8574	
23.00	28,121	28,102	26,276	82,400		395,0022	
24.00	22,813	22,816	28,921	74,551		345,0735	
Average				86,623			906,195696

Lampiran 1f. Data Input-Output PLGU Sengkang Blok II Bulan Juni 2016 (Lanjutan)

15 Juni 2016							
Waktu	Daya (MW)				BB (m^3/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	22,838	22,844	28,868	74,551		345,357	
02.00	22,884	22,894	28,780	74,559		345,526	
03.00	22,878	22,866	28,786	74,530		345,470	
04.00	22,891	22,889	28,754	74,533		344,381	
05.00	22,894	22,891	28,773	74,558		344,834	
06.00	22,868	22,874	28,809	74,551		345,141	
07.00	22,871	22,865	28,805	74,540		344,322	
08.00	22,889	22,883	28,744	74,517		344,016	
09.00	23,397	23,421	29,373	76,191		346,562	
10.00	22,439	22,446	28,657	73,542		340,475	
11.00	22,405	22,405	28,751	73,561		339,321	
12.00	22,356	22,359	28,876	73,591	10.411.530	337,809	20.162.265
13.00	22,312	22,314	28,946	73,572		337,255	
14.00	22,293	22,290	28,992	73,575		336,402	
15.00	22,296	22,297	28,989	73,582		336,852	
16.00	22,298	22,311	28,981	73,590		336,964	
17.00	22,313	22,308	28,966	73,586		336,695	
18.00	23,598	23,602	29,409	76,609		346,106	
19.00	46,667	46,693	48,468	141,829		546,858	
20.00	52,104	52,096	53,079	157,283		701,013	
21.00	51,944	51,935	52,808	156,687		734,567	
22.00	51,896	51,907	52,811	156,614		737,428	
23.00	37,906	37,900	44,170	120,176		533,178	
24.00	22,815	22,794	30,160	75,769		344,201	
Average				89,421			840,094,389

16 Juni 2016							
Waktu	Daya (MW)				BB (m^3/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	22,744	22,740	29,059	74,542		343,570	
02.00	22,752	22,752	29,039	74,543		343,190	
03.00	22,768	22,765	29,020	74,553		342,922	
04.00	22,799	22,805	28,924	74,527		341,722	
05.00	23,073	23,075	29,230	75,377		344,527	
06.00	22,890	22,887	29,233	75,010		341,904	
07.00	22,778	22,778	28,972	74,528		342,139	
08.00	22,745	22,749	29,036	74,531		341,755	
09.00	22,708	22,702	29,137	74,546		340,595	
10.00	22,678	22,671	29,227	74,576		340,150	
11.00	22,725	22,726	29,146	74,597		341,442	
12.00	22,714	22,707	29,188	74,609	11.810,654	340,878	21.307,188
13.00	22,657	22,656	29,273	74,586		339,021	
14.00	22,567	22,573	29,459	74,599		337,425	
15.00	22,516	22,520	29,423	74,460		337,656	
16.00	22,584	22,582	29,423	74,590		338,860	
17.00	22,596	22,599	29,409	74,603		341,002	
18.00	22,869	22,861	29,337	75,067		340,989	
19.00	44,714	44,710	46,373	135,796		518,175	
20.00	52,067	52,062	53,055	157,183		646,095	
21.00	51,669	51,673	52,774	156,116		699,661	
22.00	50,848	50,490	51,871	153,854		705,370	
23.00	30,217	30,221	38,231	98,688		446,408	
24.00	22,384	22,375	28,795	73,554		340,970	
Average				88,252			887,799

Lampiran 1f. Data Input-Output PLGU Sengkang Blok II Bulan Juni 2016 (Lanjutan)

17 Juni 2016							
Waktu	Daya (MW)				BB (m³/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	22,443	22,438	28,685	73,566		342,701	
02.00	22,475	22,475	28,612	73,562		342,448	
03.00	22,495	22,496	28,563	73,553		342,102	
04.00	22,500	22,505	28,552	73,557		341,229	
05.00	22,511	22,528	28,534	73,572		341,857	
06.00	22,507	22,510	28,536	73,553		341,313	
07.00	22,519	22,503	28,529	73,550		341,313	
08.00	22,499	22,503	28,534	73,535		340,933	
09.00	23,716	23,788	29,336	76,760		348,293	
10.00	28,141	28,137	34,025	90,303		375,416	
11.00	30,534	30,527	37,487	98,548		393,238	
12.00	30,452	30,451	37,735	98,638	10.303,257	392,997	20.105,782
13.00	28,690	28,684	36,152	93,526		378,778	
14.00	27,253	27,251	34,124	88,628		368,025	
15.00	30,176	30,172	37,124	97,472		390,581	
16.00	30,408	30,415	37,848	98,671		392,841	
17.00	30,435	30,431	37,801	98,667		393,124	
18.00	31,011	31,017	38,004	100,031		398,031	
19.00	47,851	47,861	49,793	145,505		543,956	
20.00	52,206	52,202	53,104	157,512		640,613	
21.00	51,574	51,585	52,740	155,899		686,534	
22.00	43,662	43,658	48,145	135,465		595,816	
23.00	30,590	30,583	38,081	99,255		407,374	
24.00	25,684	25,675	33,148	84,506		362,882	
Average				96,160			837,741

18 Juni 2016							
Waktu	Daya (MW)				BB (m³/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	22,441	22,450	28,690	73,583		341,551	
02.00	22,460	22,466	28,644	73,570		341,538	
03.00	22,478	22,472	28,597	73,546		341,245	
04.00	22,493	22,500	28,577	73,569		341,037	
05.00	22,498	22,497	28,586	73,581		340,456	
06.00	22,484	22,476	28,595	73,555		340,772	
07.00	22,460	22,456	28,625	73,550		340,887	
08.00	22,441	22,448	28,655	73,544		339,822	
09.00	22,413	22,415	28,727	73,555		338,964	
10.00	22,342	22,347	28,860	73,549		337,938	
11.00	22,310	22,305	28,953	73,567		337,378	
12.00	22,922	22,916	29,309	75,147		340,212	
13.00	25,685	25,689	32,240	83,614	10.803,129	356,108	19.361,965
14.00	27,087	27,089	33,565	87,741		366,169	
15.00	31,256	31,251	38,456	100,963		399,787	
16.00	34,062	34,073	41,819	109,954		425,837	
17.00	32,548	32,558	40,608	105,714		410,843	
18.00	29,409	29,409	36,444	95,443		385,139	
19.00	34,957	34,958	41,657	111,572		432,951	
20.00	39,113	39,113	45,420	123,646		467,727	
21.00	39,081	39,083	45,428	123,591		472,206	
22.00	33,727	33,726	40,615	106,068		420,657	
23.00	23,263	23,263	29,013	73,537		339,613	
24.00	22,163	22,177	28,777	77,617		340,329	
Average				86,615			806,749

Lampiran 1f. Data Input-Output PLGU Sengkang Blok II Bulan Juni 2016 (Lanjutan)

19 Juni 2016							
Waktu	Daya (MW)				BB (m³/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	22,186	22,165	28,222	72,573		340,012	
02.00	22,222	22,213	28,152	72,587		340,702	
03.00	22,219	22,219	28,134	72,572		340,157	
04.00	22,232	22,231	28,098	72,561		340,542	
05.00	22,251	22,247	28,077	72,575		340,777	
06.00	22,244	22,239	28,089	72,571		339,707	
07.00	22,232	22,243	28,101	72,576		340,587	
08.00	22,221	22,220	28,106	72,547		340,032	
09.00	22,173	22,177	28,199	72,549		338,853	
10.00	22,286	22,256	28,535	73,076		337,897	
11.00	22,376	22,383	28,803	73,562		338,182	
12.00	22,370	22,376	28,808	73,553	10.891,042	337,736	19.668,527
13.00	22,343	22,343	28,884	73,569		337,665	
14.00	22,316	22,320	28,942	73,579		336,461	
15.00	22,741	22,745	29,213	74,699		338,994	
16.00	25,091	25,096	31,349	81,536		353,416	
17.00	25,809	25,802	31,974	83,585		357,759	
18.00	26,040	26,035	31,982	84,057		360,091	
19.00	41,299	41,316	44,818	127,433		486,093	
20.00	54,298	54,313	52,466	155,076		618,673	
21.00	44,799	44,774	40,807	107,369		445,664	
22.00	28,760	28,757	35,130	92,646		380,830	
23.00	23,377	23,371	30,273	77,021		347,192	
24.00	22,172	22,172	28,219	72,564		340,018	
average				82,352			819,522

20 Juni 2016							
Waktu	Daya (MW)				BB (m³/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	22,182	22,182	28,214	72,578		339,959	
02.00	22,254	22,258	28,063	72,574		341,207	
03.00	22,288	22,297	27,969	72,555		340,928	
04.00	22,323	22,316	27,920	72,559		340,718	
05.00	22,310	22,308	27,961	72,578		339,850	
06.00	22,327	22,320	27,930	72,572		340,713	
07.00	22,297	22,299	27,953	72,549		340,485	
08.00	22,312	22,308	27,929	72,550		340,377	
09.00	22,317	22,318	27,923	72,558		339,769	
10.00	22,280	22,287	28,023	72,590		339,284	
11.00	22,228	22,213	28,129	72,570		338,448	
12.00	22,461	22,459	28,453	73,373	9.818,320	339,576	18.342,592
13.00	22,497	22,480	28,624	73,601		339,068	
14.00	22,465	22,472	28,643	73,580		338,264	
15.00	22,443	22,448	28,702	73,594		337,538	
16.00	22,418	22,418	28,770	73,618		337,111	
17.00	22,418	22,417	28,762	73,597		337,949	
18.00	22,489	22,473	28,647	73,609		338,817	
19.00	26,182	28,218	32,321	86,722		378,867	
20.00	37,743	37,731	43,601	119,075		455,830	
21.00	39,046	39,039	45,298	123,383		469,022	
22.00	33,162	33,155	40,758	107,075		417,654	
23.00	23,680	23,673	30,939	78,293		350,119	
24.00	23,344	23,347	28,535	73,027		342,722	
Average				79,224			764,275

Lampiran 1f. Data Input-Output PLGU Sengkang Blok II Bulan Juni 2016 (Lanjutan)

21 Juni 2016							
Waktu	Daya (MW)				BB (m³/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	22,554	22,553	28,525	73,632	9.796,965	342,507	18.715,683
02.00	22,551	22,548	28,509	73,609		342,232	
03.00	22,564	22,554	28,491	73,608		341,364	
04.00	22,573	22,568	28,468	73,609		341,156	
05.00	22,608	22,600	28,418	73,625		342,709	
06.00	22,628	22,652	28,335	73,615		342,769	
07.00	22,629	22,641	28,339	73,608		342,654	
08.00	22,632	22,635	28,325	73,592		342,736	
09.00	22,651	22,651	28,277	73,579		342,614	
10.00	22,650	22,649	28,304	73,603		342,614	
11.00	22,640	22,638	28,364	73,642		342,148	
12.00	22,594	22,595	28,444	73,634		341,263	
13.00	22,504	22,504	28,609	73,616		339,464	
14.00	22,439	22,439	28,750	73,628		338,819	
15.00	22,479	22,477	28,652	73,608		339,608	
16.00	22,486	22,494	28,642	73,622		339,083	
17.00	22,486	22,497	28,610	73,593		340,499	
18.00	24,588	24,598	29,657	78,843		355,393	
19.00	38,820	38,819	43,993	121,633		464,346	
20.00	49,874	[illegible]	[illegible]	[illegible]		[illegible]	
21.00	45,189	45,164	48,570	138,924		571,850	
22.00	34,283	34,277	41,832	110,392		446,654	
23.00	23,217	23,230	30,075	76,522		346,323	
24.00	22,467	22,463	28,646	73,576		341,909	
Average				83,425			779,820

22 Juni 2016							
Waktu	Daya (MW)				BB (m³/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	22,489	22,491	28,609	73,588	10.861,571	341,662	20.352,244
02.00	22,492	22,494	28,800	73,786		341,673	
03.00	22,527	22,540	28,521	73,589		341,696	
04.00	22,541	22,549	28,472	73,562		341,675	
05.00	22,549	22,546	28,470	73,565		342,181	
06.00	22,574	22,574	28,433	73,581		341,961	
07.00	22,555	22,556	28,444	73,555		341,026	
08.00	22,711	22,718	28,641	74,071		341,158	
09.00	22,819	22,804	28,937	74,561		341,059	
10.00	22,786	22,793	29,026	74,605		340,239	
11.00	22,713	22,721	29,141	74,576		339,416	
12.00	22,652	22,654	29,305	74,611		338,854	
13.00	22,611	22,611	29,384	74,606		337,839	
14.00	22,591	22,589	29,414	74,593		337,299	
15.00	22,607	22,606	29,404	74,616		338,190	
16.00	22,613	22,609	29,377	74,599		338,267	
17.00	22,643	22,646	29,307	74,596		338,532	
18.00	24,423	24,430	30,150	79,003		351,538	
19.00	44,942	44,952	47,701	137,595		526,186	
20.00	54,374	54,449	54,854	163,676		722,062	
21.00	50,075	50,079	51,578	151,732		710,265	
22.00	45,315	45,292	48,979	139,587		649,308	
23.00	27,181	27,176	34,383	88,740		391,014	
24.00	25,059	25,057	31,179	81,295		357,574	
Average				87,595			848,010

Lampiran 1f. Data Input-Output PLGU Sengkang Blok II Bulan Juni 2016 (Lanjutan)

23 Juni 2016

Waktu	Daya (MW)				BB (m³/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	22,563	22,559	28,483	73,605		342,640	
02.00	22,581	22,582	28,412	73,575		343,028	
03.00	22,588	22,587	28,413	73,588		342,428	
04.00	22,607	22,612	28,344	73,562		342,815	
05.00	22,632	22,630	28,322	73,584		342,385	
06.00	22,619	22,632	28,331	73,582		342,541	
07.00	22,633	22,632	28,314	73,579		342,729	
08.00	22,629	22,638	28,274	73,542		342,067	
09.00	22,605	22,599	28,360	73,564		341,247	
10.00	22,545	22,548	28,526	73,619		339,455	
11.00	22,493	22,492	28,661	73,646		339,280	
12.00	22,423	22,419	28,759	73,601	12.335,831	338,108	21.865,644
13.00	22,367	22,383	28,837	73,587		337,308	
14.00	22,362	22,364	28,881	73,606		336,934	
15.00	22,425	22,418	28,786	73,629		337,741	
16.00	22,444	22,445	28,738	73,627		338,617	
17.00	22,562	22,567	28,469	73,598		340,663	
18.00	24,754	24,772	29,526	79,051		357,072	
19.00	46,789	46,770	48,232	140,792		539,766	
20.00	51,320	51,314	52,200	154,835		660,946	
21.00	50,450	50,456	51,633	152,539		706,424	
22.00	49,795	49,783	51,223	150,801		704,371	
23.00	28,515	28,515	36,617	93,647		426,754	
24.00	22,781	22,776	29,031	74,588		344,497	
Average				87,389			911,069

24 Juni 2016

Waktu	Daya (MW)				BB (m³/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	22,797	22,794	28,985	74,575		344,921	
02.00	22,814	22,813	28,957	74,584		344,238	
03.00	22,822	22,824	28,933	74,579		343,886	
04.00	22,834	22,833	28,915	74,582		343,781	
05.00	22,820	22,829	28,939	74,588		343,780	
06.00	22,837	22,838	28,906	74,581		343,692	
07.00	22,838	22,835	28,904	74,578		344,378	
08.00	22,851	22,851	28,869	74,570		343,391	
09.00	22,834	22,836	28,922	74,592		343,239	
10.00	22,807	22,821	28,975	74,603		342,639	
11.00	22,802	22,804	28,989	74,595		342,436	
12.00	22,742	22,746	29,108	74,596	11.864,465	341,452	21.160,236
13.00	22,723	22,721	29,129	74,573		341,361	
14.00	22,684	22,702	29,213	74,599		340,062	
15.00	22,667	22,674	29,274	74,616		339,410	
16.00	22,703	22,692	29,227	74,622		339,946	
17.00	22,810	22,822	28,955	74,586		341,872	
18.00	23,464	23,471	29,054	75,989		346,792	
19.00	46,800	46,785	47,910	141,495		537,523	
20.00	52,029	52,018	52,459	156,505		651,885	
21.00	47,992	47,962	49,976	145,930		649,791	
22.00	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	
23.00	25,333	25,311	33,285	83,929		374,955	
24.00	22,524	22,508	28,568	73,599		343,386	
Average				86,449			881,677

Lampiran 1f. Data Input-Output PLGU Sengkang Blok II Bulan Juni 2016 (Lanjutan)

25 Juni 2016							
Waktu	Daya (MW)				BB (m^3/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	22,563	22,558	28,480	73,601		343,229	
02.00	22,551	22,549	28,508	73,608		343,389	
03.00	22,558	22,549	28,483	73,591		342,537	
04.00	22,556	22,554	28,485	73,595		342,213	
05.00	22,555	22,554	28,505	73,614		342,373	
06.00	22,560	22,559	28,482	73,601		342,020	
07.00	22,525	22,535	28,539	73,599		342,402	
08.00	22,548	22,541	28,495	73,584		341,724	
09.00	22,522	22,523	28,533	73,579		340,950	
10.00	22,479	22,488	28,645	73,612		340,914	
11.00	22,464	22,482	28,658	73,604		340,080	
12.00	22,437	22,429	28,745	73,611	10.374,086	339,587	18.887,551
13.00	22,412	22,407	28,799	73,618		338,234	
14.00	22,393	22,400	28,807	73,600		337,907	
15.00	22,401	22,403	28,806	73,610		337,937	
16.00	22,380	22,379	28,859	73,618		337,514	
17.00	22,367	22,355	28,881	73,602		337,187	
18.00	22,917	22,924	28,927	74,768		341,808	
19.00	42,542	42,523	45,669	130,733		495,488	
20.00	48,754	48,743	50,613	148,110		590,060	
21.00	40,890	40,851	46,236	127,978		537,887	
22.00	30,523	30,487	38,717	99,727		415,931	
23.00	22,395	22,407	28,896	73,698		342,091	
24.00	22,479	22,482	28,635	73,596		342,618	
Average				82,494			786,981

26 Juni 2016							
Waktu	Daya (MW)				BB (m^3/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	22,493	22,496	28,597	73,585		342,778	
02.00	22,500	22,497	28,586	73,583		342,491	
03.00	22,521	22,522	28,532	73,575		342,151	
04.00	22,547	22,544	28,487	73,578		342,322	
05.00	22,526	22,547	28,534	73,607		342,252	
06.00	22,552	22,535	28,511	73,598		341,856	
07.00	21,647	21,643	27,912	71,202		337,584	
08.00	20,877	20,868	26,827	68,572		333,560	
09.00	23,567	23,569	29,013	76,149		347,910	
10.00	22,501	22,488	28,666	73,655		341,491	
11.00	22,505	22,485	28,585	73,575		342,008	
12.00	22,472	22,490	28,626	73,588		341,095	
13.00	21,508	21,526	27,908	70,942	10.097,368	335,010	18.441,373
14.00	21,218	21,215	27,541	69,975		331,850	
15.00	21,157	21,153	27,669	69,980		330,142	
16.00	21,144	21,146	27,695	69,985		329,711	
17.00	21,180	21,184	27,618	69,982		331,331	
18.00	21,212	21,214	27,555	69,981		331,872	
19.00	28,529	28,525	33,664	90,718		382,563	
20.00	36,043	36,002	42,802	114,847		440,274	
21.00	30,954	30,952	37,821	99,726		397,118	
22.00	26,104	26,107	33,188	85,399		364,562	
23.00	21,200	21,205	27,178	69,584		336,608	
24.00	21,230	21,235	27,143	69,608		336,465	
Average				76,208			768,391

Lampiran 1f. Data Input-Output PLGU Sengkang Blok II Bulan Juni 2016 (Lanjutan)

27 Juni 2016							
Waktu	Daya (MW)				BB (m³/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	21,233	21,225	27,139	69,597		336,42673	
02.00	21,231	21,245	27,127	69,603		335,87793	
03.00	21,235	21,245	27,092	69,573		335,1667	
04.00	21,280	21,275	27,011	69,565		335,08298	
05.00	21,245	21,247	27,114	69,606		334,94022	
06.00	21,220	21,230	27,159	69,608		335,20407	
07.00	21,224	21,227	27,133	69,583		334,833	
08.00	21,232	21,234	27,088	69,554		334,27115	
09.00	21,229	21,211	27,141	69,581		334,18646	
10.00	21,186	21,193	27,220	69,599		333,5324	
11.00	21,134	21,133	27,316	69,582		332,07486	
12.00	21,090	21,097	27,426	69,614	10.450,302	331,2266	19.836,369
13.00	21,053	21,051	27,498	69,602		330,1902	
14.00	21,035	21,024	27,535	69,593		328,976	
15.00	21,024	21,030	27,562	69,616		328,6647	
16.00	22,263	22,252	28,510	73,026		336,67206	
17.00	27,057	27,066	32,954	87,077		368,74747	
18.00	32,129	32,121	39,426	103,676		406,7426	
19.00	42,228	42,223	46,383	130,835		493,54288	
20.00	47,024	47,031	49,551	143,605		581,8742	
21.00	47,066	47,049	49,547	143,662		639,4019	
22.00	47,069	47,071	49,606	143,746		670,8662	
23.00	37,172	37,170	43,818	118,160		546,7918	
24.00	21,155	21,162	27,956	70,273		341,27386	
Average				85,747			826,515375

28 Juni 2016							
Waktu	Daya (MW)				BB (m³/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	21,174	21,188	27,231	69,593		335,097	
02.00	21,190	21,188	27,208	69,586		335,133	
03.00	21,191	21,203	27,195	69,589		335,190	
04.00	21,226	21,225	27,125	69,576		335,457	
05.00	21,214	21,207	27,161	69,582		335,091	
06.00	21,208	21,202	27,178	69,588		335,028	
07.00	21,203	21,210	27,144	69,557		334,887	
08.00	21,235	21,245	27,067	69,546		334,852	
09.00	21,222	21,223	27,110	69,555		334,437	
10.00	21,186	21,186	27,216	69,587		333,781	
11.00	23,532	23,529	29,493	76,555		346,746	
12.00	24,974	24,974	31,281	81,229	14.147,989	353,746	23.350,269
13.00	25,722	25,717	32,198	83,637		356,831	
14.00	28,101	28,088	34,382	90,571		374,580	
15.00	32,071	32,074	39,590	103,735		406,854	
16.00	32,040	32,035	39,643	103,717		407,162	
17.00	29,524	29,525	37,906	96,955		390,419	
18.00	26,111	26,113	31,479	83,704		366,793	
19.00	39,362	39,351	44,689	123,402		472,117	
20.00	43,209	43,211	47,135	133,555		532,346	
21.00	43,222	43,215	47,099	133,536		555,809	
22.00	42,990	42,982	47,036	133,008		560,110	
23.00	27,047	27,030	35,143	89,219		393,110	
24.00	21,466	21,467	27,640	70,573		336,807	
Average				87,465			972,92786

Lampiran 1f. Data Input-Output PLGU Sengkang Blok II Bulan Juni 2016 (Lanjutan)

29 Juni 2016							
Waktu	Daya (MW)				BB (m^3/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	21,500	21,500	27,582	70,583		337,0335	
02.00	21,503	21,495	27,589	70,587		336,935	
03.00	21,506	21,490	27,564	70,559		336,2089	
04.00	21,526	21,529	27,535	70,590		335,9602	
05.00	21,522	21,526	27,519	70,567		336,1374	
06.00	21,544	21,541	27,476	70,561		336,6098	
07.00	21,566	21,573	27,435	70,573		336,68	
08.00	21,568	21,558	27,423	70,548		336,7771	
09.00	21,549	21,554	27,446	70,549		336,5526	
10.00	21,501	21,512	27,574	70,587		334,925	
11.00	21,451	21,465	27,712	70,627		333,8181	
12.00	21,420	21,417	27,741	70,577	12.928,612	333,5468	12.928,612
13.00	21,386	21,381	27,811	70,578		332,8837	
14.00	21,376	21,365	27,833	70,575		332,297	
15.00	21,337	21,337	27,914	70,588		332,1653	
16.00	21,361	21,352	27,834	70,547		332,6615	
17.00	21,407	21,412	27,761	70,580		333,3617	
18.00	28,835	28,839	33,157	90,831		386,1666	
19.00	49,002	48,993	50,632	148,628		570,0429	
20.00	54,082	54,068	54,311	162,461		709,6492	
21.00	53,296	53,304	53,810	160,410		741,166	
22.00	51,181	51,184	52,523	154,888		713,0862	
23.00	28,132	28,123	36,582	92,837		408,8909	
24.00	22,439	22,435	28,707	73,582		342,5501	
Average				86,809			538,692164

Lampiran 1f. Data Input-Output PLGU Sengkang Blok II Bulan Juni 2016 (Lanjutan)

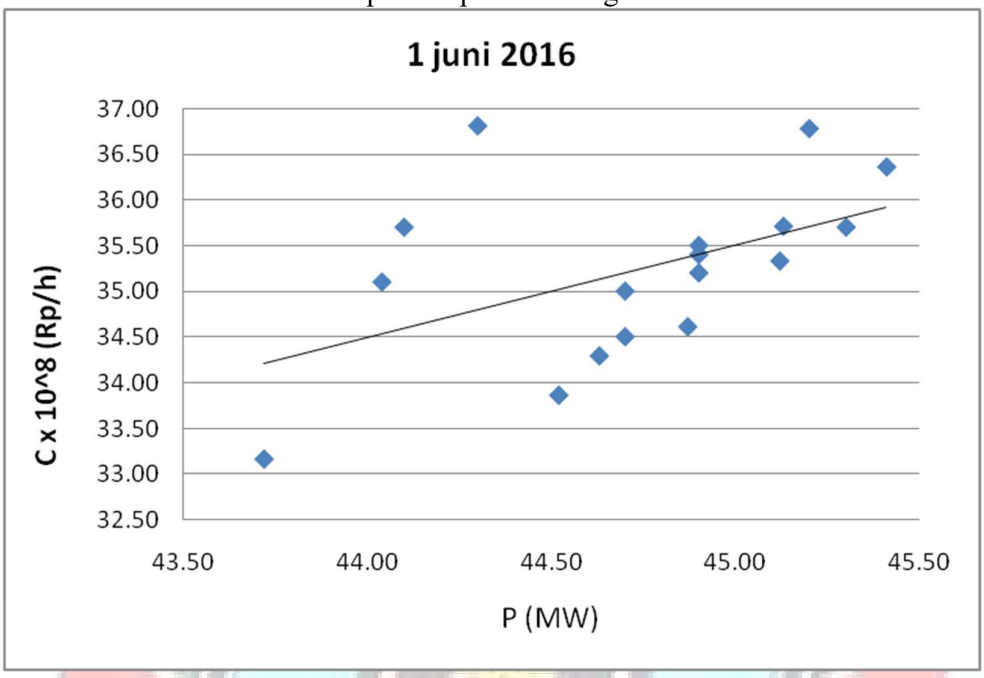
30 Juni 2016							
Waktu	Daya (MW)				BB (m³/h)		
	GT21	GT22	ST28	Total	GT21	GT22	Total
01.00	22,490	22,480	28,620	73,590		342,795	
02.00	21,389	21,388	27,626	70,403		336,822	
03.00	21,172	21,170	27,207	69,549		335,143	
04.00	22,124	22,119	27,943	72,186		340,537	
05.00	23,433	23,437	29,021	75,891		347,428	
06.00	27,601	27,595	33,609	88,805		373,003	
07.00	22,411	22,411	28,844	73,666		340,837	
08.00	22,502	22,504	28,557	73,563		341,893	
09.00	23,752	23,764	29,444	76,960		348,880	
10.00	27,436	27,435	33,333	88,204		371,132	
11.00	31,120	31,104	36,886	99,109		400,554	
12.00	35,433	35,422	42,587	113,442	15.283,082	438,208	27.572,429
13.00	38,757	38,753	45,180	122,689		487,445	
14.00	43,617	43,602	47,771	134,990		555,542	
15.00	51,555	51,545	52,771	155,870		696,269	
16.00	50,844	50,844	52,497	154,185		711,589	
17.00	50,305	50,298	52,115	152,718		706,029	
18.00	50,358	50,369	52,112	152,838		706,379	
19.00	51,226	51,209	52,646	155,081		721,650	
20.00	50,367	50,347	51,841	152,556		706,283	
21.00	50,477	50,462	51,871	152,810		703,460	
22.00	50,379	50,375	51,769	152,523		699,599	
23.00	50,395	50,407	51,824	152,626		686,385	
24.00	43,828	43,809	48,163	135,801		591,486	
Average				114,586			1.148,851

Menyatakan bahwa data tersebut benar diperoleh dari PT. Consolidated Electric Power Asia, PLTGU Sengkang Blok I : 135 MW dan Blok II : 180 MW.

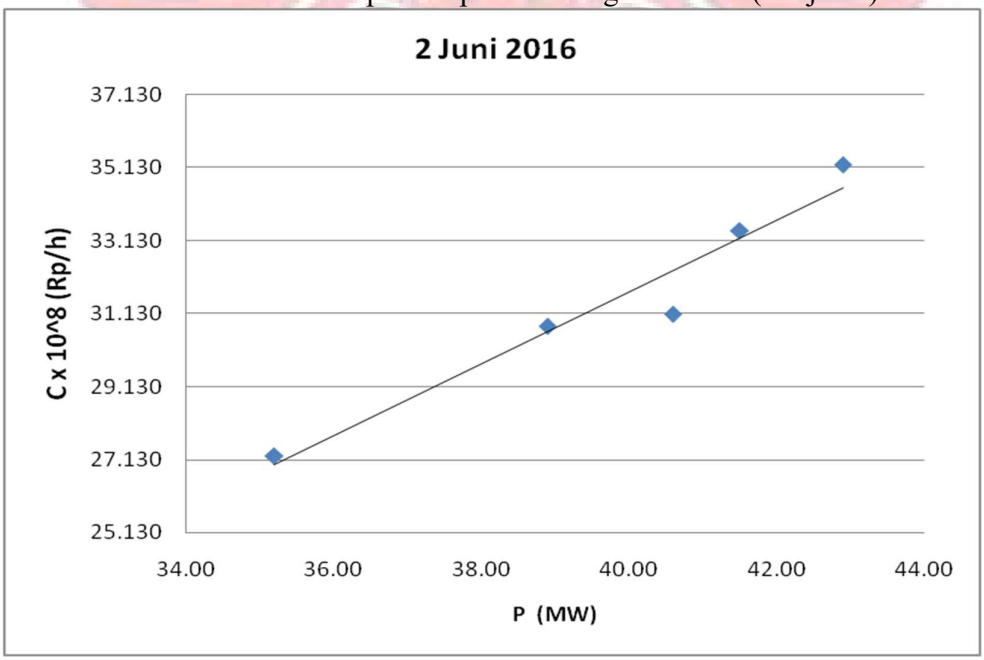
Sengkang, 17 November 2016

Eko Setiawan Rioe

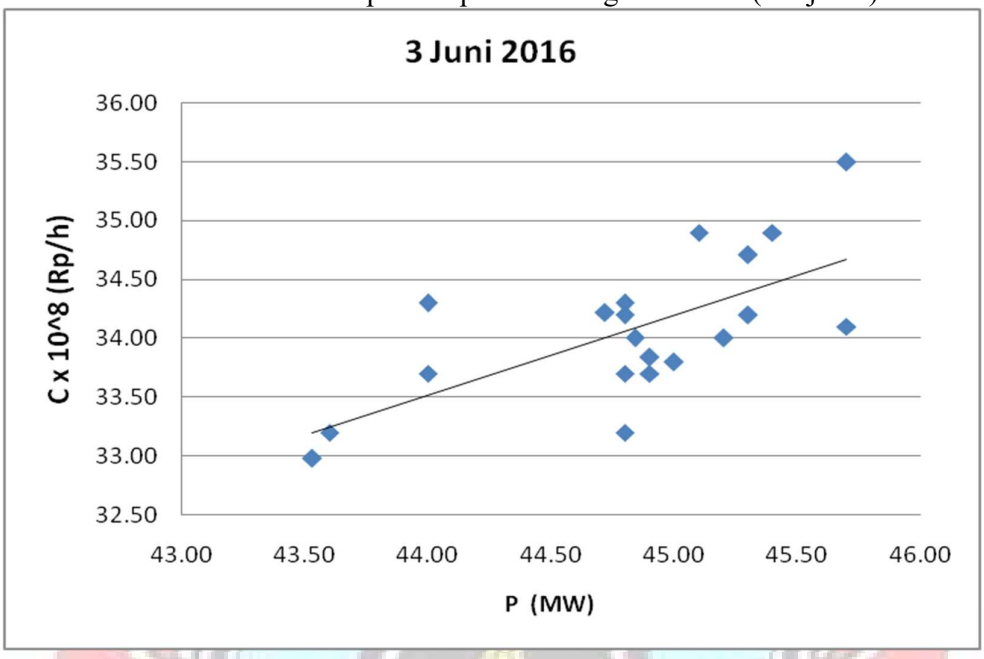
Lampiran 2a. Grafik Persamaan Input-Output PLTU Barru Unit 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal



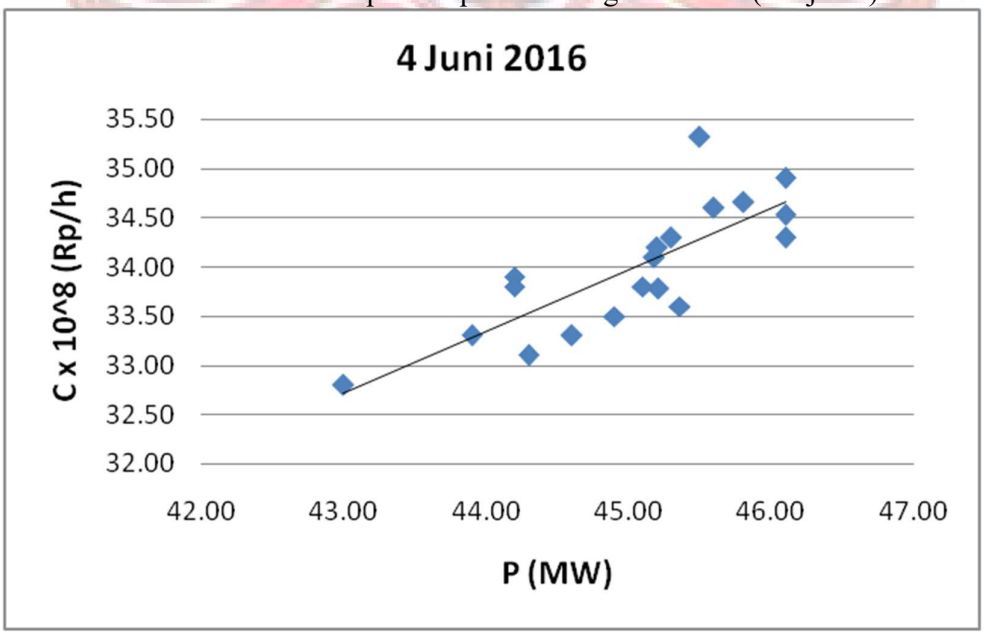
Lampiran 2a. Grafik Persamaan Input-Output PLTU Barru Unit 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



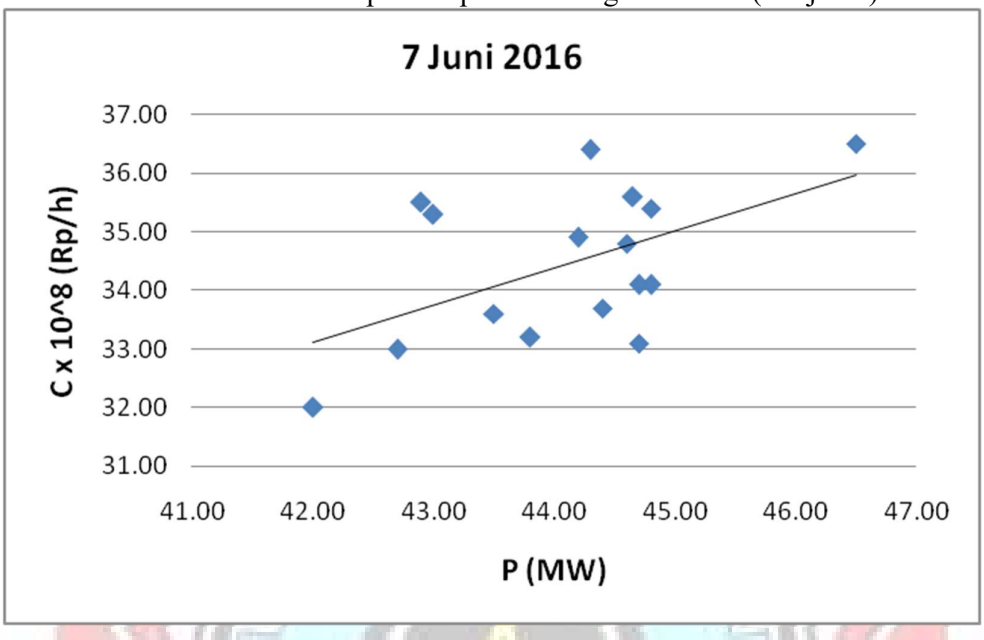
Lampiran 2a. Grafik Persamaan Input-Output PLTU Barru Unit 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



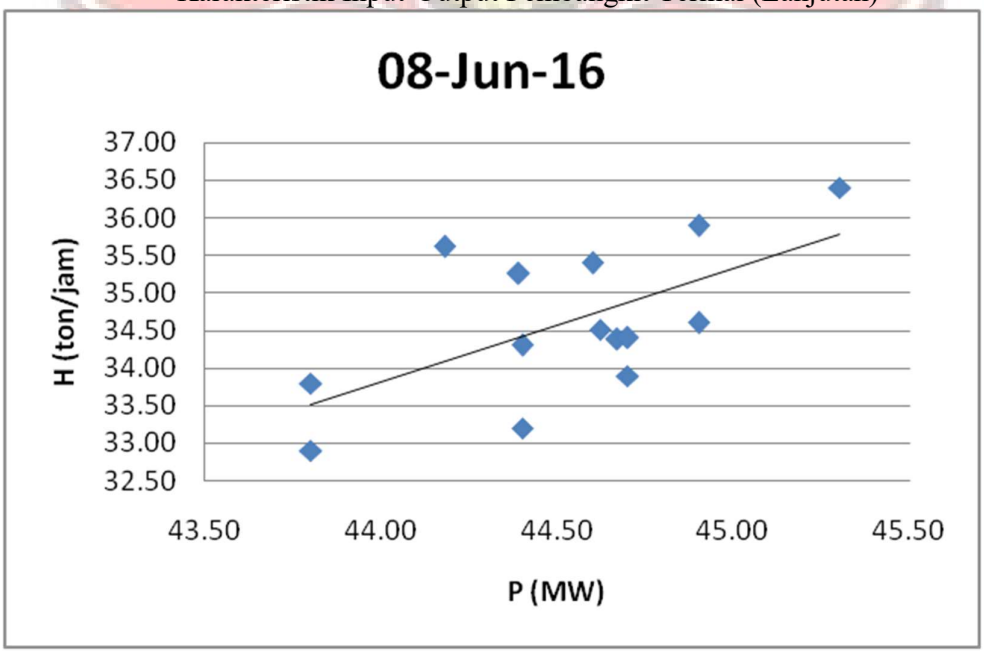
Lampiran 2a. Grafik Persamaan Input-Output PLTU Barru Unit 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



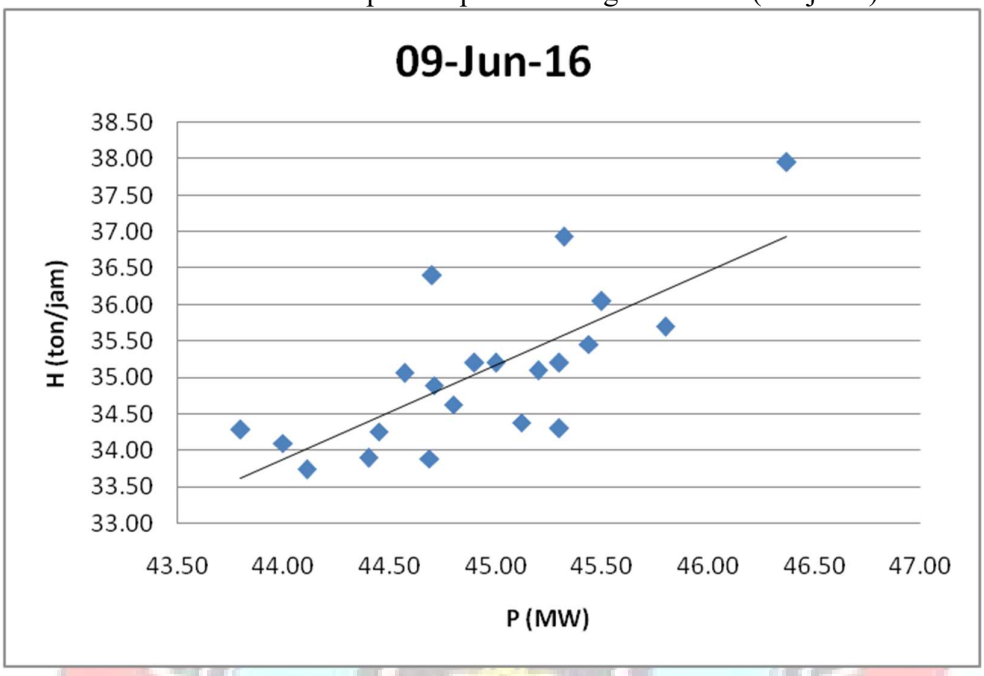
Lampiran 2a. Grafik Persamaan Input-Output PLTU Barru Unit 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



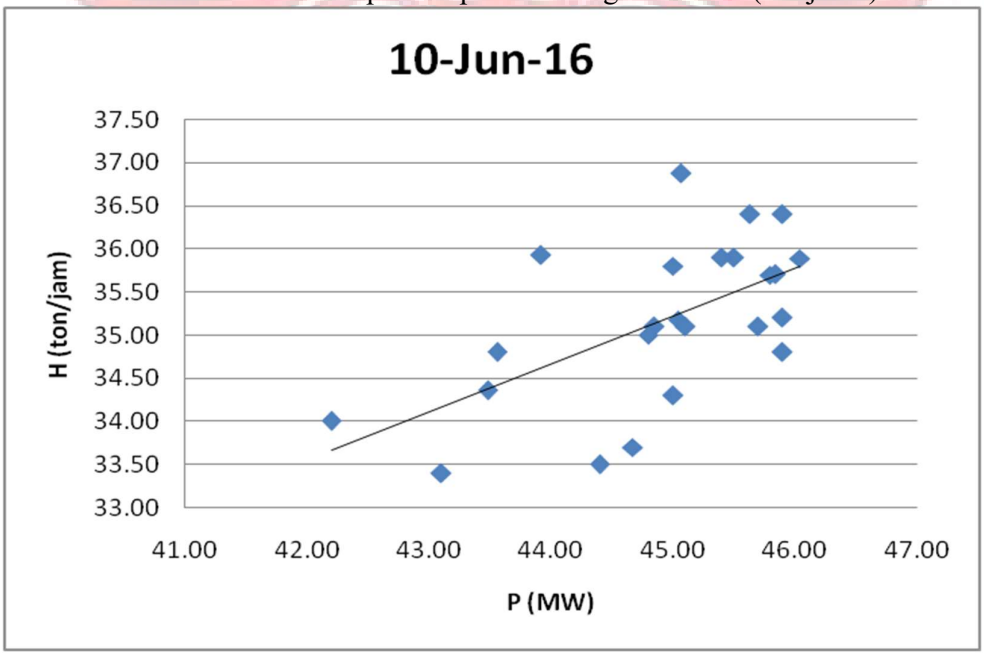
Lampiran 2a. Grafik Persamaan Input-Output PLTU Barru Unit 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



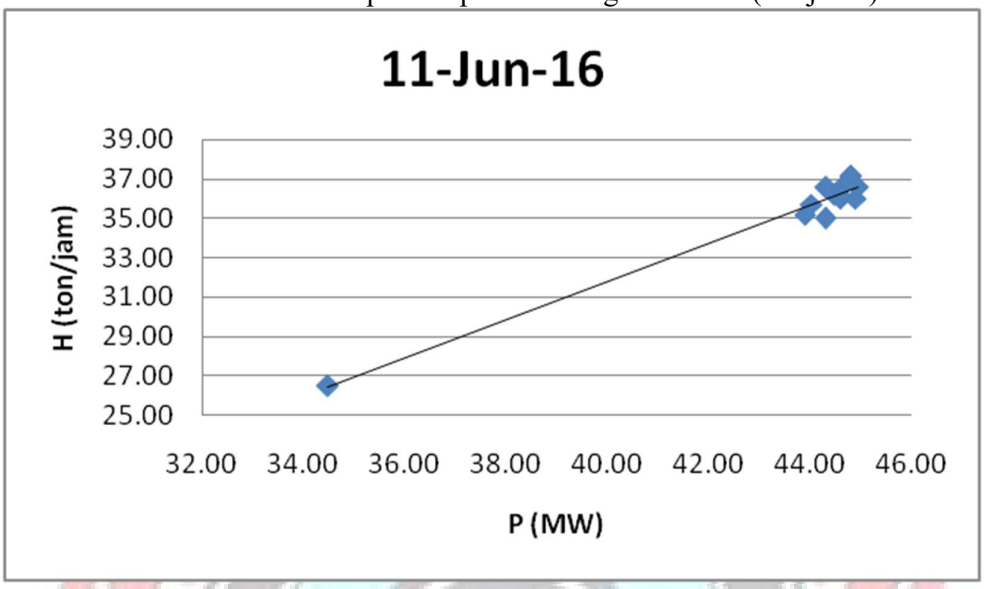
Lampiran 2a. Grafik Persamaan Input-Output PLTU Barru Unit 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



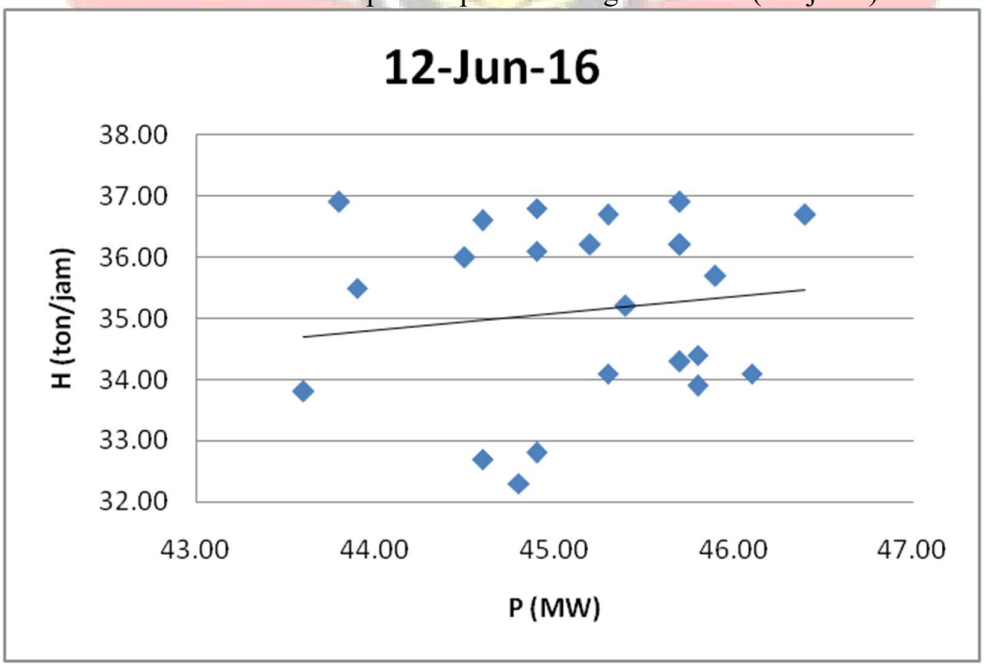
Lampiran 2a. Grafik Persamaan Input-Output PLTU Barru Unit 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



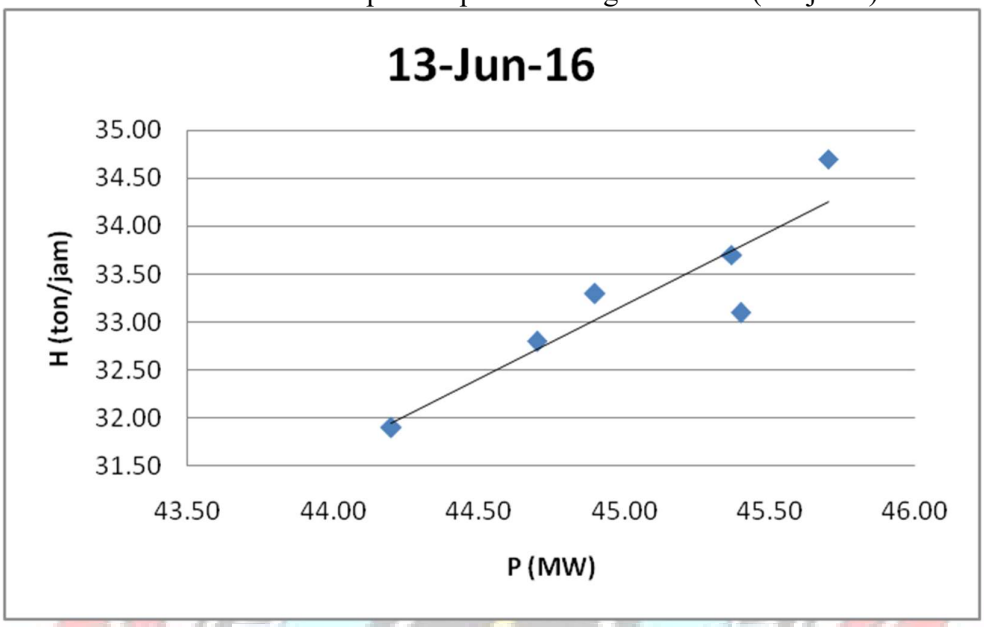
Lampiran 2a. Grafik Persamaan Input-Output PLTU Barru Unit 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



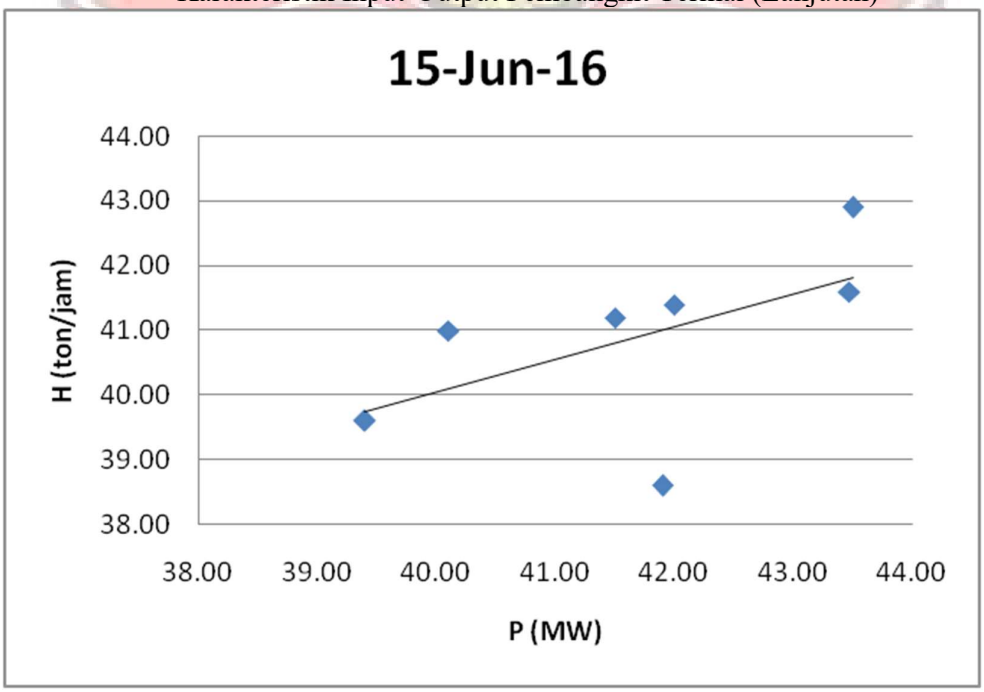
Lampiran 2a. Grafik Persamaan Input-Output PLTU Barru Unit 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



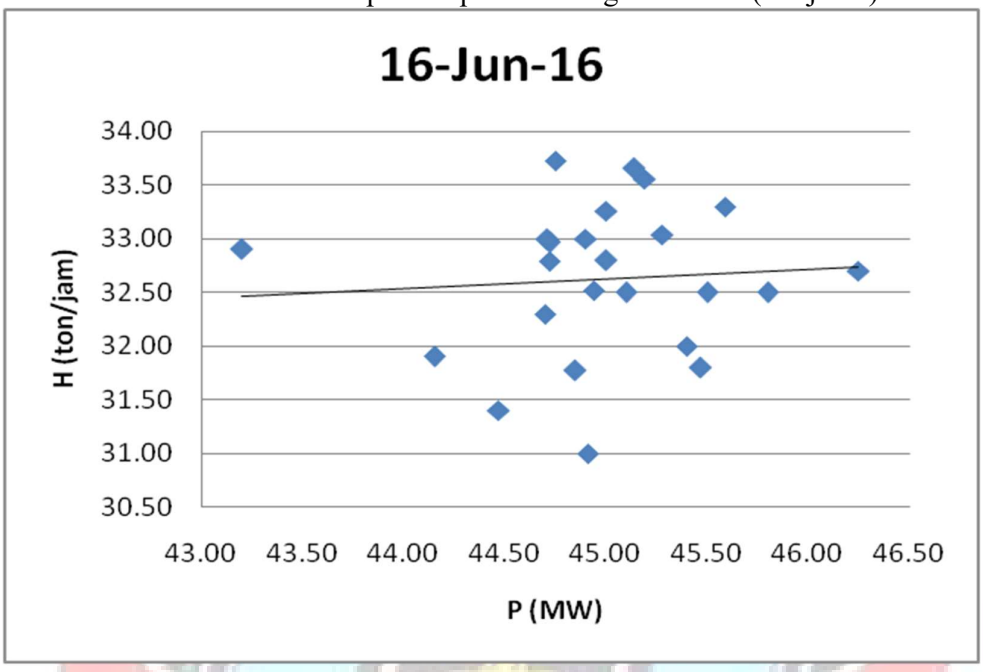
Lampiran 2a. Grafik Persamaan Input-Output PLTU Barru Unit 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



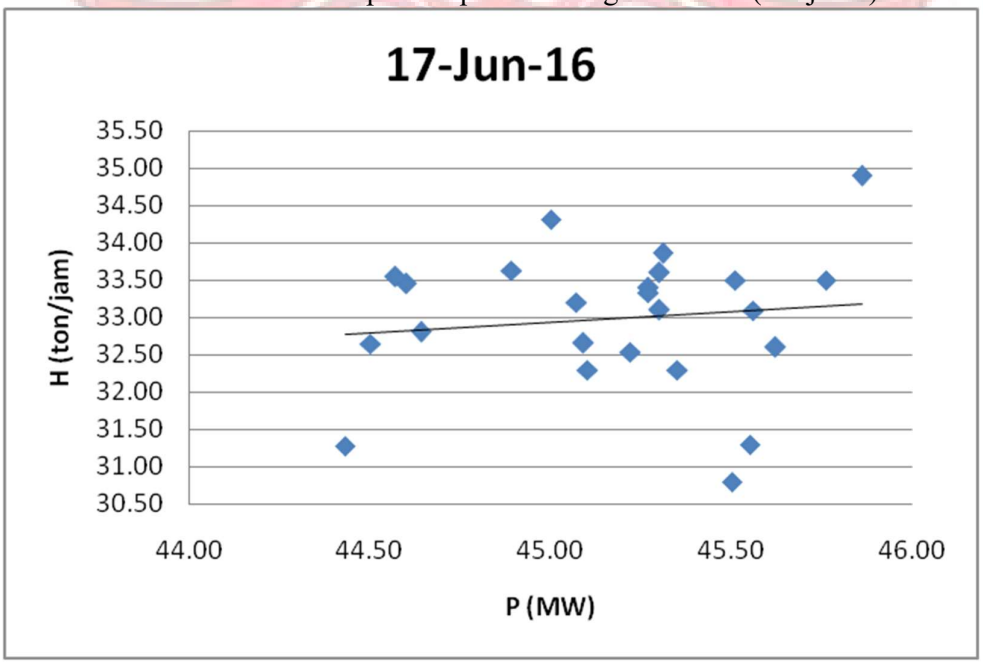
Lampiran 2a. Grafik Persamaan Input-Output PLTU Barru Unit 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



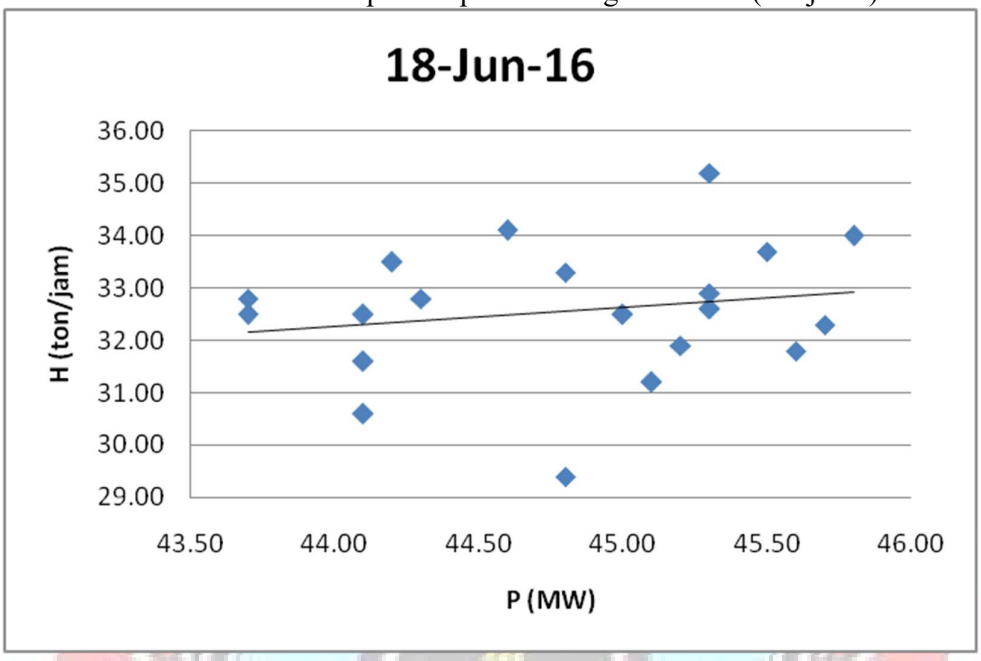
Lampiran 2a. Grafik Persamaan Input-Output PLTU Barru Unit 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



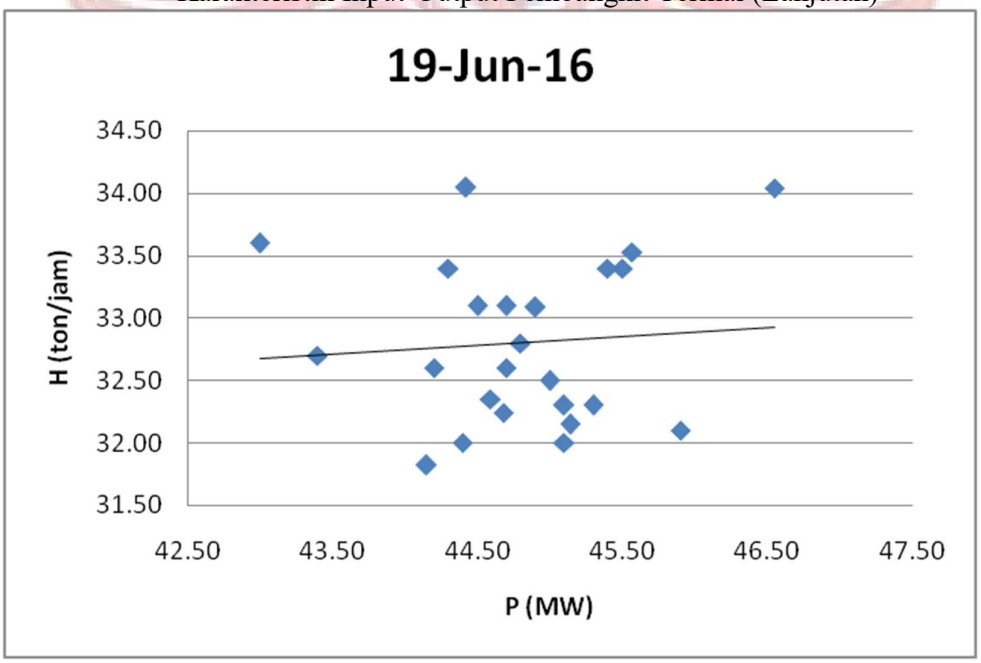
Lampiran 2a. Grafik Persamaan Input-Output PLTU Barru Unit 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



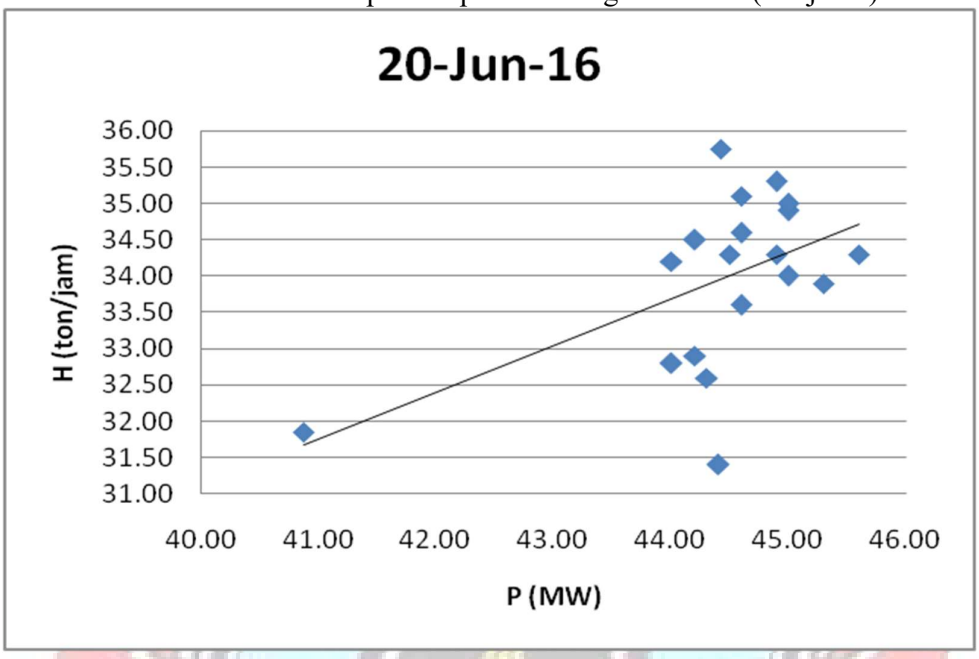
Lampiran 2a. Grafik Persamaan Input-Output PLTU Barru Unit 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



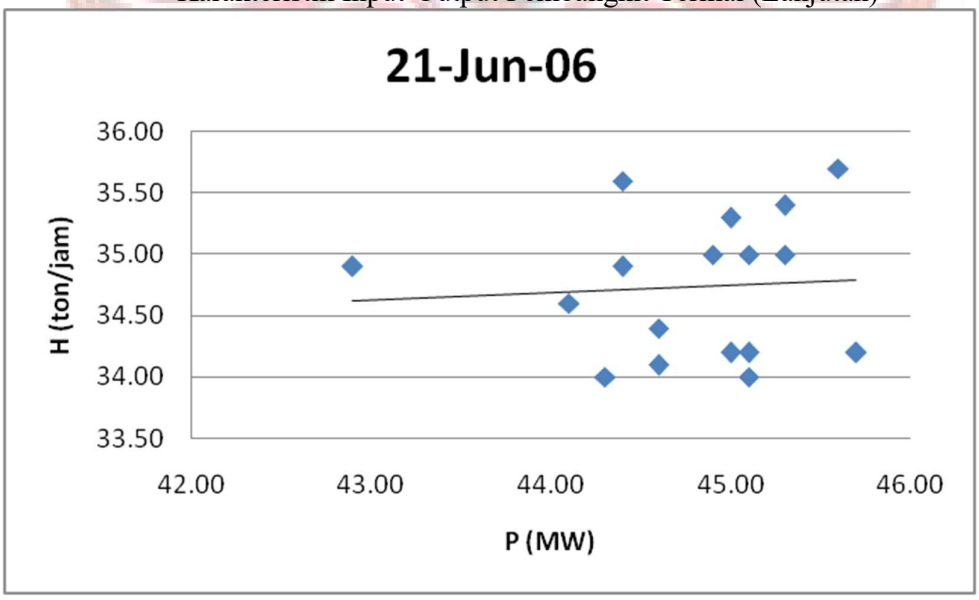
Lampiran 2a. Grafik Persamaan Input-Output PLTU Barru Unit 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



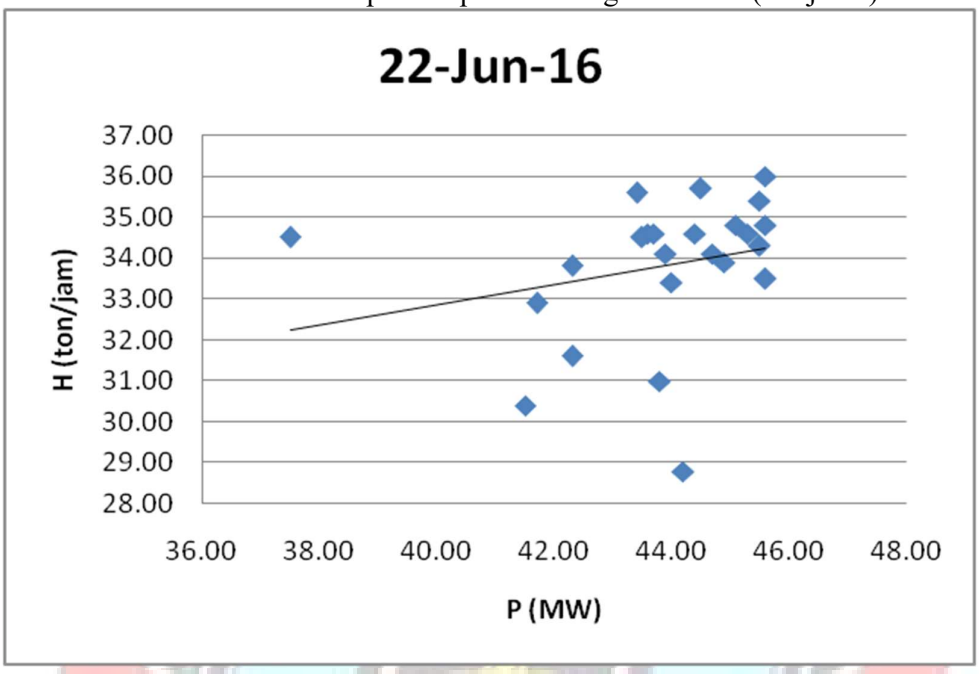
Lampiran 2a. Grafik Persamaan Input-Output PLTU Barru Unit 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



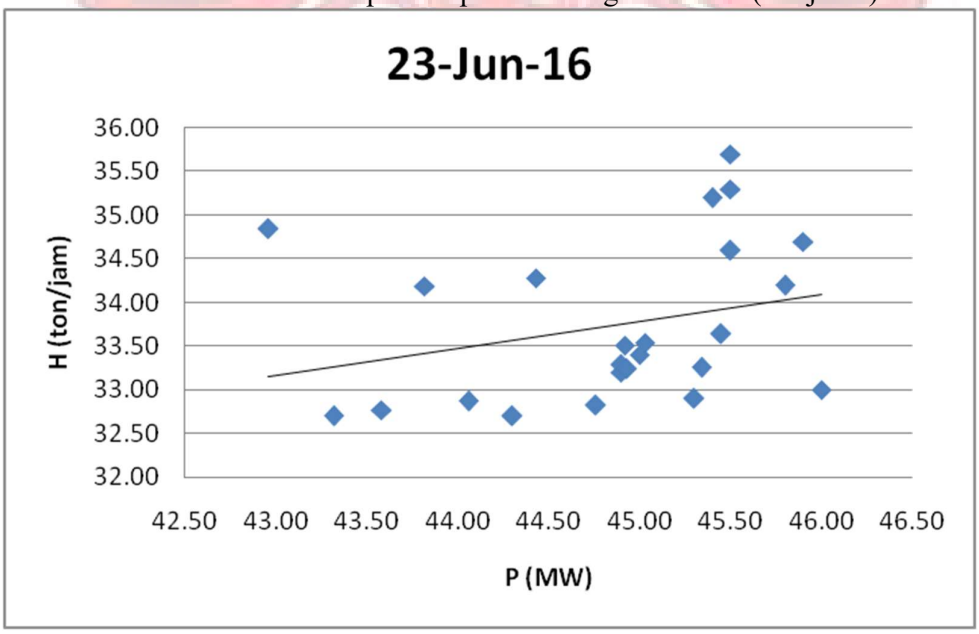
Lampiran 2a. Grafik Persamaan Input-Output PLTU Barru Unit 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



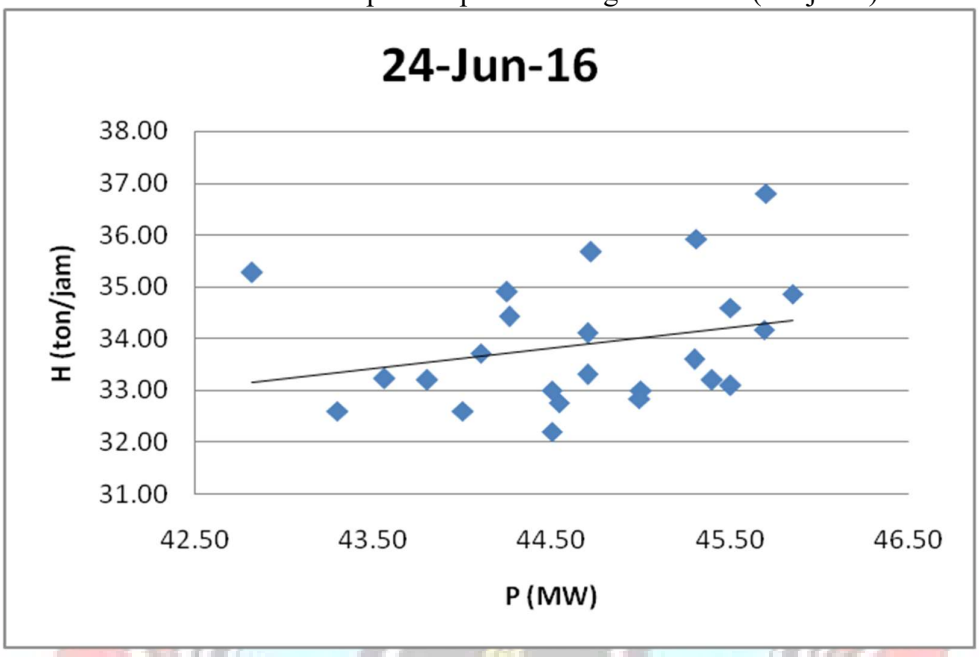
Lampiran 2a. Grafik Persamaan Input-Output PLTU Barru Unit 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



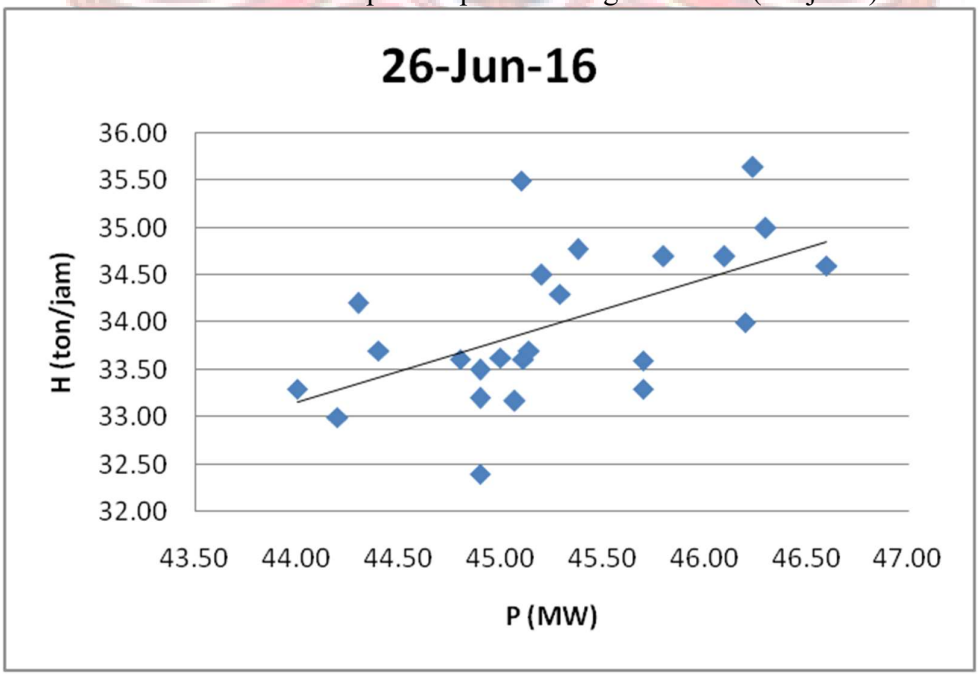
Lampiran 2a. Grafik Persamaan Input-Output PLTU Barru Unit 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



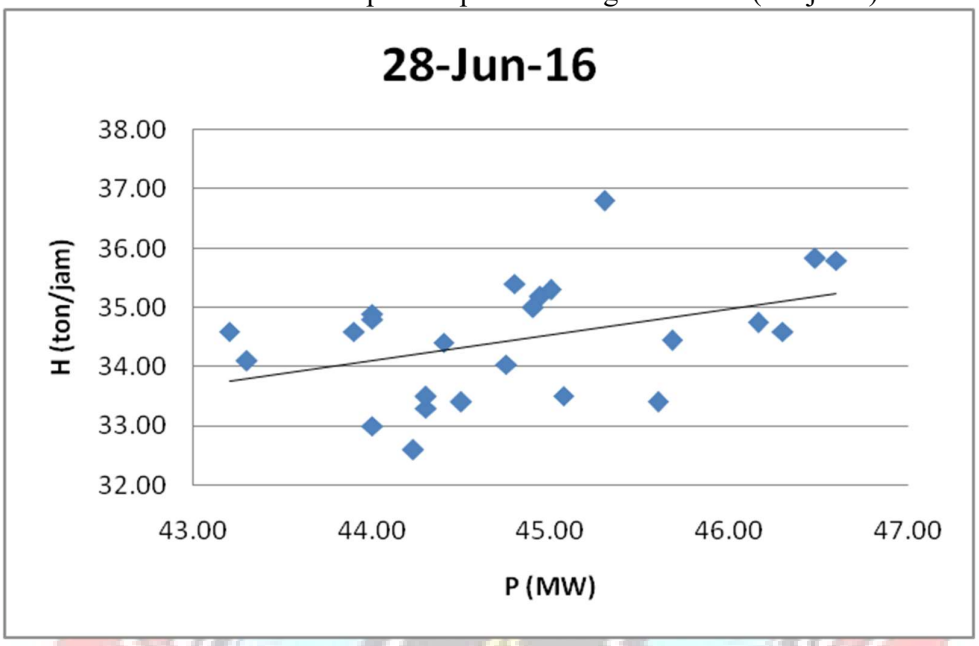
Lampiran 2a. Grafik Persamaan Input-Output PLTU Barru Unit 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



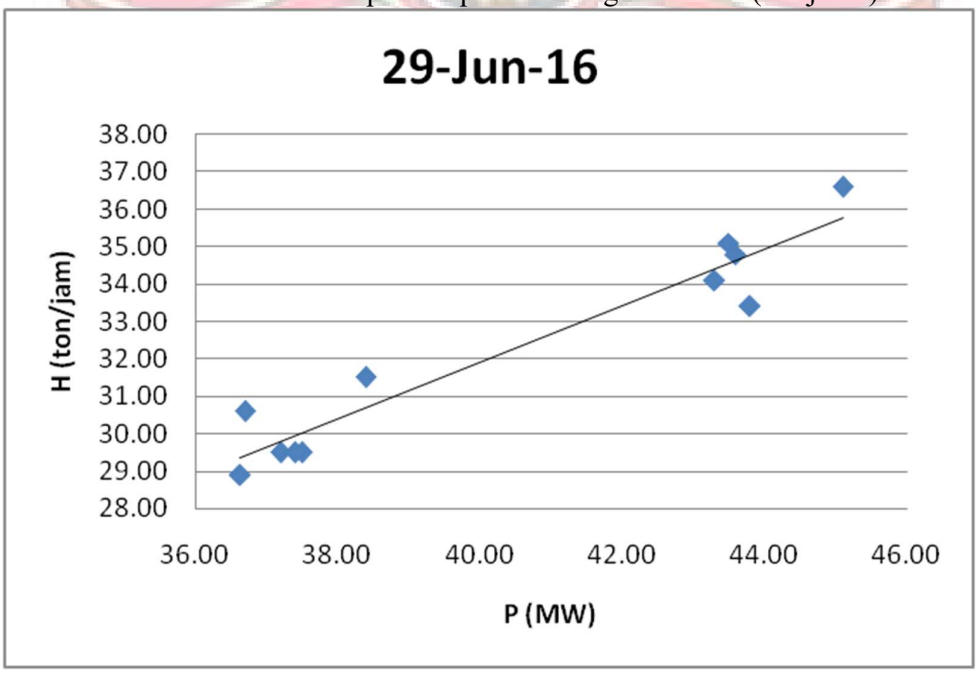
Lampiran 2a. Grafik Persamaan Input-Output PLTU Barru Unit 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



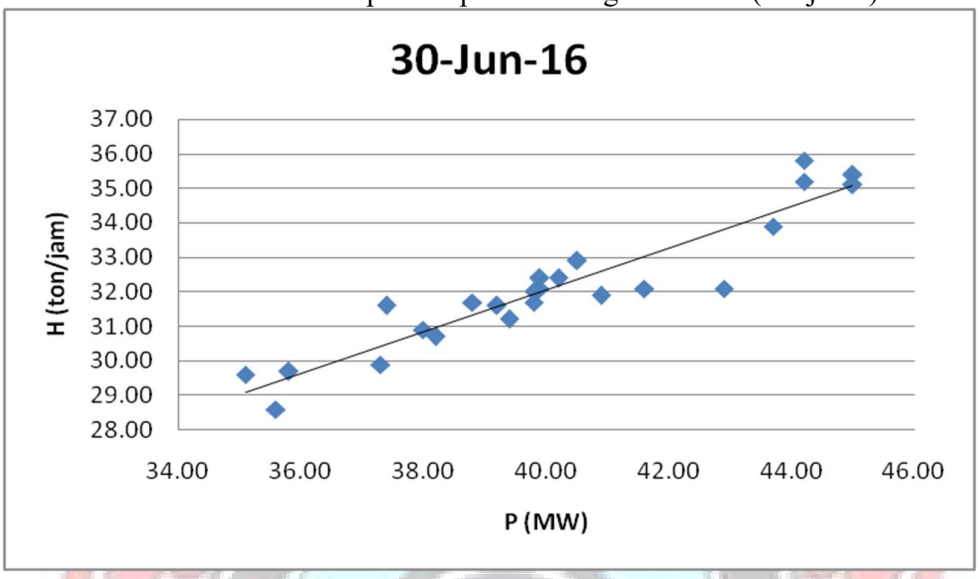
Lampiran 2a. Grafik Persamaan Input-Output PLTU Barru Unit 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



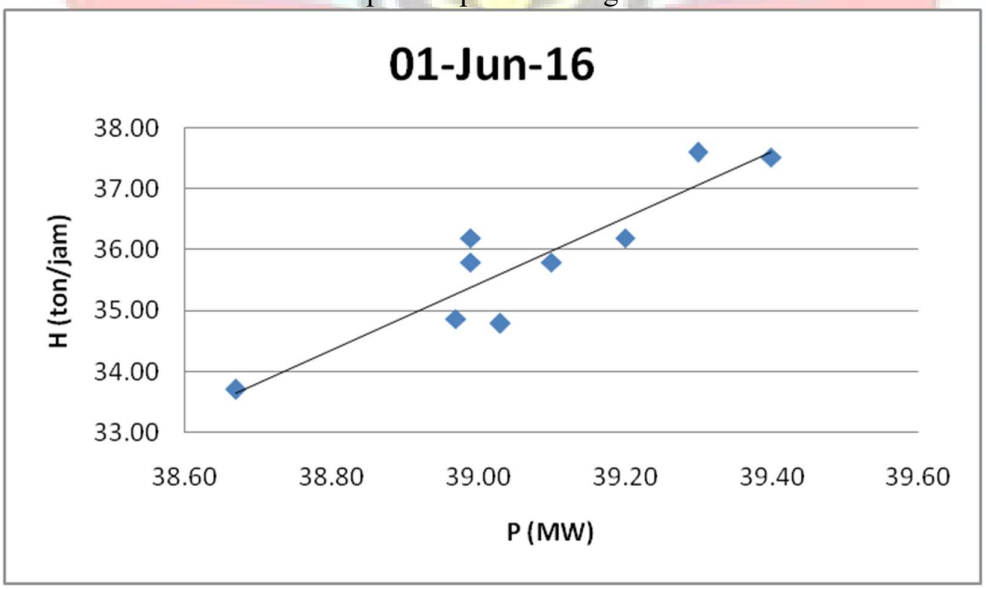
Lampiran 2a. Grafik Persamaan Input-Output PLTU Barru Unit 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



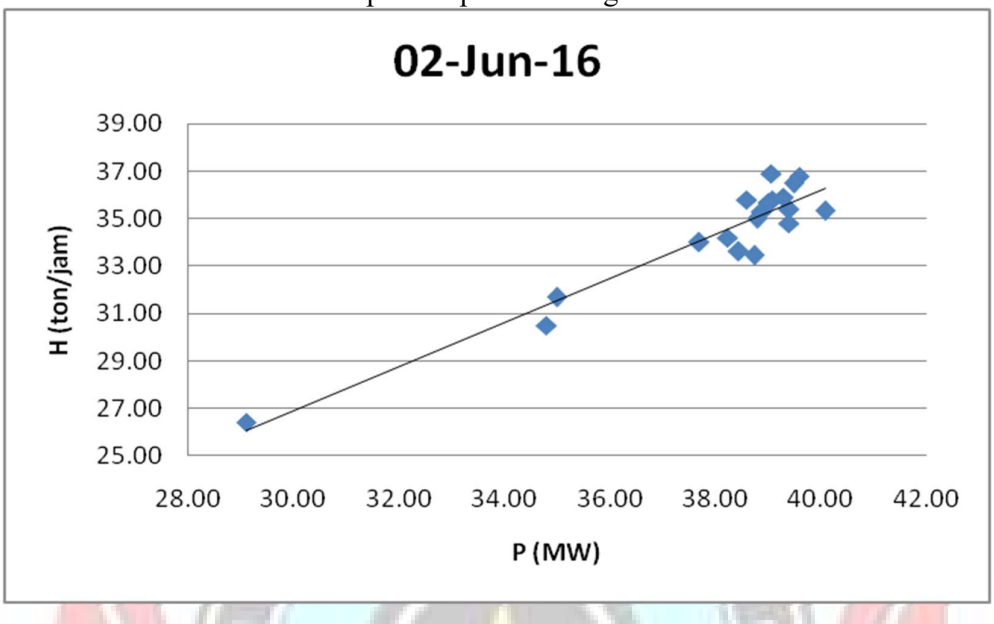
Lampiran 2a. Grafik Persamaan Input-Output PLTU Barru Unit 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



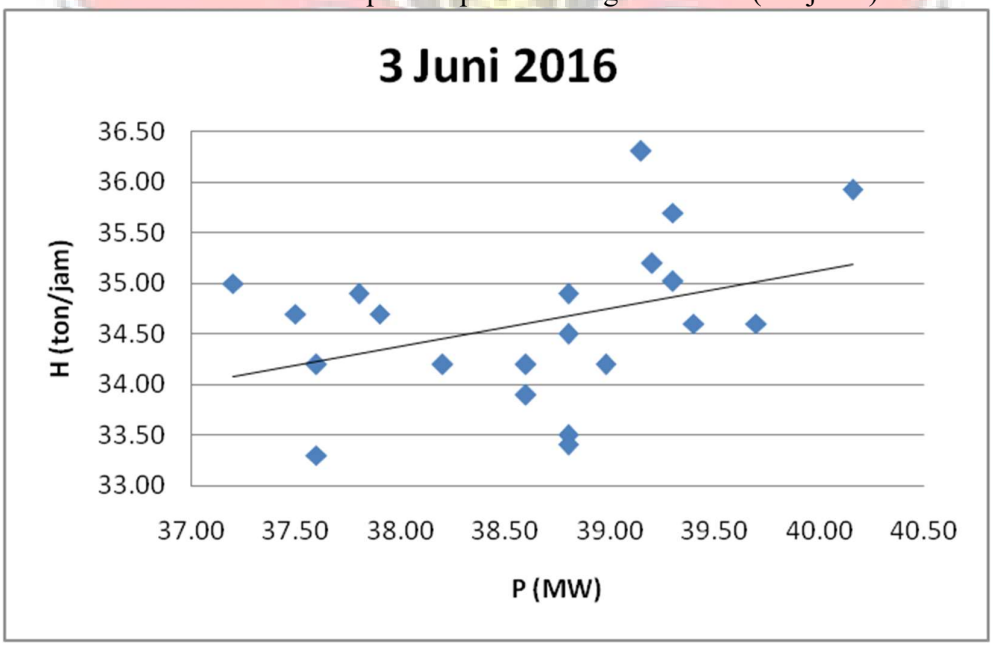
Lampiran 2b. Grafik Persamaan Input-Output PLTU Barru Unit 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal



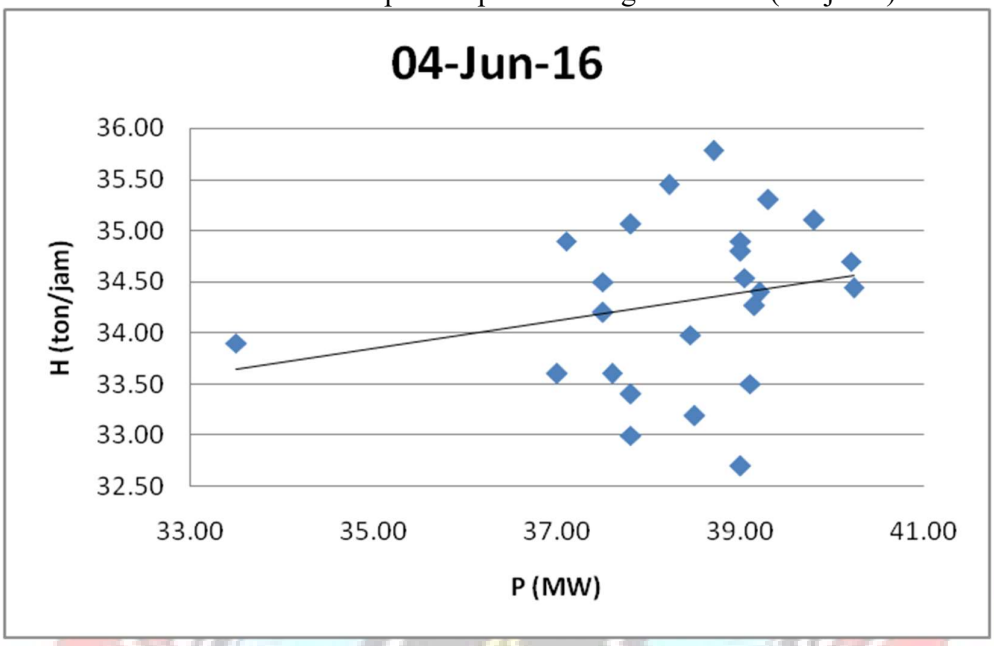
Lampiran 2b. Grafik Persamaan Input-Output PLTU Barru Unit 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal



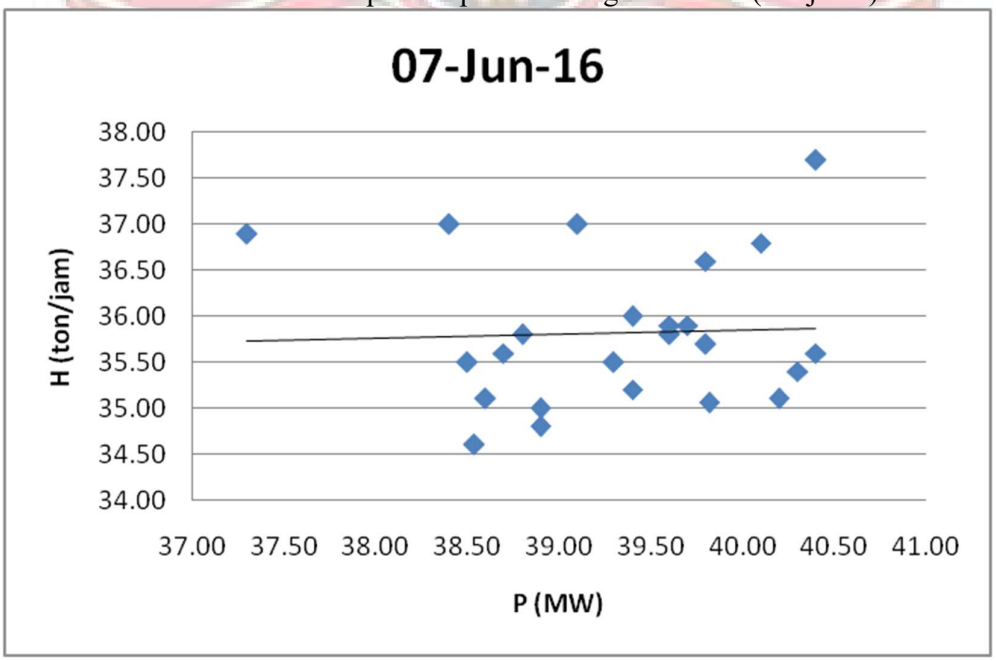
Lampiran 2b. Grafik Persamaan Input-Output PLTU Barru Unit 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



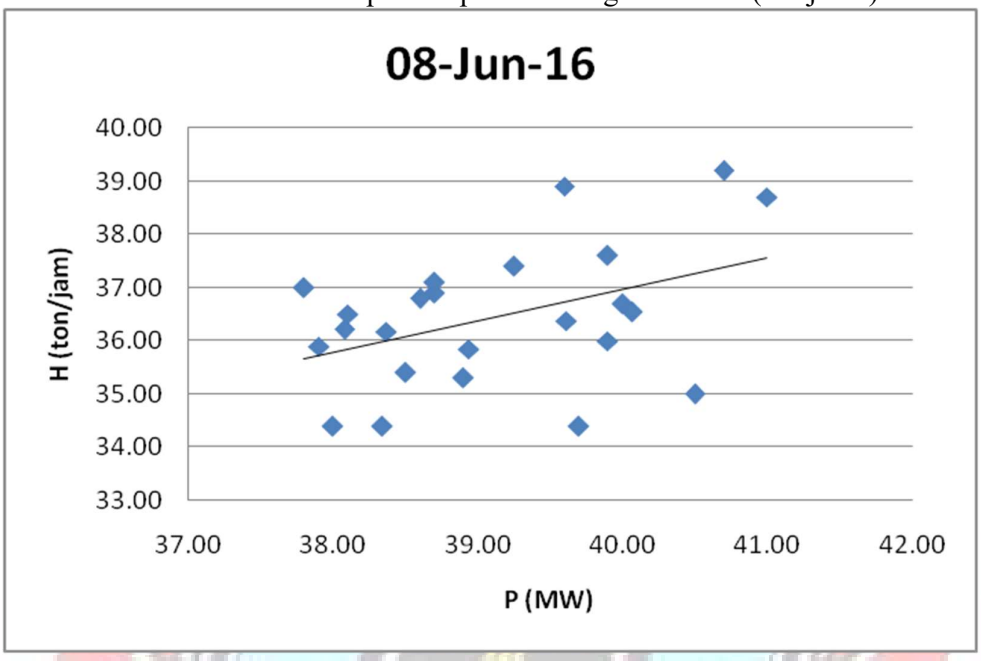
Lampiran 2b. Grafik Persamaan Input-Output PLTU Barru Unit 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



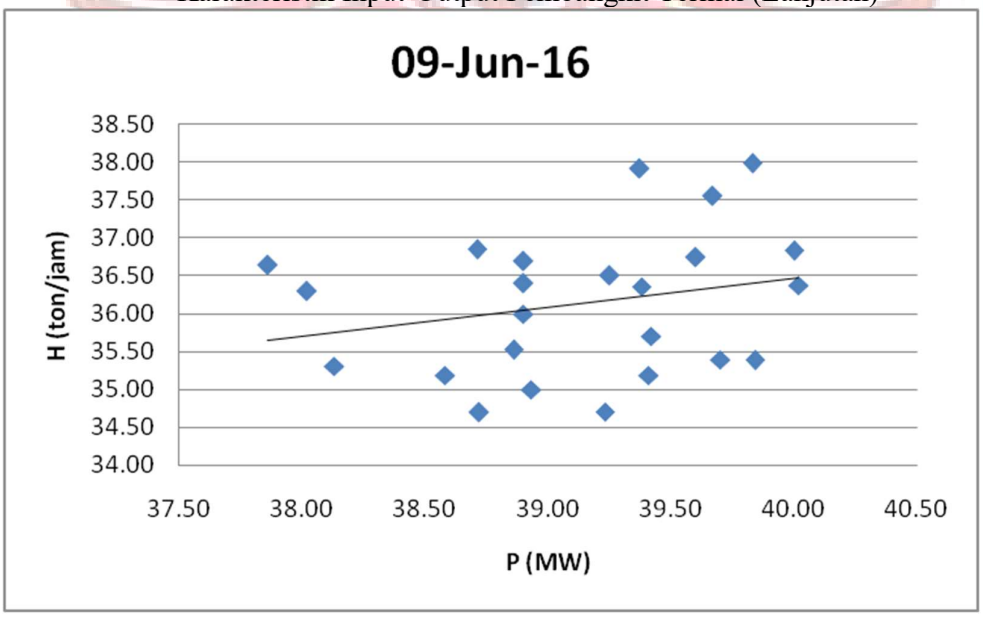
Lampiran 2b. Grafik Persamaan Input-Output PLTU Barru Unit 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



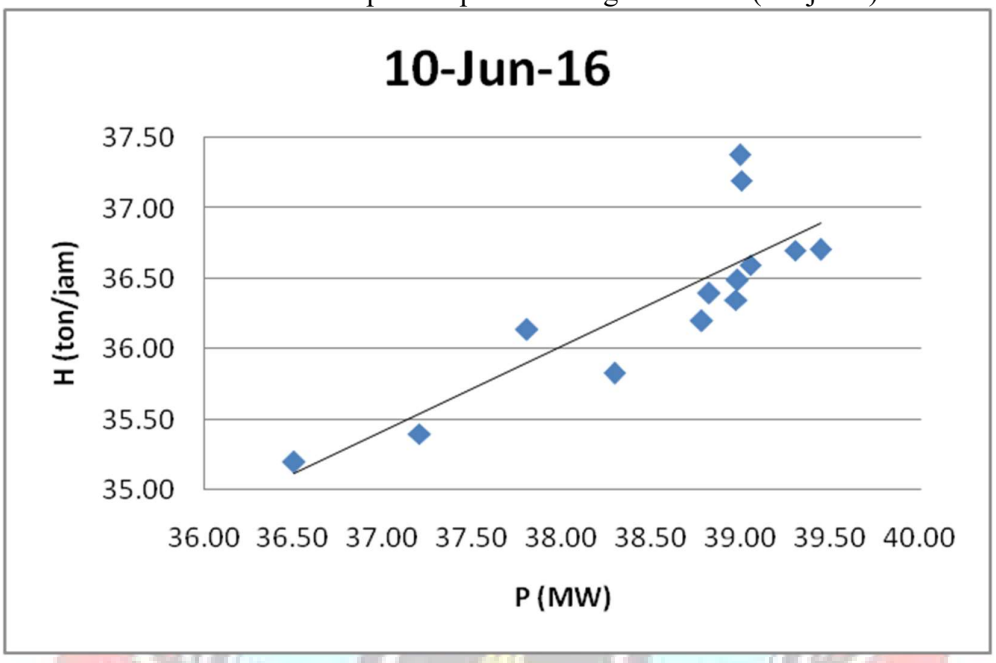
Lampiran 2b. Grafik Persamaan Input-Output PLTU Barru Unit 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



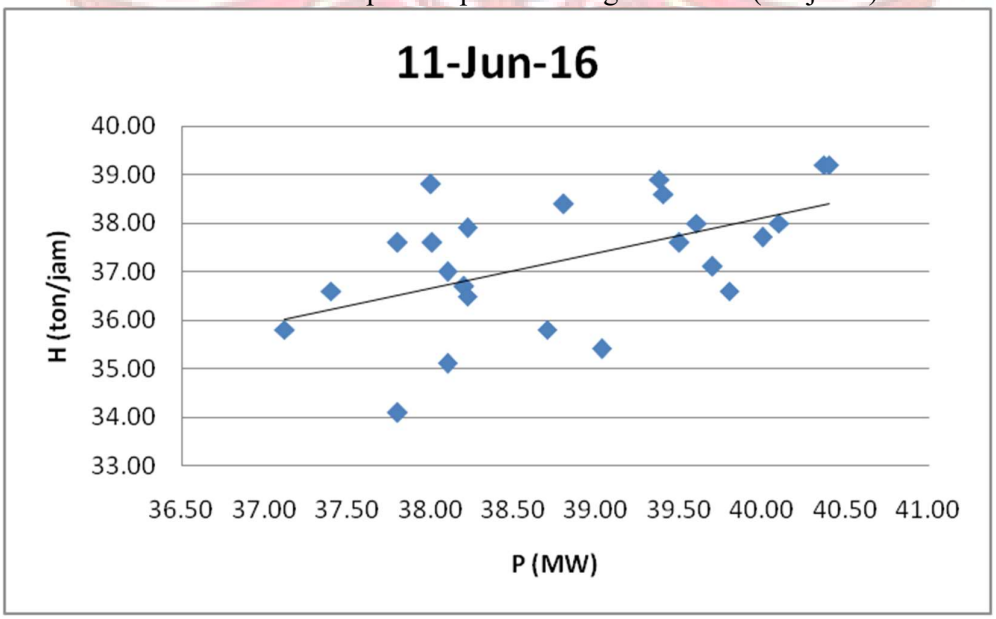
Lampiran 2b. Grafik Persamaan Input-Output PLTU Barru Unit 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



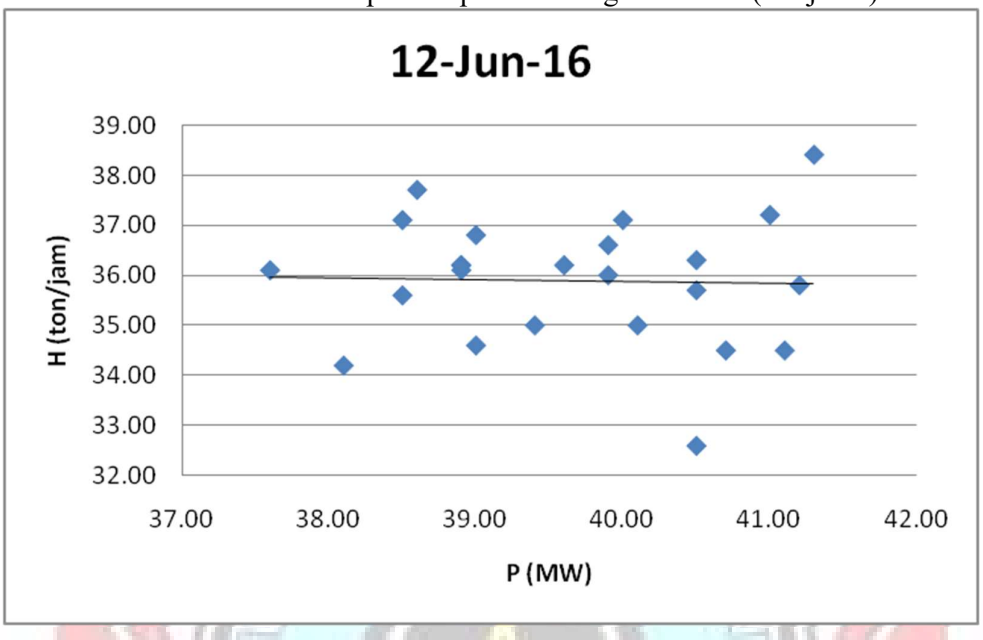
Lampiran 2b. Grafik Persamaan Input-Output PLTU Barru Unit 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



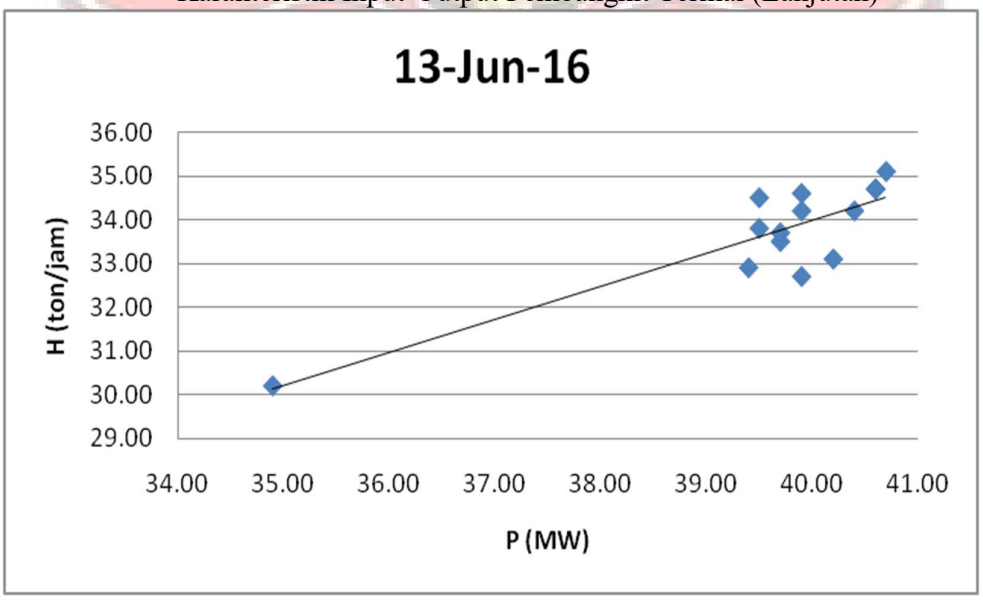
Lampiran 2b. Grafik Persamaan Input-Output PLTU Barru Unit 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



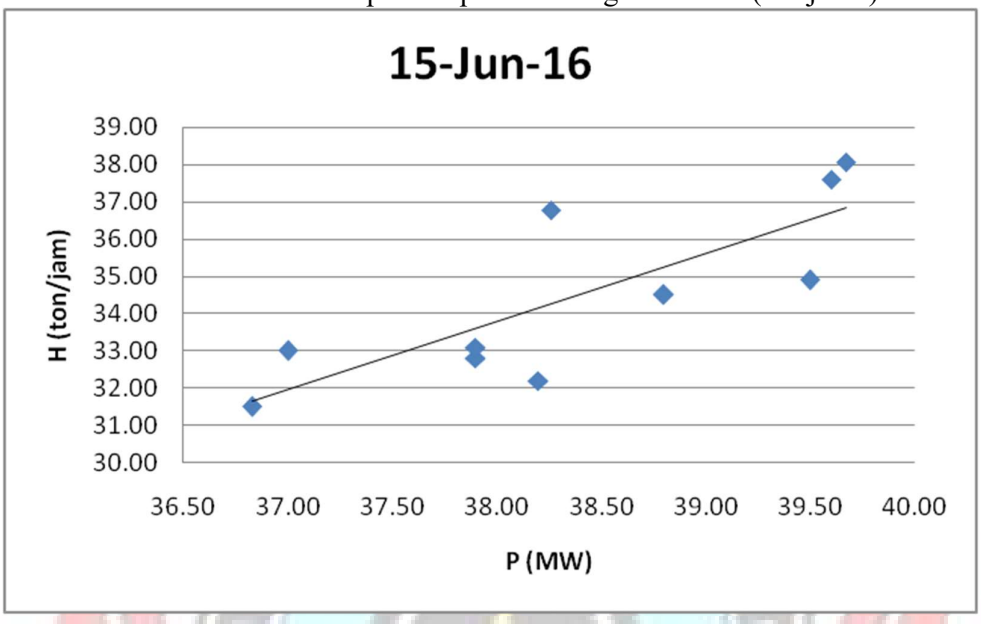
Lampiran 2b. Grafik Persamaan Input-Output PLTU Barru Unit 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



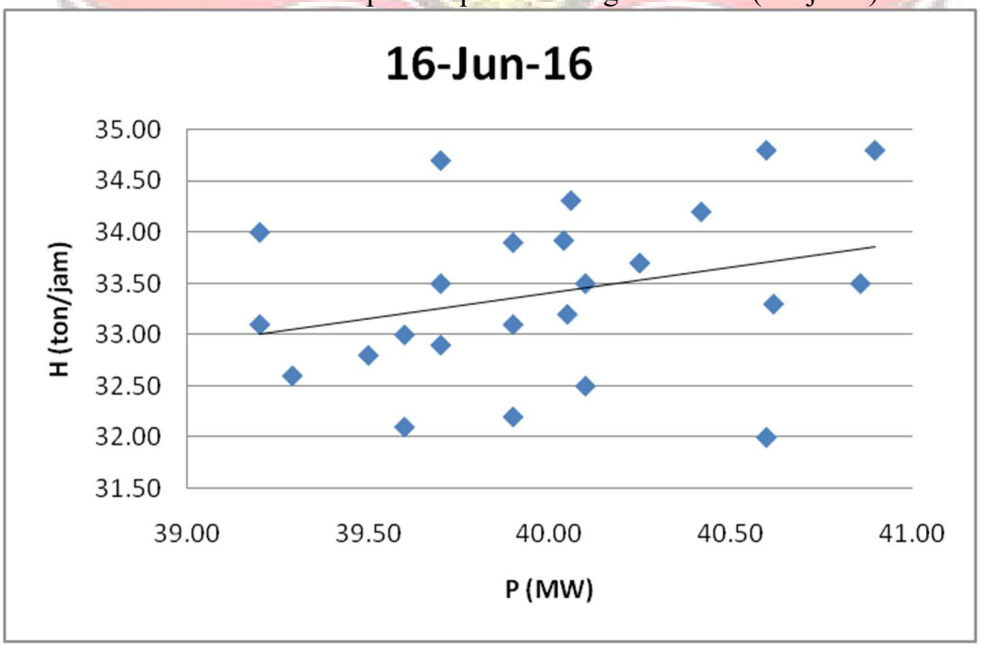
Lampiran 2b. Grafik Persamaan Input-Output PLTU Barru Unit 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



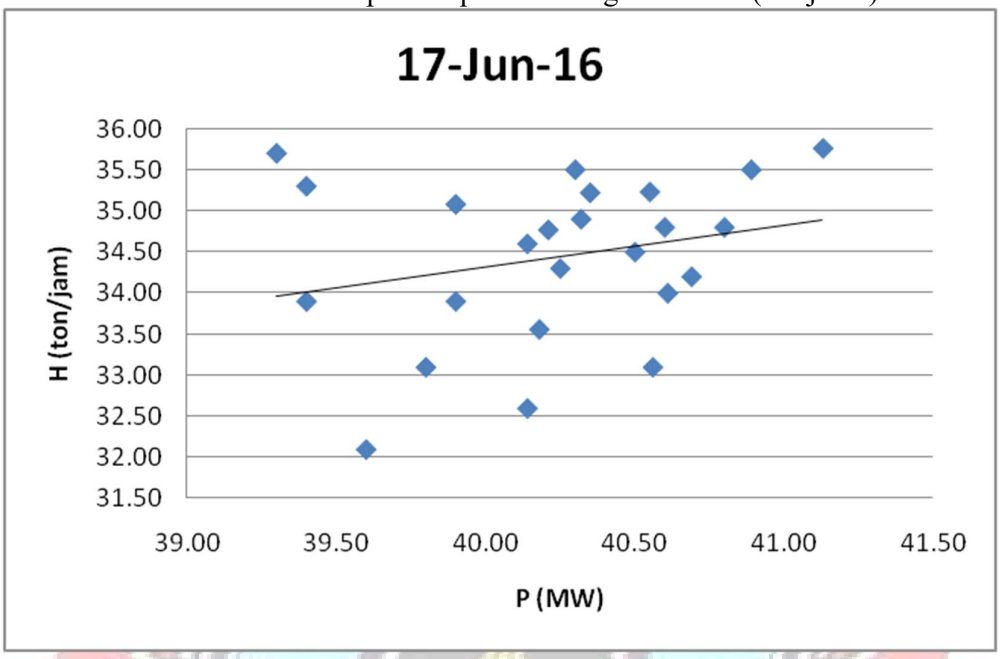
Lampiran 2b. Grafik Persamaan Input-Output PLTU Barru Unit 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



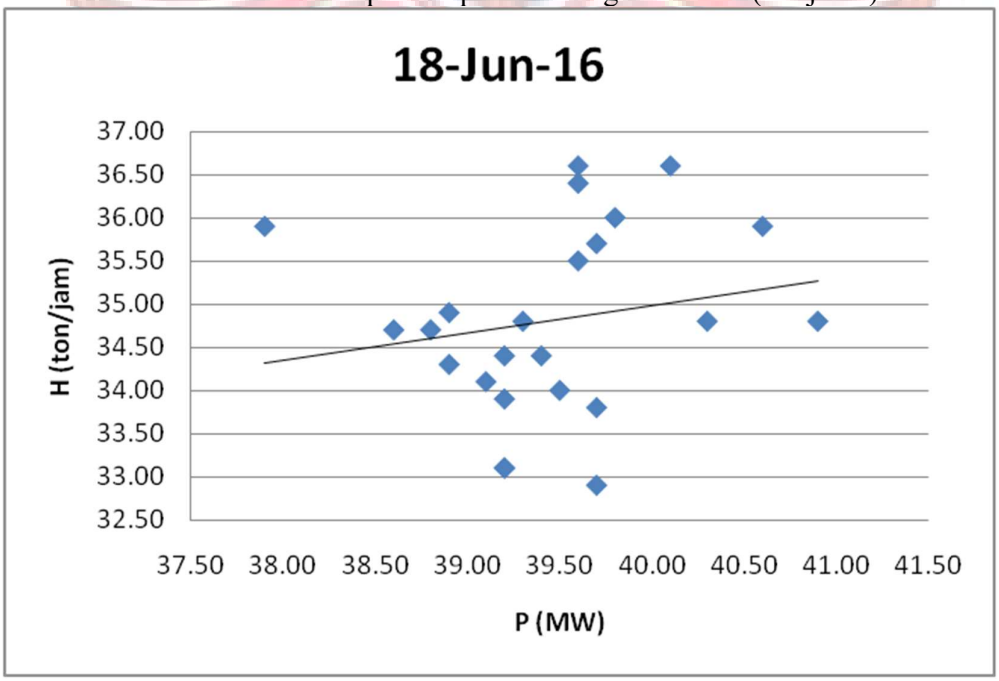
Lampiran 2b. Grafik Persamaan Input-Output PLTU Barru Unit 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



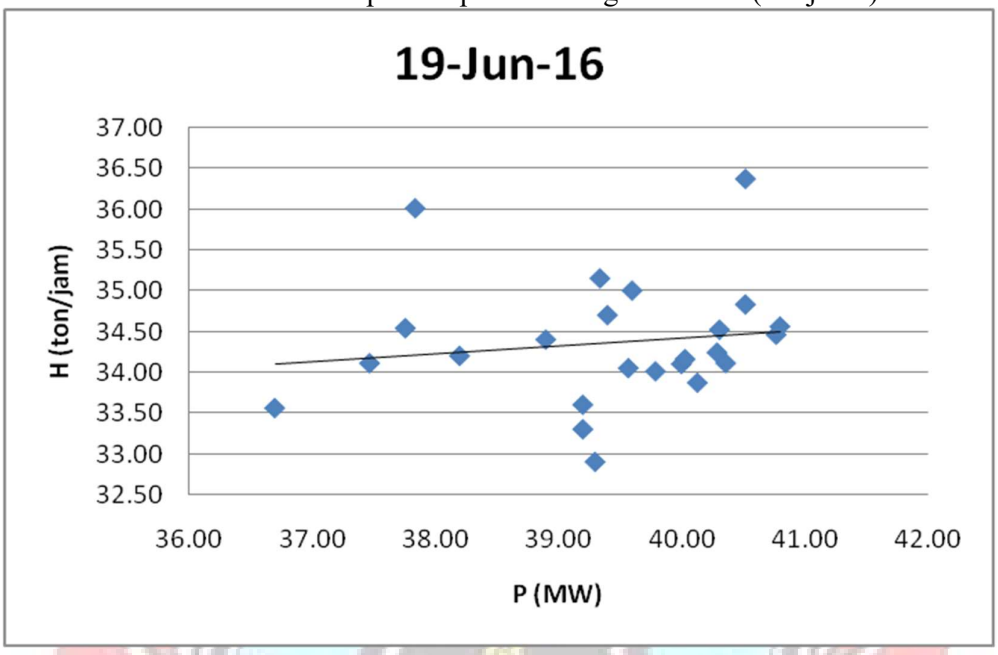
Lampiran 2b. Grafik Persamaan Input-Output PLTU Barru Unit 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



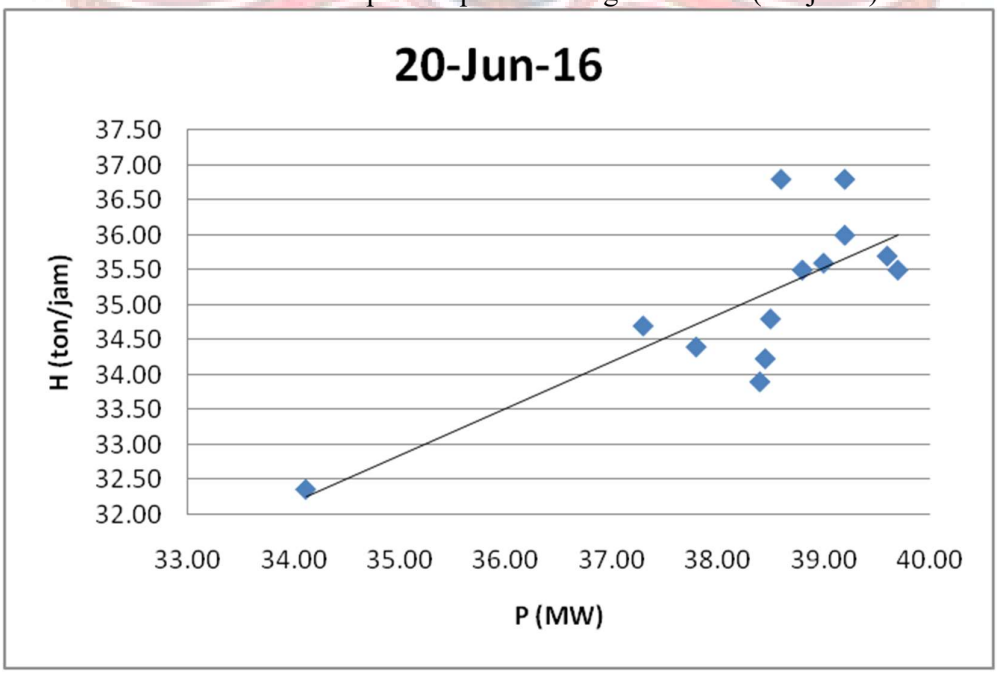
Lampiran 2b. Grafik Persamaan Input-Output PLTU Barru Unit 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



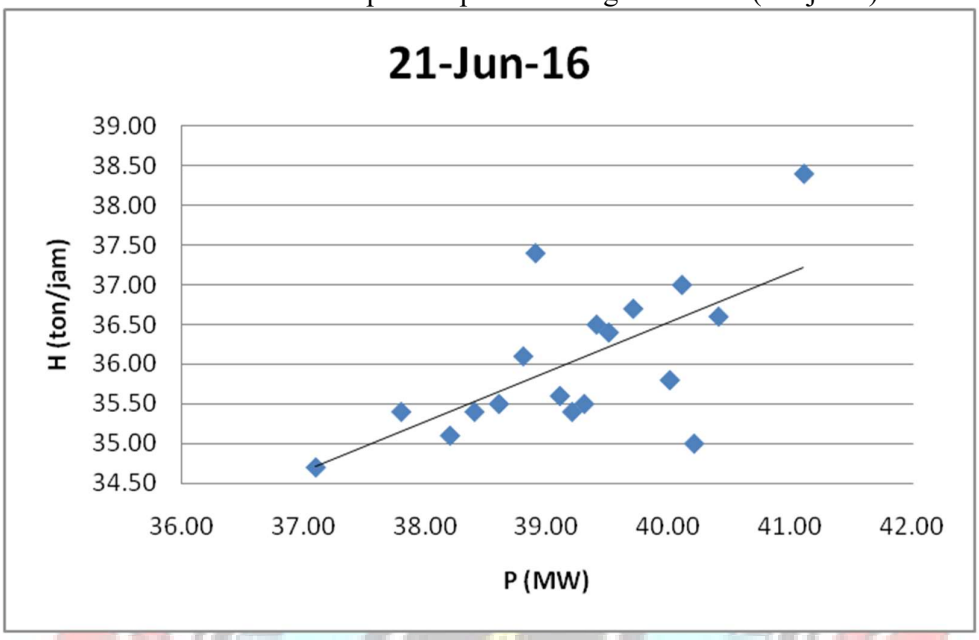
Lampiran 2b. Grafik Persamaan Input-Output PLTU Barru Unit 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



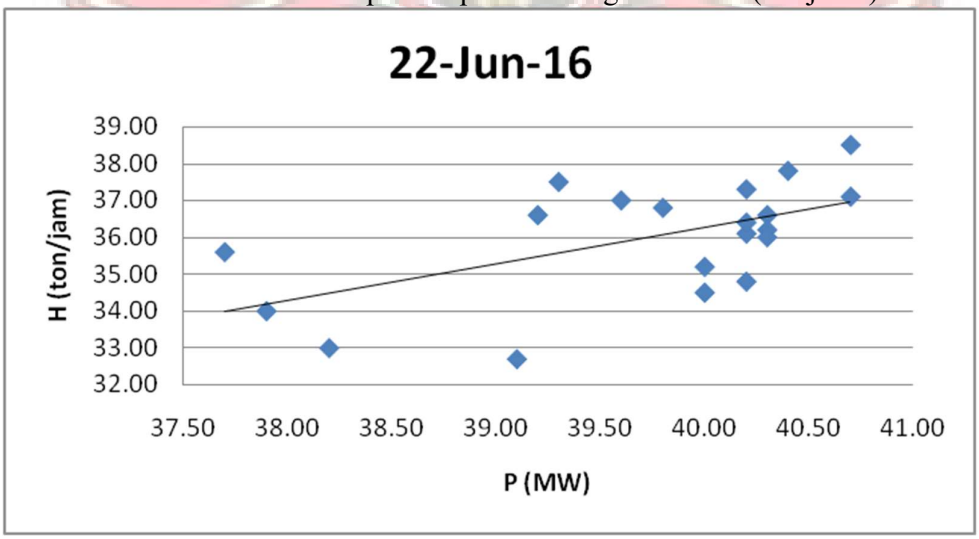
Lampiran 2b. Grafik Persamaan Input-Output PLTU Barru Unit 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



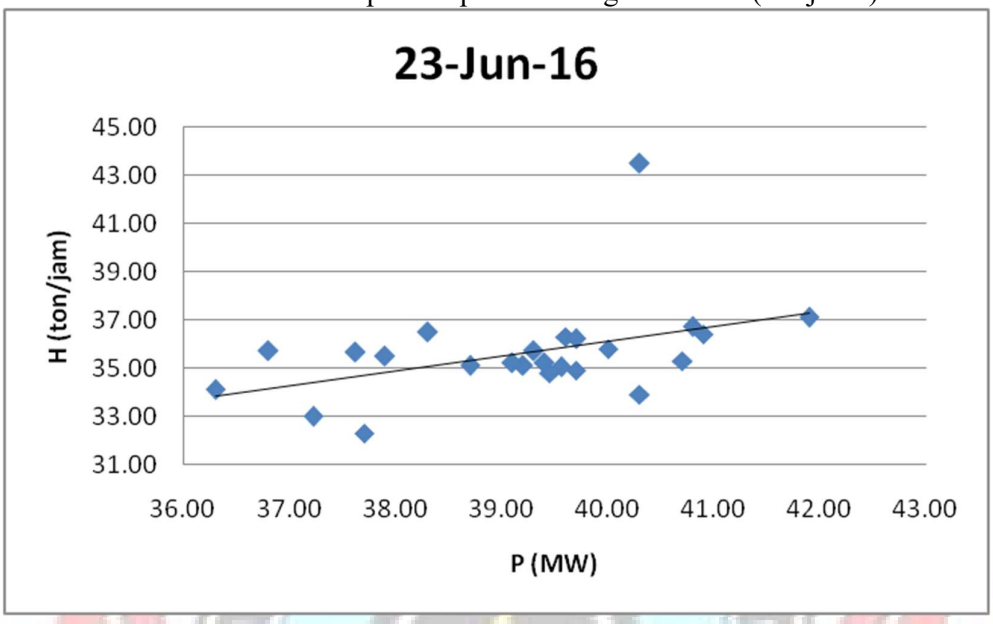
Lampiran 2b. Grafik Persamaan Input-Output PLTU Barru Unit 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



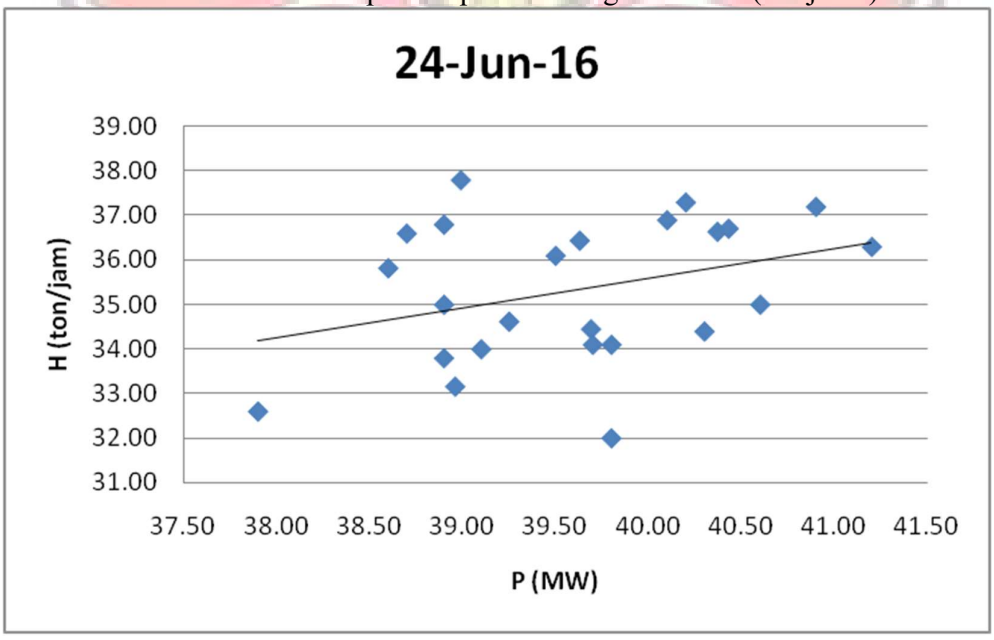
Lampiran 2b. Grafik Persamaan Input-Output PLTU Barru Unit 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



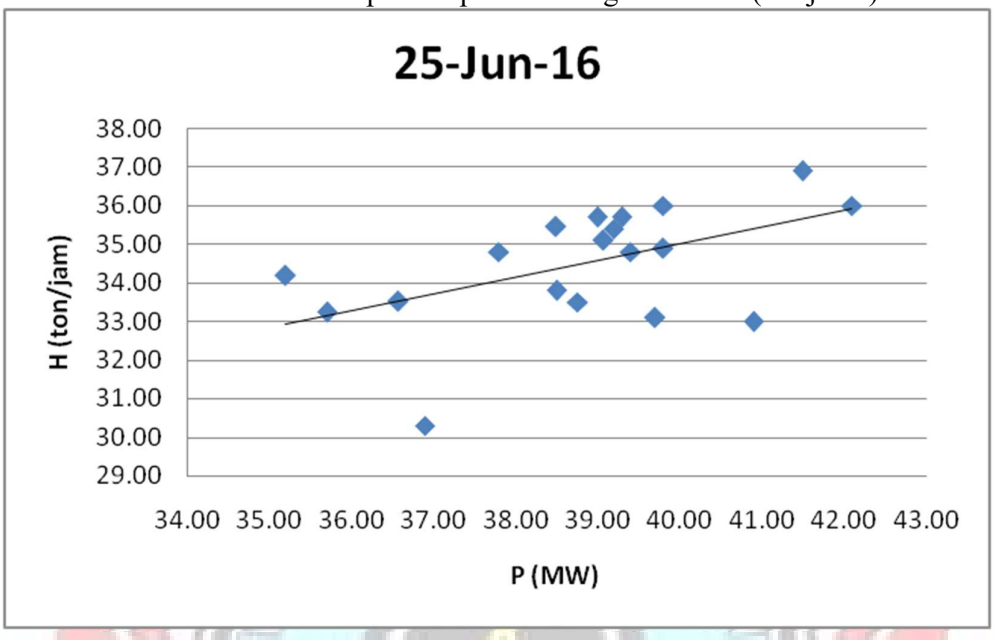
Lampiran 2b. Grafik Persamaan Input-Output PLTU Barru Unit 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



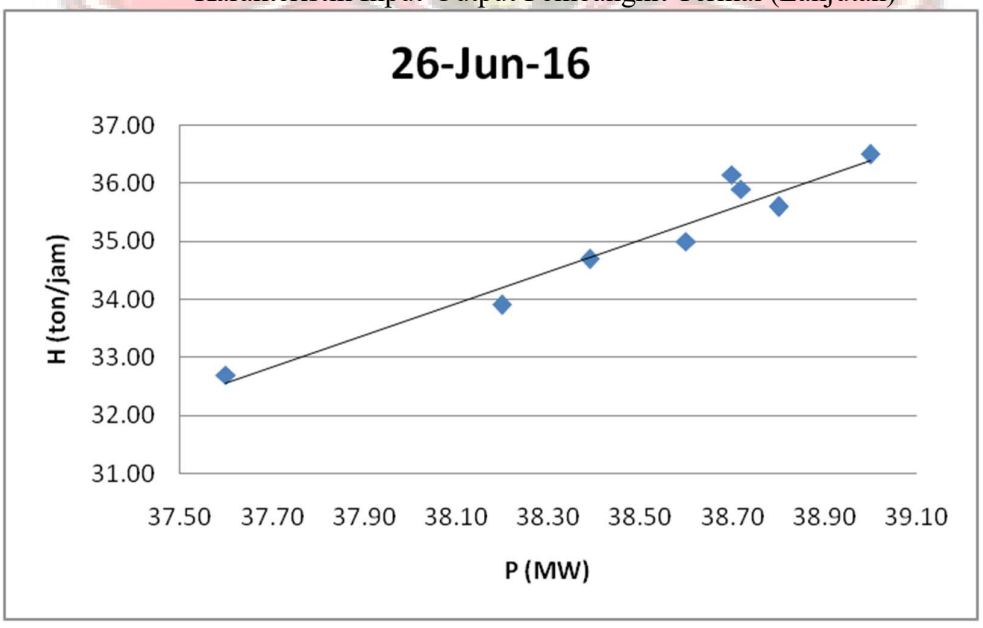
Lampiran 2b. Grafik Persamaan Input-Output PLTU Barru Unit 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



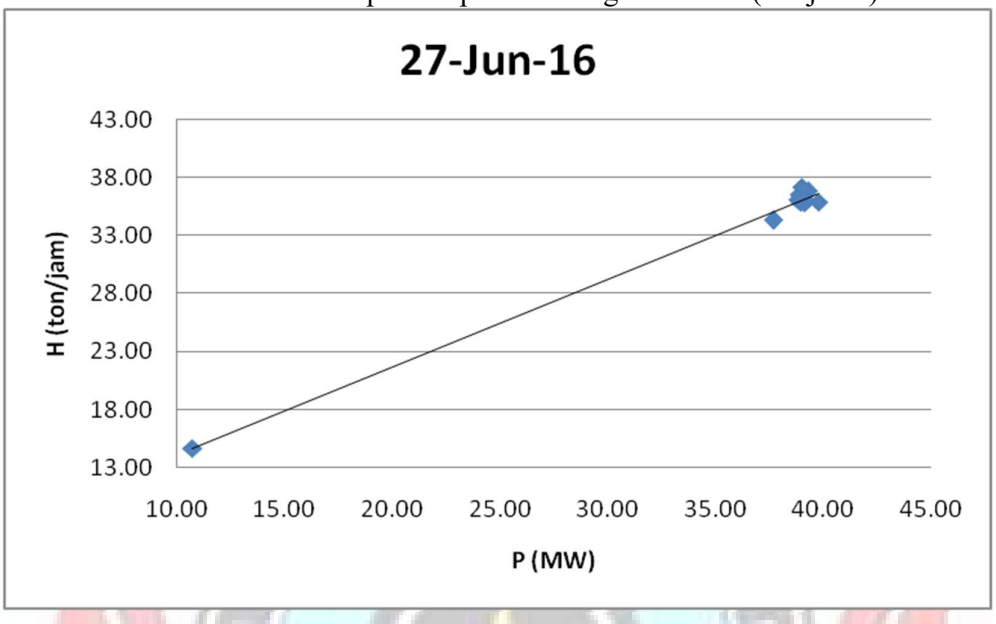
Lampiran 2b. Grafik Persamaan Input-Output PLTU Barru Unit 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



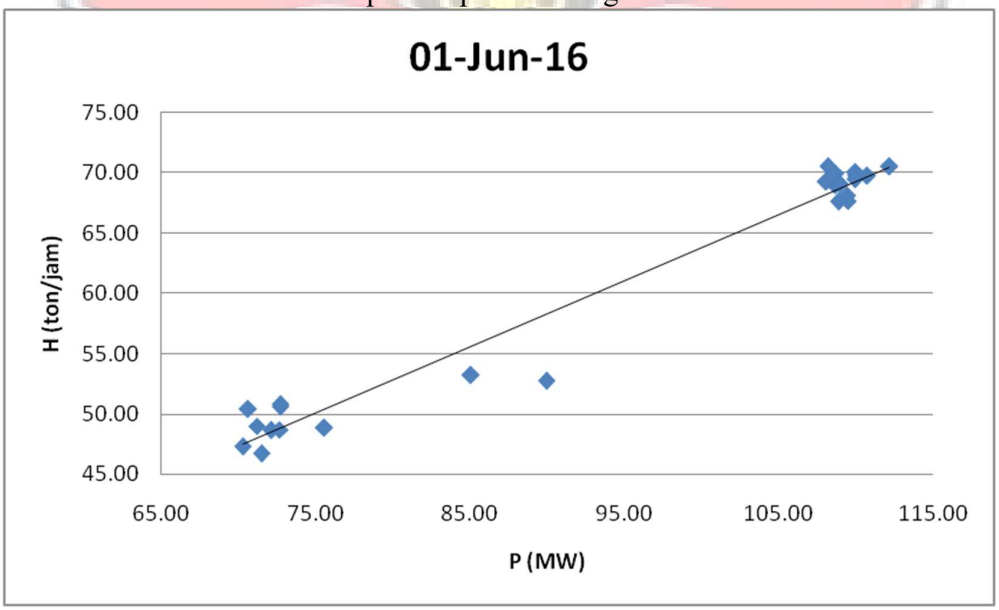
Lampiran 2b. Grafik Persamaan Input-Output PLTU Barru Unit 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



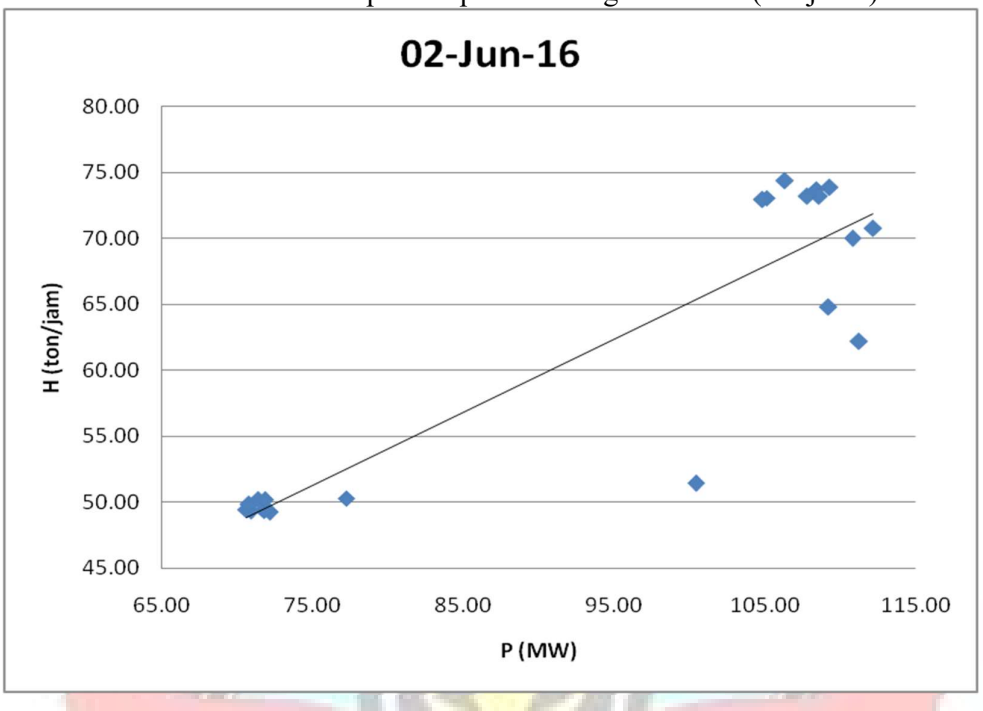
Lampiran 2b. Grafik Persamaan Input-Output PLTU Barru Unit 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



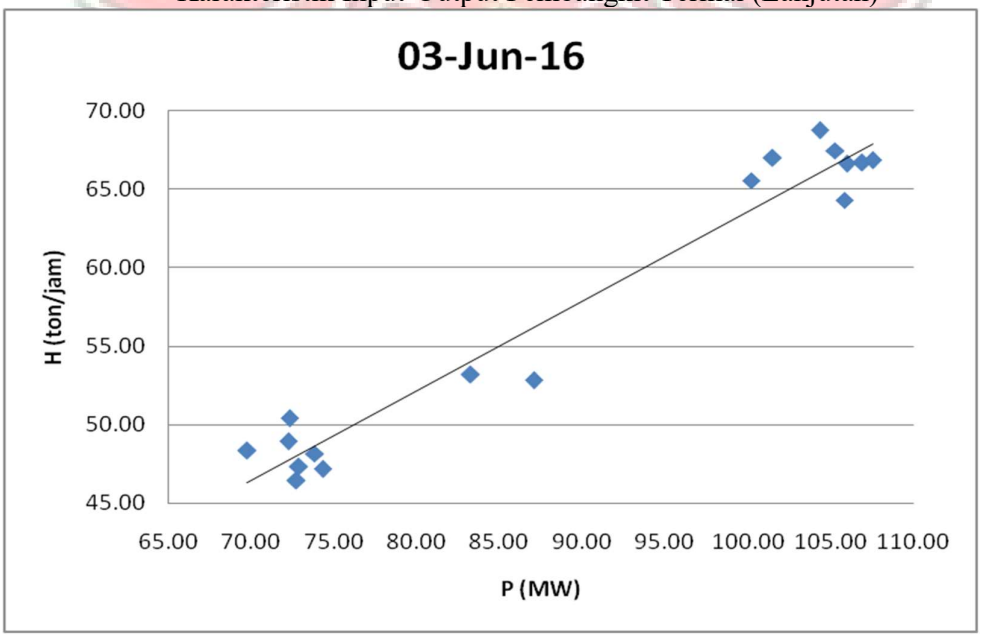
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal



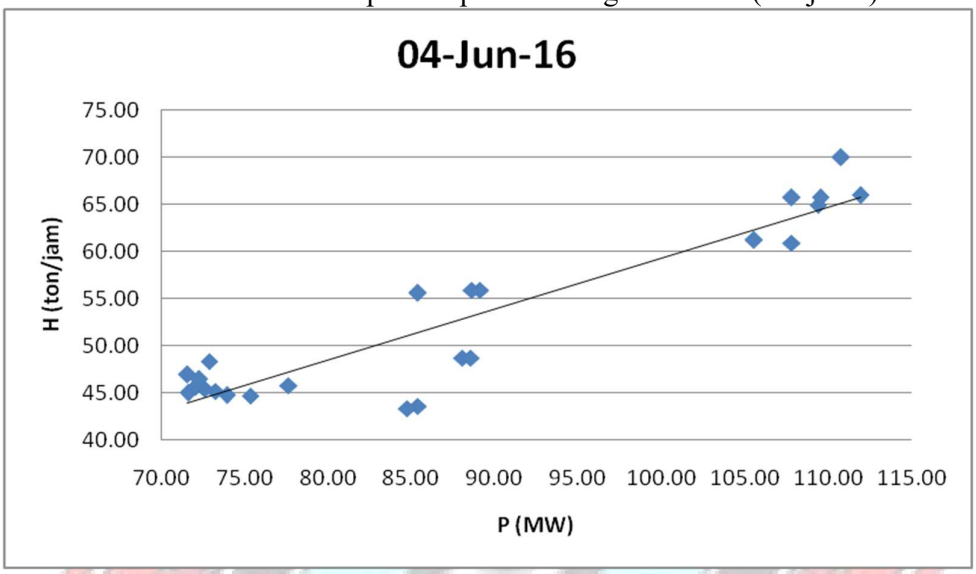
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



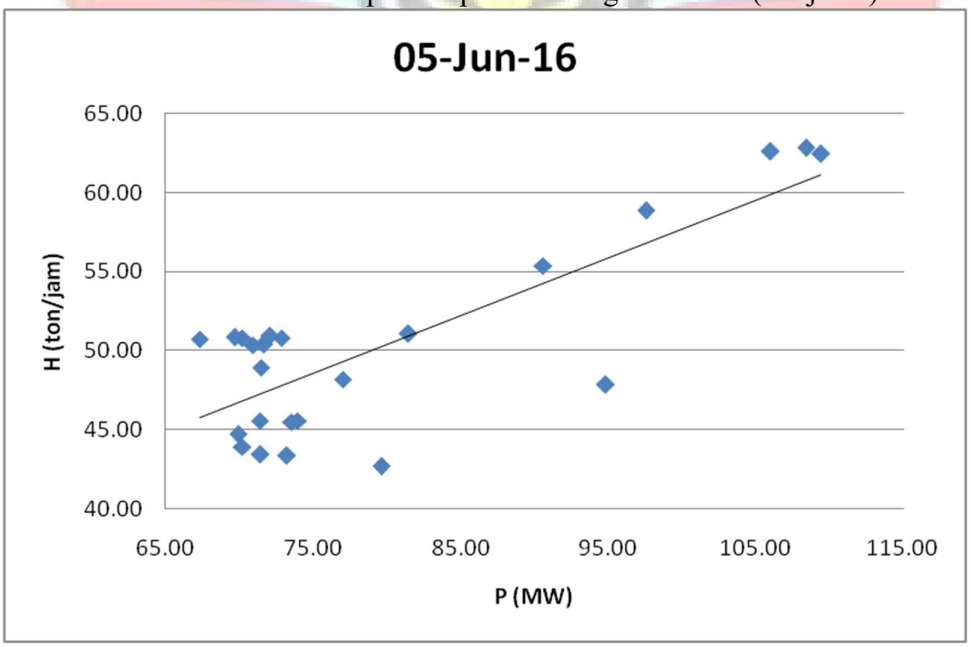
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



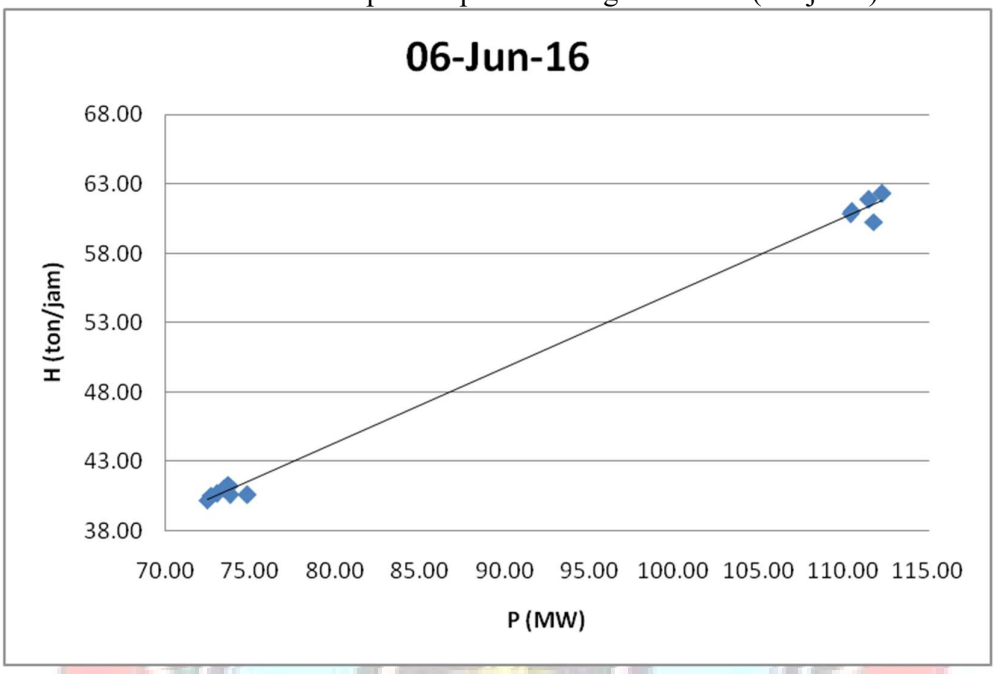
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



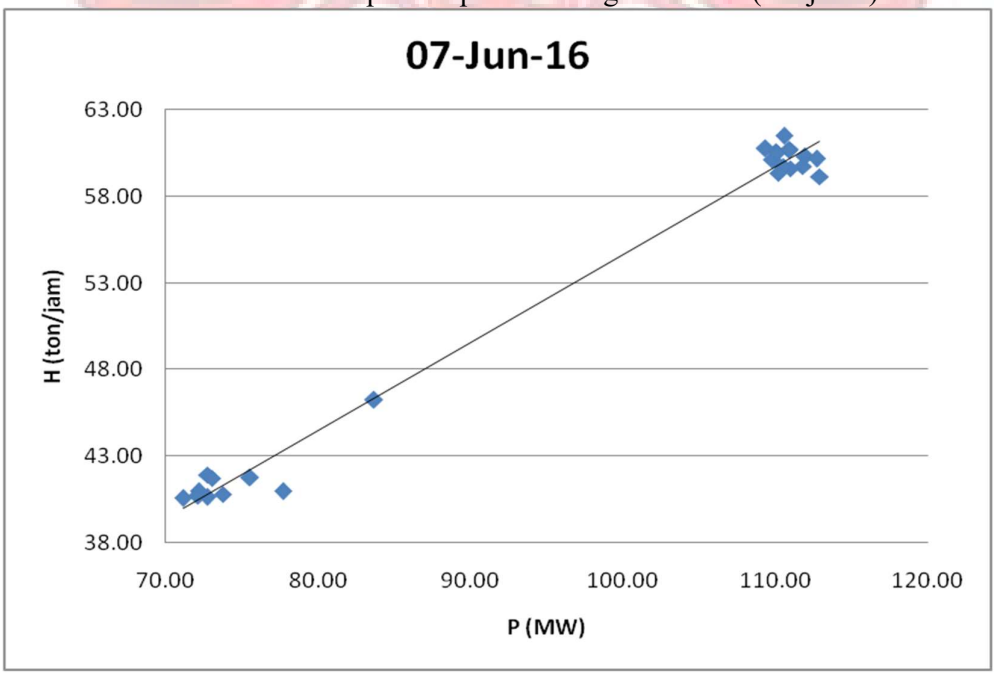
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



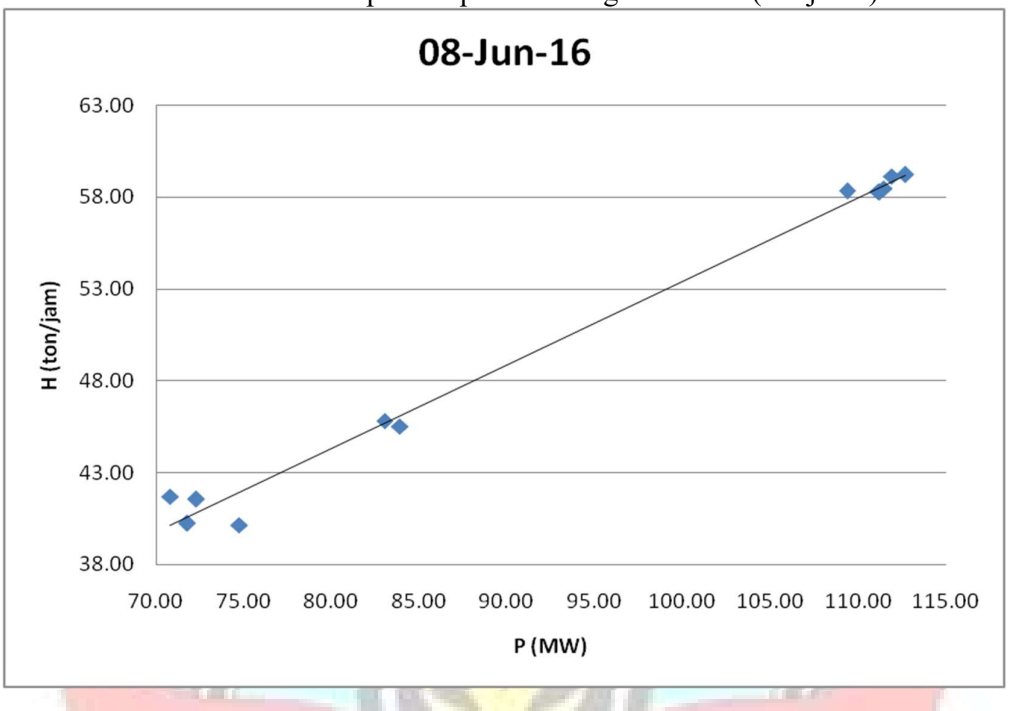
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



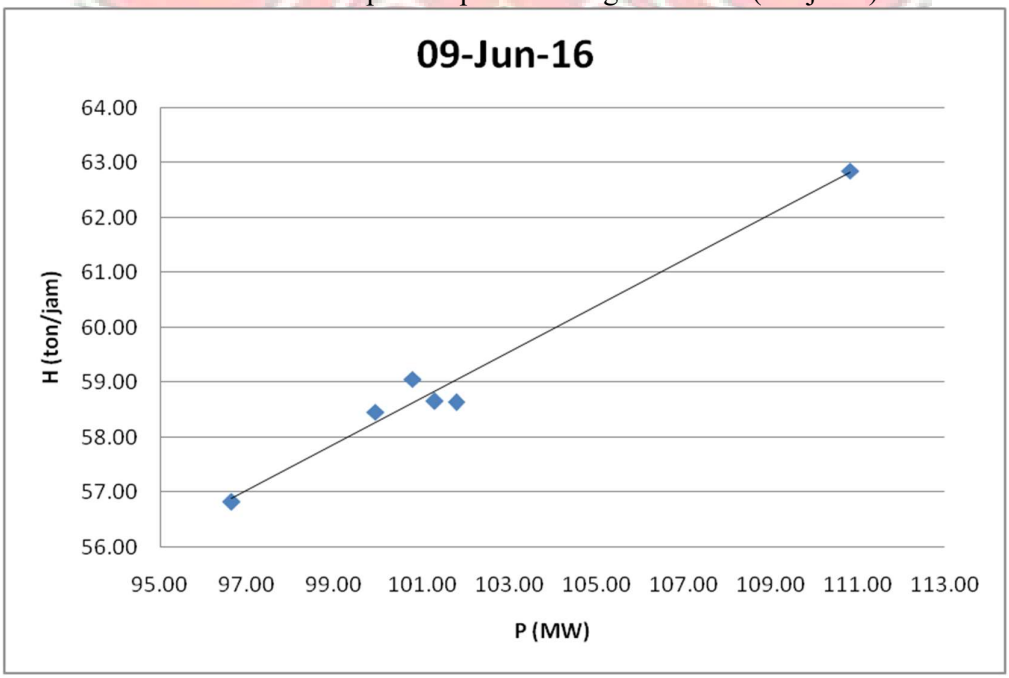
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



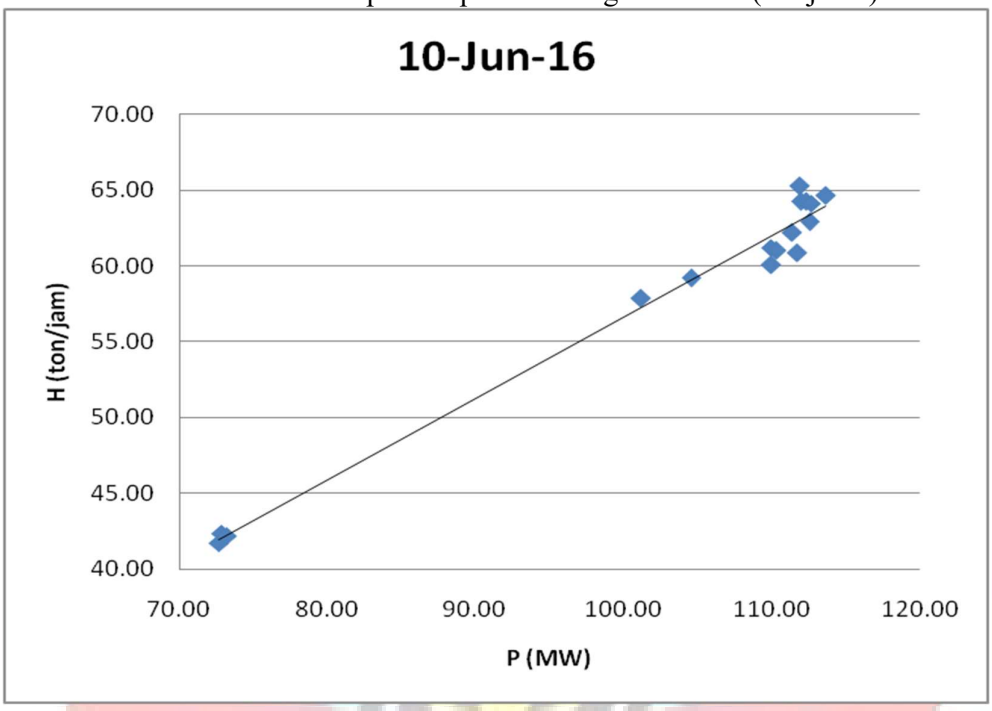
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



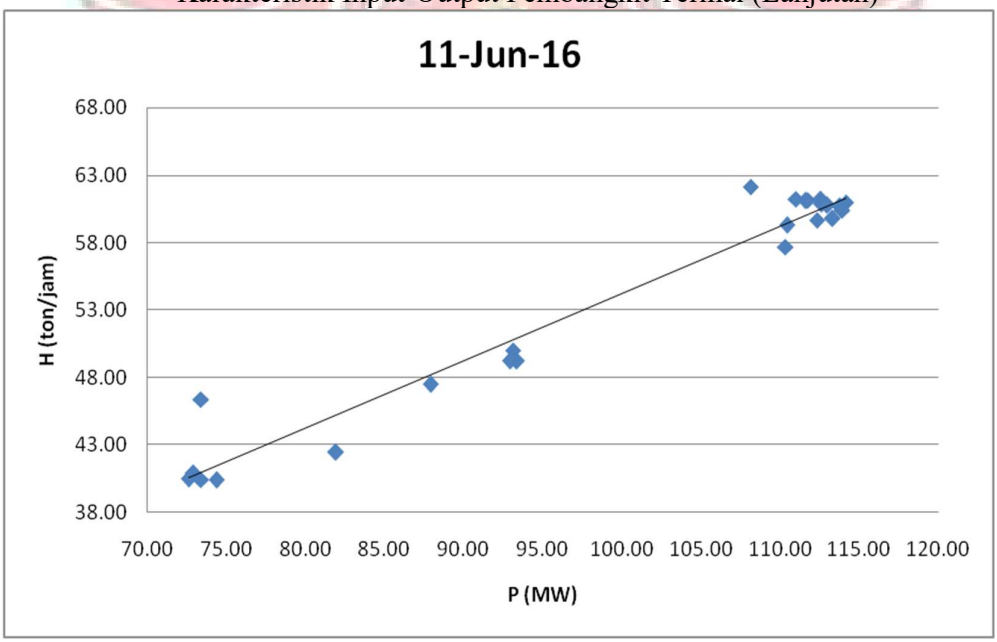
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



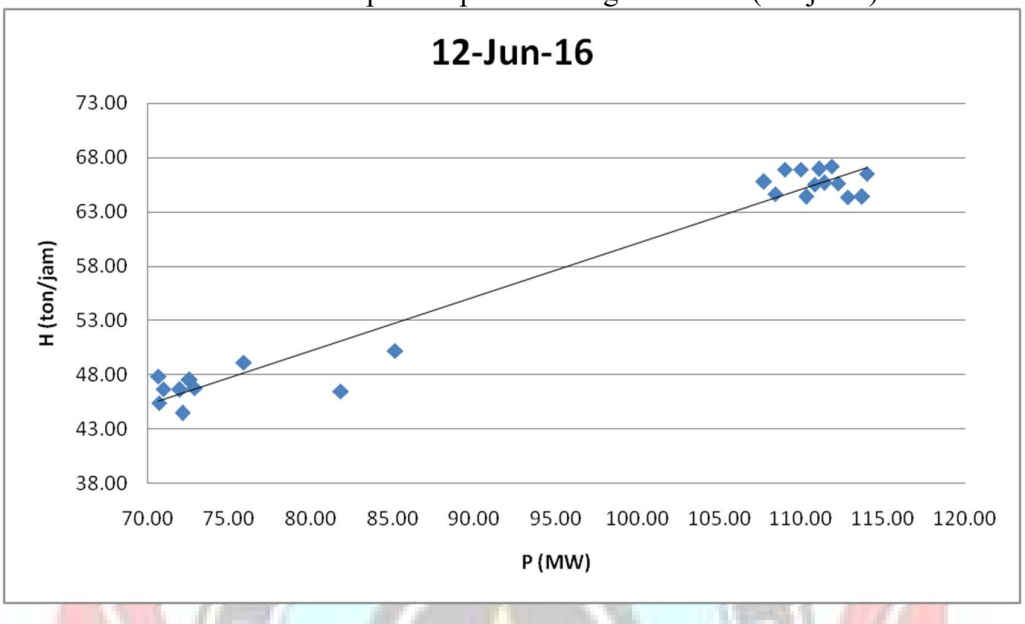
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



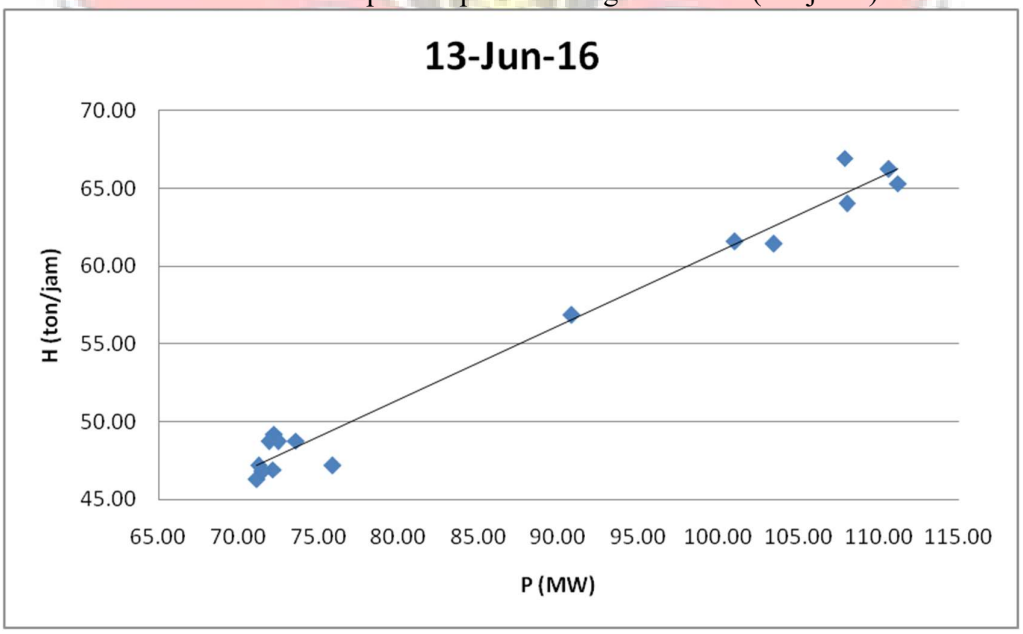
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



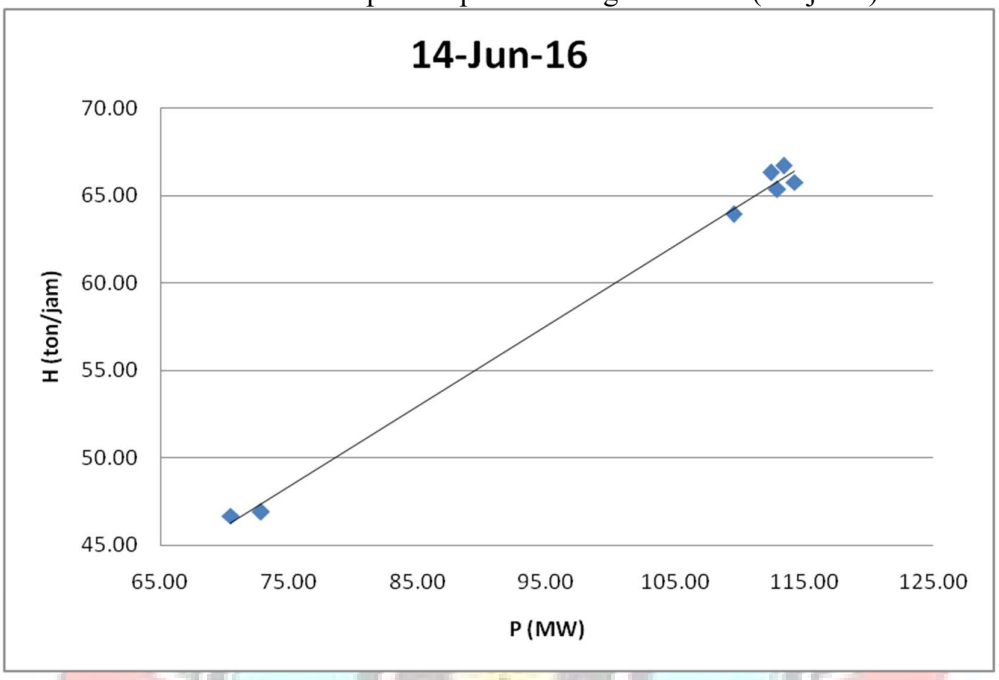
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



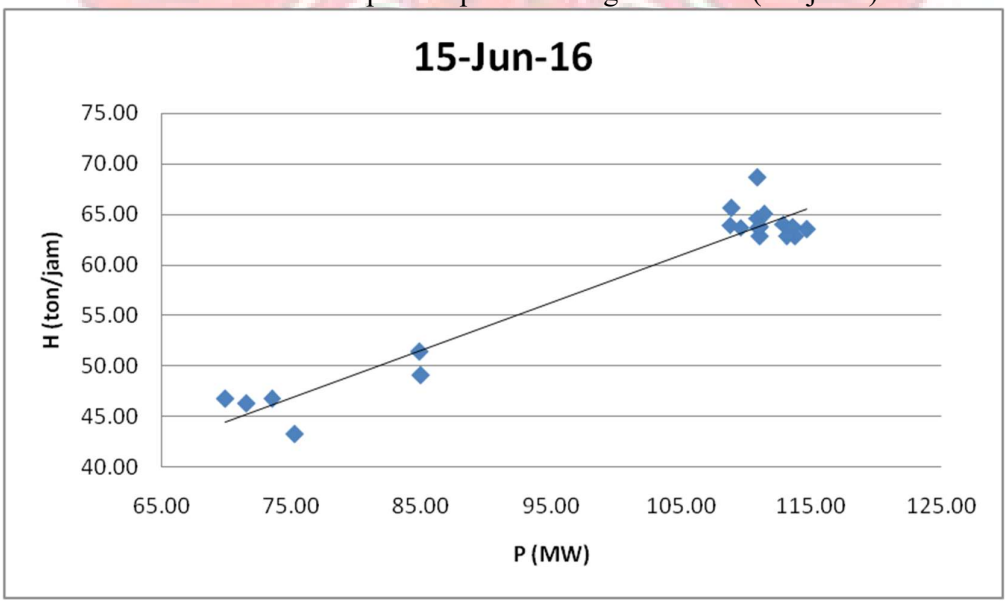
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



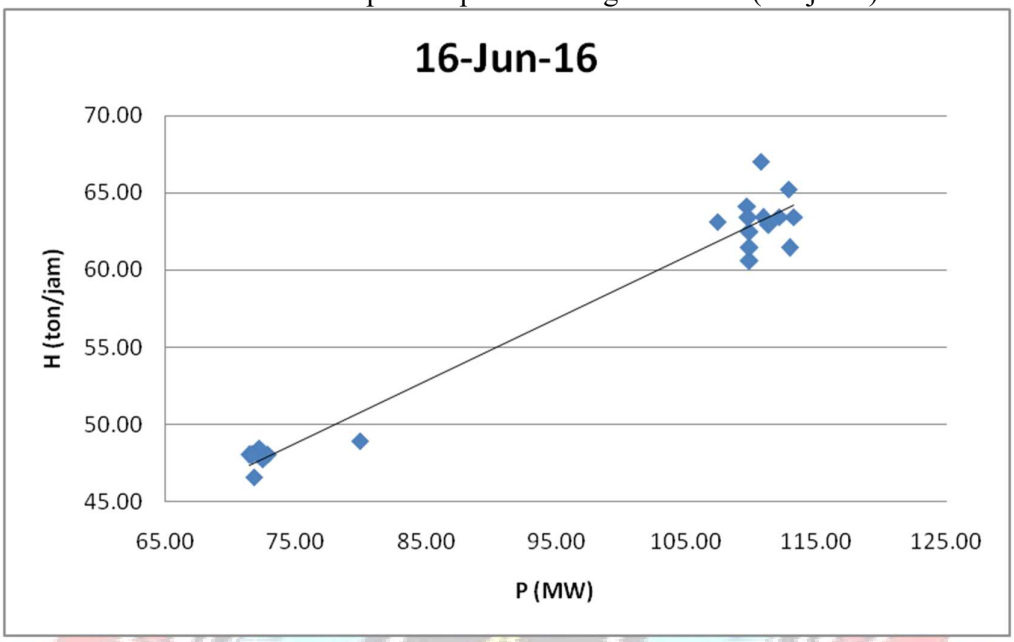
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



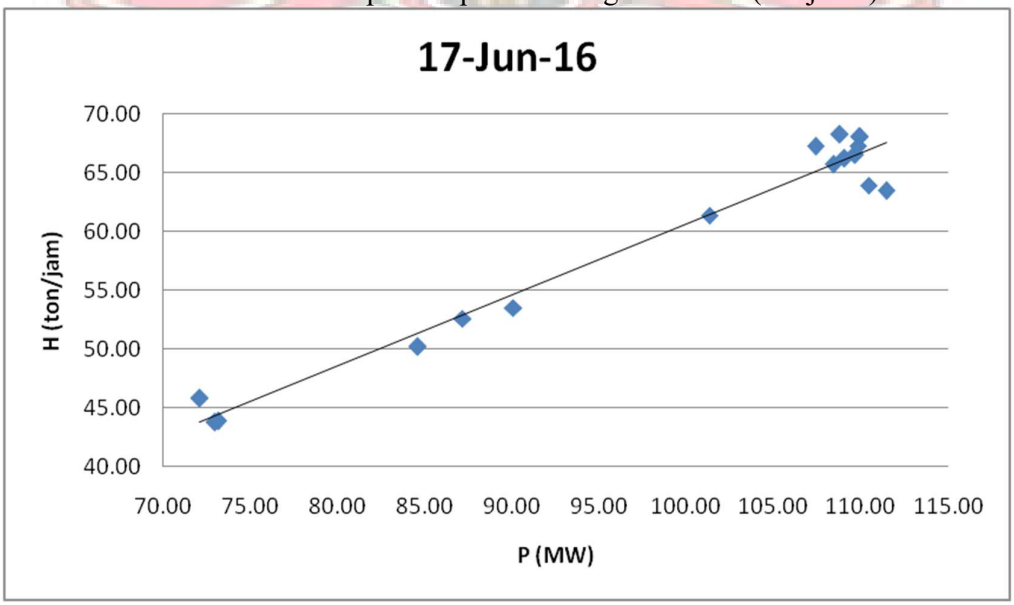
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



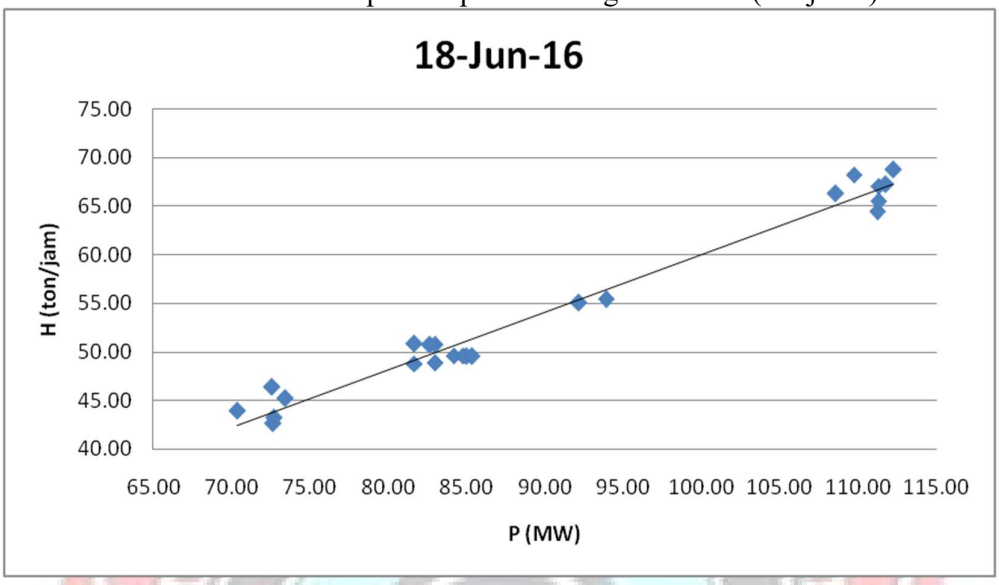
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



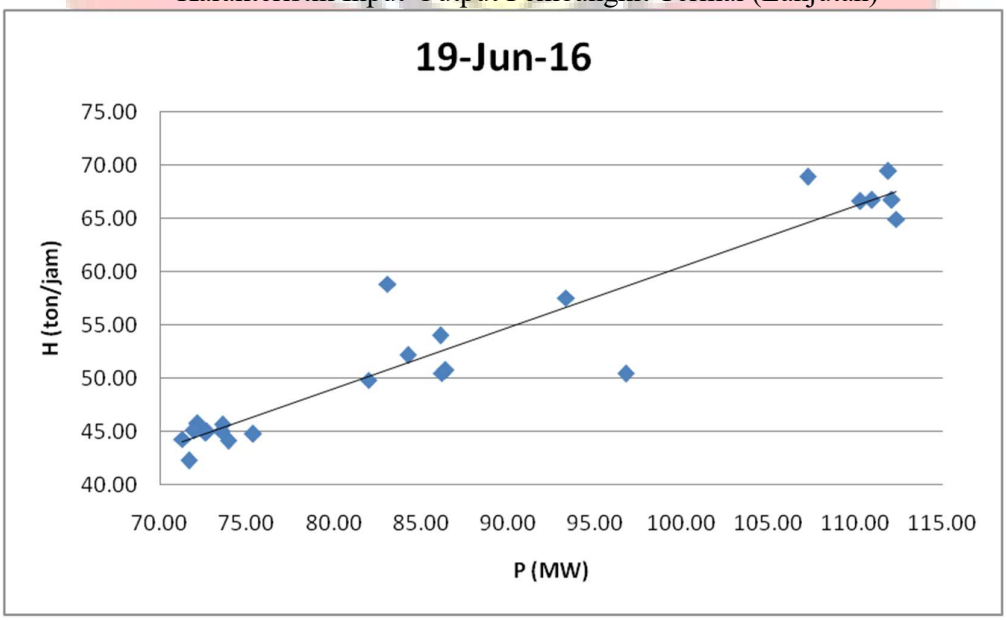
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



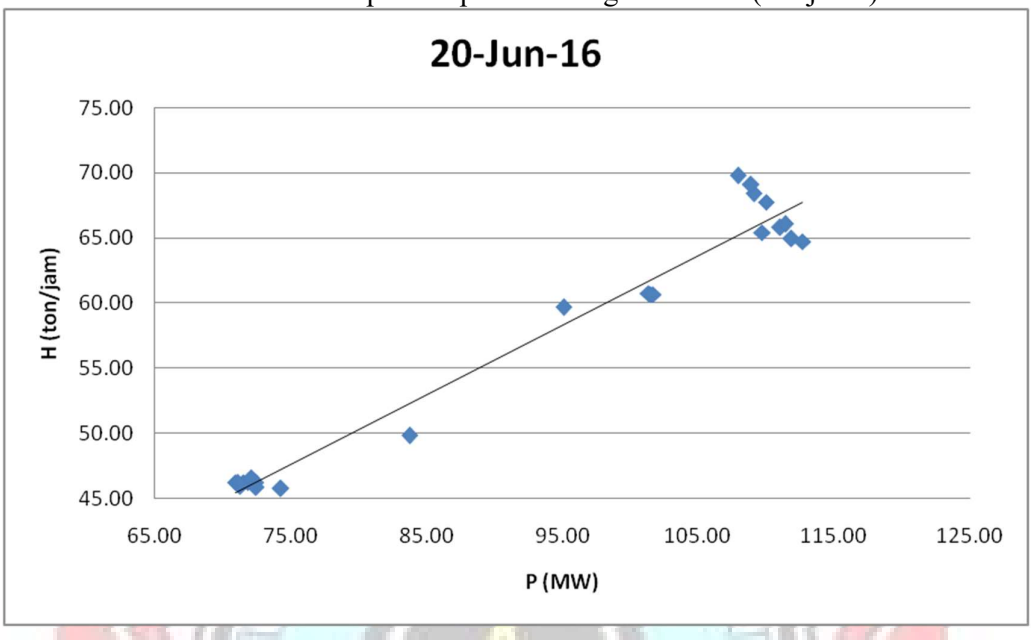
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



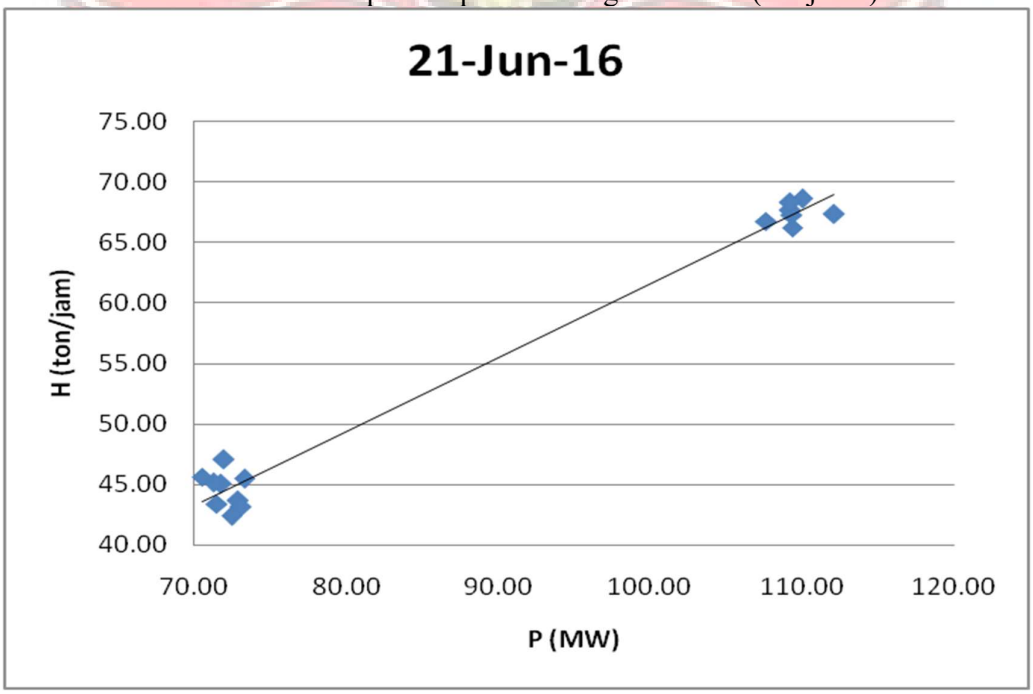
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



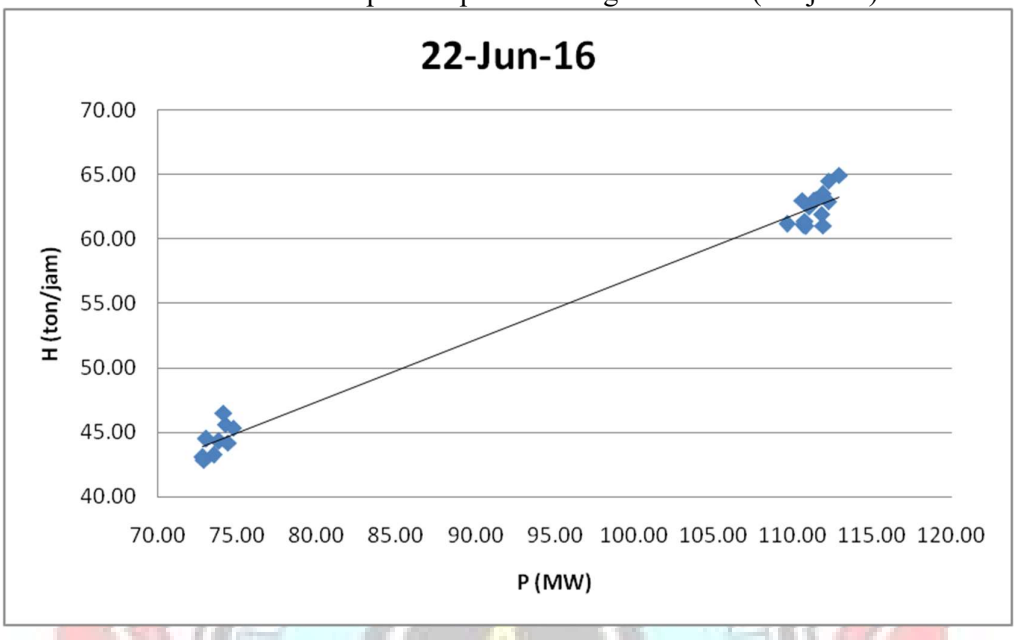
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



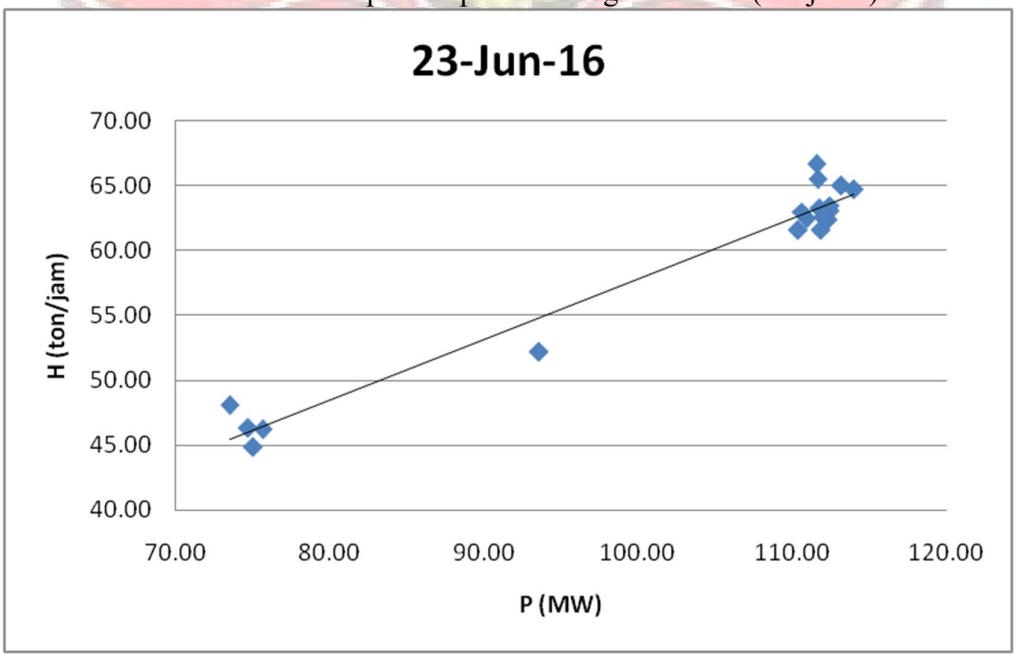
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



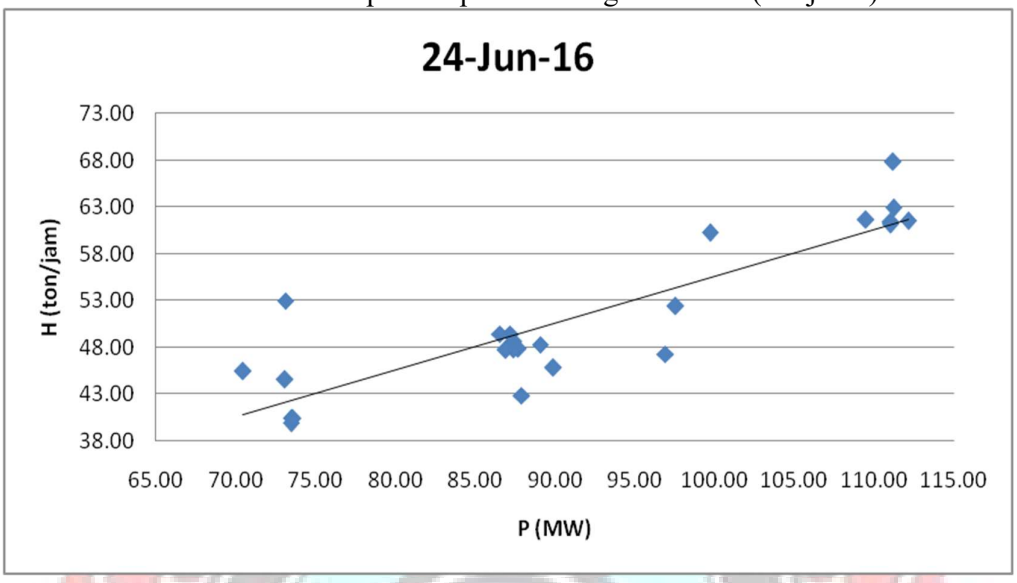
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



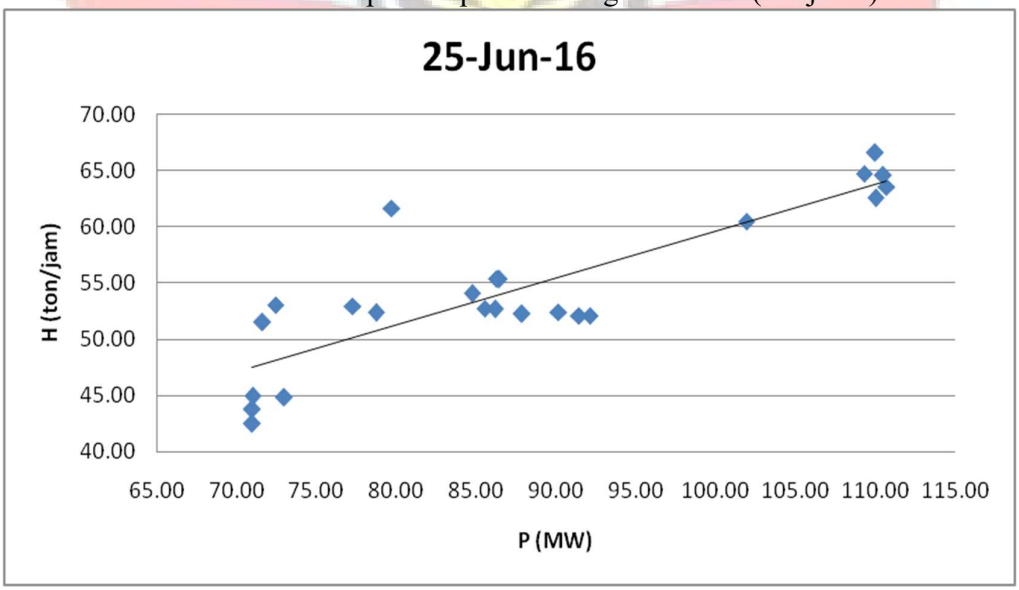
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



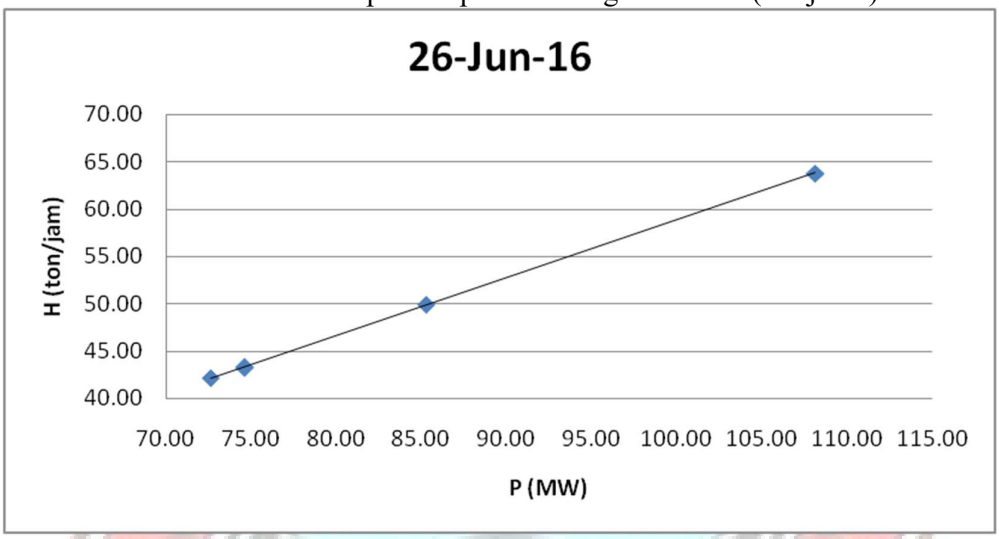
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



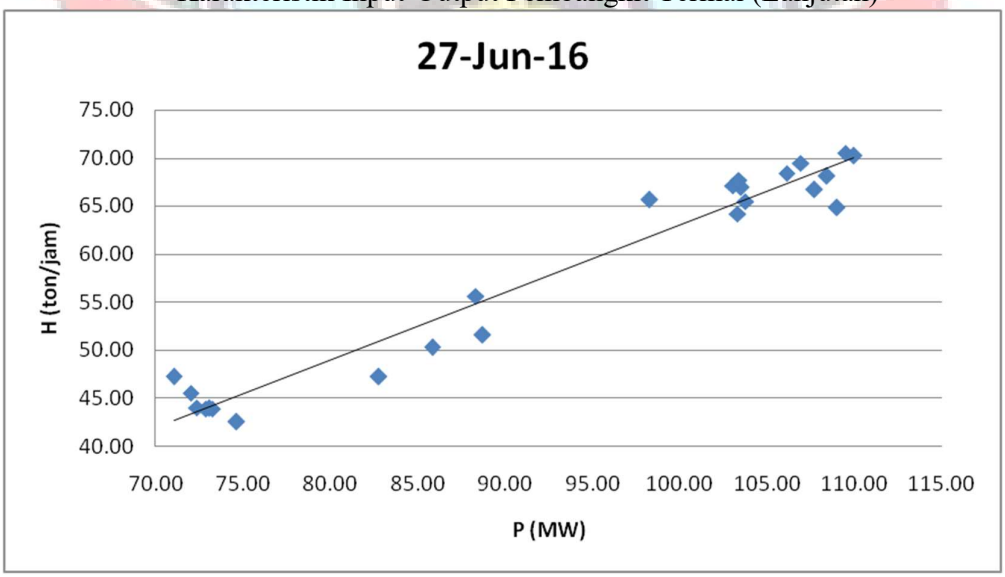
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



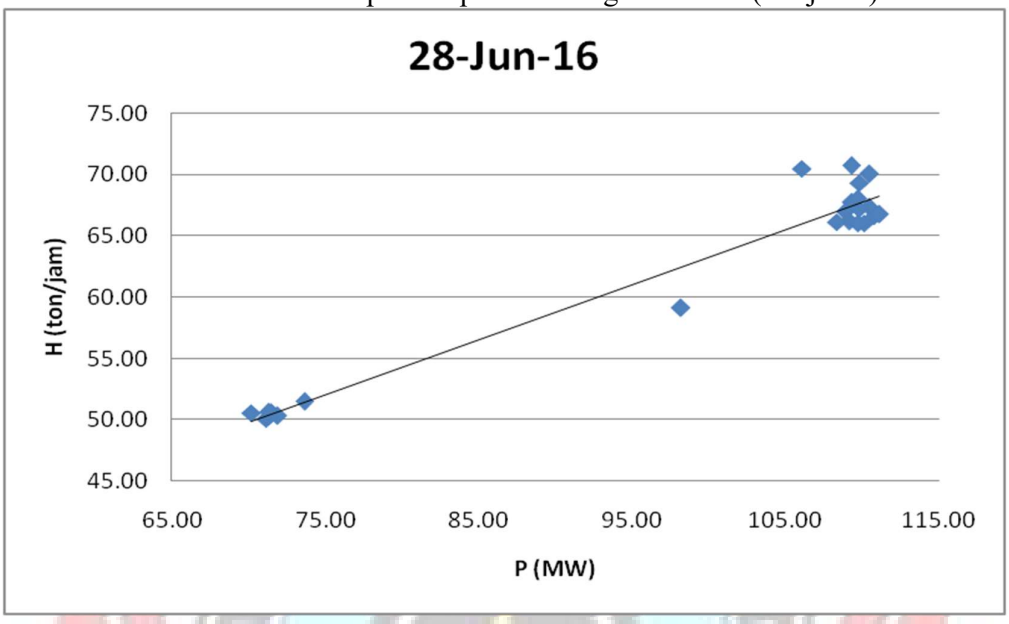
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



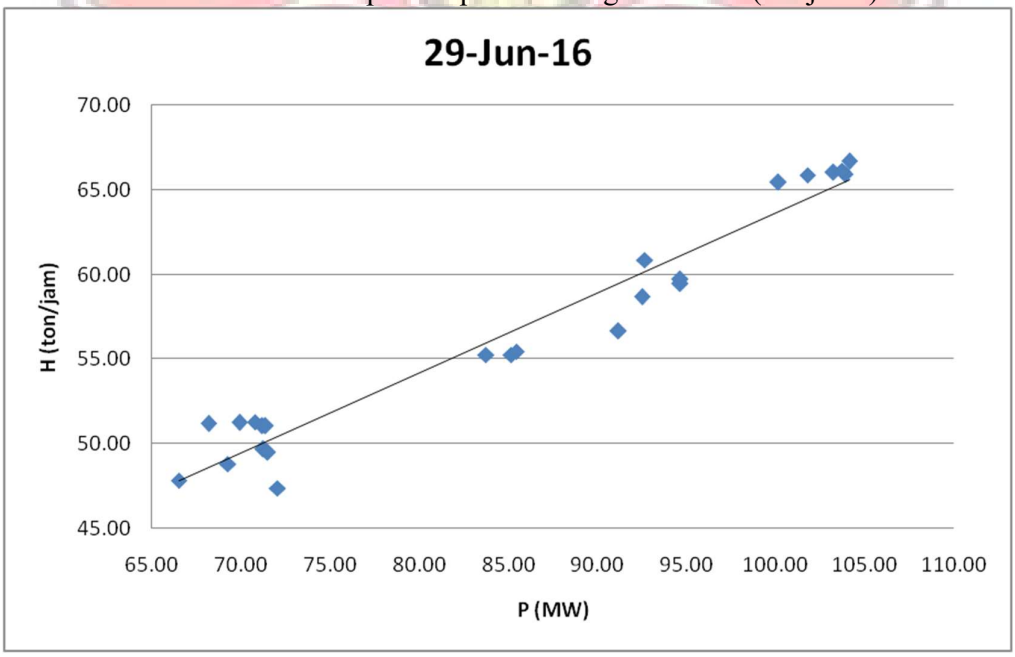
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



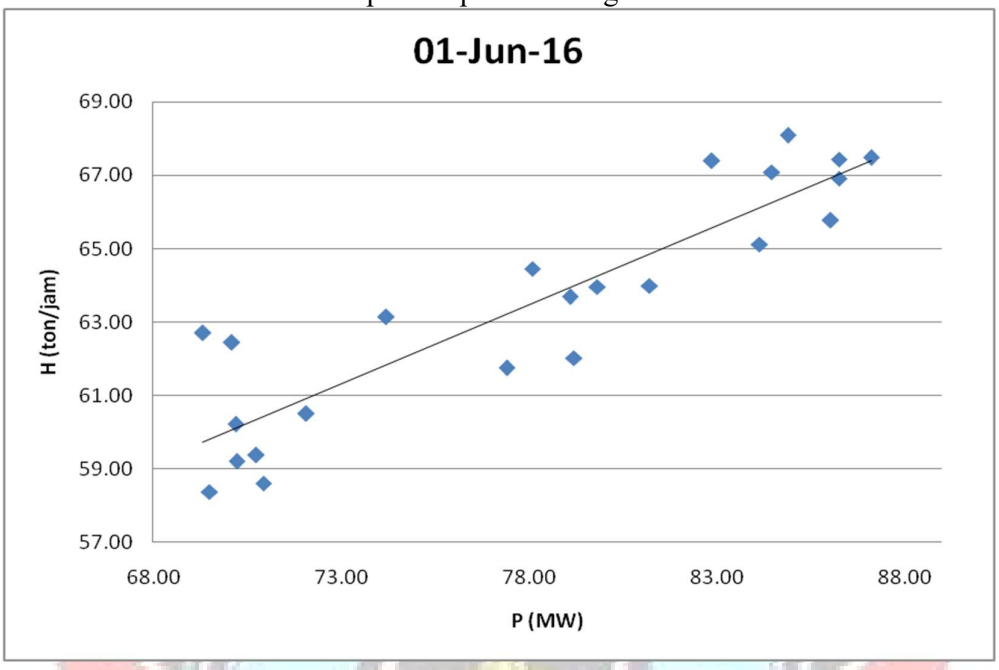
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



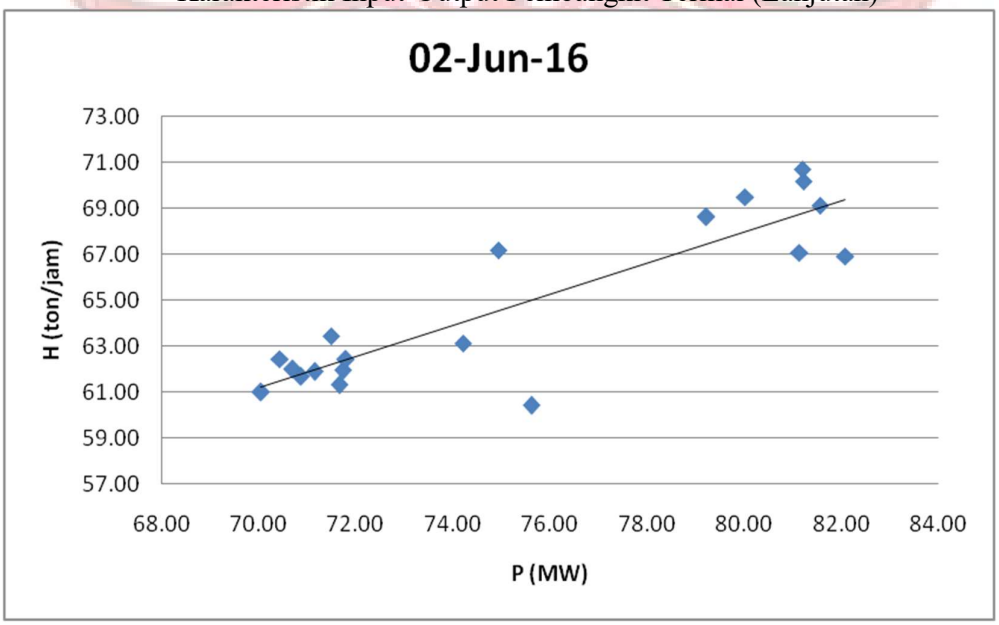
Lampiran 2c. Grafik Persamaan Input-Output PLTU Jene'ponto 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



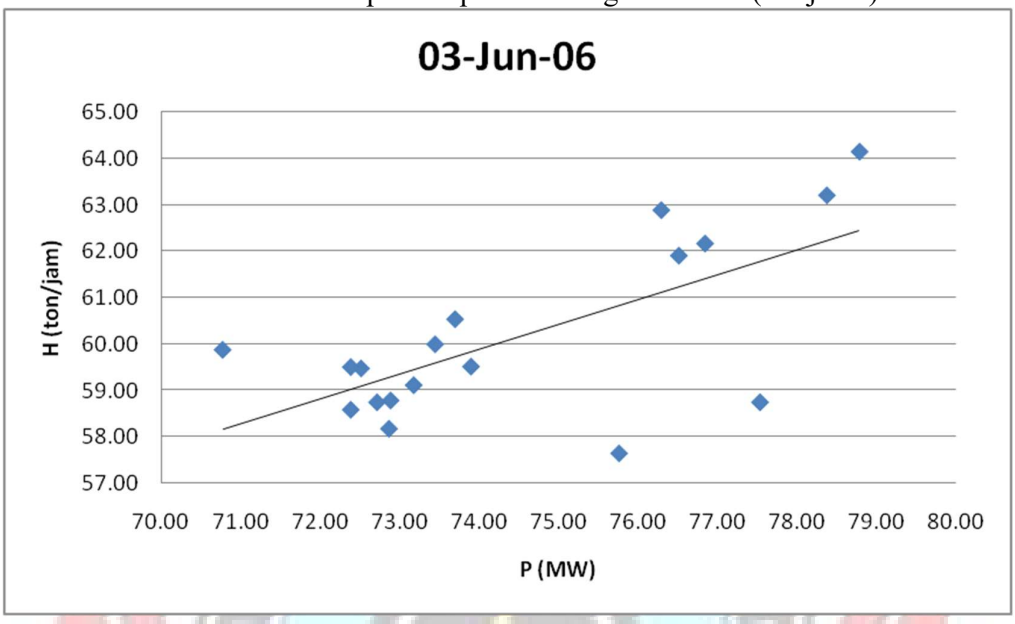
Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal



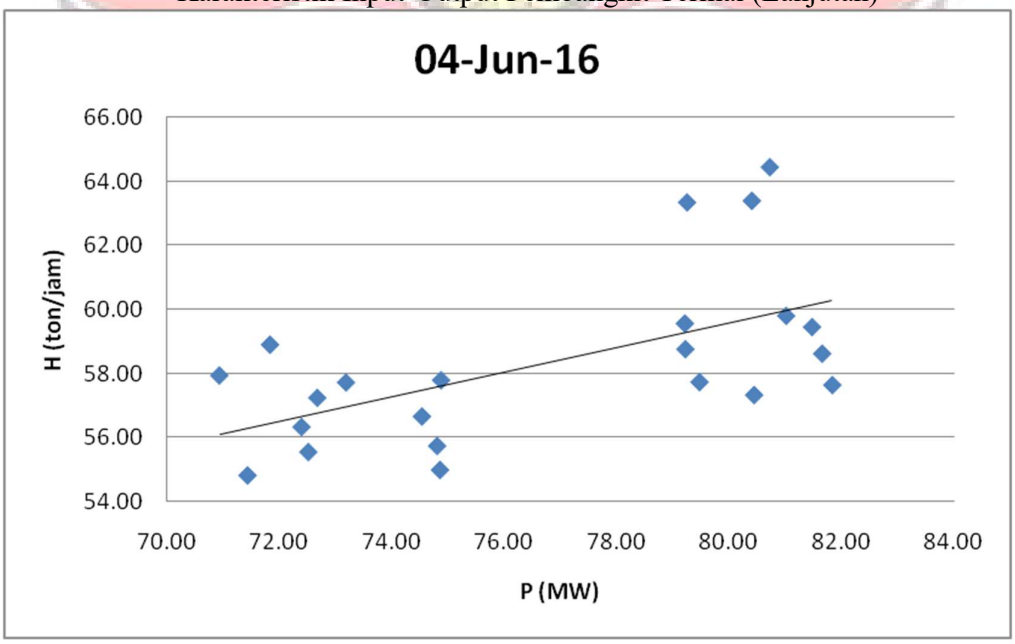
Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



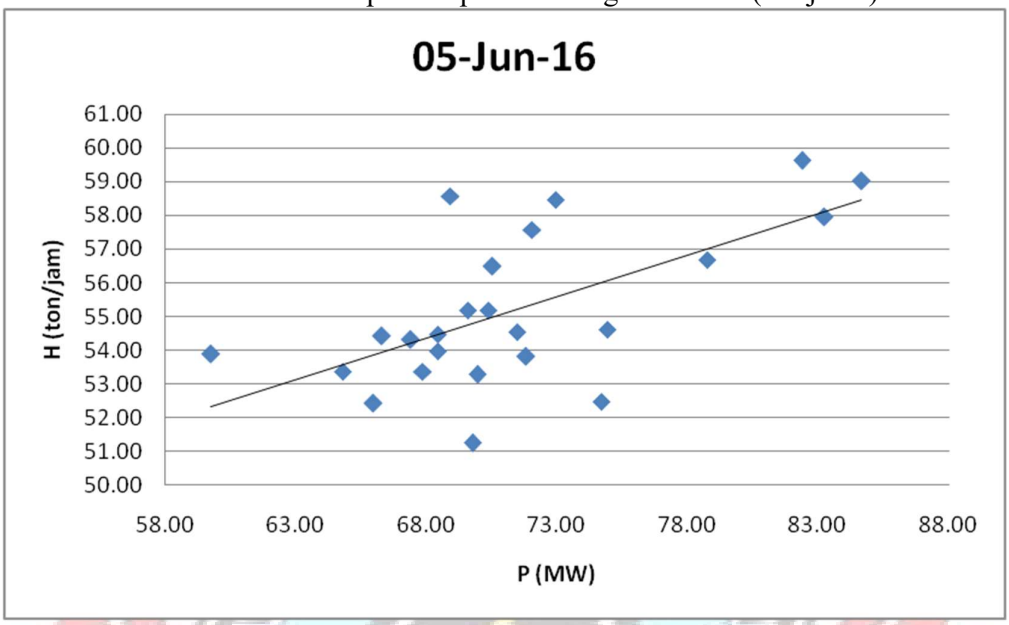
Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



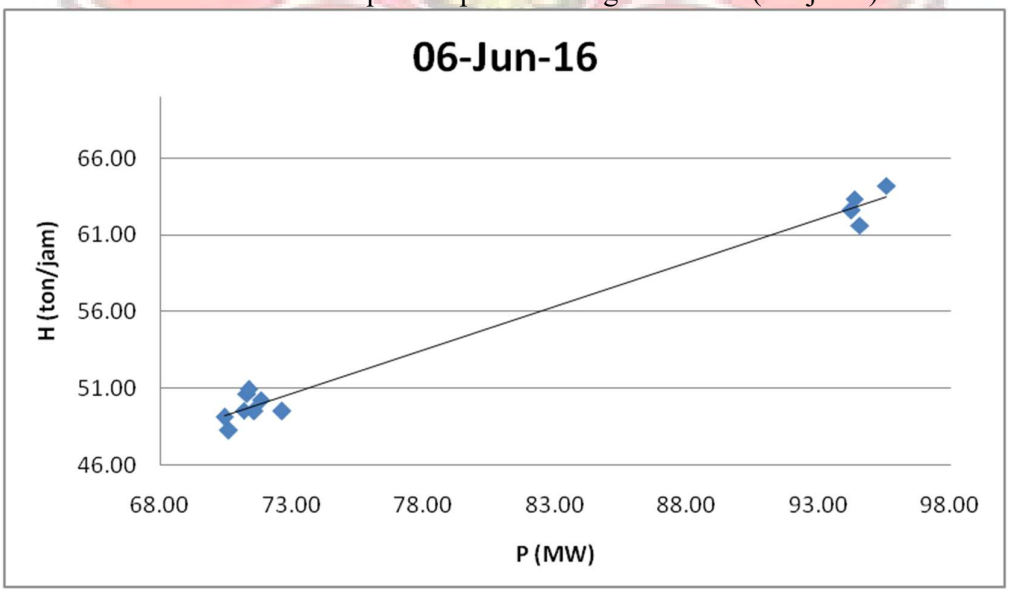
Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



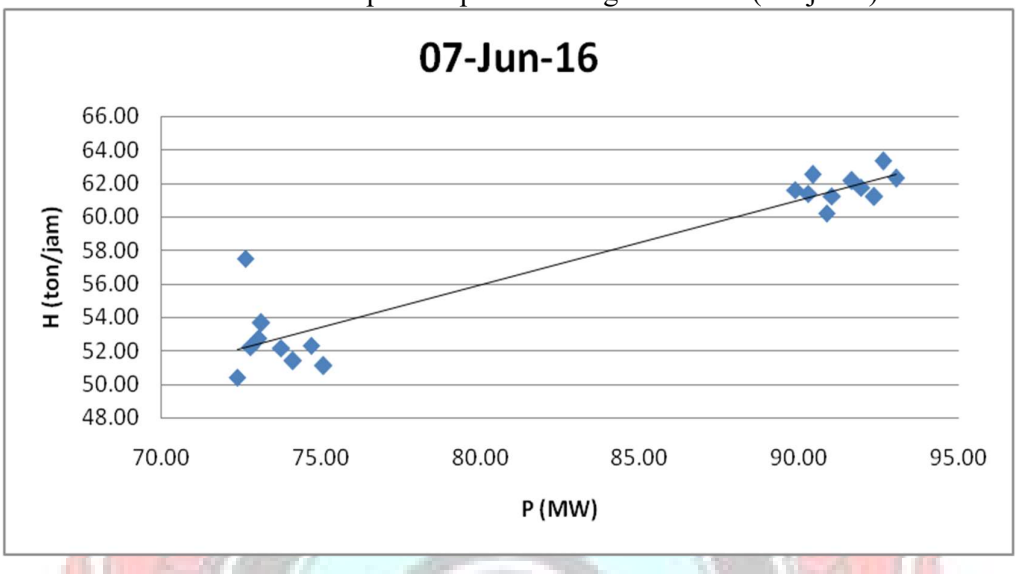
Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



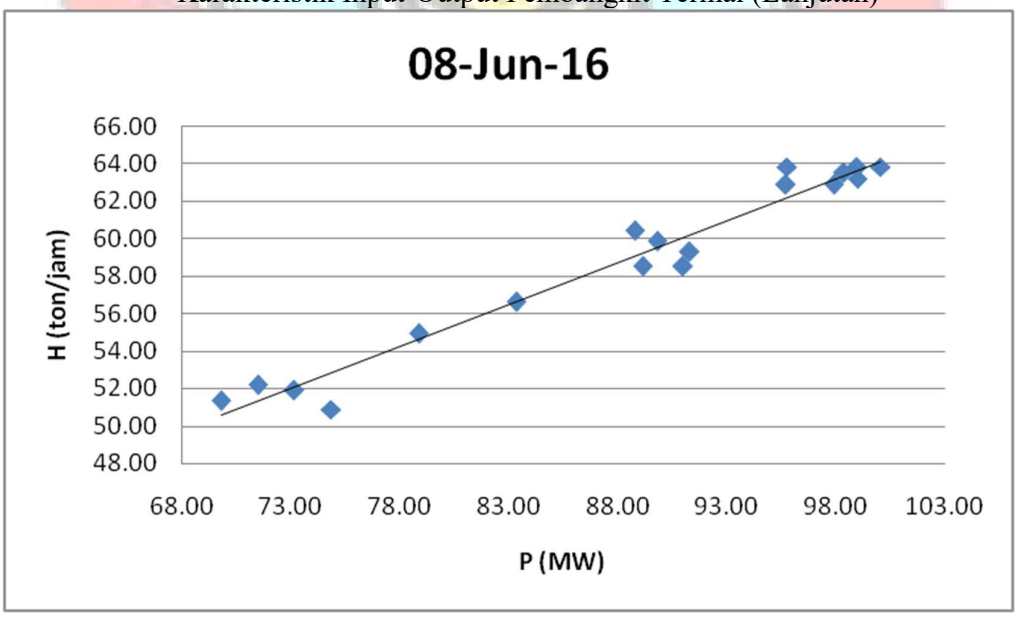
Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



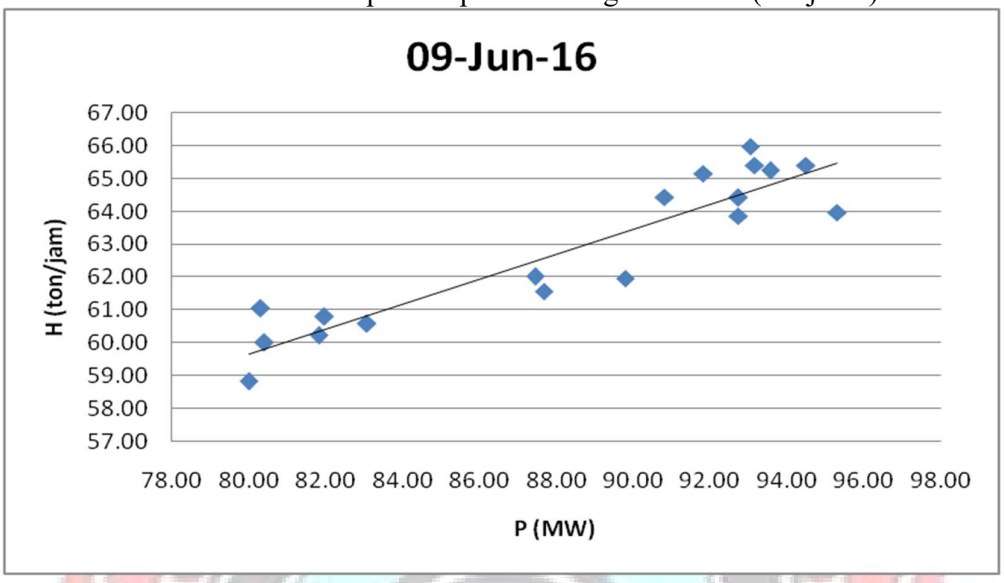
Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



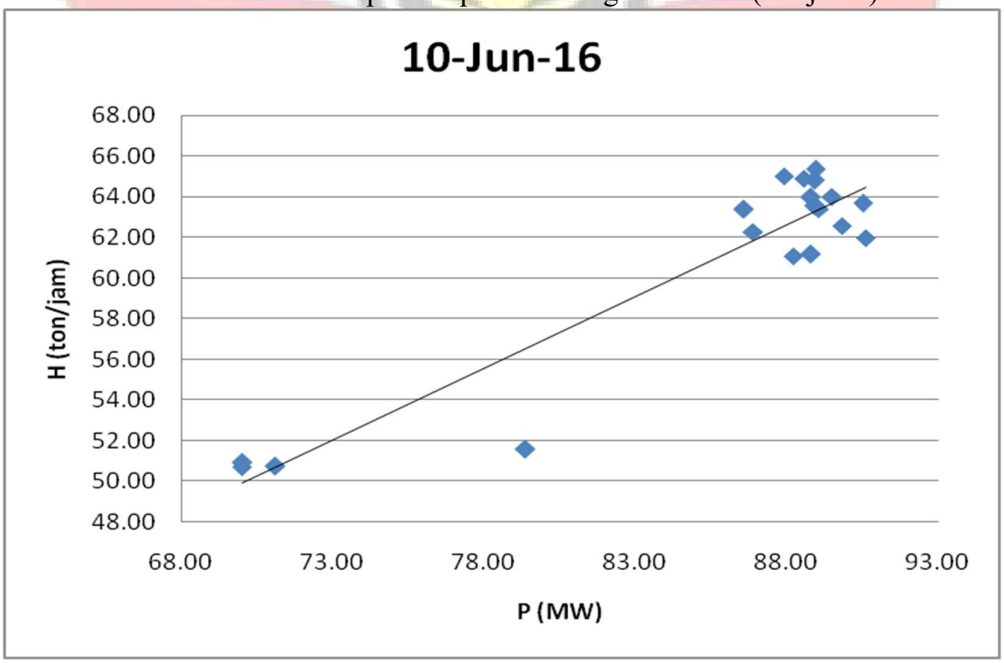
Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



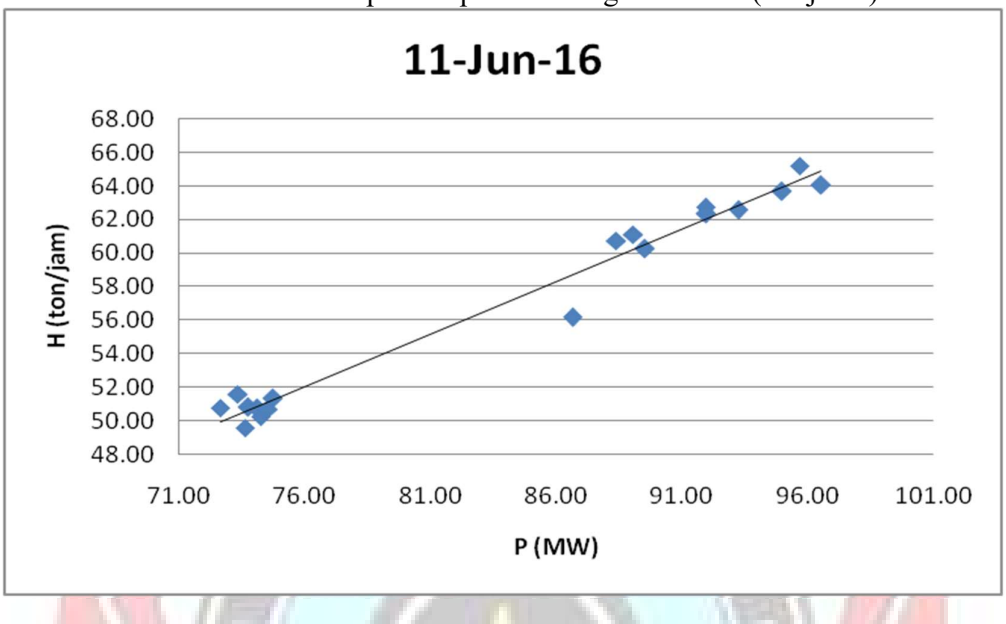
Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



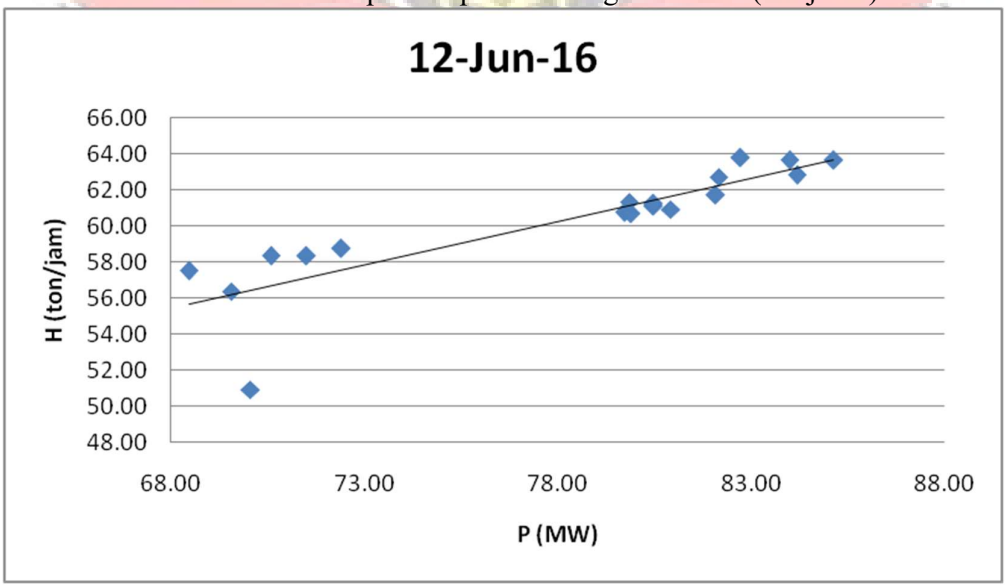
Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



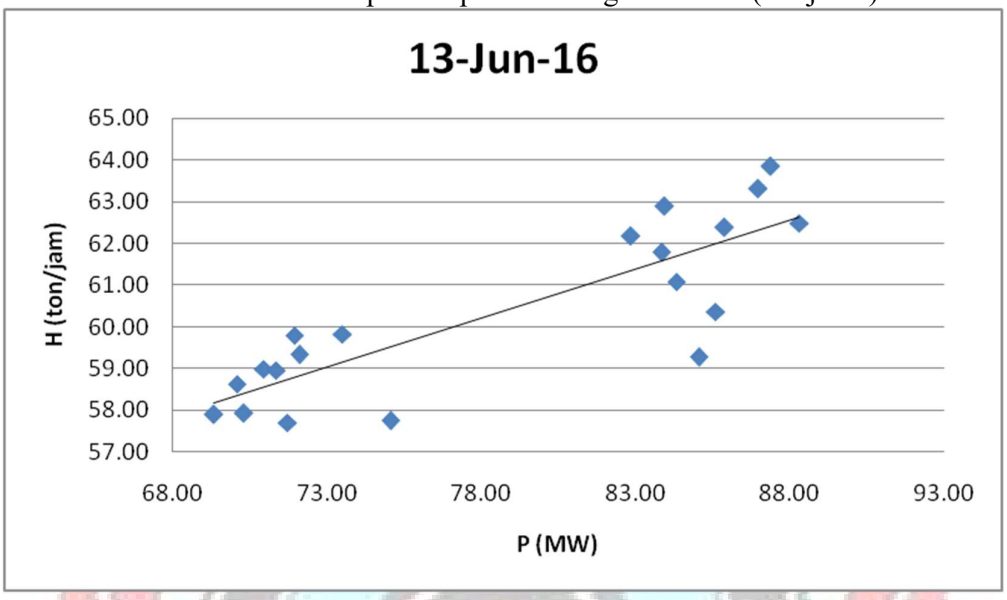
Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



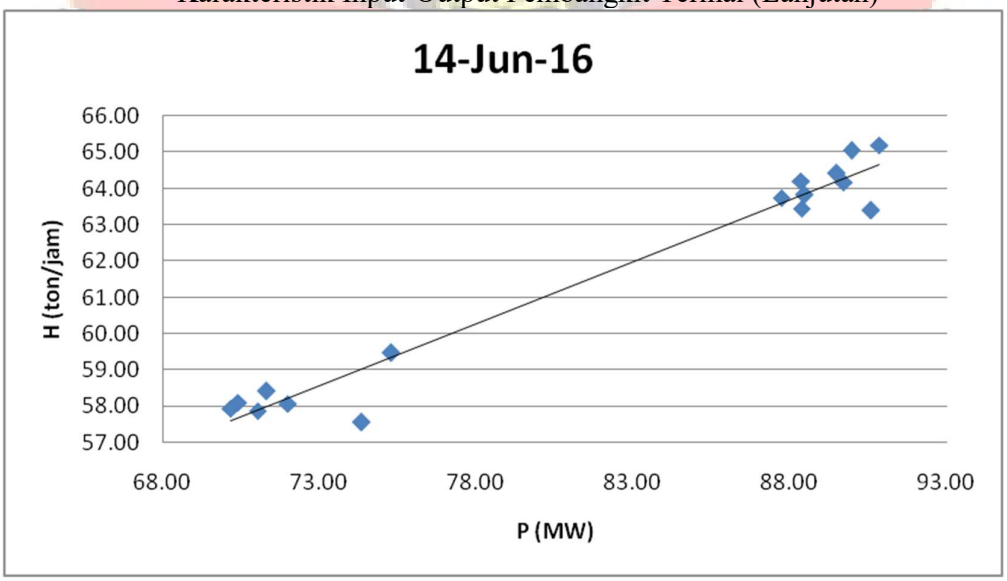
Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



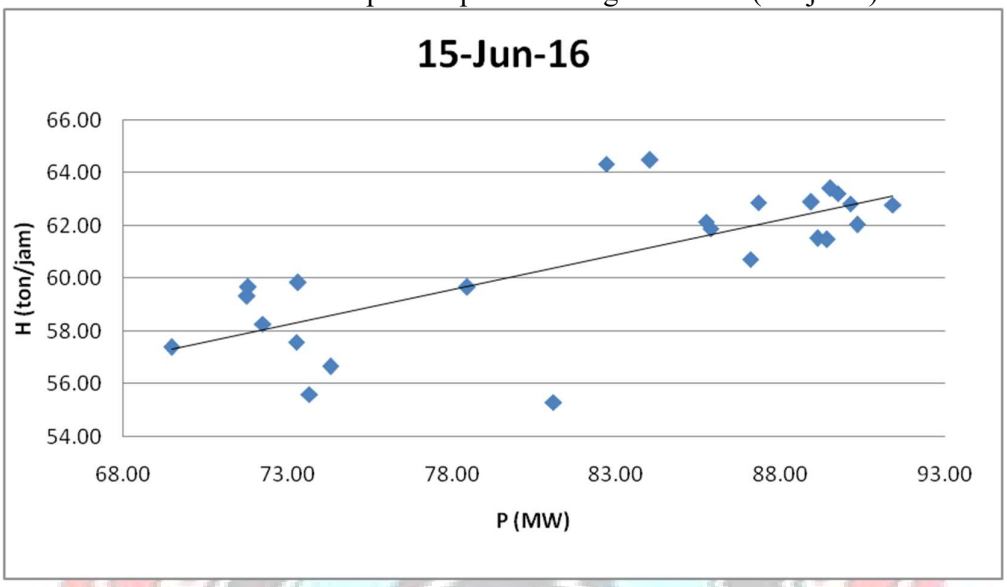
Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



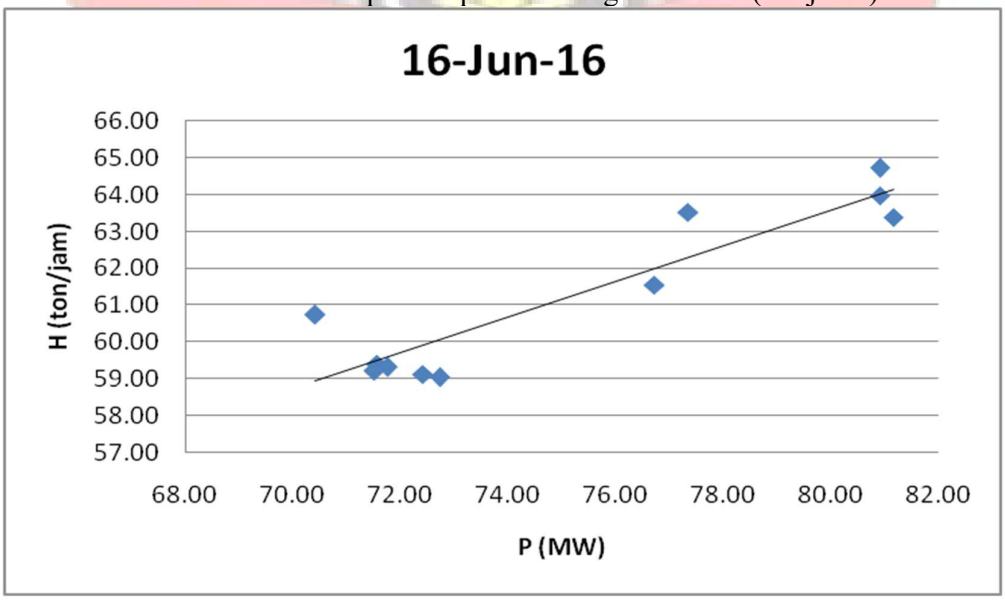
Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)

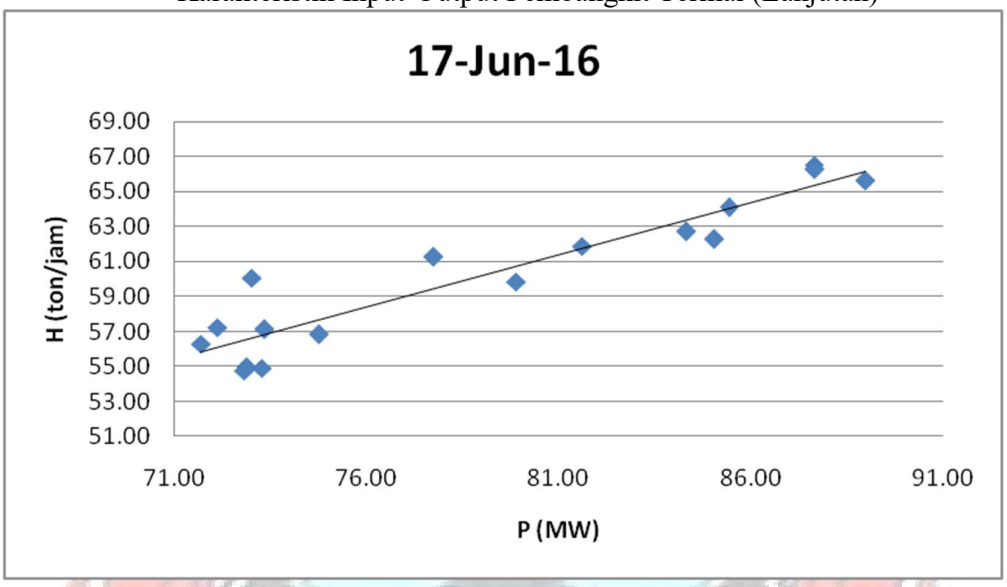


Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)

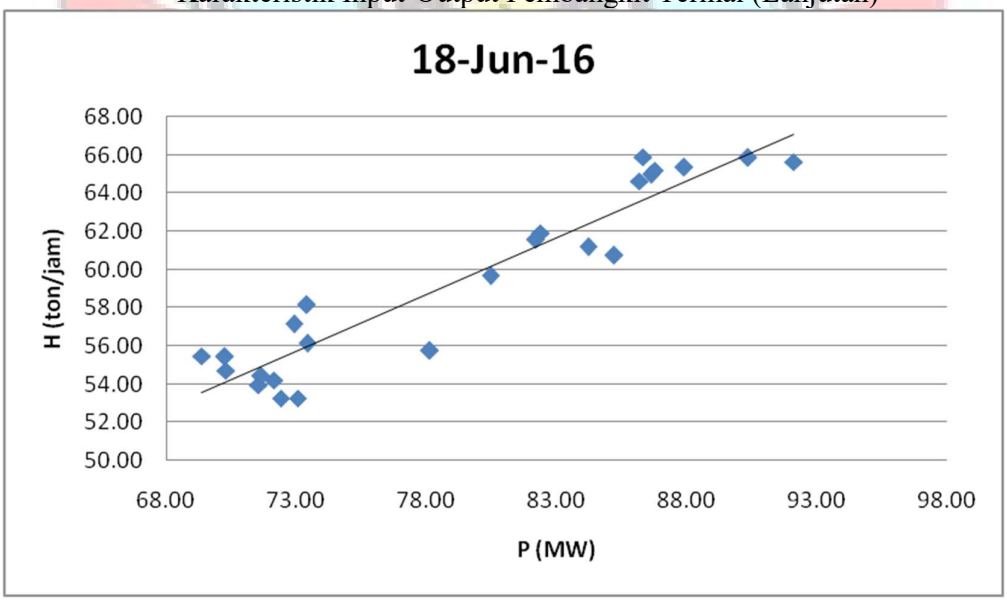


Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan

Karakteristik Input-Output Pembangkit Termal (Lanjutan)

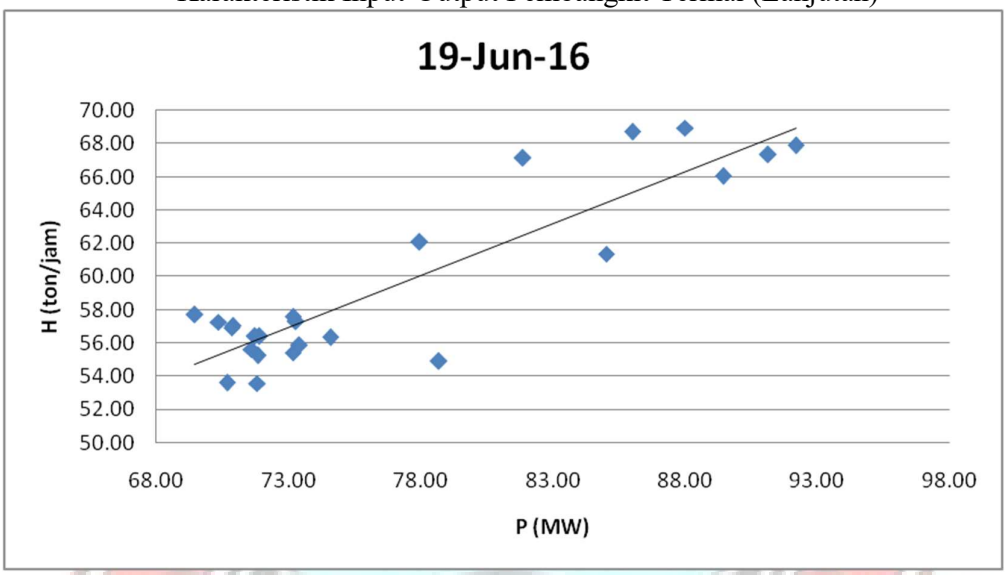


Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)

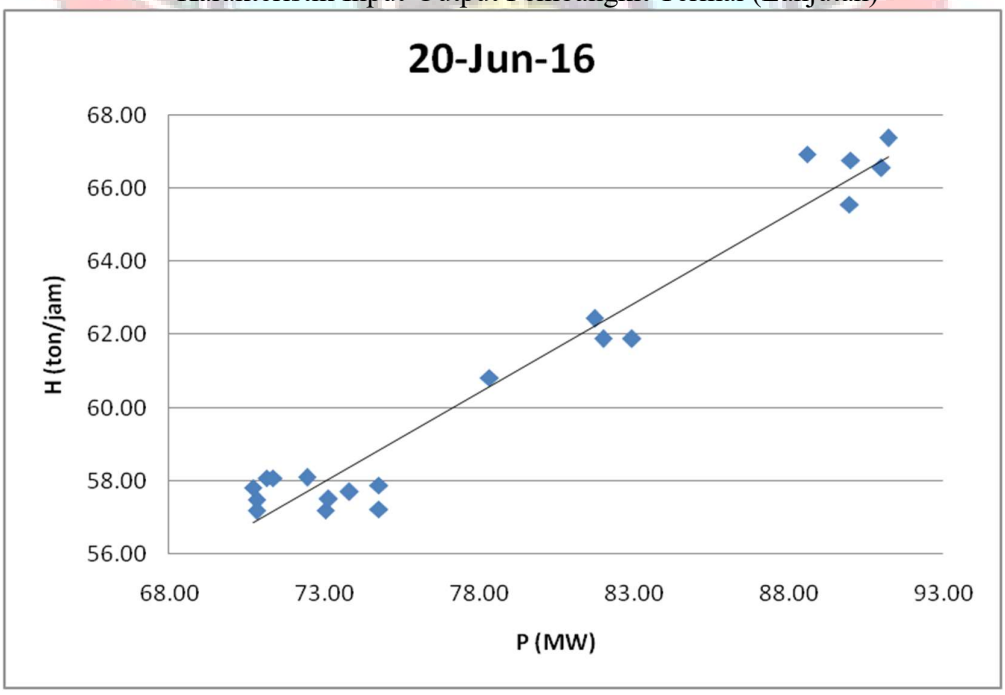


Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan

Karakteristik Input-Output Pembangkit Termal (Lanjutan)

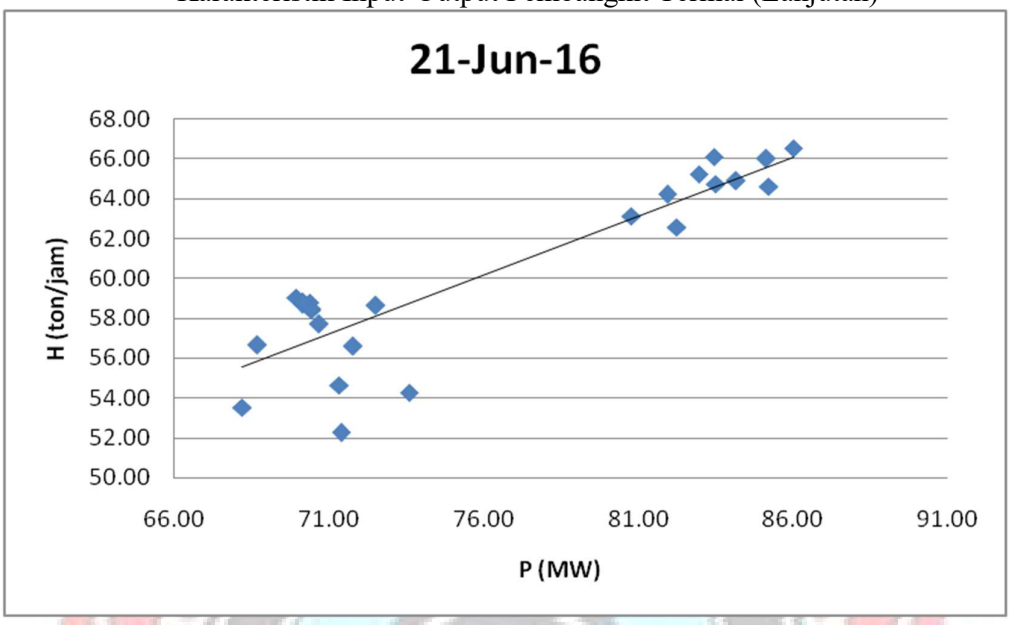


Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)

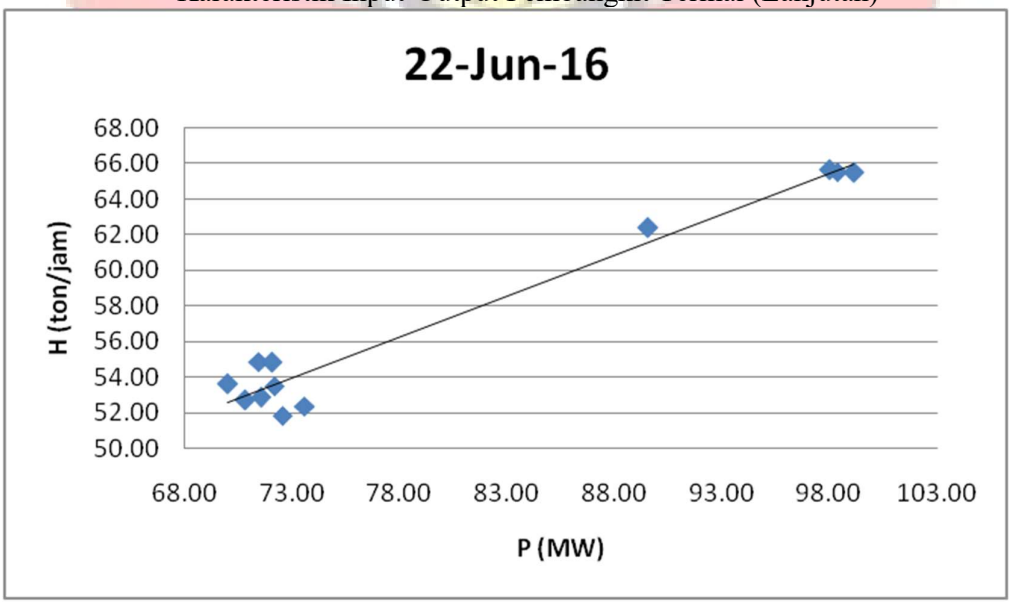


Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan

Karakteristik Input-Output Pembangkit Termal (Lanjutan)

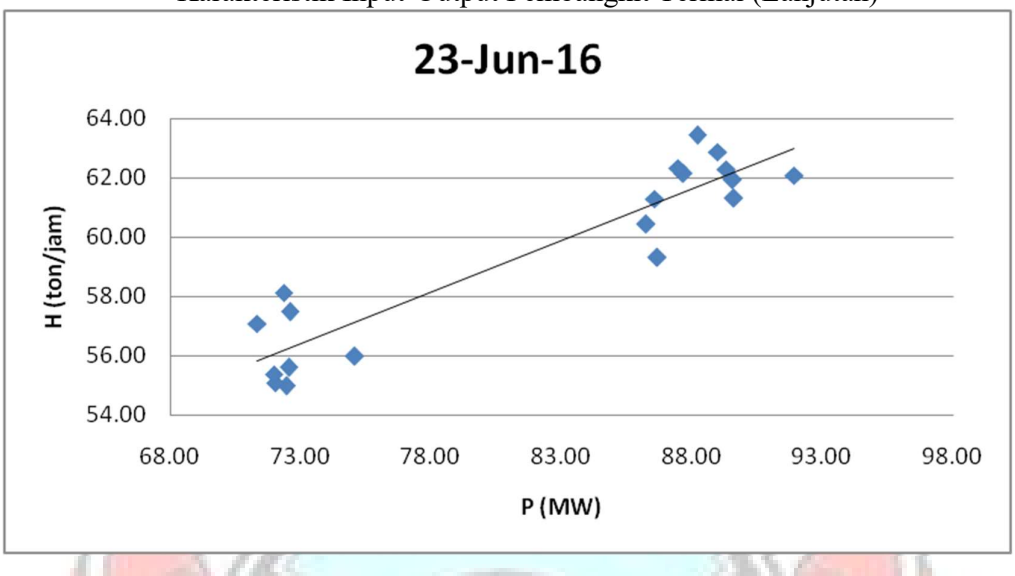


Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)

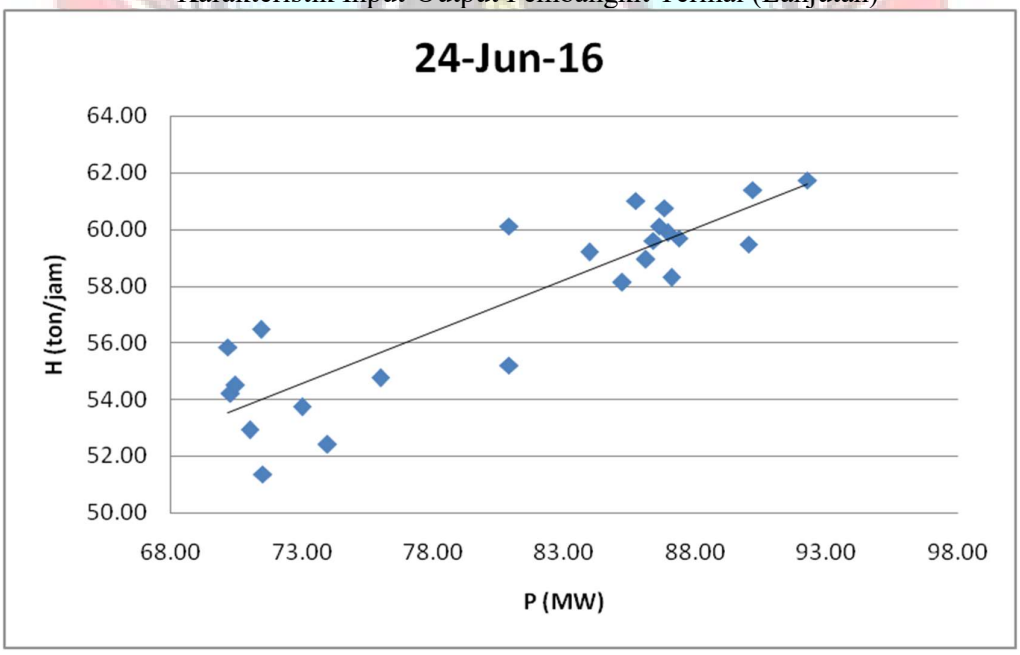


Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan

Karakteristik Input-Output Pembangkit Termal (Lanjutan)

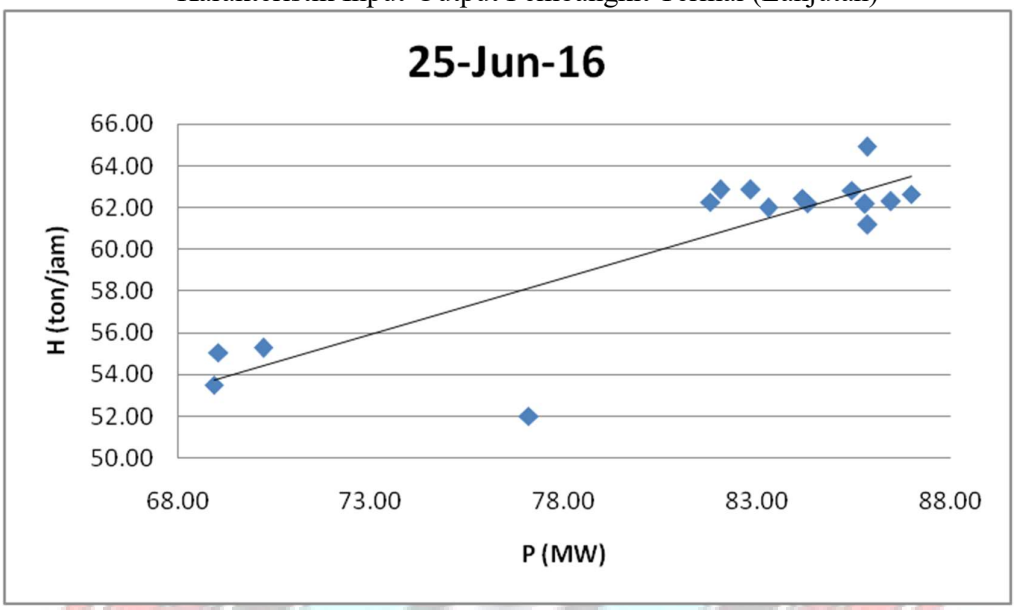


Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)

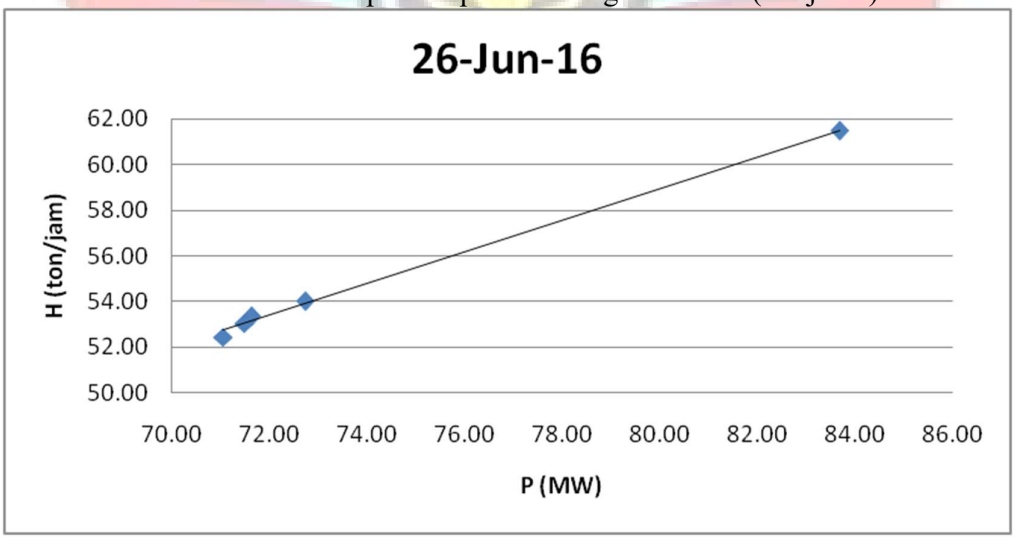


Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan

Karakteristik Input-Output Pembangkit Termal (Lanjutan)

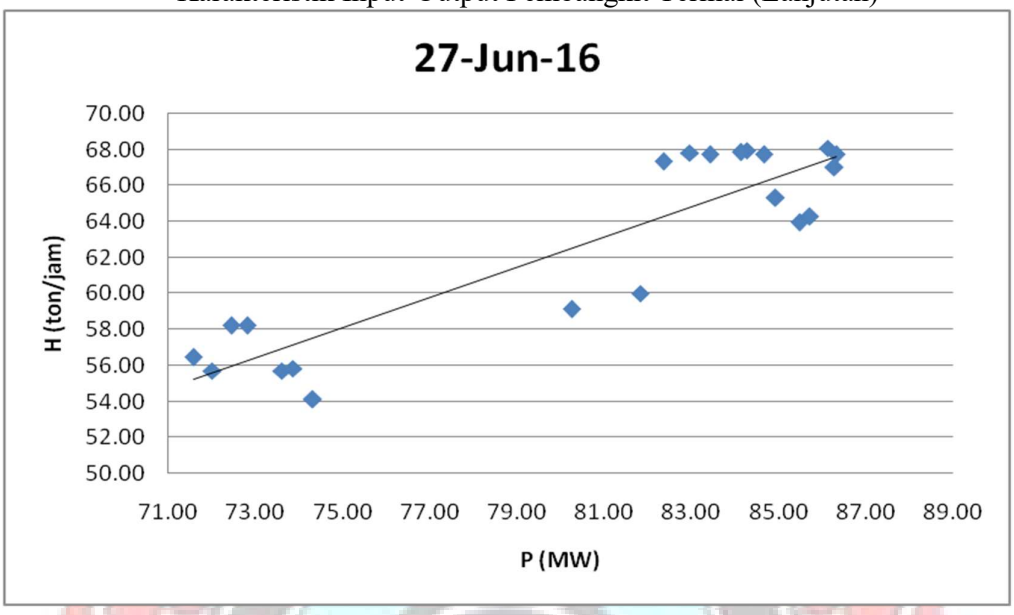


Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)

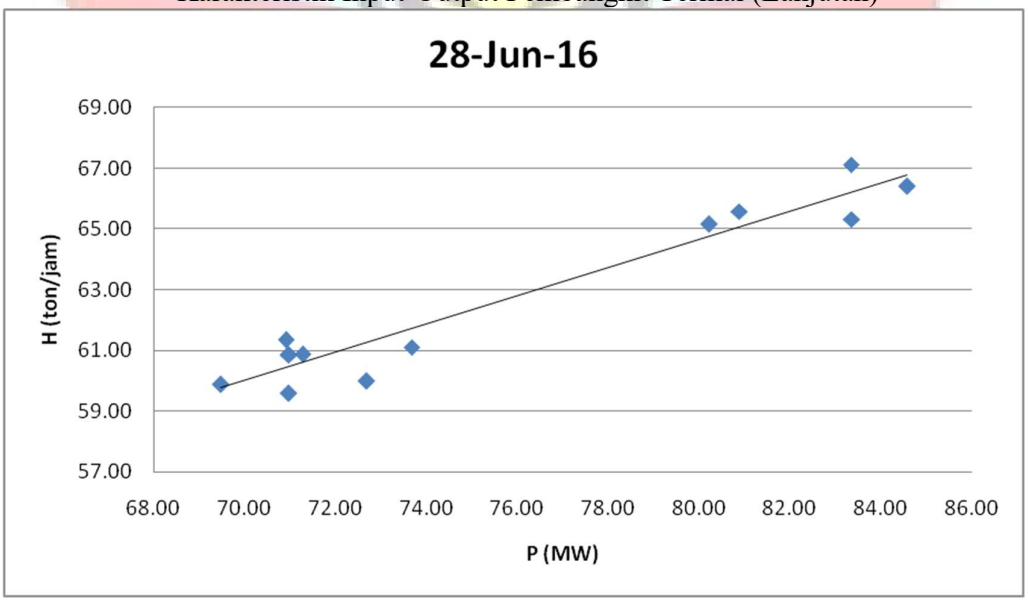


Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan

Karakteristik Input-Output Pembangkit Termal (Lanjutan)

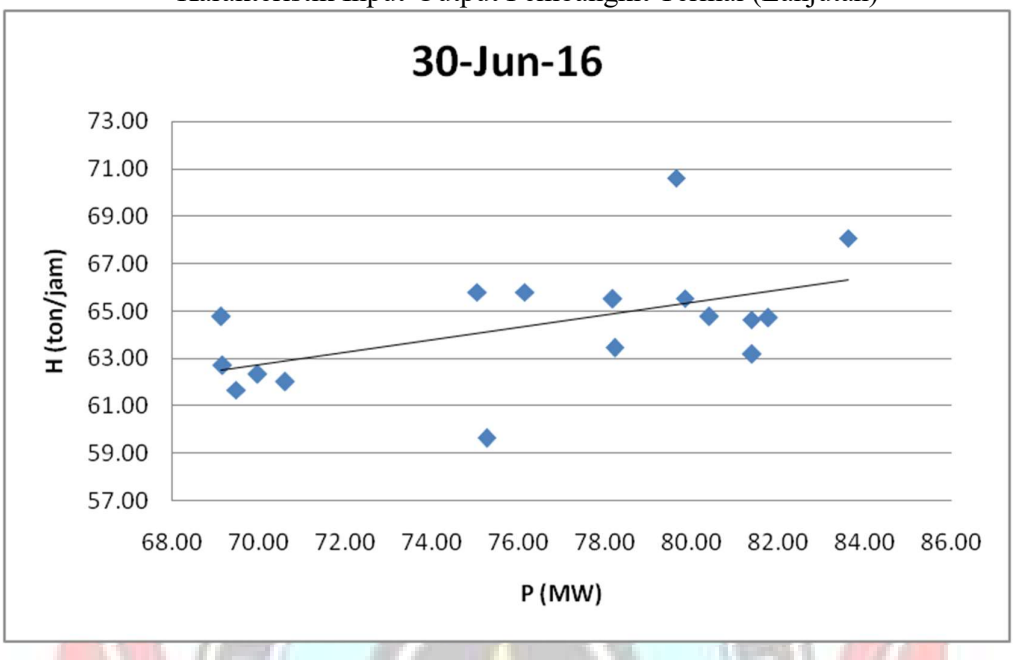


Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)

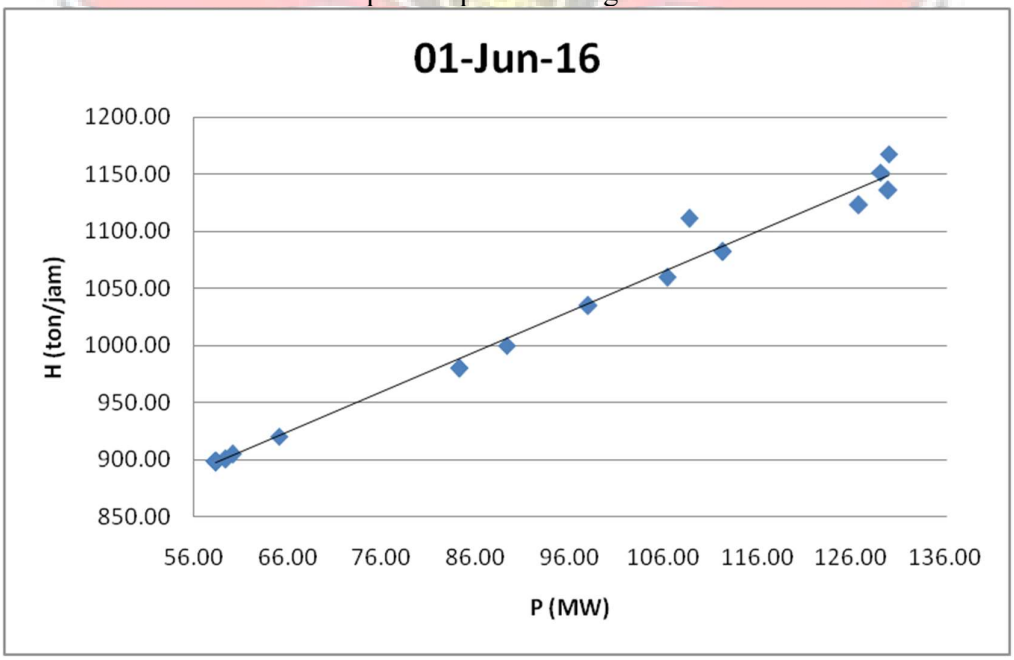


Lampiran 2d. Grafik Persamaan Input-Output PLTU Jene'ponto 2 Berdasarkan

Karakteristik Input-Output Pembangkit Termal (Lanjutan)

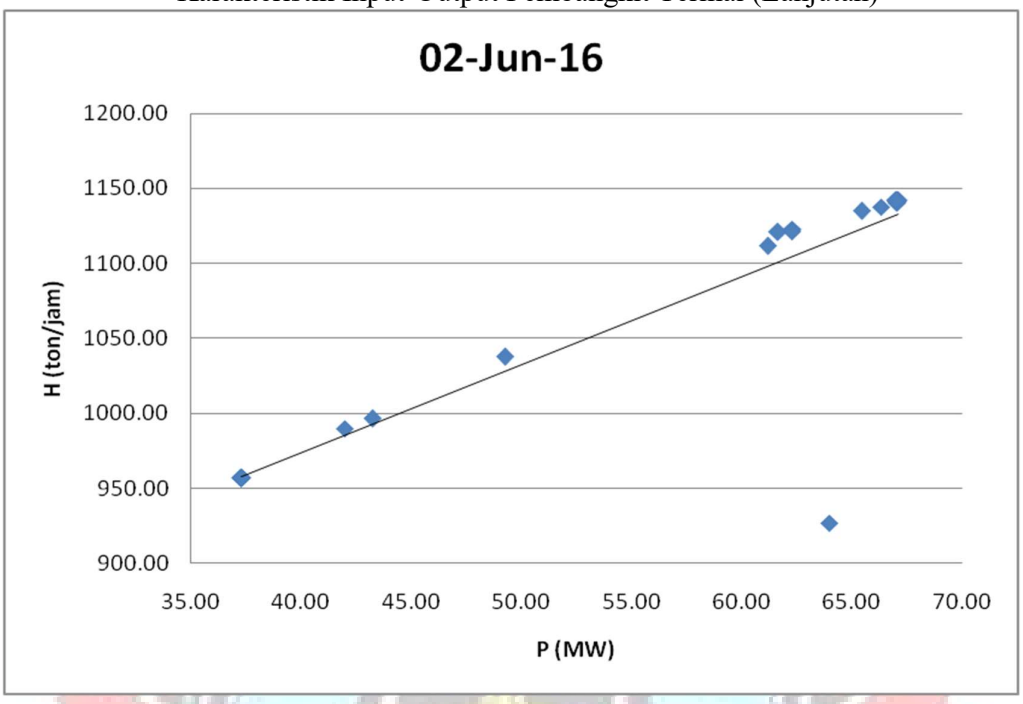


Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal

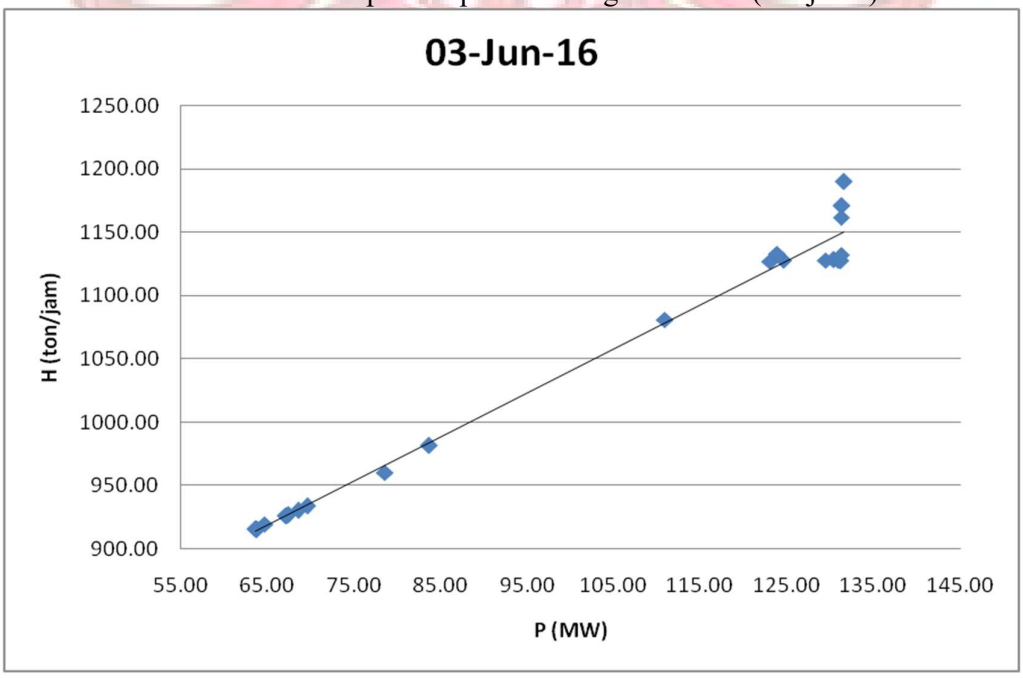


Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan

Karakteristik Input-Output Pembangkit Termal (Lanjutan)

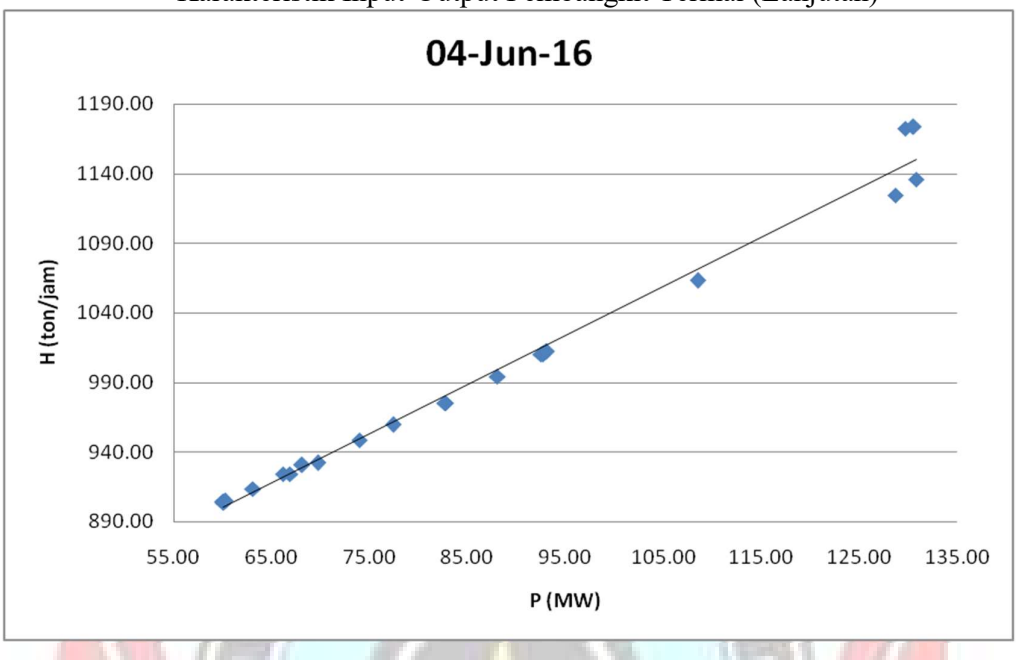


Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)

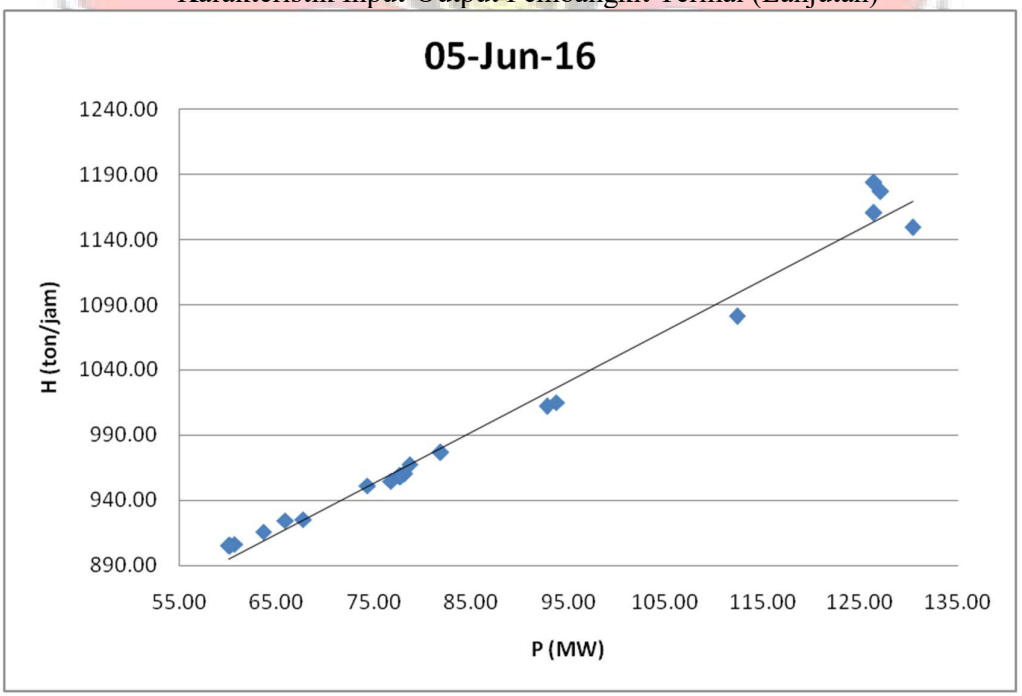


Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan

Karakteristik Input-Output Pembangkit Termal (Lanjutan)

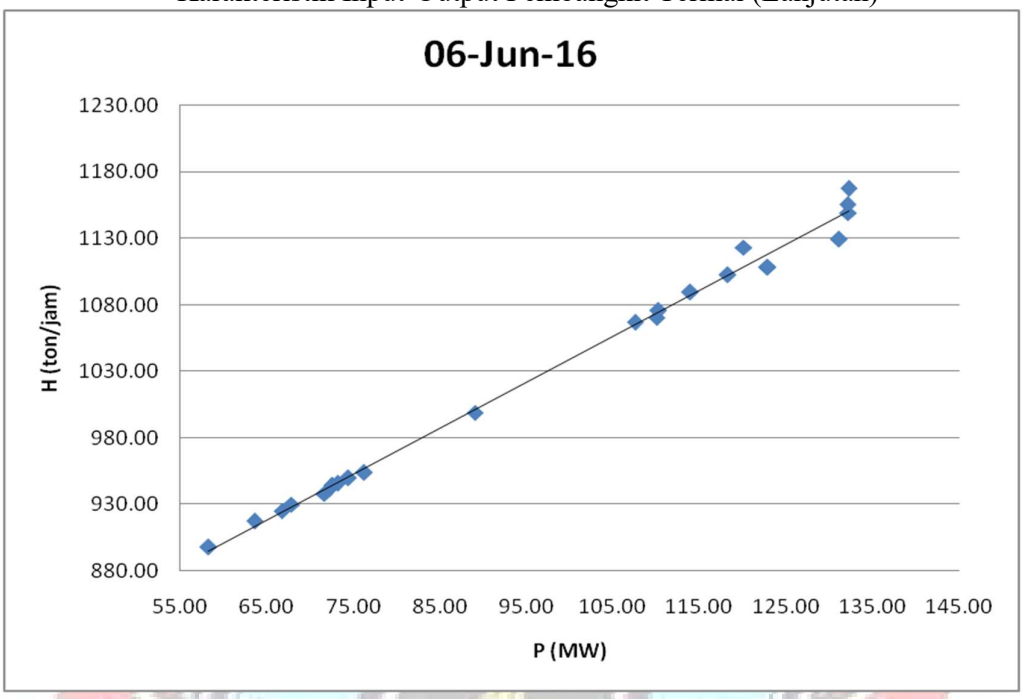


Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)

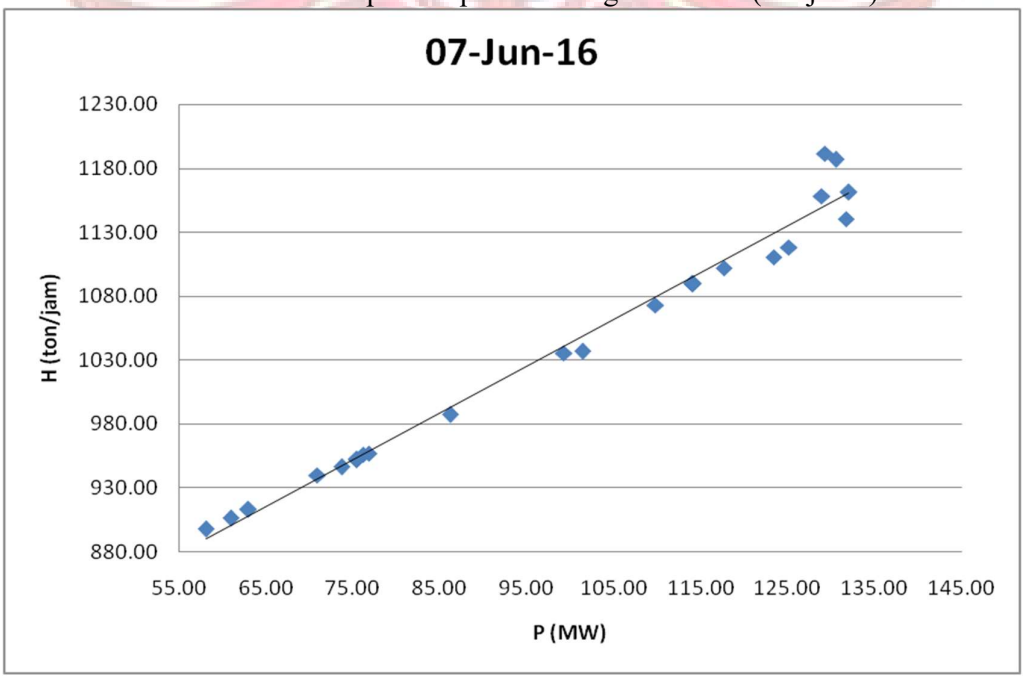


Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan

Karakteristik Input-Output Pembangkit Termal (Lanjutan)

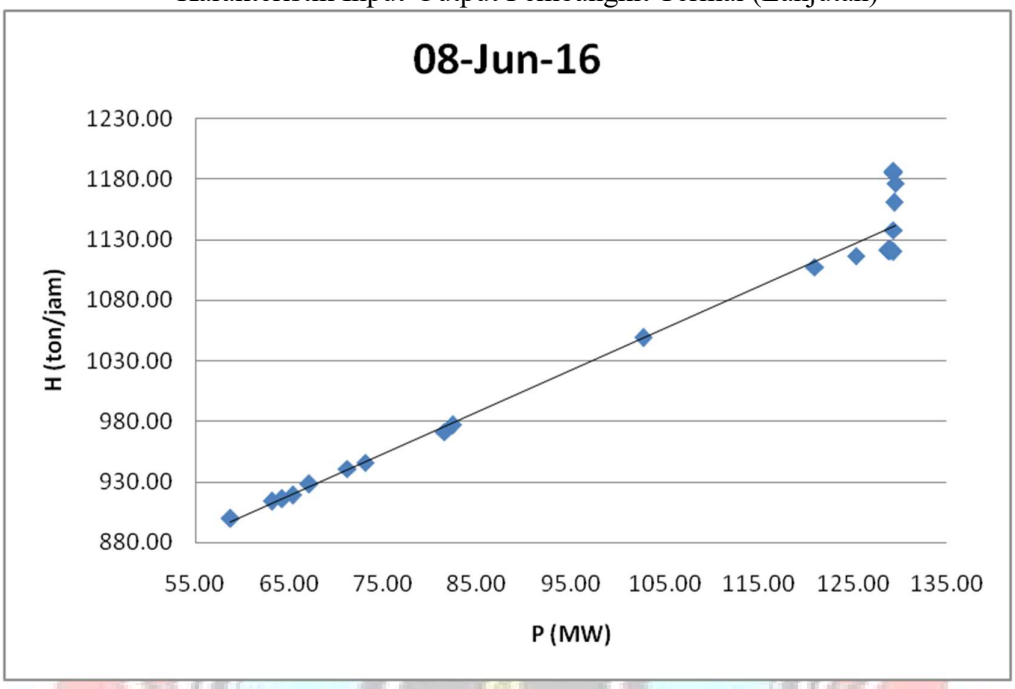


Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)

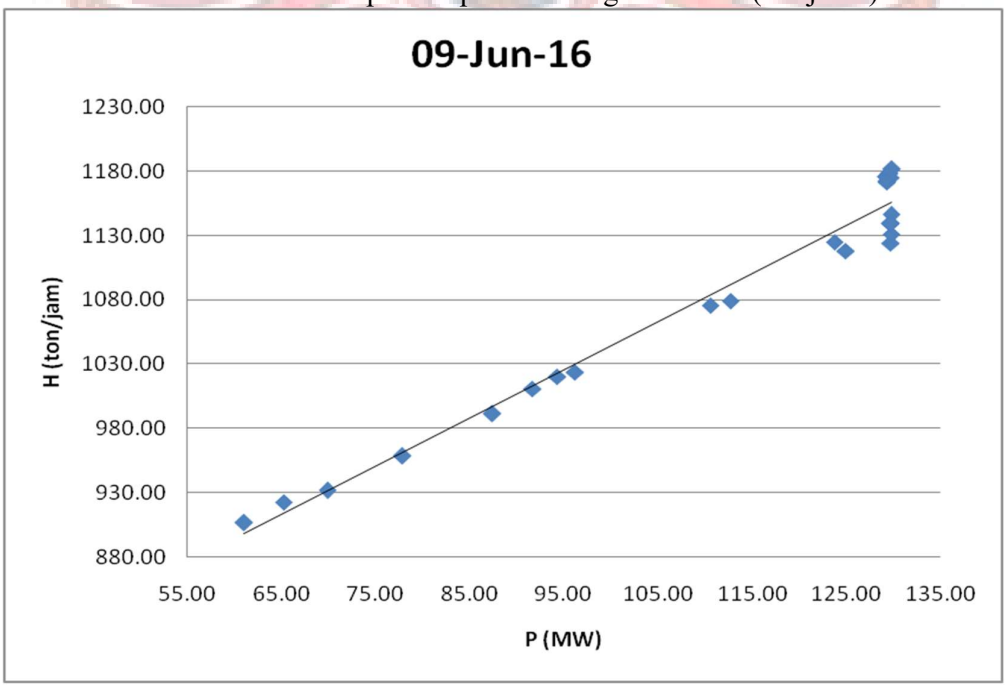


Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan

Karakteristik Input-Output Pembangkit Termal (Lanjutan)

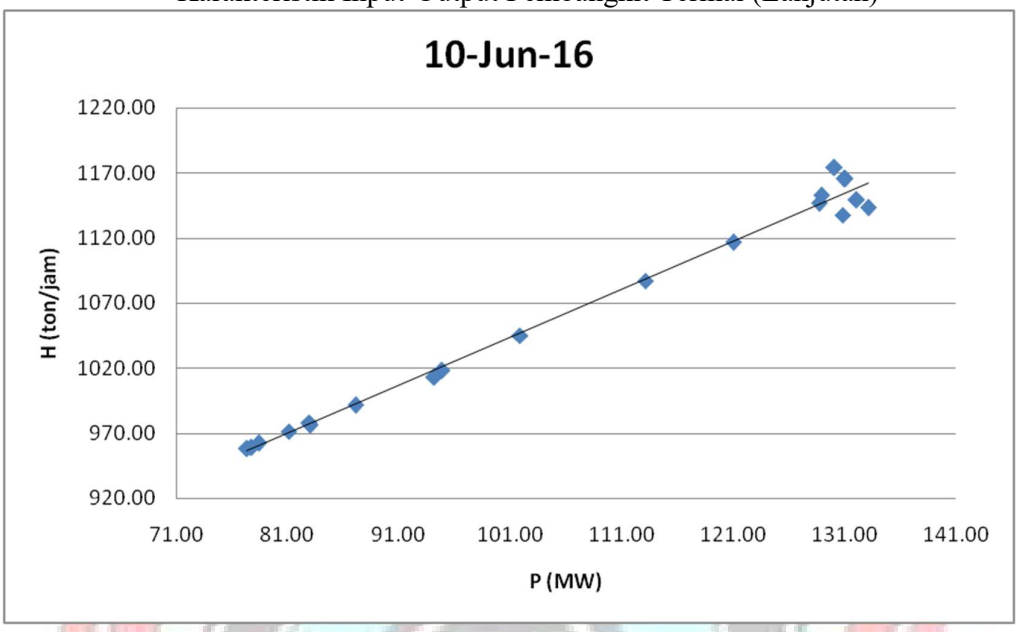


Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)

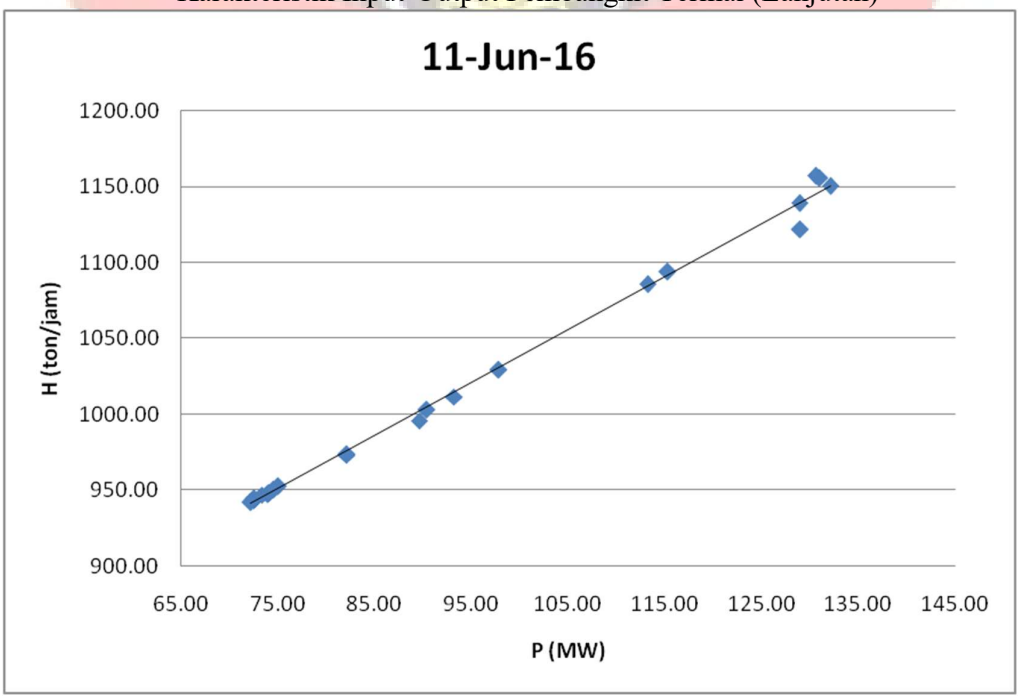


Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan

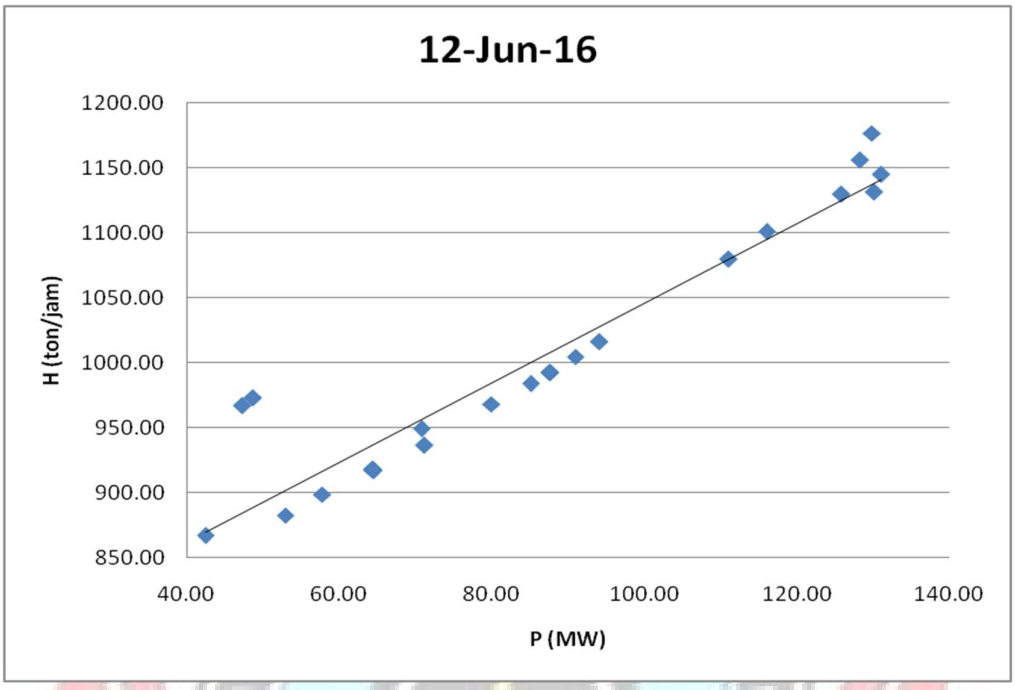
Karakteristik Input-Output Pembangkit Termal (Lanjutan)



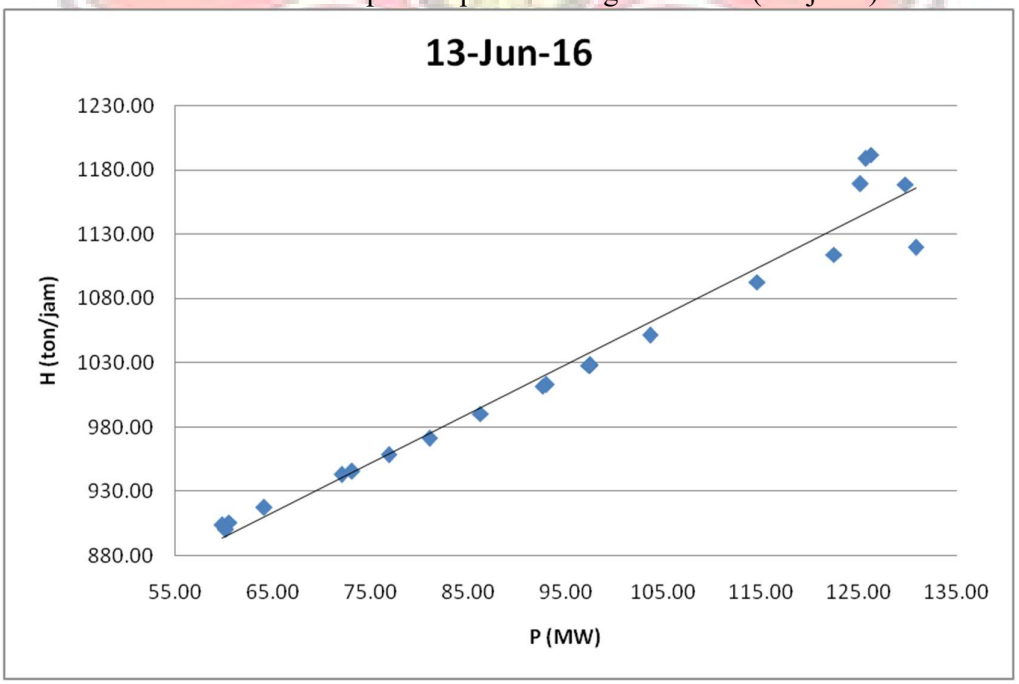
Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



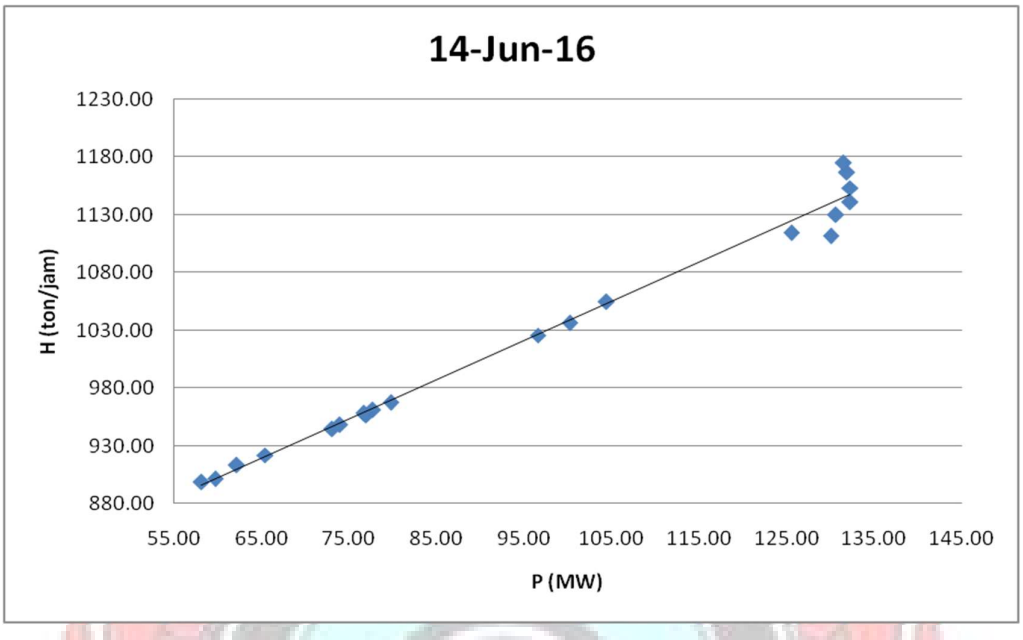
Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



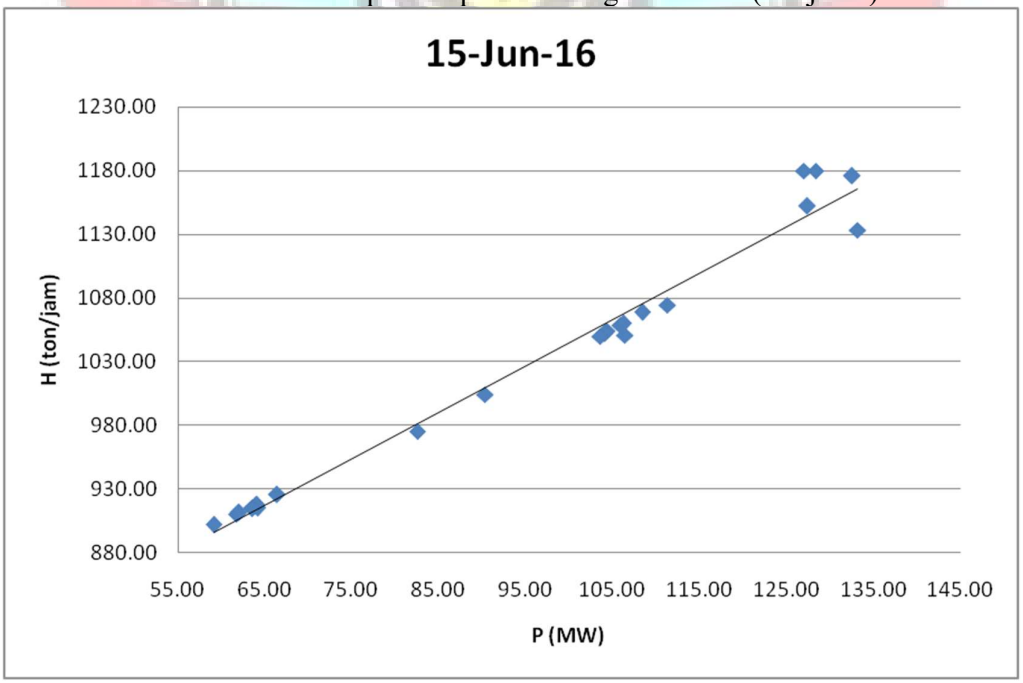
Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



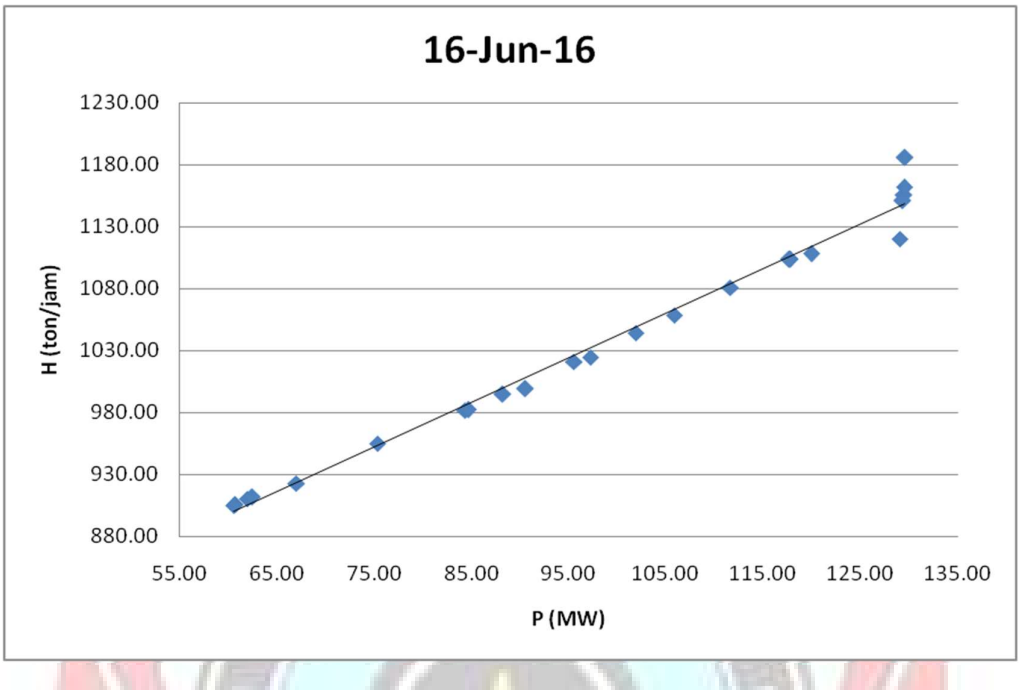
Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



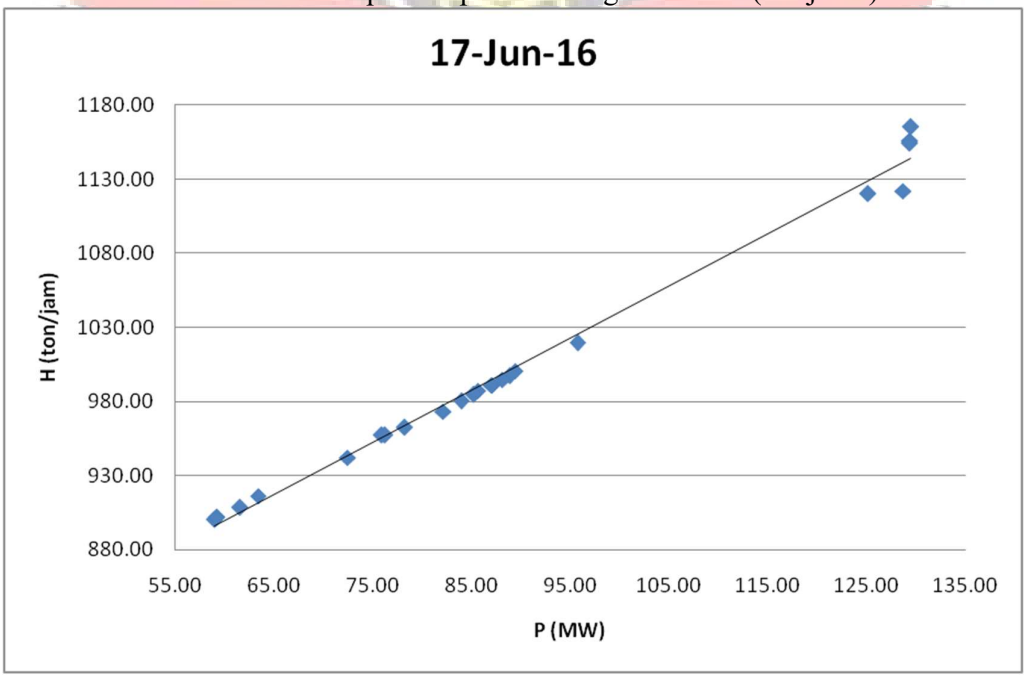
Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



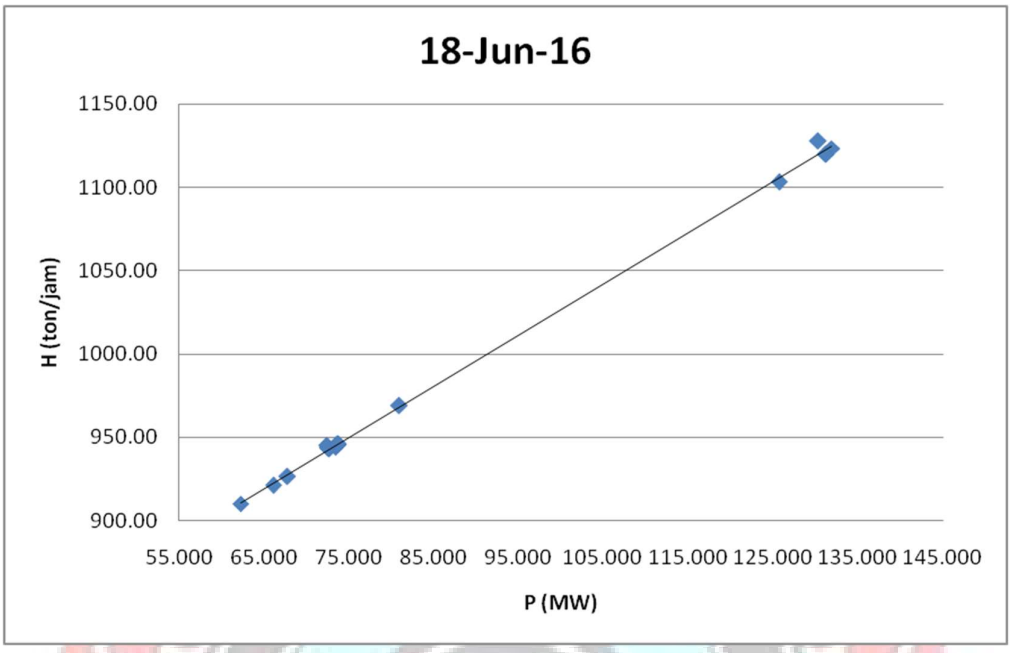
Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



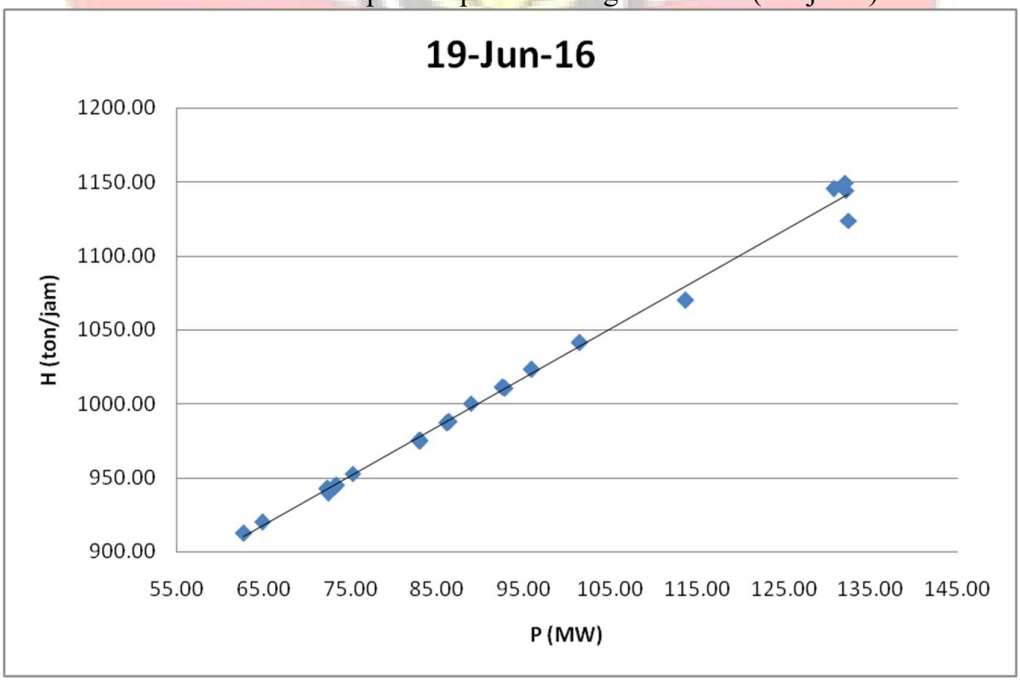
Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



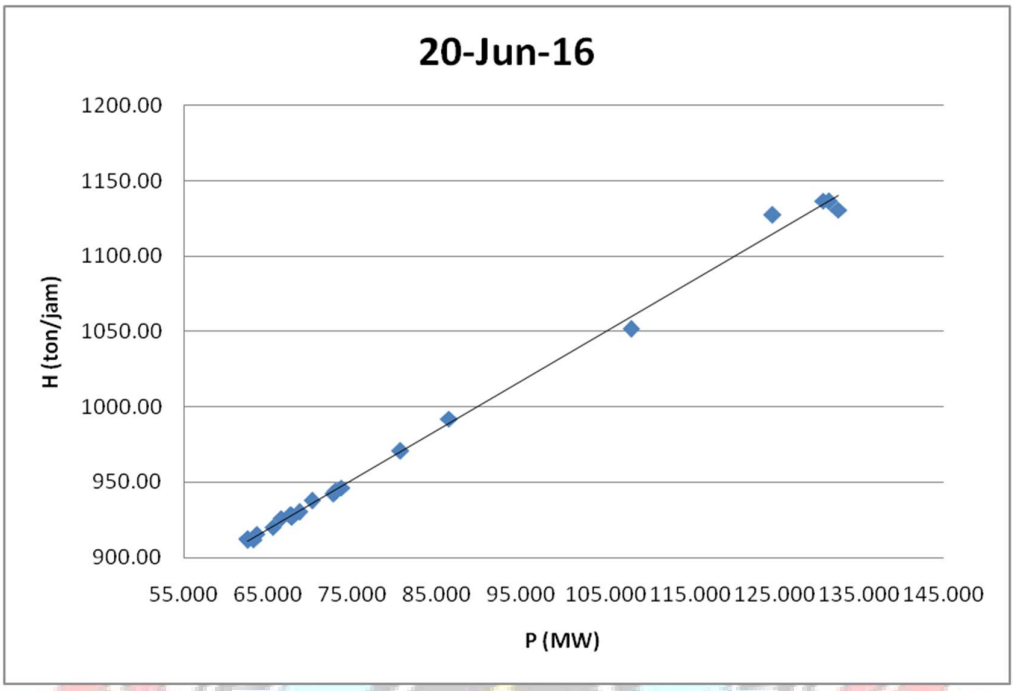
Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



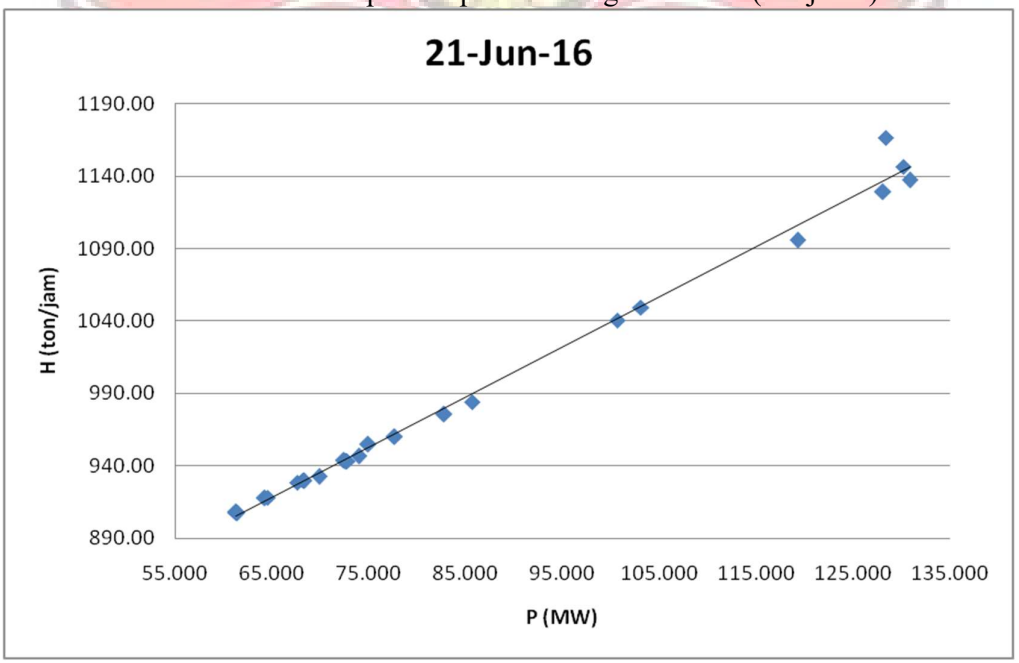
Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



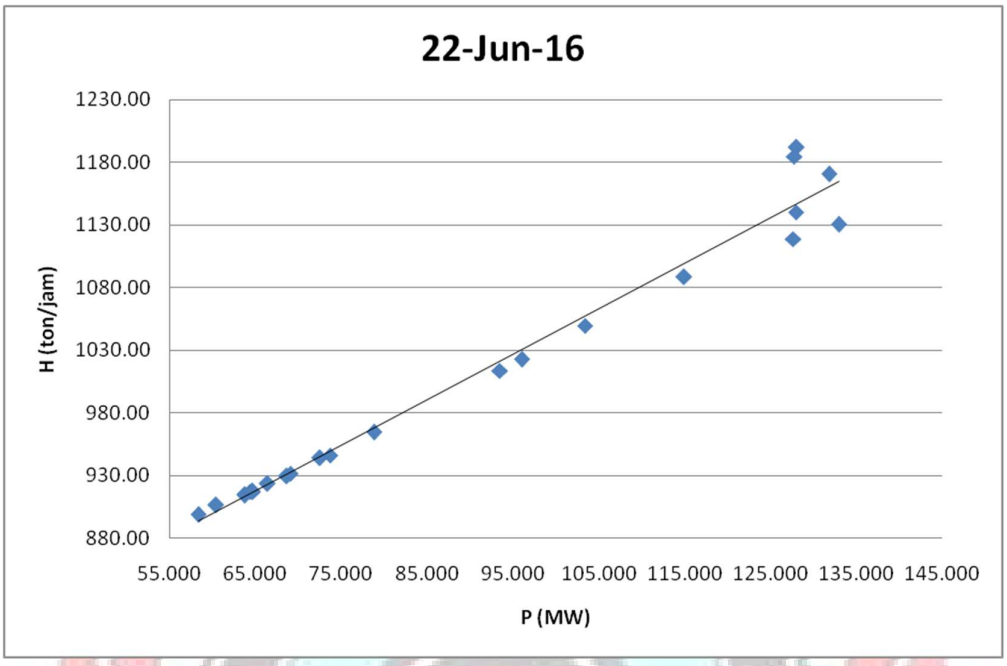
Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



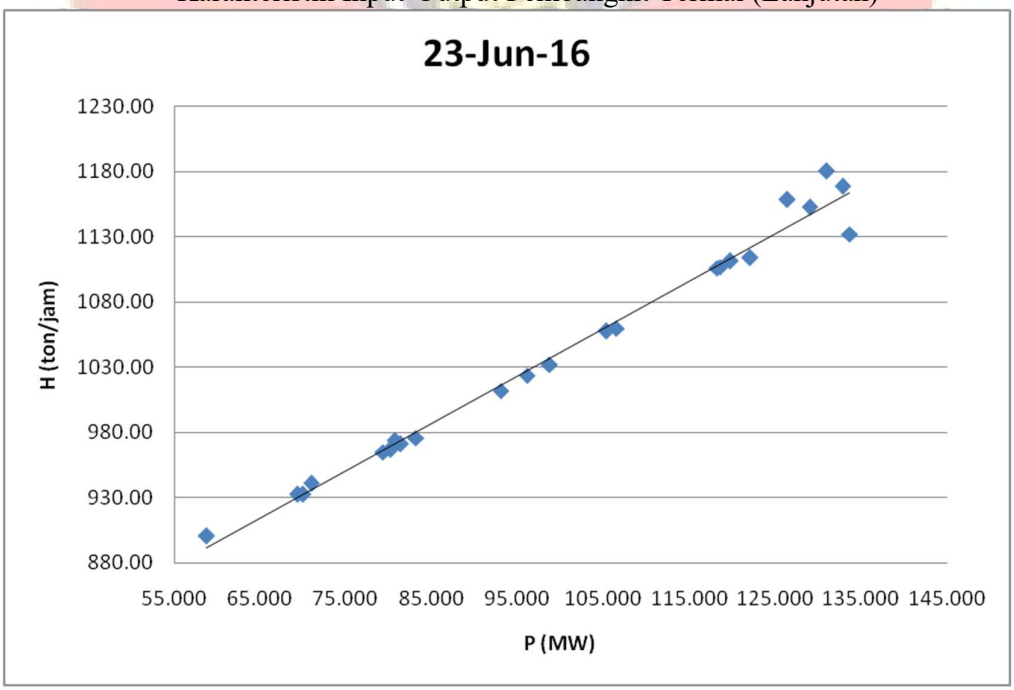
Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



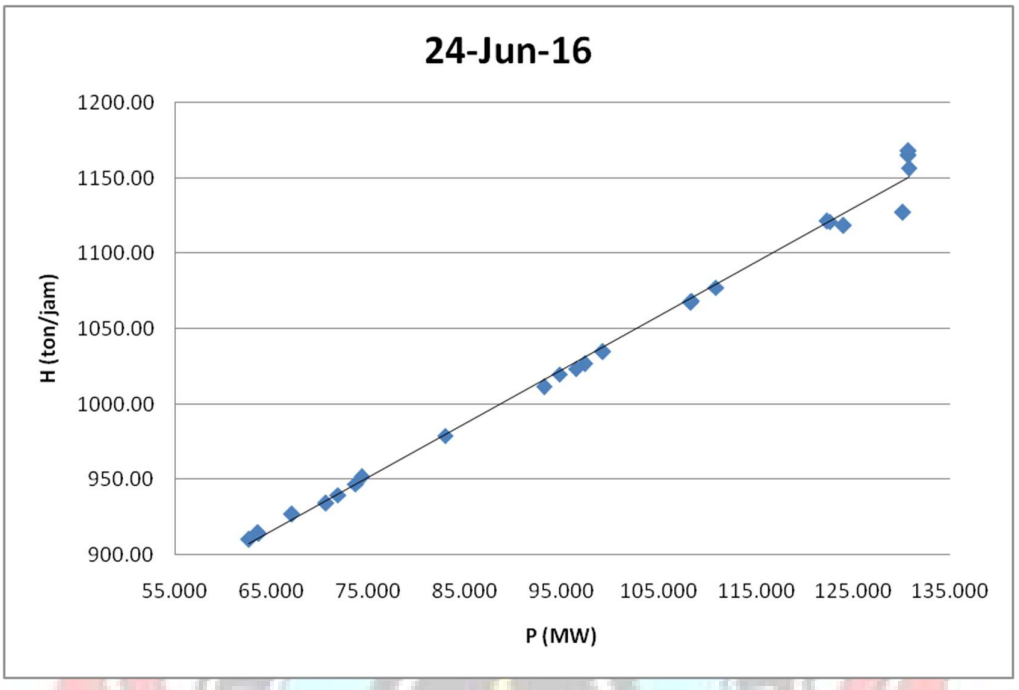
Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



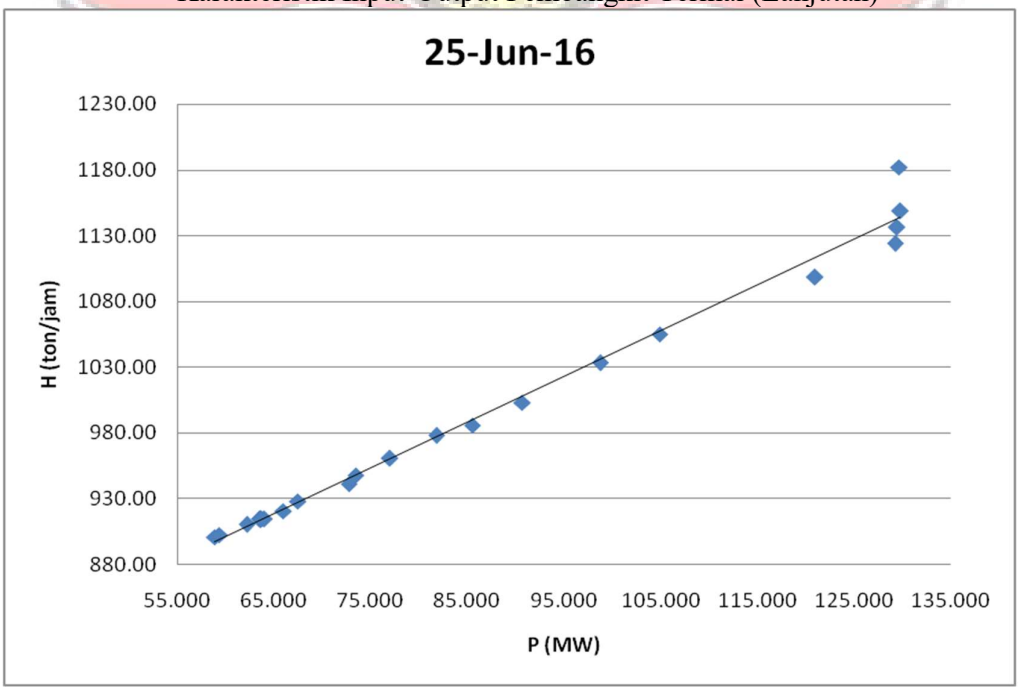
Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



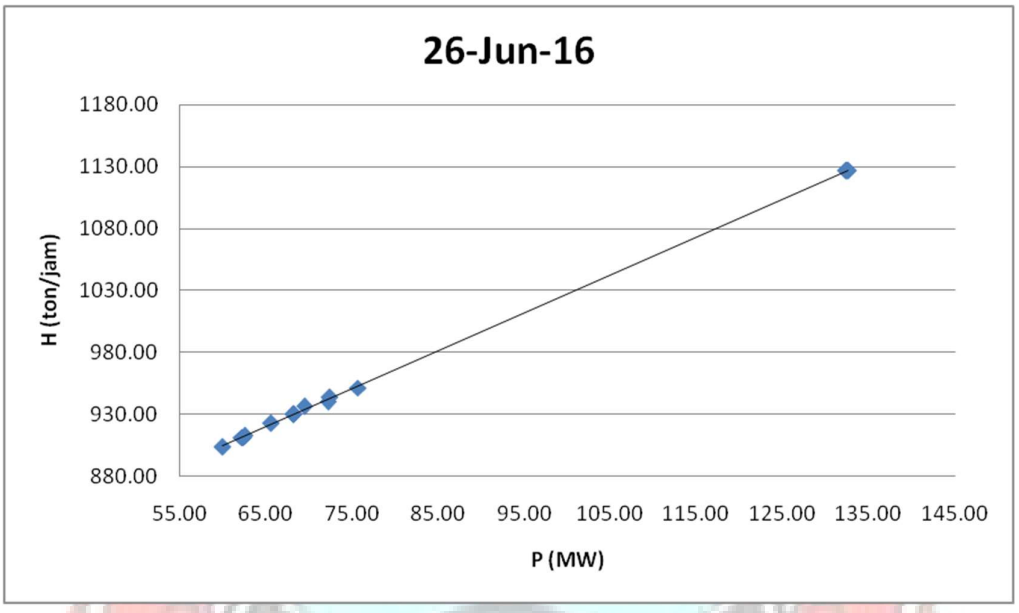
Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



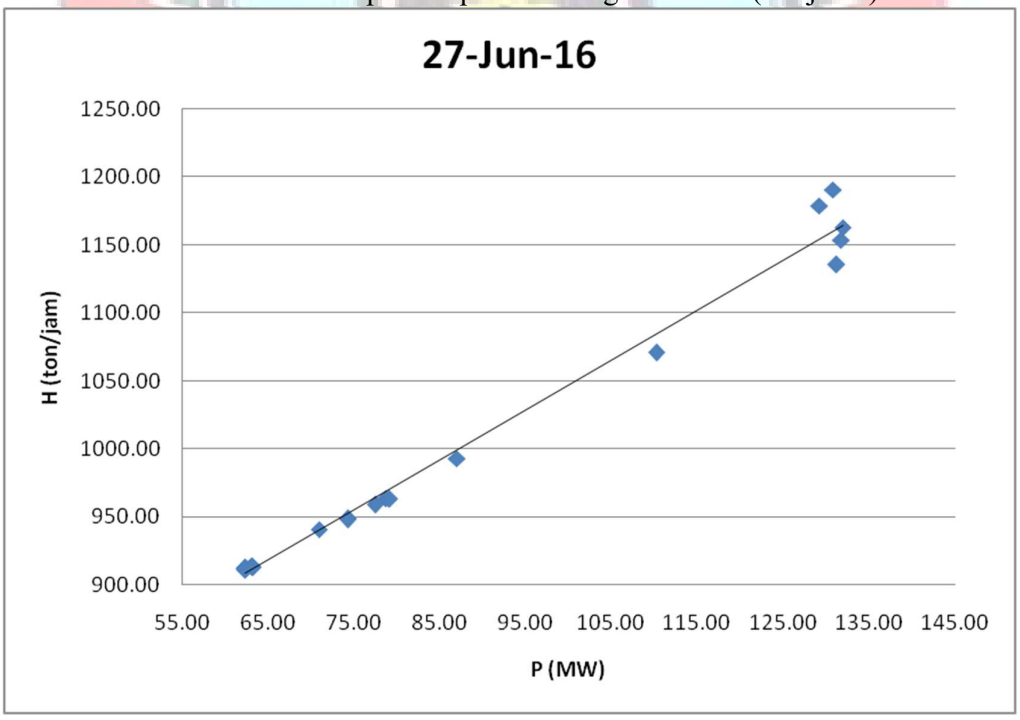
Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



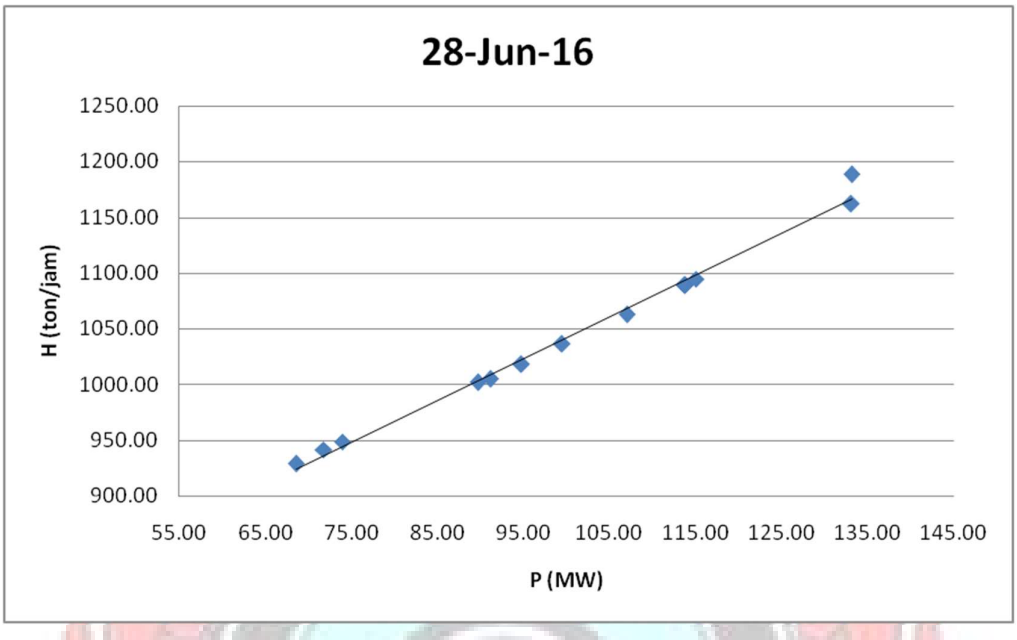
Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



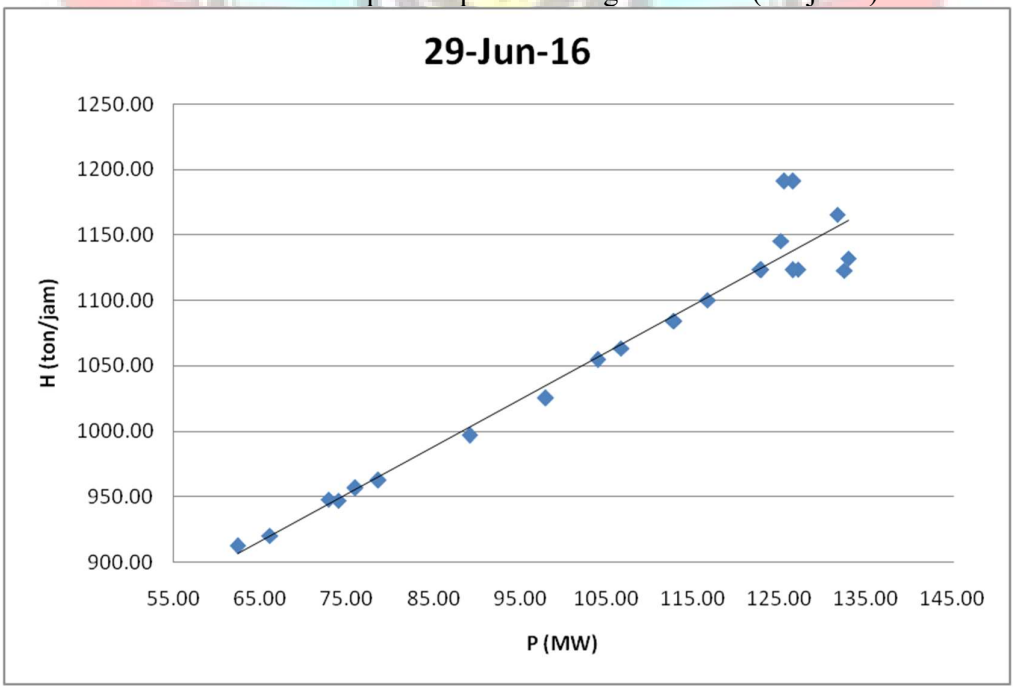
Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



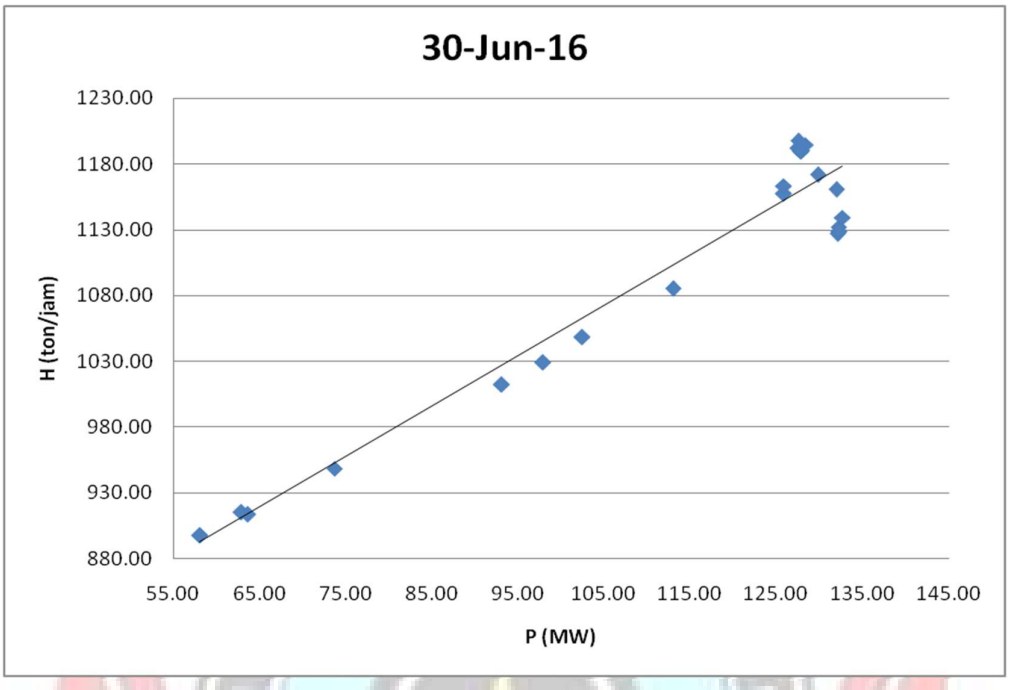
Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



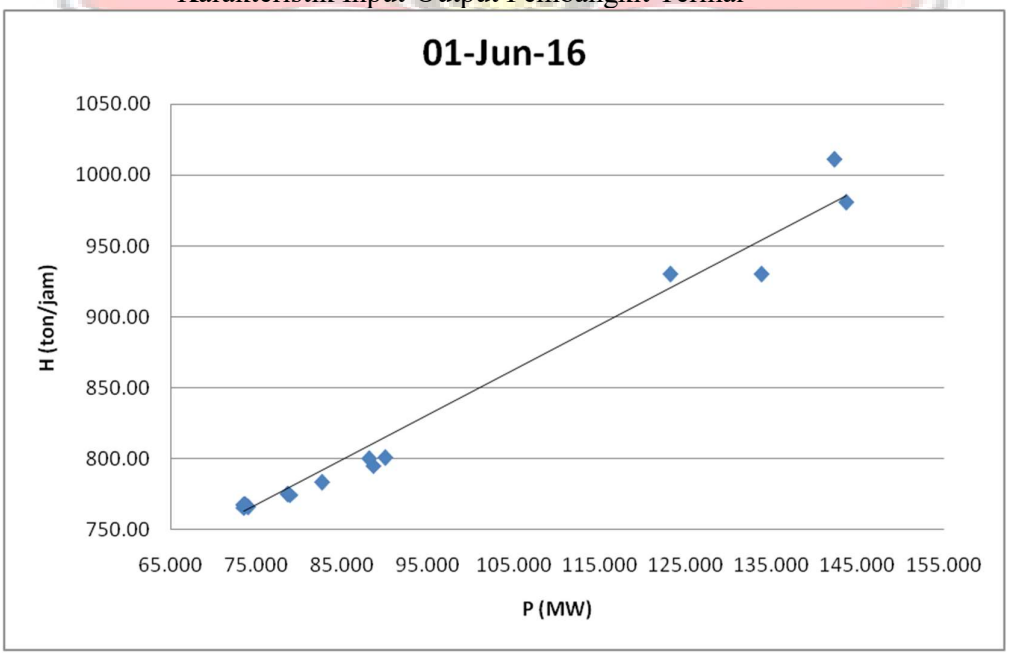
Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



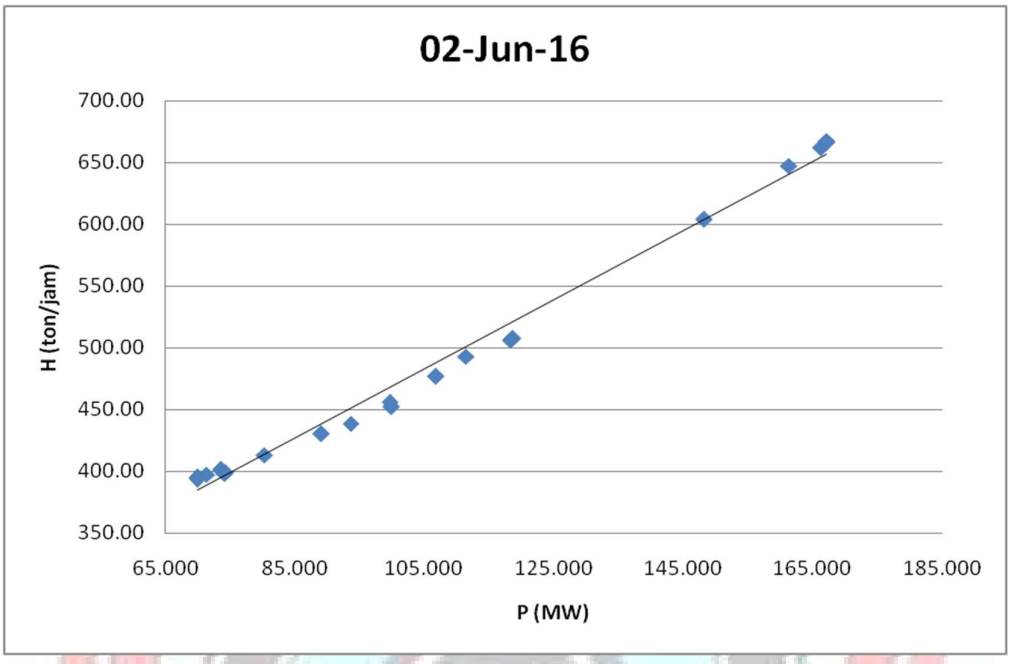
Lampiran 2e. Grafik Persamaan Input-Output PLTGU Sengkang 1 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



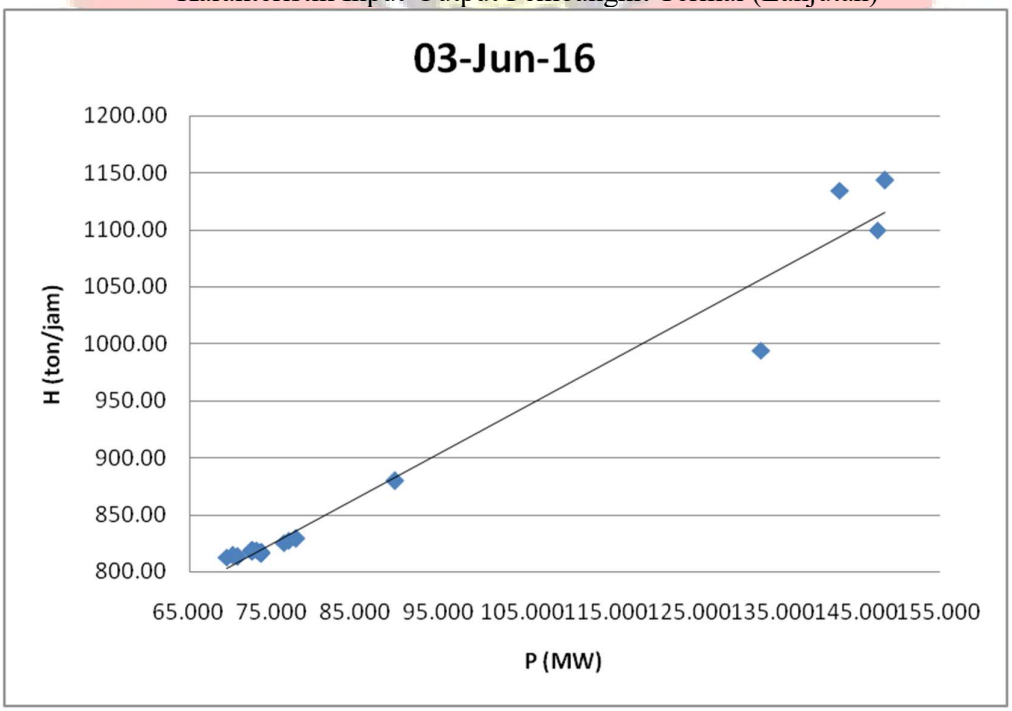
Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal



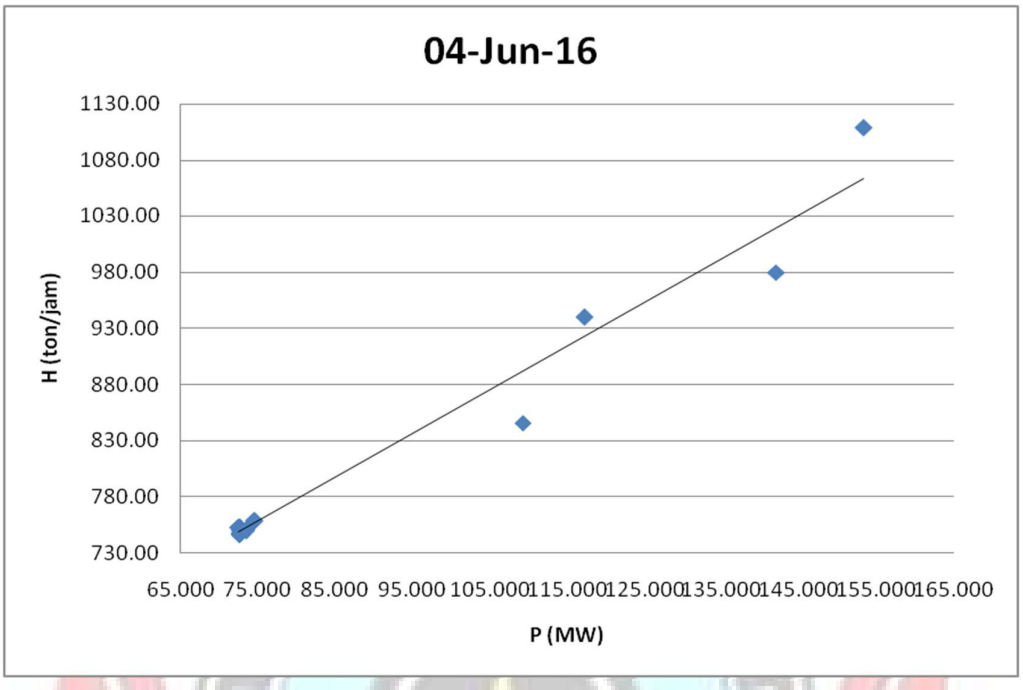
Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



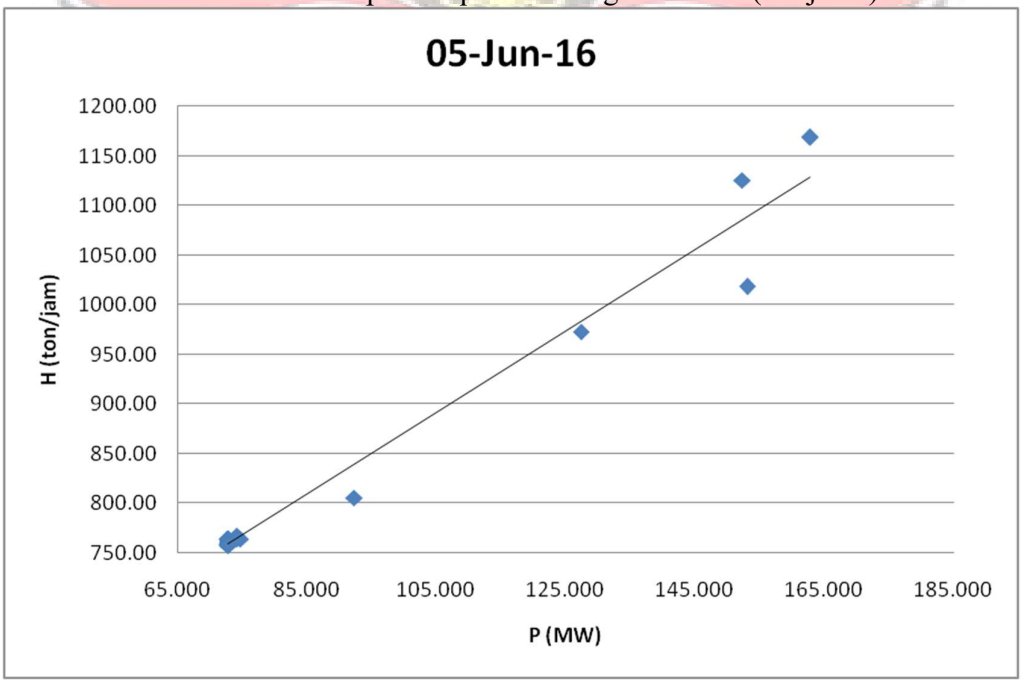
Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



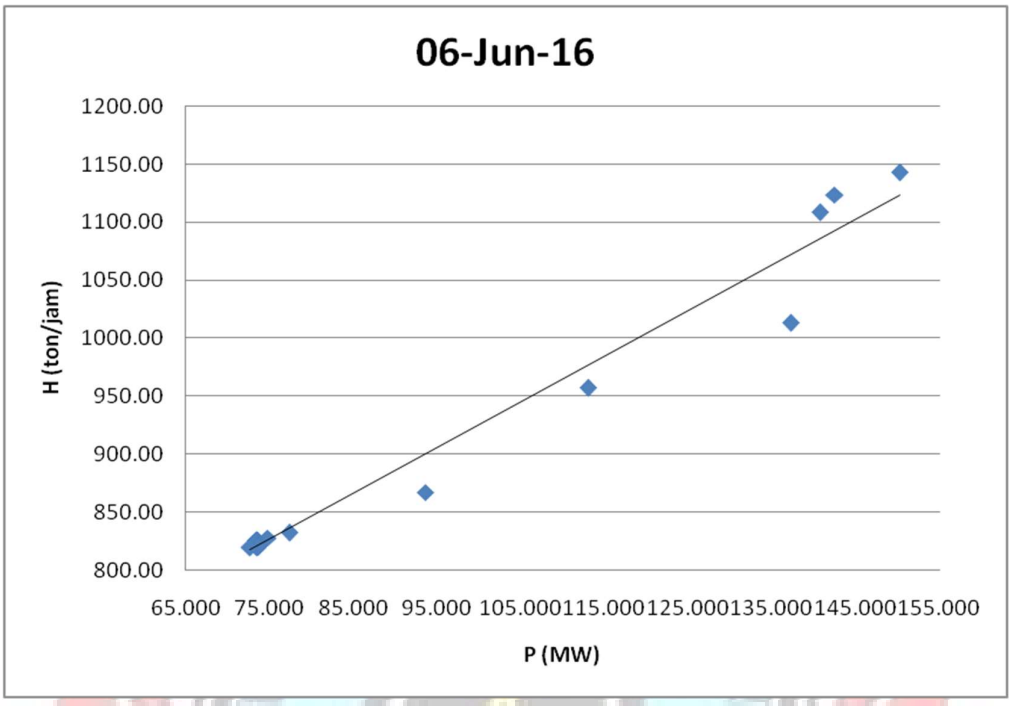
Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



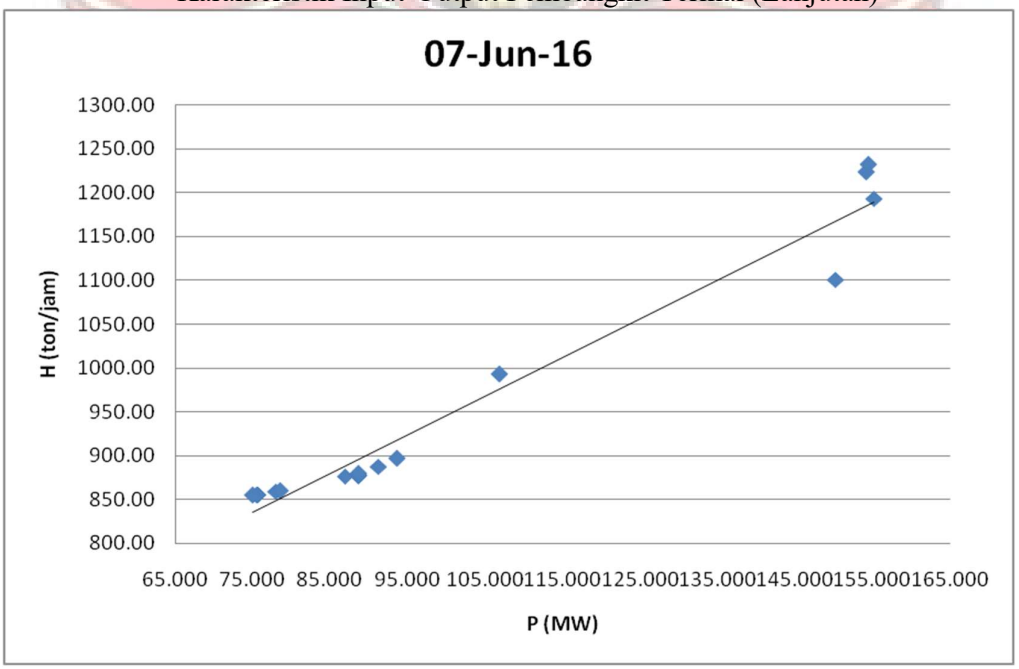
Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



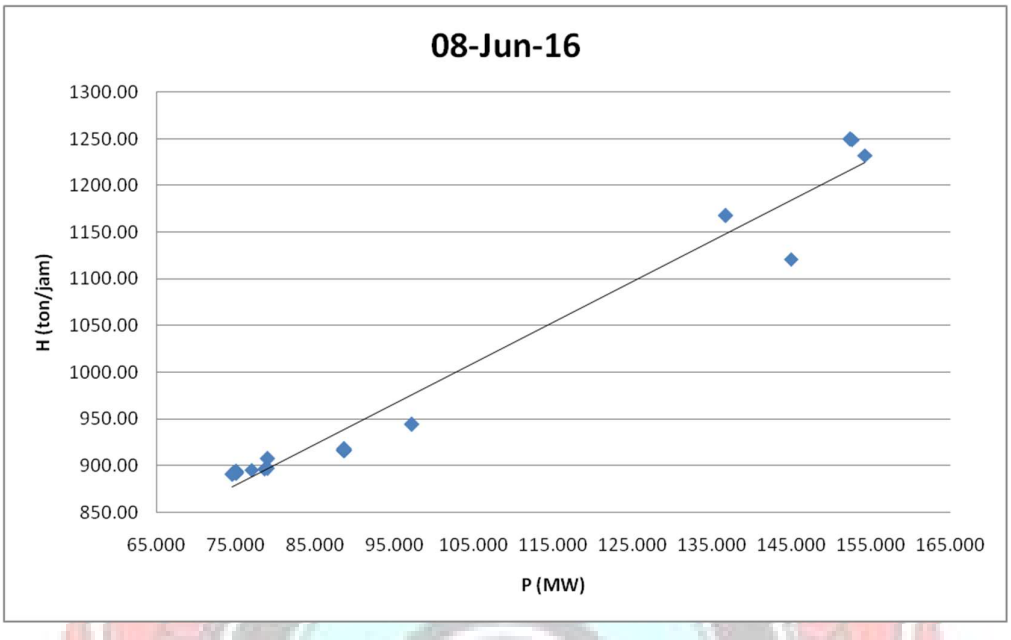
Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



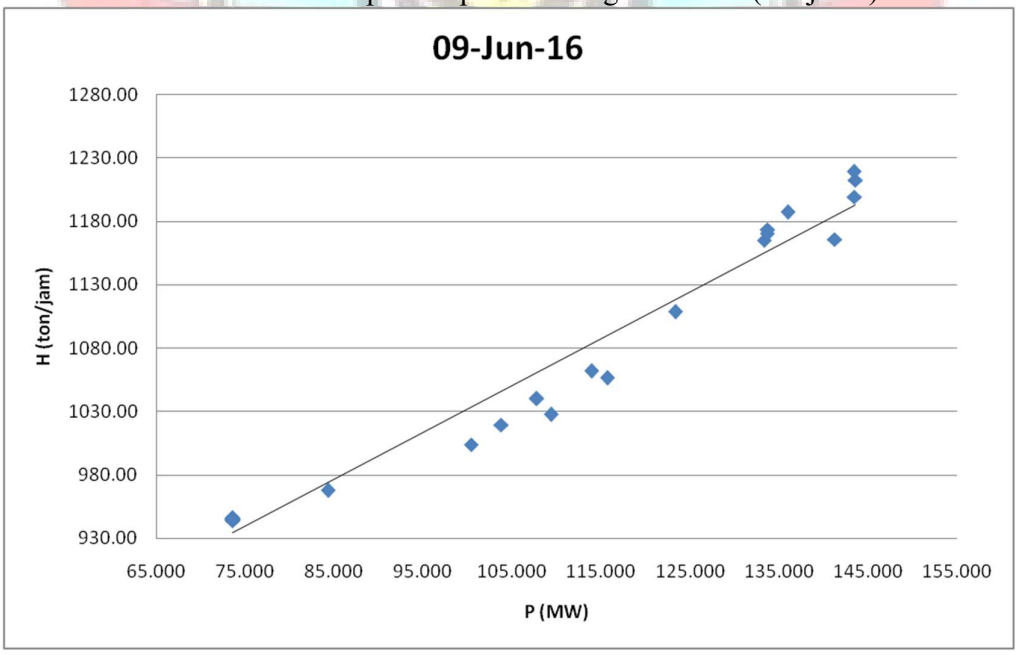
Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



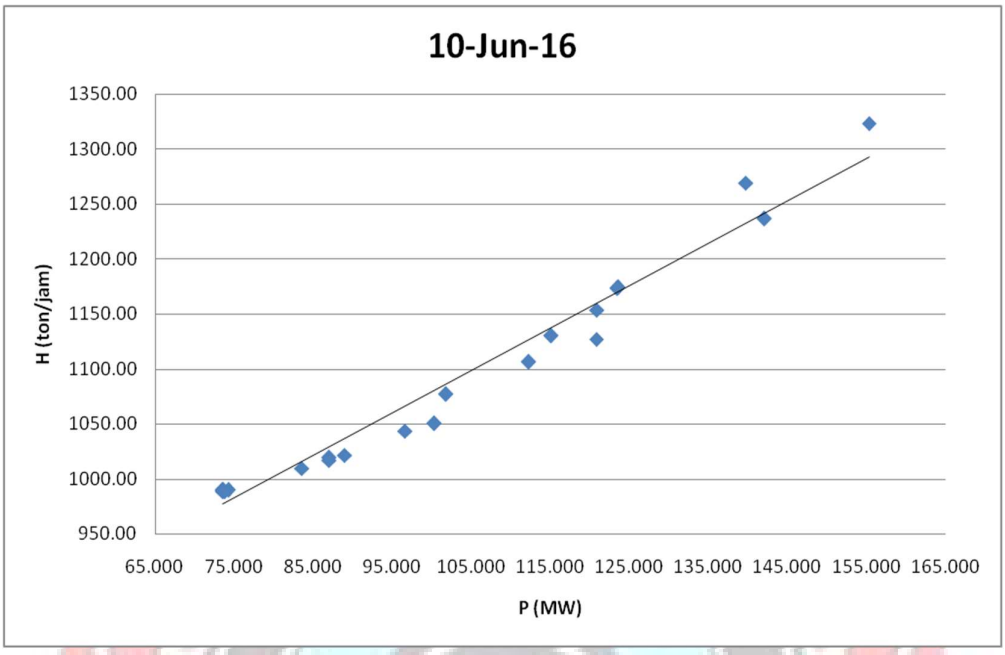
Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



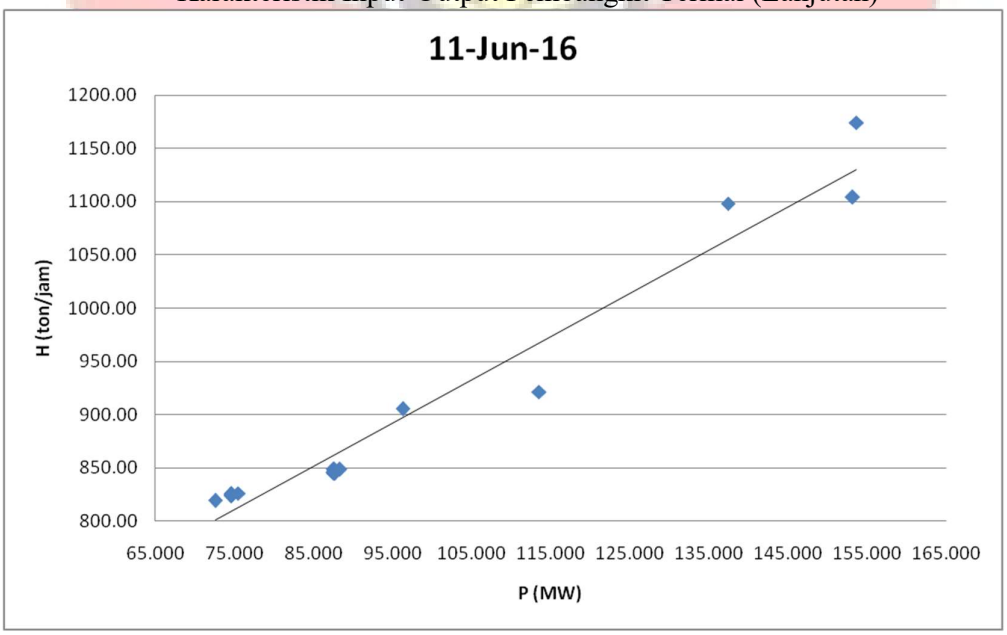
Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



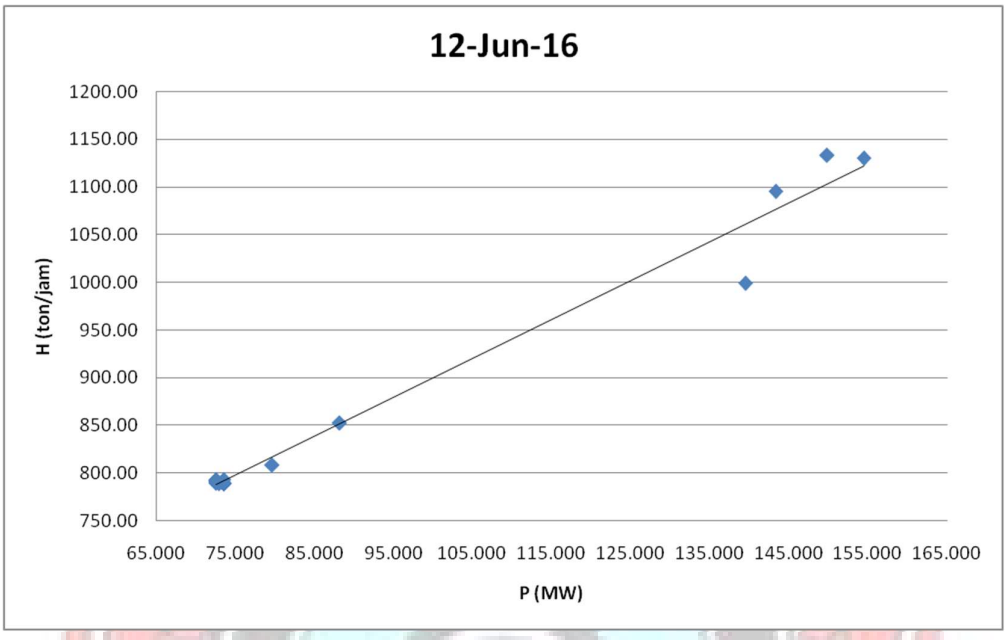
Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



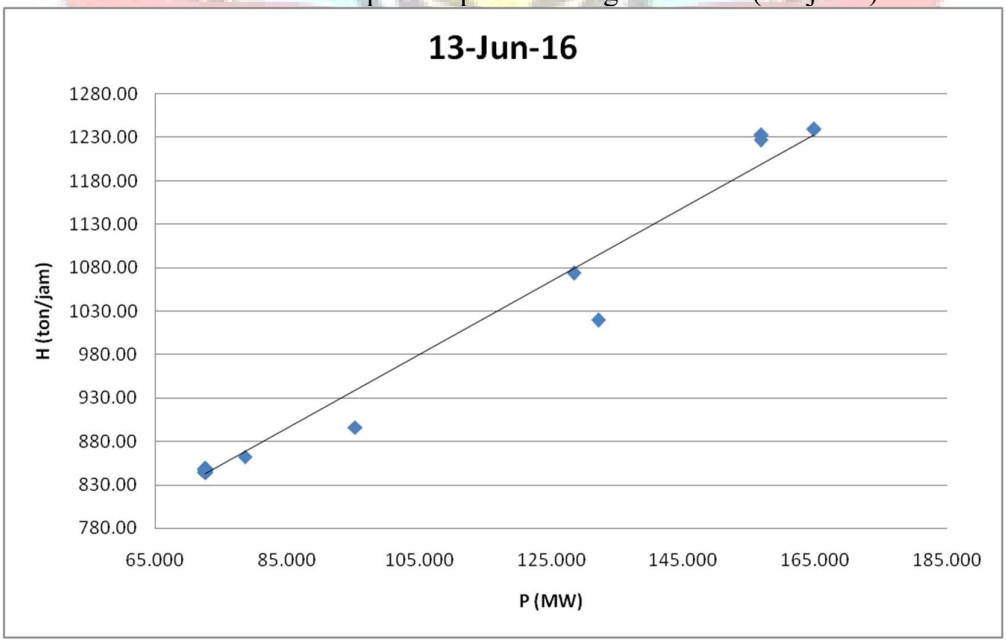
Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



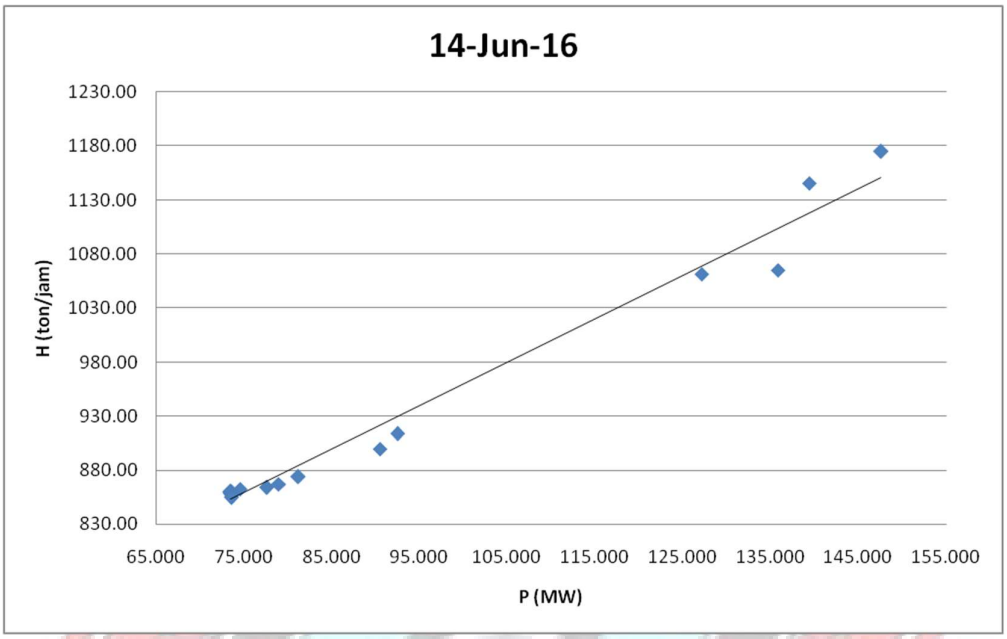
Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



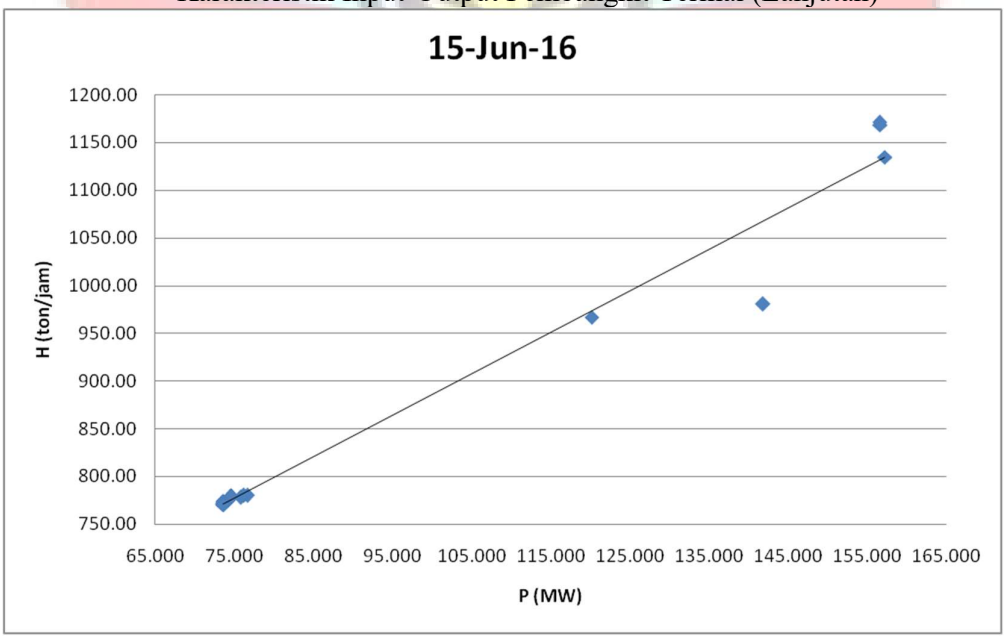
Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



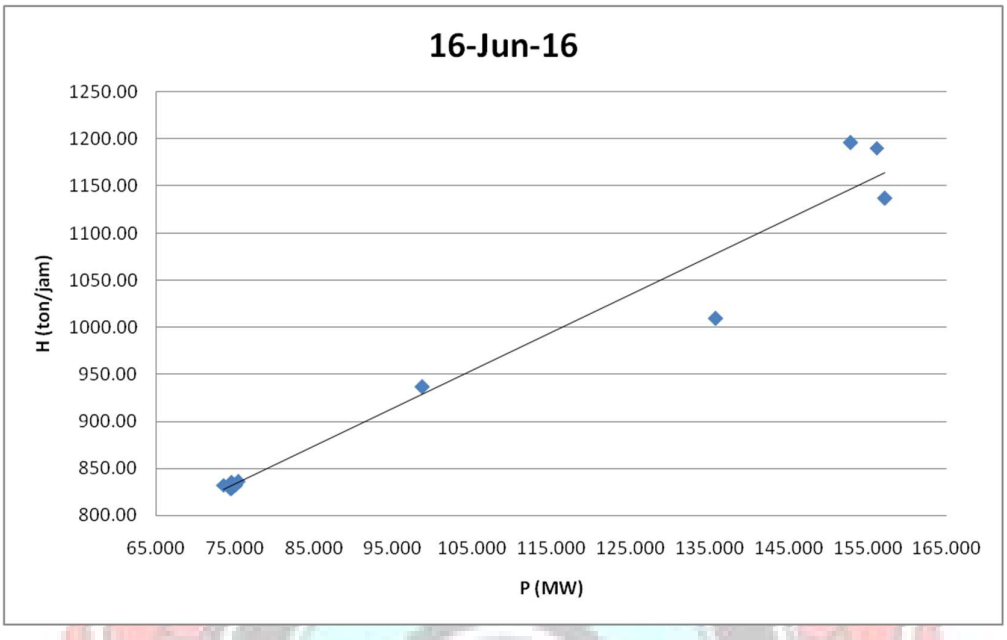
Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



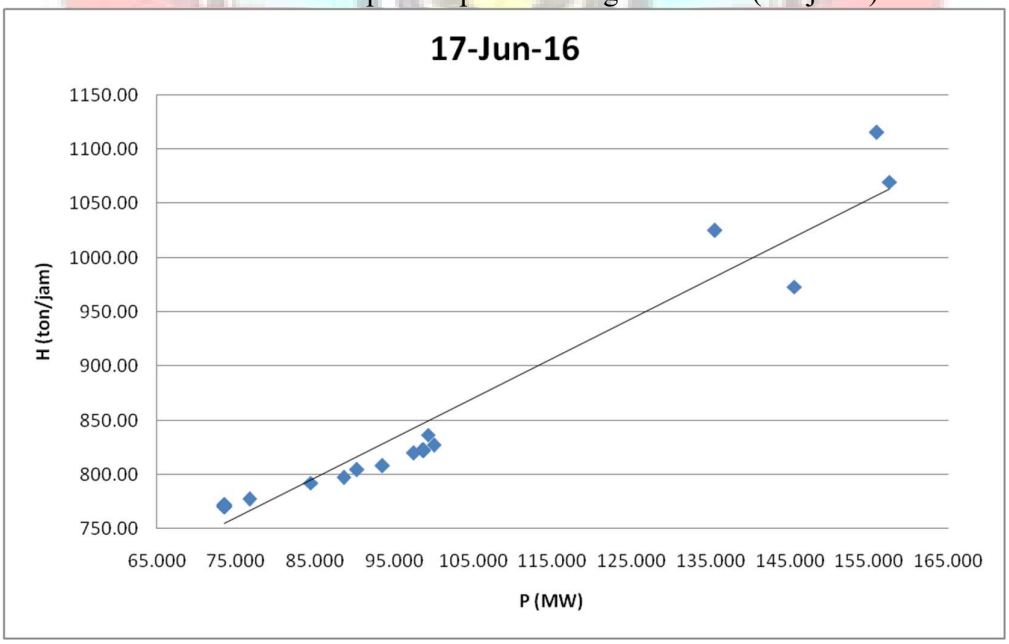
Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



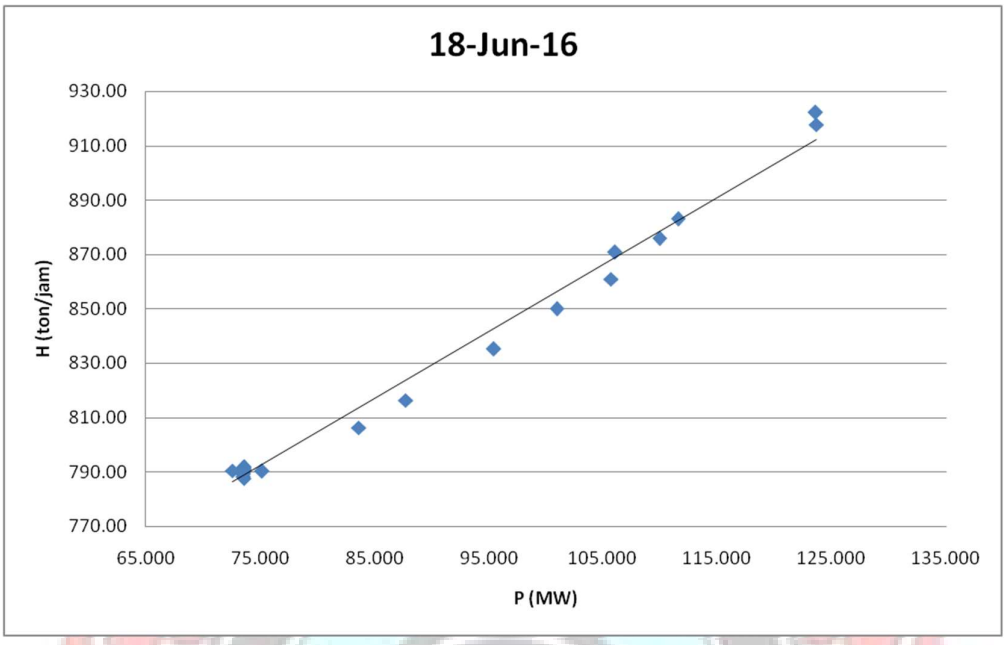
Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



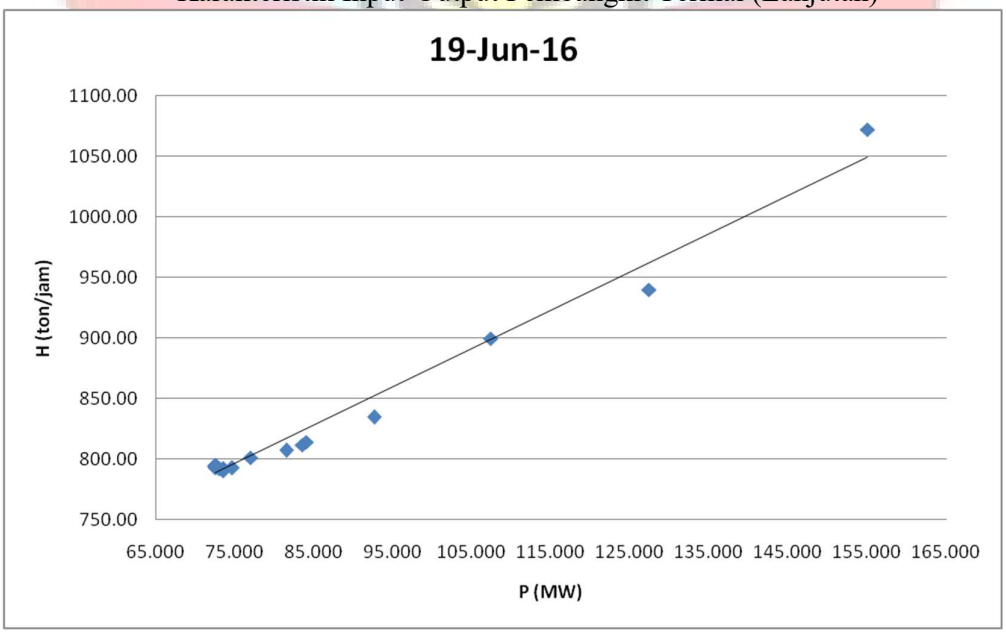
Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



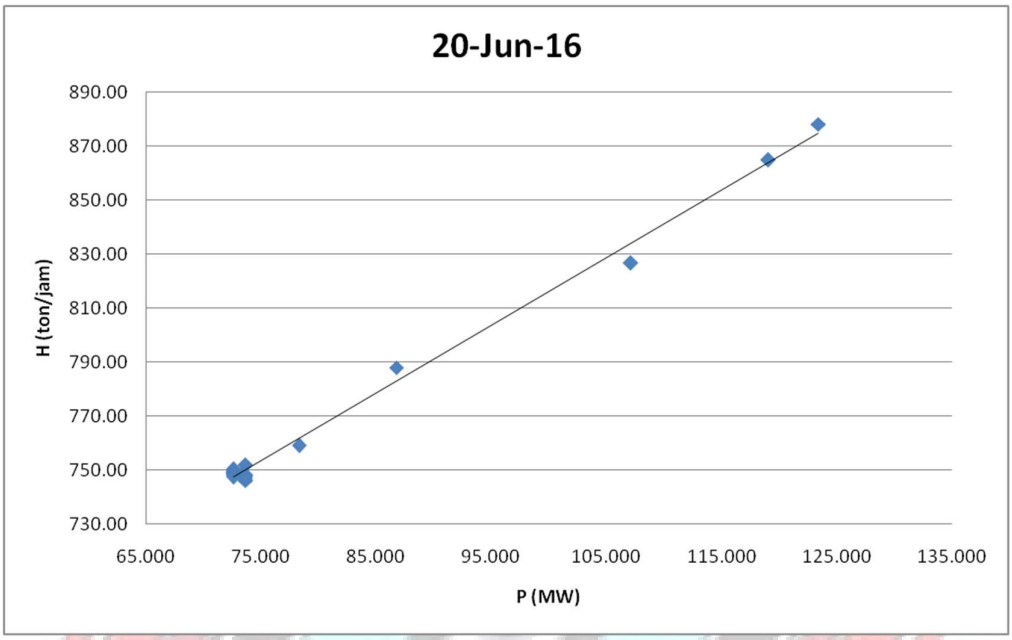
Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



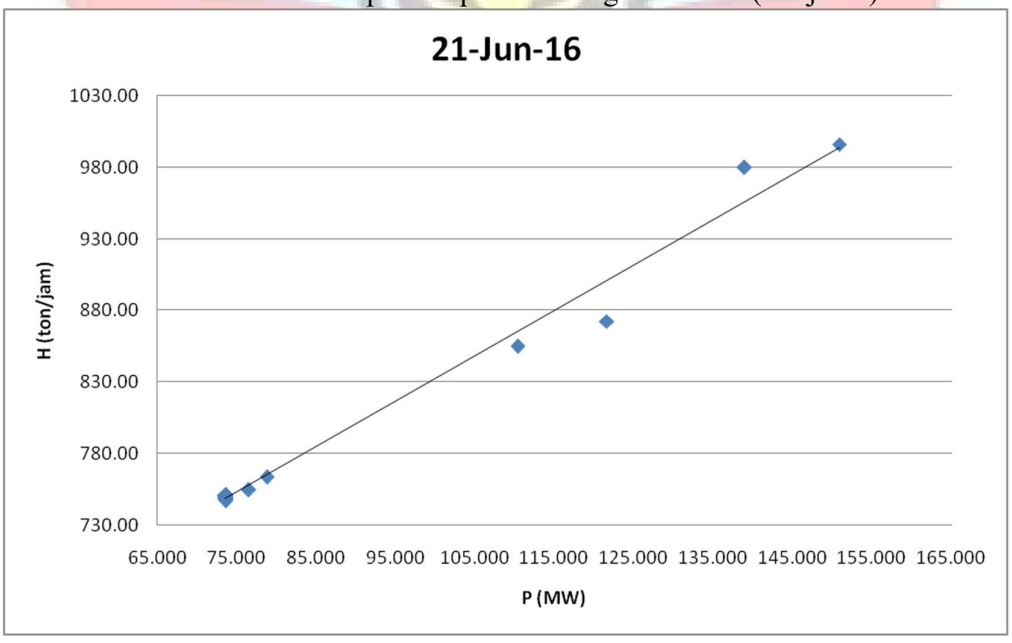
Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



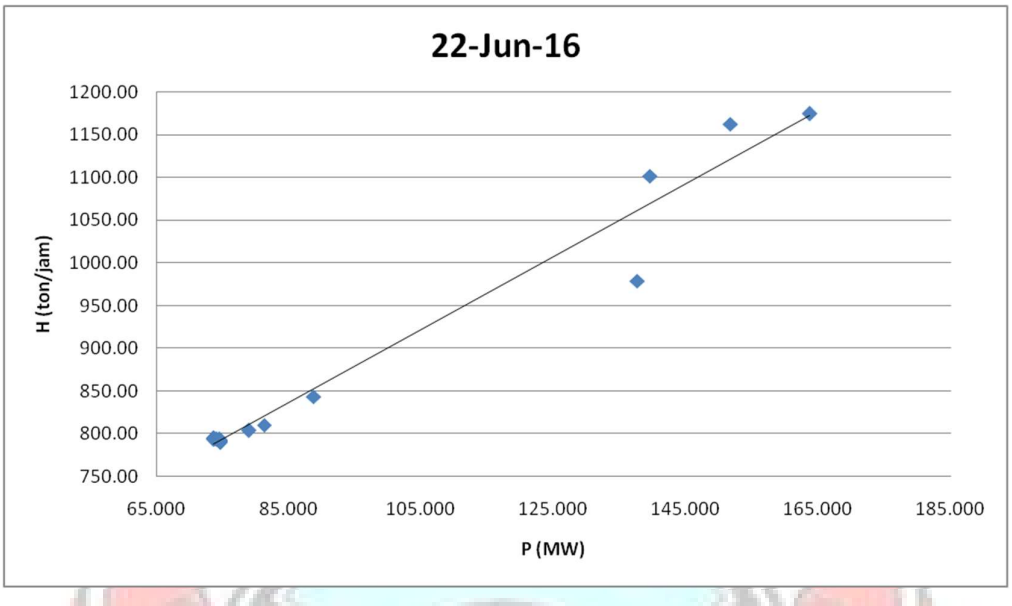
Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



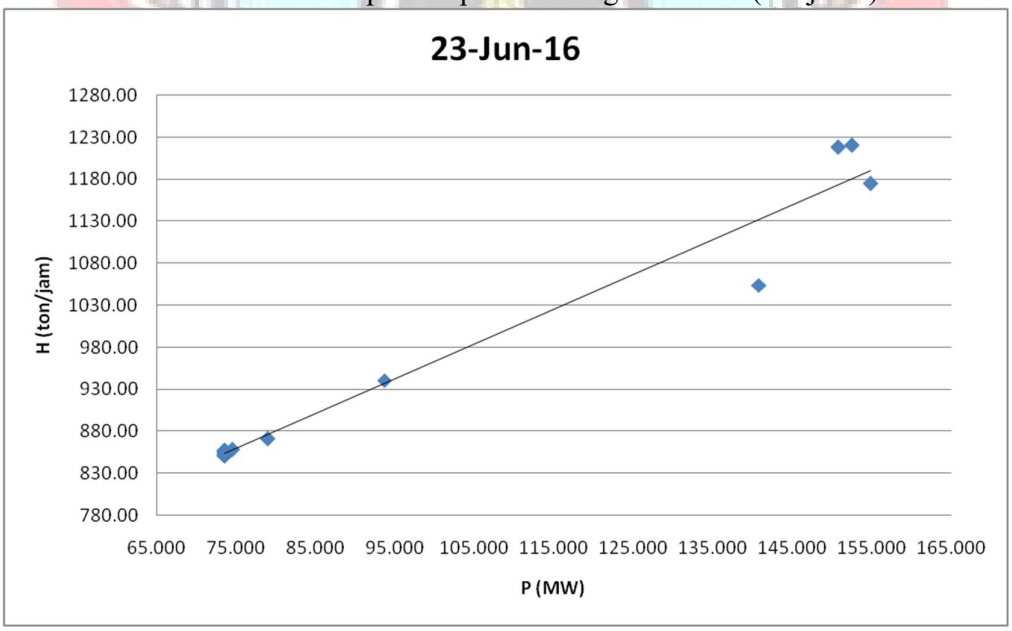
Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



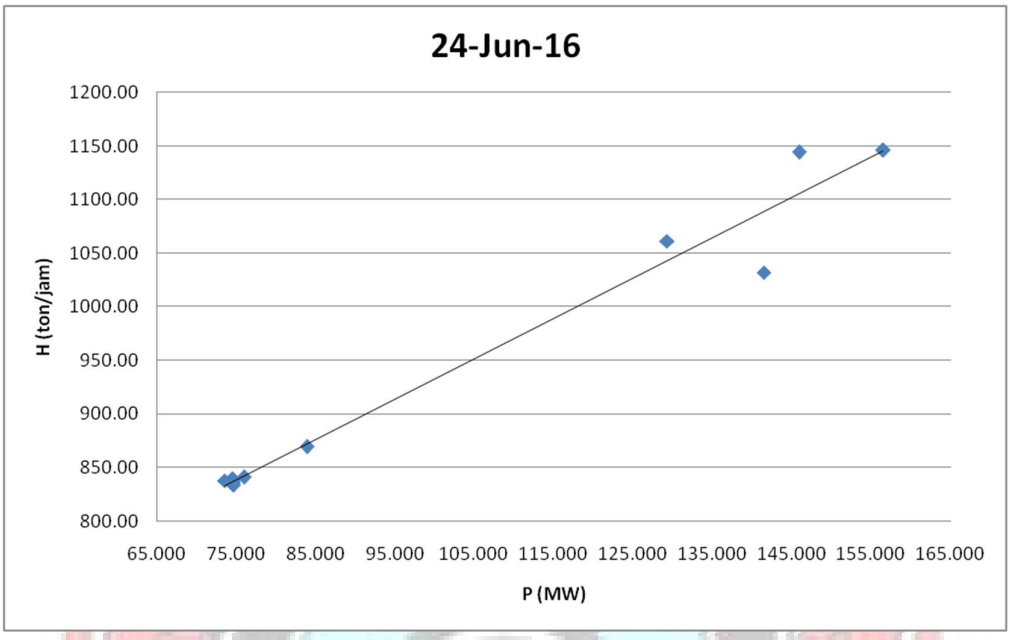
Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



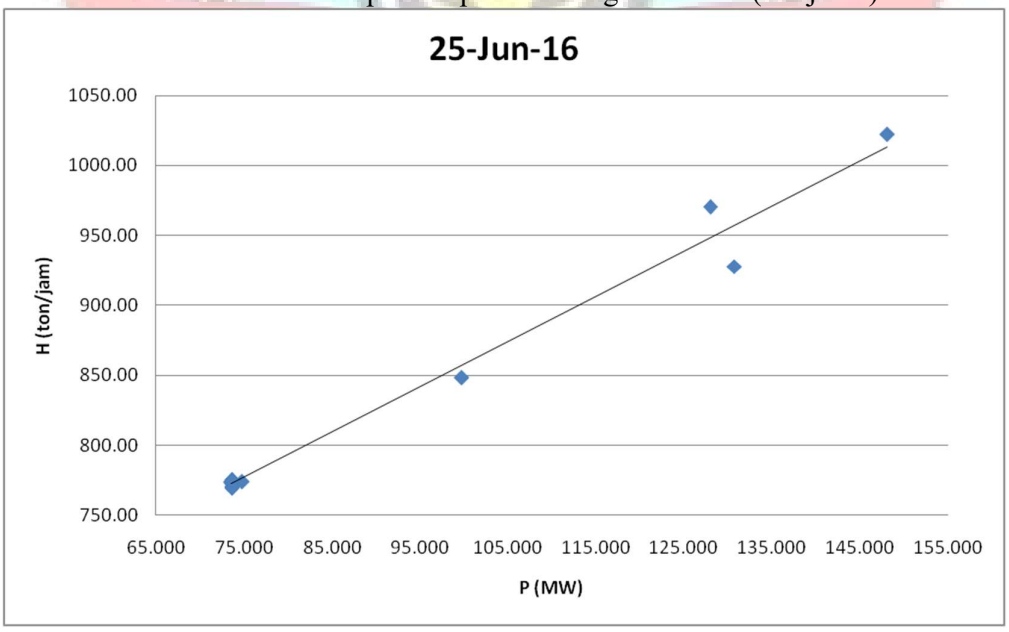
Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



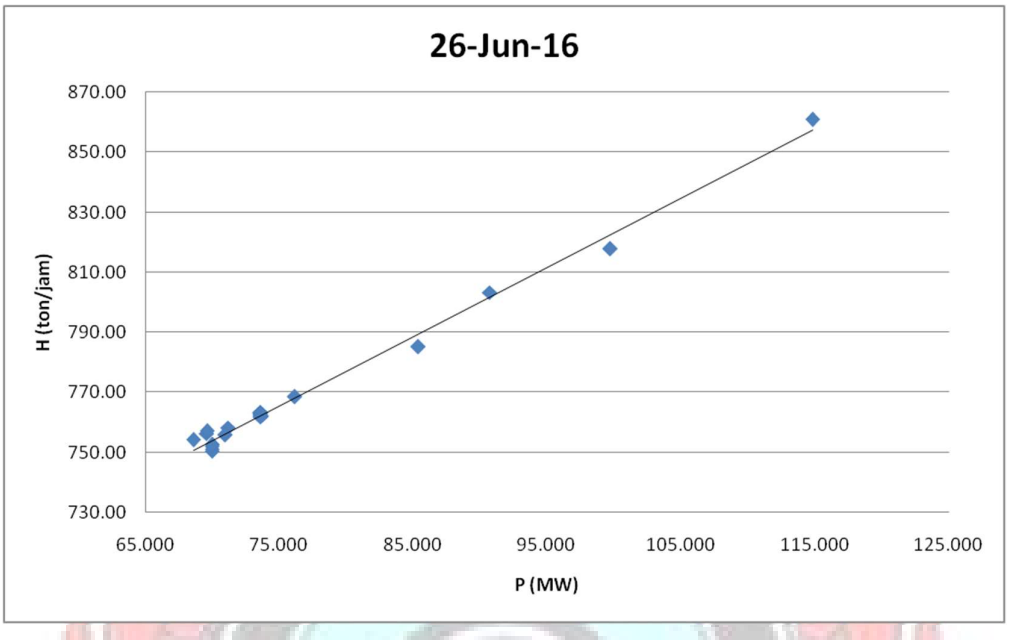
Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



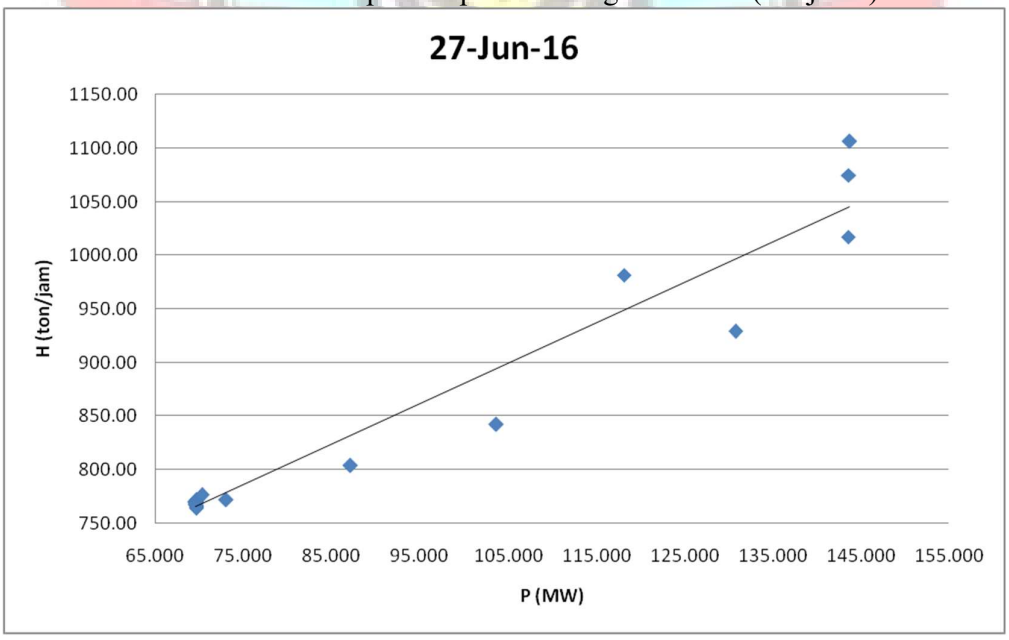
Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



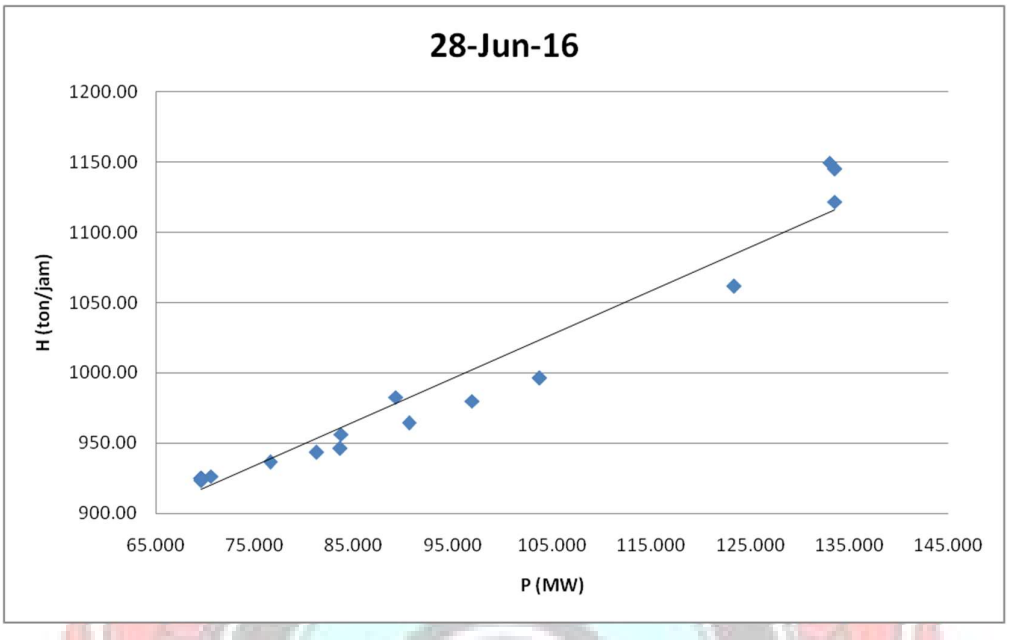
Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



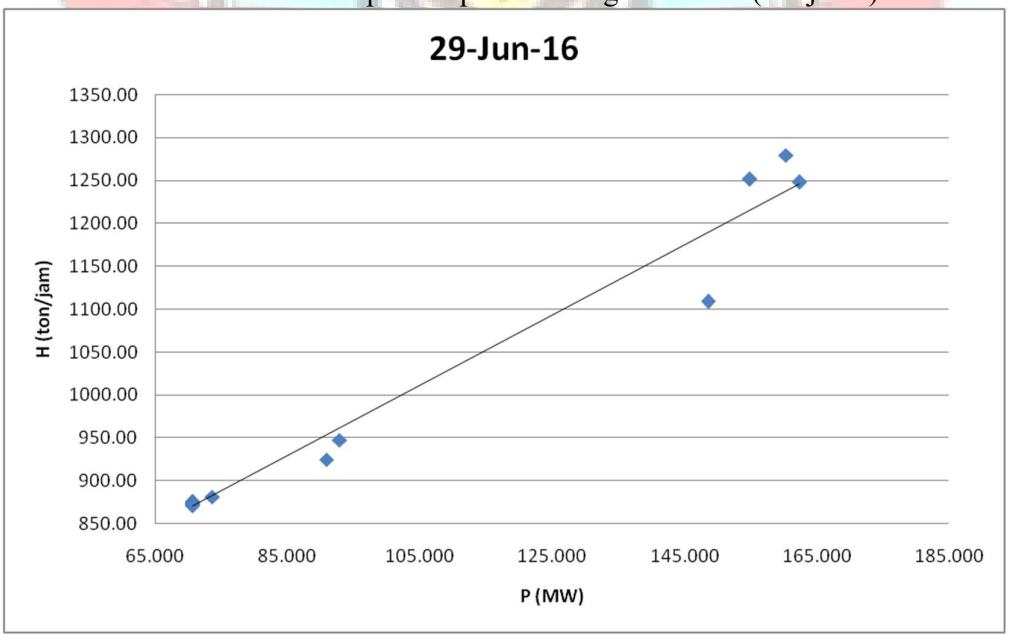
Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



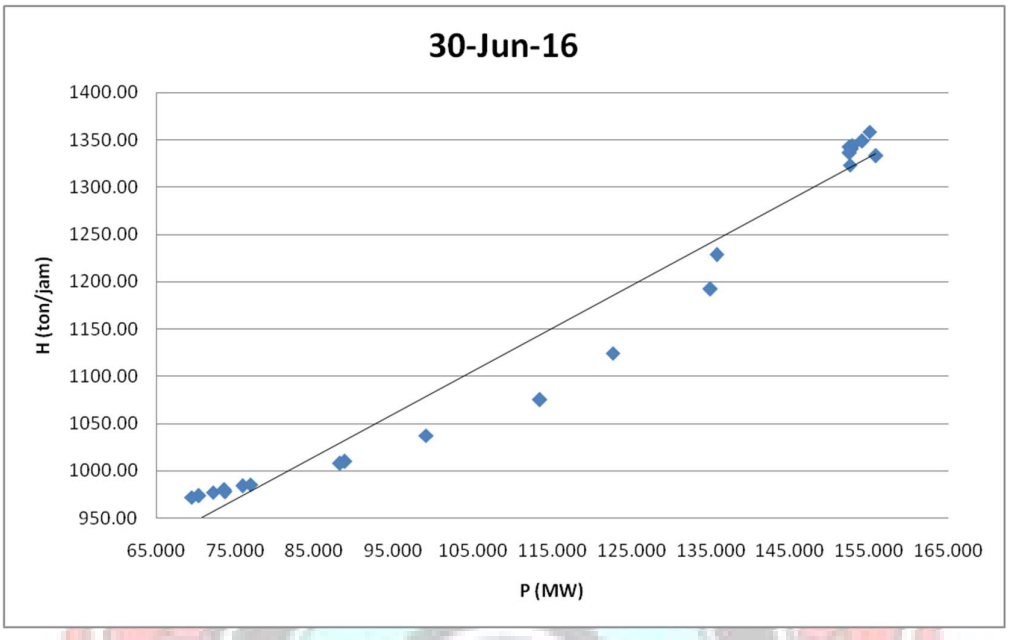
Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)



Lampiran 2f. Grafik Persamaan Input-Output PLTGU Sengkang 2 Berdasarkan Karakteristik Input-Output Pembangkit Termal (Lanjutan)


30-Jun-16
1400.00
1350.00
1300.00
1250.00
1200.00
1150.00
1100.00
1050.00
1000.00
950.00
H (ton/jam)
65.000
75.000
85.000
95.000
105.000
115.000
125.000
135.000
145.000
155.000
165.000
P (MW)

Lampiran 3a. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 1

01 Juni 2016																		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> ton/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	36,78	45,20	1.662,456	2.043,040	92.345,408	4.174.012,442	75.143,011									
02.00	36,81	44,30	1.630,683	1.962,490	86.938,307	3.851.367,000	72.239,257									
03.00	36,36	45,41	1.651,108	2.062,068	93.638,512	4.252.124,849	74.976,796									
04.00	35,10	44,04	1.545,804	1.939,522	85.416,531	3.761.744,037	68.077,208								α	654,410
05.00	34,50	44,70	1.542,150	1.998,090	89.314,623	3.992.363,648	68.934,105									
06.00	35,71	45,13	1.611,592	2.036,717	91.917,034	4.148.215,731	72.731,160									
08.00	35,20	44,90	1.580,480	2.016,010	90.518,849	4.064.296,320	70.963,552									
09.00	35,70	44,10	1.574,370	1.944,810	85.766,121	3.782.285,936	69.429,717									
10.00	35,70	45,30	1.617,210	2.052,090	92.959,677	4.211.073,368	73.259,613									
11.00	35,50	44,90	1.593,950	2.016,010	90.518,849	4.064.296,320	71.568,355	53,025	34.693,807	654,293607	-1.526,197	-28,783	17,712	0,3340307	β	-28,788
12.00	35,40	44,90	1.589,460	2.016,010	90.518,849	4.064.296,320	71.366,754									
13.00	35,00	44,70	1.564,500	1.998,090	89.314,623	3.992.363,648	69.933,150									
15.00	35,33	45,12	1.594,090	2.035,814	91.855,946	4.144.540,271	71.925,323									
16.00	34,61	44,87	1.552,951	2.013,317	90.337,529	4.053.444,940	69.680,898									
17.00	33,86	44,52	1.507,447	1.982,030	88.239,993	3.928.444,507	67.111,549									
20.00	33,16	43,72	1.449,755	1.911,438	83.568,087	3.653.596,757	63.383,297								γ	0,334
24.00	34,29	44,63	1.530,363	1.991,837	88.895,681	3.967.414,236	68.300,087									
Total	599,010	760,440	26798,368	34019,384	1522064,620	68105880,330	1199023,834									

Lampiran 3a. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 1 (Lanjutan)

02 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> ton/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
04.00	30,78	38,90	1.197,225	1.513,210	58.863,869	2.289.804,504	46.572,064									
05.00	27,23	35,20	958,496	1.239,040	43.614,208	1.535.220,122	33.739,059								α	81,364
06.00	31,10	40,60	1.262,660	1.648,360	66.923,416	2.717.090,690	51.263,996									
07.00	33,40	41,50	1.386,100	1.722,250	71.473,375	2.966.145,063	57.523,150	32.990,119	2.690.316,525	81,549	-119.751,768	-3,6299	1.958,212	0,0594	β	-3,620
09.00	35,20	42,90	1.510,080	1.840,410	78.953,589	3.387.108,968	64.782,432									
Total	157,707	199,100	6314,561	7963,270	319828,457	12895369,346	253880,701								γ	0,0592

Lampiran 3a. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 1 (Lanjutan)

03 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> ton/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
1	34,00	44,84	1.524,560	2.010,626	90.156,452	4.042.615,303	68.361,270									
2	33,70	44,90	1.513,130	2.016,010	90.518,849	4.064.296,320	67.939,537									
3	33,70	44,80	1.509,760	2.007,040	89.915,392	4.028.209,562	67.637,248									
4	34,90	45,40	1.584,460	2.061,160	93.576,664	4.248.380,546	71.934,484									
5	33,70	44,00	1.482,800	1.936,000	85.184,000	3.748.096,000	65.243,200								α	346,199
6	34,00	45,20	1.536,800	2.043,040	92.345,408	4.174.012,442	69.463,360									
7	34,22	44,72	1.530,318	1.999,878	89.434,562	3.999.513,615	68.435,839									
8	33,84	44,90	1.519,416	2.016,010	90.518,849	4.064.296,320	68.221,778									
10	32,98	43,53	1.435,619	1.894,861	82.483,295	3.590.497,830	62.492,512									
11	34,71	45,30	1.572,363	2.052,090	92.959,677	4.211.073,368	71.228,044									
13	34,90	45,10	1.573,990	2.034,010	91.733,851	4.137.196,680	70.986,949	478,871	165.785,346	346,200	-7.032,708	-14,686	82,490	0,172	β	-14,686
14	33,20	44,80	1.487,360	2.007,040	89.915,392	4.028.209,562	66.633,728									
15	34,20	45,30	1.549,260	2.052,090	92.959,677	4.211.073,368	70.181,478									
17	34,30	44,00	1.509,200	1.936,000	85.184,000	3.748.096,000	66.404,800									
18	34,30	44,80	1.536,640	2.007,040	89.915,392	4.028.209,562	68.841,472									
19	34,20	44,80	1.532,160	2.007,040	89.915,392	4.028.209,562	68.640,768									
20	33,20	43,60	1.447,520	1.900,960	82.881,856	3.613.648,922	63.111,872									
21	34,1	45,70	1.558,370	2.088,490	95.443,993	4.361.790,480	71.217,509								γ	0,172
22	35,5	45,70	1.622,350	2.088,490	95.443,993	4.361.790,480	74.141,395									
24	33,8	45,0	1.521,000	2.025,000	91.125,000	4.100.625,000	68.445,000									
Total	681,450	896,390	30.547,077	40.182,875	1.801.611,694	80.789.840,920	1.369.562,244									

Lampiran 3a. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 1 (Lanjutan)

04 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> ton/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	34,30	46,10	1.581,230	2.125,210	97.972,181	4.516.517,544	72.894,703									
02.00	33,50	44,90	1.504,150	2.016,010	90.518,849	4.064.296,320	67.536,335									
04.00	33,90	44,20	1.498,380	1.953,640	86.350,888	3.816.709,250	66.228,396									
06.00	33,80	44,20	1.493,960	1.953,640	86.350,888	3.816.709,250	66.033,032								α	119,260
07.00	34,10	45,18	1.540,638	2.041,232	92.222,880	4.166.629,711	69.606,025									
08.00	33,60	45,36	1.524,096	2.057,530	93.329,543	4.233.428,055	69.132,995									
09.00	35,32	45,50	1.607,060	2.070,250	94.196,375	4.285.935,063	73.121,230									
11.00	34,66	45,81	1.587,775	2.098,556	96.134,855	4.403.937,705	72.735,954									
12.00	34,53	46,10	1.591,833	2.125,210	97.972,181	4.516.517,544	73.383,501									
14.00	33,78	45,21	1.527,194	2.043,944	92.406,713	4.177.707,484	69.044,432									
15.00	33,30	43,90	1.461,870	1.927,210	84.604,519	3.714.138,384	64.176,093	2.907,848	346.789,759	119,260	-12.938,317	-4,4494	164,985	0,0567	β	-4,449
16.00	32,80	43,00	1.410,400	1.849,000	79.507,000	3.418.801,000	60.647,200									
17.00	34,90	46,10	1.608,890	2.125,210	97.972,181	4.516.517,544	74.169,829									
19.00	33,30	44,60	1.485,180	1.989,160	88.716,536	3.956.757,506	66.239,028									
20.00	33,80	45,10	1.524,380	2.034,010	91.733,851	4.137.196,680	68.749,538									
21.00	34,6	45,60	1.577,760	2.079,360	94.818,816	4.323.738,010	71.945,856									
22.00	34,2	45,20	1.545,840	2.043,040	92.345,408	4.174.012,442	69.871,968								γ	0,057
23.00	34,3	45,3	1.553,790	2.052,090	92.959,677	4.211.073,368	70.386,687									
24.00	33,1	44,3	1.466,330	1.962,490	86.938,307	3.851.367,000	64.958,419									
Total	645,790	855,660	29.090,755	38.546,792	1.737.051,647	78.301.989,858	1.310.861,221									

Lampiran 3a. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 1 (Lanjutan)

07 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> ton/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	33,20	43,80	1.454,160	1.918,440	84.027,672	3.680.412,034	63.692,208									
02.00	33,70	44,40	1.496,280	1.971,360	87.528,384	3.886.260,250	66.434,832									
03.00	33,00	42,70	1.409,100	1.823,290	77.854,483	3.324.386,424	60.168,570								α	25,315
04.00	32,00	42,00	1.344,000	1.764,000	74.088,000	3.111.696,000	56.448,000									
09.00	34,90	44,20	1.542,580	1.953,640	86.350,888	3.816.709,250	68.182,036									
10.00	33,10	44,70	1.479,570	1.998,090	89.314,623	3.992.363,648	66.136,779									
13.00	34,10	44,70	1.524,270	1.998,090	89.314,623	3.992.363,648	68.134,869									
15.00	34,80	44,60	1.552,080	1.989,160	88.716,536	3.956.757,506	69.222,768								β	-0,222
16.00	36,40	44,30	1.612,520	1.962,490	86.938,307	3.851.367,000	71.434,636	11.739,680	297.186,384	25,315	-2.603,673	-0,2218	114,132	0,0097		
17.00	33,60	43,50	1.461,600	1.892,250	82.312,875	3.580.610,063	63.579,600									
18.00	35,30	43,00	1.517,900	1.849,000	79.507,000	3.418.801,000	65.269,700									
19.00	35,40	44,80	1.585,920	2.007,040	89.915,392	4.028.209,562	71.049,216									
20.00	34,10	44,80	1.527,680	2.007,040	89.915,392	4.028.209,562	68.440,064									
21.00	35,50	42,90	1.522,950	1.840,410	78.953,589	3.387.108,968	65.334,555								γ	0,010
23.00	35,60	44,65	1.589,540	1.993,623	89.015,245	3.974.530,673	70.972,961									
24.00	36,50	46,50	1.697,250	2.162,250	100.544,625	4.675.325,063	78.922,125									
Total	551,200	705,550	24.317,400	31.130,173	1.374.297,634	60.705.110,648	1.073.422,919									

Lampiran 3a. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 1 (Lanjutan)

08 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> ton/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	35,26	44,39	1.565,191	1.970,472	87.469,257	3.882.760,297	69.478,846									
02.00	35,62	44,18	1.573,692	1.951,872	86.233,723	3.809.805,866	69.525,695									
05.00	34,38	44,67	1.535,755	1.995,409	89.134,916	3.981.656,678	68.602,158								α	1.092,227
06.00	33,20	44,40	1.474,080	1.971,360	87.528,384	3.886.260,250	65.449,152									
07.00	35,90	44,90	1.611,910	2.016,010	90.518,849	4.064.296,320	72.374,759									
09.00	34,30	44,40	1.522,920	1.971,360	87.528,384	3.886.260,250	67.617,648									
10.00	35,40	44,60	1.578,840	1.989,160	88.716,536	3.956.757,506	70.416,264									
13.00	36,40	45,30	1.648,920	2.052,090	92.959,677	4.211.073,368	74.696,076	18,528	20.237,105	1.092,2449720	-909,420	-49,08358	10,540	0,56885	β	-49,083
16.00	33,90	44,70	1.515,330	1.998,090	89.314,623	3.992.363,648	67.735,251									
17.00	32,90	43,80	1.441,020	1.918,440	84.027,672	3.680.412,034	63.116,676									
18.00	34,40	44,70	1.537,680	1.998,090	89.314,623	3.992.363,648	68.734,296									
20.00	33,80	43,80	1.480,440	1.918,440	84.027,672	3.680.412,034	64.843,272									
22.00	34,60	44,90	1.553,540	2.016,010	90.518,849	4.064.296,320	69.753,946								γ	0,569
24.00	34,51	44,62	1.539,836	1.990,944	88.835,939	3.963.859,604	68.707,491									
Total	484,570	623,360	21.579,154	27.757,748	1.236.129,103	55.052.577,821	961.051,530									

Lampiran 3a. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 1 (Lanjutan)

09 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P²	P³	P⁴	H(P²)	Penyebut	α		β		γ		Hasil Matlab	
	H -> ton/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	34,63	44,80	1.551,424	2.007,040	89.915,392	4.028.209,562	69.503,795	831,987	757.567,630	910,552	-33.453,104	-40,2087	383,676	0,4612	α	910,546
02.00	33,89	44,69	1.514,544	1.997,196	89.254,694	3.988.792,262	67.684,976									
03.00	34,38	45,12	1.551,226	2.035,814	91.855,946	4.144.540,271	69.991,299									
05.00	35,46	45,44	1.611,302	2.064,794	93.824,221	4.263.372,611	73.217,581									
07.00	34,28	43,80	1.501,464	1.918,440	84.027,672	3.680.412,034	65.764,123									
09.00	35,10	45,20	1.586,520	2.043,040	92.345,408	4.174.012,442	71.710,704									
10.00	34,10	44,00	1.500,400	1.936,000	85.184,000	3.748.096,000	66.017,600								β	-40,208
11.00	34,89	44,71	1.559,932	1.998,984	89.374,579	3.995.937,432	69.744,555									
12.00	36,93	45,32	1.673,668	2.053,902	93.082,857	4.218.515,069	75.850,616									
13.00	37,96	46,37	1.760,205	2.150,177	99.703,703	4.623.260,701	81.620,715									
14.00	35,06	44,57	1.562,624	1.986,485	88.537,632	3.946.122,258	69.646,161									
15.00	36,40	44,70	1.627,080	1.998,090	89.314,623	3.992.363,648	72.730,476									
16.00	35,70	45,80	1.635,060	2.097,640	96.071,912	4.400.093,570	74.885,748									
17.00	36,05	45,50	1.640,275	2.070,250	94.196,375	4.285.935,063	74.632,513									
18.00	35,20	45,00	1.584,000	2.025,000	91.125,000	4.100.625,000	71.280,000									
19.00	35,20	44,90	1.580,480	2.016,010	90.518,849	4.064.296,320	70.963,552									
20.00	34,26	44,45	1.522,857	1.975,803	87.824,421	3.903.795,519	67.690,994									
21.00	33,74	44,11	1.488,271	1.945,692	85.824,479	3.785.717,748	65.647,651								γ	0,461
22.00	35,20	45,30	1.594,560	2.052,090	92.959,677	4.211.073,368	72.233,568									
23.00	34,30	45,30	1.553,790	2.052,090	92.959,677	4.211.073,368	70.386,687									
24.00	33,90	44,40	1.505,160	1.971,360	87.528,384	3.886.260,250	66.829,104									
Total	736,630	943,480	33.104,842	42.395,897	1.905.429,500	85.652.504,494	1.488.032,418									

Lampiran 3a. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 1 (Lanjutan)

10 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P²	P³	P⁴	H(P²)	Penyebut	α		β		γ		Hasil Matlab	
	H -> ton/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	35,90	45,50	1.633,450	2.070,250	94.196,375	4.285.935,063	74.321,975	16.827,144	1.576.837,364	93,708	-53.997,068	-3,2089	713,606	0,0424	α	93,708
02.00	35,90	45,40	1.629,860	2.061,160	93.576,664	4.248.380,546	73.995,644									
03.00	34,80	45,90	1.597,320	2.106,810	96.702,579	4.438.648,376	73.316,988									
04.00	34,30	45,00	1.543,500	2.025,000	91.125,000	4.100.625,000	69.457,500									
05.00	35,10	45,70	1.604,070	2.088,490	95.443,993	4.361.790,480	73.305,999									
06.00	34,36	43,48	1.493,973	1.890,510	82.199,392	3.574.029,573	64.957,937									
07.00	35,93	43,92	1.578,046	1.928,966	84.720,204	3.720.911,372	69.307,763									
08.00	36,40	45,90	1.670,760	2.106,810	96.702,579	4.438.648,376	76.687,884									
09.00	35,70	45,80	1.635,060	2.097,640	96.071,912	4.400.093,570	74.885,748									
10.00	33,40	43,10	1.439,540	1.857,610	80.062,991	3.450.714,912	62.044,174								β	-3,209
11.00	34,00	42,20	1.434,800	1.780,840	75.151,448	3.171.391,106	60.548,560									
12.00	35,89	46,04	1.652,376	2.119,682	97.590,141	4.493.050,085	76.075,373									
13.00	36,88	45,07	1.662,182	2.031,305	91.550,912	4.126.199,597	74.914,525									
14.00	35,20	45,90	1.615,680	2.106,810	96.702,579	4.438.648,376	74.159,712									
15.00	35,10	44,85	1.574,235	2.011,523	90.216,784	4.046.222,768	70.604,440									
16.00	33,70	44,67	1.505,379	1.995,409	89.134,916	3.981.656,678	67.245,280									
17.00	36,40	45,63	1.660,932	2.082,097	95.006,082	4.335.127,501	75.788,327									
18.00	34,80	43,56	1.515,888	1.897,474	82.653,950	3.600.406,063	66.032,081									
19.00	35,00	44,80	1.568,000	2.007,040	89.915,392	4.028.209,562	70.246,400									
20.00	35,71	45,84	1.636,946	2.101,306	96.323,849	4.415.485,225	75.037,623									
21.00	35,18	45,04	1.584,507	2.028,602	91.368,216	4.115.224,452	71.366,204									
22.00	35,10	45,10	1.583,010	2.034,010	91.733,851	4.137.196,680	71.393,751								γ	0,042
23.00	35,80	45,00	1.611,000	2.025,000	91.125,000	4.100.625,000	72.495,000									
24.00	33,50	44,40	1.487,400	1.971,360	87.528,384	3.886.260,250	66.040,560									
Total	844,050	1.077,800	37.917,913	48.425,702	2.176.803,192	97.895.480,608	1.704.229,448									

Lampiran 3a. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 1 (Lanjutan)

11 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> ton/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	35,00	44,30	1.550,500	1.962,490	86.938,307	3.851.367,000	68.687,150									
02.00	36,20	44,50	1.610,900	1.980,250	88.121,125	3.921.390,063	71.685,050									
03.00	36,00	44,60	1.605,600	1.989,160	88.716,536	3.956.757,506	71.609,760								α	58,717
04.00	37,10	44,80	1.662,080	2.007,040	89.915,392	4.028.209,562	74.461,184									
06.00	36,00	44,90	1.616,400	2.016,010	90.518,849	4.064.296,320	72.576,360									
07.00	35,70	44,03	1.571,871	1.938,641	85.358,359	3.758.328,539	69.209,480									
10.00	36,60	44,94	1.644,804	2.019,604	90.760,986	4.078.798,701	73.917,492	142.431,416	8.363.180,083	58,717	-342.420,021	-2,4041	6.071,156	0,0426	β	-2,404
11.00	36,57	44,32	1.620,782	1.964,262	87.056,110	3.858.326,776	71.833,076									
13.00	26,50	34,48	913,720	1.188,870	40.992,251	1.413.412,828	31.505,066									
14.00	37,20	44,80	1.666,560	2.007,040	89.915,392	4.028.209,562	74.661,888									
18.00	36,50	44,60	1.627,900	1.989,160	88.716,536	3.956.757,506	72.604,340									
19.00	35,20	43,90	1.545,280	1.927,210	84.604,519	3.714.138,384	67.837,792								γ	0,043
24.00	36,10	44,60	1.610,060	1.989,160	88.716,536	3.956.757,506	71.808,676									
Total	460,670	568,770	20.246,457	24.978,897	1.100.330,898	48.586.750,251	892.397,313									

Lampiran 3a. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 1 (Lanjutan)

12 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> ton/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	36,90	45,70	1.686,330	2.088,490	95.443,993	4.361.790,480	77.065,281									
02.00	36,90	43,80	1.616,220	1.918,440	84.027,672	3.680.412,034	70.790,436									
03.00	35,70	45,90	1.638,630	2.106,810	96.702,579	4.438.648,376	75.213,117									
04.00	36,70	45,30	1.662,510	2.052,090	92.959,677	4.211.073,368	75.311,703									
05.00	36,20	45,20	1.636,240	2.043,040	92.345,408	4.174.012,442	73.958,048								α	737,554
06.00	36,00	44,50	1.602,000	1.980,250	88.121,125	3.921.390,063	71.289,000									
07.00	36,10	44,90	1.620,890	2.016,010	90.518,849	4.064.296,320	72.777,961									
08.00	36,20	45,70	1.654,340	2.088,490	95.443,993	4.361.790,480	75.603,338									
09.00	36,20	45,70	1.654,340	2.088,490	95.443,993	4.361.790,480	75.603,338									
10.00	35,20	45,40	1.598,080	2.061,160	93.576,664	4.248.380,546	72.552,832									
11.00	36,80	44,90	1.652,320	2.016,010	90.518,849	4.064.296,320	74.189,168									
12.00	36,60	44,60	1.632,360	1.989,160	88.716,536	3.956.757,506	72.803,256									
13.00	36,70	46,40	1.702,880	2.152,960	99.897,344	4.635.236,762	79.013,632	2.491,880	1.837.902,752	737,557	-78.526,079	-31,5128	880,350	0,3533	β	-31,513
14.00	35,50	43,90	1.558,450	1.927,210	84.604,519	3.714.138,384	68.415,955									
15.00	34,10	45,30	1.544,730	2.052,090	92.959,677	4.211.073,368	69.976,269									
16.00	32,80	44,90	1.472,720	2.016,010	90.518,849	4.064.296,320	66.125,128									
17.00	33,90	45,80	1.552,620	2.097,640	96.071,912	4.400.093,570	71.109,996									
18.00	34,40	45,80	1.575,520	2.097,640	96.071,912	4.400.093,570	72.158,816									
19.00	34,10	46,10	1.572,010	2.125,210	97.972,181	4.516.517,544	72.469,661									
20.00	32,70	44,60	1.458,420	1.989,160	88.716,536	3.956.757,506	65.045,532									
21.00	32,70	44,60	1.458,420	1.989,160	88.716,536	3.956.757,506	65.045,532									
22.00	34,30	45,70	1.567,510	2.088,490	95.443,993	4.361.790,480	71.635,207								γ	0,353
23.00	32,30	44,80	1.447,040	2.007,040	89.915,392	4.028.209,562	64.827,392									
24.00	33,80	43,60	1.473,680	1.900,960	82.881,856	3.613.648,922	64.252,448									
Total	842,800	1.083,100	38.038,260	48.892,010	2.207.590,045	99.703.251,905	1.717.233,046									

Lampiran 3a. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 1 (Lanjutan)

13 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> ton/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
15.00	33,70	45,37	1.528,969	2.058,437	93.391,282	4.237.162,471	69.369,324	2,714	1.308,763	482,243	-58,420	-21,526	0,696	0,257	α	482,245
17.00	31,90	44,20	1.409,980	1.953,640	86.350,888	3.816.709,250	62.321,116									
18.00	34,70	45,70	1.585,790	2.088,490	95.443,993	4.361.790,480	72.470,603								β	-21,526
21.00	32,80	44,70	1.466,160	1.998,090	89.314,623	3.992.363,648	65.537,352									
22.00	33,30	44,90	1.495,170	2.016,010	90.518,849	4.064.296,320	67.133,133								γ	0,257
23.00	33,10	45,40	1.502,740	2.061,160	93.576,664	4.248.380,546	68.224,396									
Total	199,500	270,270	8.988,809	12.175,827	548.596,299	24.720.702,715	405.055,924									

Lampiran 3a. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 1 (Lanjutan)

15 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> ton/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
9	38,60	41,90	1.617,340	1.755,610	73.560,059	3.082.166,472	67.766,546	2.384,653	819.521,626	343,665	-36.030,466	-15,1093	448,312	0,1880	α	343,665
10	41,00	40,10	1.644,100	1.608,010	64.481,201	2.585.696,160	65.928,410									
11	41,40	42,00	1.738,800	1.764,000	74.088,000	3.111.696,000	73.029,600								β	-15,109
12	39,60	39,40	1.560,240	1.552,360	61.162,984	2.409.821,570	61.473,456									
13	41,20	41,50	1.709,800	1.722,250	71.473,375	2.966.145,063	70.956,700								γ	0,188
14	42,90	43,50	1.866,150	1.892,250	82.312,875	3.580.610,063	81.177,525									
15	41,60	43,47	1.808,352	1.889,641	82.142,690	3.570.742,731	78.609,061									
Total	286,300	291,870	11.944,782	12.184,121	509.221,184	21.306.878,058	498.941,298									

Lampiran 3a. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 1 (Lanjutan)

16 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> ton/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	32,70	46,25	1.512,375	2.139,063	98.931,641	4.575.588,379	69.947,344									
02.00	31,80	45,47	1.445,946	2.067,521	94.010,175	4.274.642,672	65.747,165									
03.00	31,40	44,47	1.396,358	1.977,581	87.943,023	3.910.826,216	62.096,040									
04.00	31,00	44,91	1.392,210	2.016,908	90.579,343	4.067.918,284	62.524,151									
05.00	31,90	44,15	1.408,385	1.949,223	86.058,173	3.799.468,355	62.180,198								α	130,389
06.00	33,30	45,59	1.518,147	2.078,448	94.756,449	4.319.946,504	69.212,322									
07.00	32,00	45,40	1.452,800	2.061,160	93.576,664	4.248.380,546	65.957,120									
08.00	32,80	45,00	1.476,000	2.025,000	91.125,000	4.100.625,000	66.420,000									
09.00	32,90	43,20	1.421,280	1.866,240	80.621,568	3.482.851,738	61.399,296									
10.00	32,50	45,50	1.478,750	2.070,250	94.196,375	4.285.935,063	67.283,125									
11.00	32,50	45,80	1.488,500	2.097,640	96.071,912	4.400.093,570	68.173,300									
12.00	32,50	45,10	1.465,750	2.034,010	91.733,851	4.137.196,680	66.105,325									
13.00	32,30	44,70	1.443,810	1.998,090	89.314,623	3.992.363,648	64.538,307	1.907,709	248.747,302	130,391	-8.502,495	-4,4569	96,822	0,0508	β	-4,457
14.00	33,00	44,90	1.481,700	2.016,010	90.518,849	4.064.296,320	66.528,330									
15.00	32,79	44,72	1.466,369	1.999,878	89.434,562	3.999.513,615	65.576,013									
16.00	32,52	44,94	1.461,449	2.019,604	90.760,986	4.078.798,701	65.677,509									
17.00	32,97	44,72	1.474,418	1.999,878	89.434,562	3.999.513,615	65.935,991									
18.00	33,56	45,19	1.516,576	2.042,136	92.284,130	4.170.319,851	68.534,088									
19.00	33,66	45,14	1.519,412	2.037,620	91.978,149	4.151.893,634	68.586,276									
20.00	33,04	45,28	1.496,051	2.050,278	92.836,606	4.203.641,518	67.741,198									
21.00	32,99	44,71	1.474,983	1.998,984	89.374,579	3.995.937,432	65.946,485									
22.00	31,77	44,85	1.424,885	2.011,523	90.216,784	4.046.222,768	63.906,070								γ	0,051
23.00	33,73	44,75	1.509,418	2.002,563	89.614,672	4.010.256,566	67.546,433									
24.00	33,26	45,00	1.496,700	2.025,000	91.125,000	4.100.625,000	67.351,500									
Total	782,890	1.079,740	35.222,272	48.584,607	2.186.497,676	98.416.855,673	1.584.913,585									

Lampiran 3a. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 1 (Lanjutan)

17 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> ton/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	33,50	45,51	1.524,585	2.071,160	94.258,496	4.289.704,160	69.383,863									
02.00	31,30	45,55	1.425,715	2.074,803	94.507,254	4.304.805,414	64.941,318									
03.00	32,60	45,62	1.487,212	2.081,184	94.943,632	4.331.328,507	67.846,611									
04.00	32,30	45,10	1.456,730	2.034,010	91.733,851	4.137.196,680	65.698,523									
05.00	33,40	45,27	1.512,018	2.049,373	92.775,111	4.199.929,283	68.449,055								α	204,835
06.00	33,50	45,76	1.532,960	2.093,978	95.820,415	4.384.742,189	70.148,250									
07.00	34,9	45,86	1.600,514	2.103,140	96.449,982	4.423.196,177	73.399,572									
08.00	32,65	44,50	1.452,925	1.980,250	88.121,125	3.921.390,063	64.655,163									
09.00	34,31	45,00	1.543,950	2.025,000	91.125,000	4.100.625,000	69.477,750									
10.00	32,54	45,22	1.471,459	2.044,848	92.468,045	4.181.404,979	66.539,367									
11.00	33,20	45,07	1.496,324	2.031,305	91.550,912	4.126.199,597	67.439,323									
12.00	33,09	45,56	1.507,580	2.075,714	94.569,512	4.308.586,949	68.685,363									
13.00	32,30	45,35	1.464,805	2.056,623	93.267,830	4.229.696,108	66.428,907	57,102	12.626,332	221,120	-492,951	-8,6329	5,648	0,0989	β	-7,917
14.00	32,66	45,09	1.472,639	2.033,108	91.672,844	4.133.528,546	66.401,311									
15.00	33,33	45,27	1.508,849	2.049,373	92.775,111	4.199.929,283	68.305,599									
16.00	32,81	44,64	1.464,638	1.992,730	88.955,449	3.970.971,259	65.381,458									
17.00	33,63	44,89	1.509,651	2.015,112	90.458,382	4.060.676,776	67.768,220									
18.00	31,28	44,43	1.389,770	1.974,025	87.705,926	3.896.774,306	61.747,499									
19.00	33,86	45,31	1.534,197	2.052,996	93.021,253	4.214.792,987	69.514,448									
20.00	33,45	44,60	1.491,870	1.989,160	88.716,536	3.956.757,506	66.537,402									
21.00	33,5	44,57	1.494,878	1.986,485	88.537,632	3.946.122,258	66.626,704									
22.00	33,1	45,30	1.499,430	2.052,090	92.959,677	4.211.073,368	67.924,179								γ	0,091
23.00	33,6	45,3	1.522,080	2.052,090	92.959,677	4.211.073,368	68.950,224									
24.00	30,8	45,5	1.401,400	2.070,250	94.196,375	4.285.935,063	63.763,700									
Total	791,650	1.084,2700	35.766,1796	48.988,8051	2.213.550,0286	100.026.439,8239	1.616.013,8072									

Lampiran 3a. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 1 (Lanjutan)

18 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> ton/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	30,60	44,10	1.349,460	1.944,810	85.766,121	3.782.285,936	59.511,186									
02.00	32,30	45,70	1.476,110	2.088,490	95.443,993	4.361.790,480	67.458,227									
03.00	31,80	45,60	1.450,080	2.079,360	94.818,816	4.323.738,010	66.123,648								α	1.116,924
04.00	31,90	45,20	1.441,880	2.043,040	92.345,408	4.174.012,442	65.172,976									
05.00	32,50	45,00	1.462,500	2.025,000	91.125,000	4.100.625,000	65.812,500									
06.00	31,20	45,10	1.407,120	2.034,010	91.733,851	4.137.196,680	63.461,112									
07.00	31,6	44,10	1.393,560	1.944,810	85.766,121	3.782.285,936	61.455,996									
08.00	32,60	45,30	1.476,780	2.052,090	92.959,677	4.211.073,368	66.898,134									
09.00	34,00	45,80	1.557,200	2.097,640	96.071,912	4.400.093,570	71.319,760									
10.00	29,40	44,80	1.317,120	2.007,040	89.915,392	4.028.209,562	59.006,976									
11.00	32,90	45,30	1.490,370	2.052,090	92.959,677	4.211.073,368	67.513,761	444,238	496.166,504	1.116,893	-21.702,537	-48,8534	244,373	0,5501	β	-48,855
12.00	32,50	43,70	1.420,250	1.909,690	83.453,453	3.646.915,896	62.064,925									
13.00	33,70	45,50	1.533,350	2.070,250	94.196,375	4.285.935,063	69.767,425									
14.00	32,50	44,10	1.433,250	1.944,810	85.766,121	3.782.285,936	63.206,325									
15.00	33,30	44,80	1.491,840	2.007,040	89.915,392	4.028.209,562	66.834,432									
16.00	35,20	45,30	1.594,560	2.052,090	92.959,677	4.211.073,368	72.233,568									
17.00	34,10	44,60	1.520,860	1.989,160	88.716,536	3.956.757,506	67.830,356									
18.00	33,50	44,20	1.480,700	1.953,640	86.350,888	3.816.709,250	65.446,940								γ	0,550
19.00	32,80	44,30	1.453,040	1.962,490	86.938,307	3.851.367,000	64.369,672									
20.00	32,80	43,70	1.433,360	1.909,690	83.453,453	3.646.915,896	62.637,832									
Total	651,200	896,20	29.183,390	40.167,240	1.800.656,170	80.738.553,827	1.308.125,751									

Lampiran 3a. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 1 (Lanjutan)

19 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> ton/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	32,30	45,10	1.456,730	2.034,010	91.733,851	4.137.196,680	65.698,523									
02.00	32,00	45,10	1.443,200	2.034,010	91.733,851	4.137.196,680	65.088,320									
03.00	32,50	45,00	1.462,500	2.025,000	91.125,000	4.100.625,000	65.812,500									
04.00	32,10	45,90	1.473,390	2.106,810	96.702,579	4.438.648,376	67.628,601									
05.00	32,30	45,30	1.463,190	2.052,090	92.959,677	4.211.073,368	66.282,507								α	634,204
06.00	33,40	45,50	1.519,700	2.070,250	94.196,375	4.285.935,063	69.146,350									
07.00	34,04	46,55	1.584,562	2.166,903	100.869,311	4.695.466,445	73.761,361									
08.00	33,53	45,57	1.527,962	2.076,625	94.631,797	4.312.370,975	69.629,233									
09.00	32,24	44,68	1.440,483	1.996,302	89.194,791	3.985.223,272	64.360,789									
10.00	32,15	45,14	1.451,251	2.037,620	91.978,149	4.151.893,634	65.509,470									
11.00	33,09	44,90	1.485,741	2.016,010	90.518,849	4.064.296,320	66.709,771									
12.00	32,35	44,59	1.442,487	1.988,268	88.656,875	3.953.210,037	64.320,473									
13.00	31,82	44,15	1.404,853	1.949,223	86.058,173	3.799.468,355	62.024,260	5.997,453	3.803.593,208	634,201	-161.691,519	-26,960	1.811,579	0,302	β	-26,960
14.00	34,05	44,42	1.512,501	1.973,136	87.646,719	3.893.267,253	67.185,294									
15.00	33,10	44,70	1.479,570	1.998,090	89.314,623	3.992.363,648	66.136,779									
16.00	32,60	44,70	1.457,220	1.998,090	89.314,623	3.992.363,648	65.137,734									
17.00	32,80	44,80	1.469,440	2.007,040	89.915,392	4.028.209,562	65.830,912									
18.00	32,60	44,20	1.440,920	1.953,640	86.350,888	3.816.709,250	63.688,664									
19.00	33,60	43,00	1.444,800	1.849,000	79.507,000	3.418.801,000	62.126,400									
20.00	33,10	44,50	1.472,950	1.980,250	88.121,125	3.921.390,063	65.546,275									
21.00	33,4	44,30	1.479,620	1.962,490	86.938,307	3.851.367,000	65.547,166									
22.00	32,7	43,40	1.419,180	1.883,560	81.746,504	3.547.798,274	61.592,412								γ	0,302
23.00	32,0	44,4	1.420,800	1.971,360	87.528,384	3.886.260,250	63.083,520									
24.00	33,4	45,4	1.516,360	2.061,160	93.576,664	4.248.380,546	68.842,744									
Total	787,170	1.075,300	35.269,410	48.190,936	2.160.319,507	96.869.514,697	1.580.690,059									

Lampiran 3a. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 1 (Lanjutan)

20 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> ton/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
02.00	32,80	44,00	1.443,200	1.936,000	85.184,000	3.748.096,000	63.500,800									
04.00	34,30	45,60	1.564,080	2.079,360	94.818,816	4.323.738,010	71.322,048								α	86,544
05.00	32,90	44,20	1.454,180	1.953,640	86.350,888	3.816.709,250	64.274,756									
06.00	31,40	44,40	1.394,160	1.971,360	87.528,384	3.886.260,250	61.900,704									
10.00	35,75	44,42	1.588,015	1.973,136	87.646,719	3.893.267,253	70.539,626									
11.00	31,85	40,87	1.301,710	1.670,357	68.267,487	2.790.092,173	53.200,867									
12.00	33,90	45,30	1.535,670	2.052,090	92.959,677	4.211.073,368	69.565,851									
13.00	34,00	45,00	1.530,000	2.025,000	91.125,000	4.100.625,000	68.850,000								β	-3,123
14.00	34,90	45,00	1.570,500	2.025,000	91.125,000	4.100.625,000	70.672,500									
15.00	33,60	44,60	1.498,560	1.989,160	88.716,536	3.956.757,506	66.835,776									
16.00	34,30	44,50	1.526,350	1.980,250	88.121,125	3.921.390,063	67.922,575	13.207,442	1.143.026,132	86,544	-41.247,493	-3,1230	576,255	0,0436		
17.00	32,60	44,30	1.444,180	1.962,490	86.938,307	3.851.367,000	63.977,174									
18.00	34,20	44,00	1.504,800	1.936,000	85.184,000	3.748.096,000	66.211,200									
19.00	35,00	45,00	1.575,000	2.025,000	91.125,000	4.100.625,000	70.875,000									
20.00	34,60	44,60	1.543,160	1.989,160	88.716,536	3.956.757,506	68.824,936									
21.00	34,5	44,20	1.524,900	1.953,640	86.350,888	3.816.709,250	67.400,580								γ	0,044
22.00	35,1	44,60	1.565,460	1.989,160	88.716,536	3.956.757,506	69.819,516									
23.00	35,3	44,9	1.584,970	2.016,010	90.518,849	4.064.296,320	71.165,153									
24.00	34,3	44,9	1.540,070	2.016,010	90.518,849	4.064.296,320	69.149,143									
Total	645,300	844,390	28.688,965	37.542,823	1.669.912,596	74.307.538,772	1.276.008,206									

Lampiran 3a. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 1 (Lanjutan)

21 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> ton/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	35,40	45,30	1.603,620	2.052,090	92.959,677	4.211.073,368	72.643,986									
03.00	35,00	45,10	1.578,500	2.034,010	91.733,851	4.137.196,680	71.190,350									
04.00	35,70	45,60	1.627,920	2.079,360	94.818,816	4.323.738,010	74.233,152								α	357,747
05.00	34,20	45,00	1.539,000	2.025,000	91.125,000	4.100.625,000	69.255,000									
06.00	34,20	45,70	1.562,940	2.088,490	95.443,993	4.361.790,480	71.426,358									
07.00	34,90	44,40	1.549,560	1.971,360	87.528,384	3.886.260,250	68.800,464									
10.00	34,00	45,10	1.533,400	2.034,010	91.733,851	4.137.196,680	69.156,340									
11.00	34,20	45,10	1.542,420	2.034,010	91.733,851	4.137.196,680	69.563,142									
12.00	34,10	44,60	1.520,860	1.989,160	88.716,536	3.956.757,506	67.830,356									
15.00	34,00	44,30	1.506,200	1.962,490	86.938,307	3.851.367,000	66.724,660	829,157	296.624,465	357,742	-12.120,497	-14,6179	137,077	0,1653	β	-14,618
16.00	34,60	44,10	1.525,860	1.944,810	85.766,121	3.782.285,936	67.290,426									
17.00	35,30	45,00	1.588,500	2.025,000	91.125,000	4.100.625,000	71.482,500									
18.00	34,40	44,60	1.534,240	1.989,160	88.716,536	3.956.757,506	68.427,104									
19.00	35,60	44,40	1.580,640	1.971,360	87.528,384	3.886.260,250	70.180,416									
21.00	35,00	44,90	1.571,500	2.016,010	90.518,849	4.064.296,320	70.560,350								γ	0,165
22.00	35,00	45,30	1.585,500	2.052,090	92.959,677	4.211.073,368	71.823,150									
24.00	34,90	42,90	1.497,210	1.840,410	78.953,589	3.387.108,968	64.230,309									
Total	590,500	761,40	26447,87	34108,82	1528300,42	68491609,00	1184818,06									

Lampiran 3a. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 1 (Lanjutan)

22 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> ton/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	34,80	45,10	1.569,480	2.034,010	91.733,851	4.137.196,680	70.783,548									
02.00	33,50	45,60	1.527,600	2.079,360	94.818,816	4.323.738,010	69.658,560									
03.00	36,00	45,60	1.641,600	2.079,360	94.818,816	4.323.738,010	74.856,960									
04.00	35,70	44,50	1.588,650	1.980,250	88.121,125	3.921.390,063	70.694,925									
05.00	34,60	45,30	1.567,380	2.052,090	92.959,677	4.211.073,368	71.002,314								α	239,420
06.00	33,90	44,90	1.522,110	2.016,010	90.518,849	4.064.296,320	68.342,739									
07.00	35,40	45,50	1.610,700	2.070,250	94.196,375	4.285.935,063	73.286,850									
08.00	34,10	44,70	1.524,270	1.998,090	89.314,623	3.992.363,648	68.134,869									
09.00	31,00	43,80	1.357,800	1.918,440	84.027,672	3.680.412,034	59.471,640									
10.00	32,90	41,70	1.371,930	1.738,890	72.511,713	3.023.738,432	57.209,481									
11.00	34,30	45,50	1.560,650	2.070,250	94.196,375	4.285.935,063	71.009,575									
12.00	34,60	43,60	1.508,560	1.900,960	82.881,856	3.613.648,922	65.773,216									
13.00	35,60	43,40	1.545,040	1.883,560	81.746,504	3.547.798,274	67.054,736	1.213.744,170	290.595.089,443	239,420	-12.190.523,849	-10,0437	147.978,378	0,1219	β	-10,044
14.00	34,50	37,50	1.293,750	1.406,250	52.734,375	1.977.539,063	48.515,625									
15.00	28,80	44,20	1.272,960	1.953,640	86.350,888	3.816.709,250	56.264,832									
16.00	34,50	43,50	1.500,750	1.892,250	82.312,875	3.580.610,063	65.282,625									
17.00	34,60	44,40	1.536,240	1.971,360	87.528,384	3.886.260,250	68.209,056									
18.00	30,40	41,50	1.261,600	1.722,250	71.473,375	2.966.145,063	52.356,400									
19.00	33,40	44,00	1.469,600	1.936,000	85.184,000	3.748.096,000	64.662,400									
20.00	33,80	42,30	1.429,740	1.789,290	75.686,967	3.201.558,704	60.478,002									
21.00	31,60	42,30	1.336,680	1.789,290	75.686,967	3.201.558,704	56.541,564									
22.00	34,80	45,60	1.586,880	2.079,360	94.818,816	4.323.738,010	72.361,728								γ	0,122
23.00	34,10	43,90	1.496,990	1.927,210	84.604,519	3.714.138,384	65.717,861									
24.00	34,60	43,70	1.512,020	1.909,690	83.453,453	3.646.915,896	66.075,274									
Total	811,500	1.052,100	35.592,980	46.198,110	2.031.680,871	89.474.533,269	1.563.744,780									

Lampiran 3a. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 1 (Lanjutan)

23 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> ton/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	34,19	43,82	1.498,206	1.920,192	84.142,831	3.687.138,853	65.651,378									
02.00	32,87	44,06	1.448,252	1.941,284	85.532,955	3.768.582,016	63.809,992									
03.00	32,70	43,32	1.416,564	1.876,622	81.295,282	3.521.711,632	61.365,552									
04.00	34,20	45,80	1.566,360	2.097,640	96.071,912	4.400.093,570	71.739,288									
05.00	35,20	45,40	1.598,080	2.061,160	93.576,664	4.248.380,546	72.552,832								α	847,616
06.00	33,40	45,00	1.503,000	2.025,000	91.125,000	4.100.625,000	67.635,000									
07.00	33	46,00	1.518,000	2.116,000	97.336,000	4.477.456,000	69.828,000									
08.00	35,70	45,50	1.624,350	2.070,250	94.196,375	4.285.935,063	73.907,925									
09.00	34,70	45,90	1.592,730	2.106,810	96.702,579	4.438.648,376	73.106,307									
10.00	32,70	44,30	1.448,610	1.962,490	86.938,307	3.851.367,000	64.173,423									
11.00	32,90	45,30	1.490,370	2.052,090	92.959,677	4.211.073,368	67.513,761									
12.00	33,20	44,90	1.490,680	2.016,010	90.518,849	4.064.296,320	66.931,532									
13.00	34,60	45,50	1.574,300	2.070,250	94.196,375	4.285.935,063	71.630,650	4.254,468	3.706.322,689	871,160	-161.347,528	-37,924	1.825,721	0,429	β	-36,866
14.00	35,30	45,50	1.606,150	2.070,250	94.196,375	4.285.935,063	73.079,825									
15.00	32,77	43,58	1.428,117	1.899,216	82.767,851	3.607.022,934	62.237,321									
16.00	33,51	44,92	1.505,269	2.017,806	90.639,863	4.071.542,668	67.616,692									
17.00	33,29	44,90	1.494,721	2.016,010	90.518,849	4.064.296,320	67.112,973									
18.00	32,82	44,76	1.469,023	2.003,458	89.674,762	4.013.842,355	65.753,478									
19.00	33,24	44,93	1.493,473	2.018,705	90.700,411	4.075.169,473	67.101,751									
20.00	33,54	45,03	1.510,306	2.027,701	91.307,372	4.111.570,940	68.009,088									
21.00	33,3	45,34	1.508,008	2.055,716	93.206,145	4.225.966,628	68.373,101									
22.00	33,6	45,45	1.528,938	2.065,703	93.886,179	4.267.126,819	69.490,232								γ	0,417
23.00	34,8	43,0	1.496,726	1.845,562	79.285,326	3.406.097,619	64.299,366									
24.00	34,3	44,4	1.523,060	1.974,025	87.705,926	3.896.774,306	67.669,574									
Total	809,850	1076,60	36333,29	48309,95	2168481,87	97366587,93	1630589,04									

Lampiran 3a. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 1 (Lanjutan)

24 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> ton/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	32,20	44,50	1.432,900	1.980,250	88.121,125	3.921.390,063	63.764,050									
02.00	34,90	44,25	1.544,325	1.958,063	86.644,266	3.834.008,754	68.336,381									
03.00	32,60	43,30	1.411,580	1.874,890	81.182,737	3.515.212,512	61.121,414									
04.00	32,60	44,00	1.434,400	1.936,000	85.184,000	3.748.096,000	63.113,600									
05.00	36,80	45,70	1.681,760	2.088,490	95.443,993	4.361.790,480	76.856,432								α	1.281,849
06.00	33,20	45,40	1.507,280	2.061,160	93.576,664	4.248.380,546	68.430,512									
07.00	33,30	44,70	1.488,510	1.998,090	89.314,623	3.992.363,648	66.536,397									
08.00	33,20	43,80	1.454,160	1.918,440	84.027,672	3.680.412,034	63.692,208									
09.00	33,10	45,50	1.506,050	2.070,250	94.196,375	4.285.935,063	68.525,275									
10.00	34,10	44,70	1.524,270	1.998,090	89.314,623	3.992.363,648	68.134,869									
11.00	33,00	44,50	1.468,500	1.980,250	88.121,125	3.921.390,063	65.348,250									
12.00	34,60	45,50	1.574,300	2.070,250	94.196,375	4.285.935,063	71.630,650									
13.00	33,00	45,00	1.485,000	2.025,000	91.125,000	4.100.625,000	66.825,000	4.313,629	5.529.430,032	1.281,851	-243.842,054	-56,528	2.760,049	0,640	β	-56,528
14.00	33,60	45,30	1.522,080	2.052,090	92.959,677	4.211.073,368	68.950,224									
15.00	33,72	44,10	1.487,052	1.944,810	85.766,121	3.782.285,936	65.578,993									
16.00	33,22	43,56	1.447,063	1.897,474	82.653,950	3.600.406,063	63.034,073									
17.00	32,76	44,54	1.459,130	1.983,812	88.358,969	3.935.508,464	64.989,668									
18.00	34,17	45,69	1.561,227	2.087,576	95.381,352	4.357.973,973	71.332,475									
19.00	34,86	45,85	1.598,331	2.102,223	96.386,902	4.419.339,440	73.283,476									
20.00	35,27	42,82	1.510,261	1.833,552	78.512,714	3.361.914,404	64.669,393									
21.00	35,67	44,72	1.595,162	1.999,878	89.434,562	3.999.513,615	71.335,663									
22.00	35,93	45,31	1.627,988	2.052,996	93.021,253	4.214.792,987	73.764,150								γ	0,640
23.00	32,84	44,99	1.477,472	2.024,100	91.064,263	4.096.981,215	66.471,447									
24.00	34,43	44,26	1.523,872	1.958,948	86.703,021	3.837.475,700	67.446,566									
Total	813,070	1.071,990	36.322,674	47.896,681	2.140.691,361	95.705.168,035	1.623.171,167									

Lampiran 3a. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 1 (Lanjutan)

25 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> ton/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	33,70	45,30	1.526,610	2.052,090	92.959,677	4.211.073,368	69.155,433									
02.00	34,10	44,00	1.500,400	1.936,000	85.184,000	3.748.096,000	66.017,600									
03.00	34,70	43,80	1.519,860	1.918,440	84.027,672	3.680.412,034	66.569,868									
04.00	35,10	45,50	1.597,050	2.070,250	94.196,375	4.285.935,063	72.665,775									
05.00	33,50	44,60	1.494,100	1.989,160	88.716,536	3.956.757,506	66.636,860								α	990,815
06.00	34,30	46,20	1.584,660	2.134,440	98.611,128	4.555.834,114	73.211,292									
07.00	33,60	45,50	1.528,800	2.070,250	94.196,375	4.285.935,063	69.560,400									
08.00	33,04	44,90	1.483,496	2.016,010	90.518,849	4.064.296,320	66.608,970									
09.00	33,86	45,07	1.526,070	2.031,305	91.550,912	4.126.199,597	68.779,984									
10.00	34,27	45,70	1.566,139	2.088,490	95.443,993	4.361.790,480	71.572,552									
11.00	35,88	45,96	1.649,045	2.112,322	97.082,301	4.461.902,542	75.790,099									
12.00	34,24	45,25	1.549,360	2.047,563	92.652,203	4.192.512,191	70.108,540									
13.00	35,36	46,46	1.642,826	2.158,532	100.285,378	4.659.258,668	76.325,677	14.261,349	14.125.506,229	990,475	-609.615,716	-42,746	6.810,951	0,478	β	-42,762
14.00	34,43	45,50	1.566,565	2.070,250	94.196,375	4.285.935,063	71.278,708									
15.00	33,00	44,88	1.481,040	2.014,214	90.397,942	4.057.059,649	66.469,075									
16.00	36,31	42,51	1.543,538	1.807,100	76.819,825	3.265.610,771	65.615,805									
17.00	34,24	43,36	1.484,646	1.880,090	81.520,685	3.534.736,904	64.374,268									
18.00	34,43	45,33	1.560,712	2.054,809	93.144,487	4.222.239,616	70.747,070									
19.00	35,87	43,84	1.572,541	1.921,946	84.258,095	3.693.874,889	68.940,189									
20.00	33,89	45,84	1.553,426	2.101,306	96.323,849	4.415.485,225	71.209,044									
21.00	34,68	45,71	1.585,223	2.089,404	95.506,661	4.365.609,493	72.460,534									
22.00	34,10	44,60	1.520,860	1.989,160	88.716,536	3.956.757,506	67.830,356								γ	0,47777
23.00	34,40	43,90	1.510,160	1.927,210	84.604,519	3.714.138,384	66.296,024									
24.00	35,20	45,30	1.594,560	2.052,090	92.959,677	4.211.073,368	72.233,568									
Total	826,198	1079,01	37141,69	48532,43	2183874,05	98312523,81	1670457,69									

Lampiran 3a. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 1 (Lanjutan)

26 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> ton/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	33,50	44,90	1.504,150	2.016,010	90.518,849	4.064.296,320	67.536,335									
02.00	34,70	46,10	1.599,670	2.125,210	97.972,181	4.516.517,544	73.744,787									
03.00	33,30	45,70	1.521,810	2.088,490	95.443,993	4.361.790,480	69.546,717									
04.00	35,50	45,10	1.601,050	2.034,010	91.733,851	4.137.196,680	72.207,355									
05.00	34,70	45,80	1.589,260	2.097,640	96.071,912	4.400.093,570	72.788,108								α	271,981
06.00	34,00	46,20	1.570,800	2.134,440	98.611,128	4.555.834,114	72.570,960									
07.00	35	46,30	1.620,500	2.143,690	99.252,847	4.595.406,816	75.029,150									
08.00	34,60	46,60	1.612,360	2.171,560	101.194,696	4.715.672,834	75.135,976									
09.00	32,40	44,90	1.454,760	2.016,010	90.518,849	4.064.296,320	65.318,724									
10.00	33,60	45,70	1.535,520	2.088,490	95.443,993	4.361.790,480	70.173,264									
11.00	33,63	45,00	1.513,350	2.025,000	91.125,000	4.100.625,000	68.100,750									
12.00	34,50	45,20	1.559,400	2.043,040	92.345,408	4.174.012,442	70.484,880									
13.00	33,00	44,20	1.458,600	1.953,640	86.350,888	3.816.709,250	64.470,120	1.790,317	486.935,284	271,983	-19.976,468	-11,1581	233,311	0,1303	β	-11,158
14.00	34,20	44,30	1.515,060	1.962,490	86.938,307	3.851.367,000	67.117,158									
15.00	33,61	44,80	1.505,728	2.007,040	89.915,392	4.028.209,562	67.456,614									
16.00	35,64	46,24	1.647,994	2.138,138	98.867,483	4.571.632,397	76.203,224									
17.00	33,61	45,11	1.516,147	2.034,912	91.794,885	4.140.867,255	68.393,396									
18.00	34,77	45,38	1.577,863	2.059,344	93.453,049	4.240.899,358	71.603,405									
19.00	33,17	45,07	1.494,972	2.031,305	91.550,912	4.126.199,597	67.378,384									
20.00	33,70	45,14	1.521,218	2.037,620	91.978,149	4.151.893,634	68.667,781									
21.00	34,3	45,29	1.553,447	2.051,184	92.898,128	4.207.356,212	70.355,615									
22.00	33,3	44,00	1.465,200	1.936,000	85.184,000	3.748.096,000	64.468,800								γ	0,13032
23.00	33,2	44,9	1.490,680	2.016,010	90.518,849	4.064.296,320	66.931,532									
24.00	33,7	44,4	1.496,280	1.971,360	87.528,384	3.886.260,250	66.434,832									
Total	815,630	1086,33	36925,82	49182,63	2227211,13	100881319,43	1672117,87									

Lampiran 3a. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 1 (Lanjutan)

27 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> ton/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	35,70	44,50	1.588,650	1.980,250	88.121,125	3.921.390,063	70.694,925									
02.00	34,60	44,50	1.539,700	1.980,250	88.121,125	3.921.390,063	68.516,650									
03.00	34,50	44,30	1.528,350	1.962,490	86.938,307	3.851.367,000	67.705,905									
04.00	34,10	44,20	1.507,220	1.953,640	86.350,888	3.816.709,250	66.619,124									
05.00	34,88	44,92	1.566,810	2.017,806	90.639,863	4.071.542,668	70.381,087								α	941,206
06.00	33,21	44,96	1.493,122	2.021,402	90.882,216	4.086.064,428	67.130,747									
07.00	34,99	45,56	1.594,144	2.075,714	94.569,512	4.308.586,949	72.629,219									
08.00	34,34	45,47	1.561,440	2.067,521	94.010,175	4.274.642,672	70.998,668									
09.00	33,96	45,13	1.532,615	2.036,717	91.917,034	4.148.215,731	69.166,906									
10.00	33,34	45,32	1.510,969	2.053,902	93.082,857	4.218.515,069	68.477,106									
11.00	33,84	44,59	1.508,926	1.988,268	88.656,875	3.953.210,037	67.282,993									
12.00	33,76	45,33	1.530,341	2.054,809	93.144,487	4.222.239,616	69.370,348									
13.00	34,37	45,49	1.563,491	2.069,340	94.134,281	4.282.168,449	71.123,219	151,071	142.183,961	941,172	-6.069,731	-40,178	67,220	0,445	β	-40,180
14.00	34,65	44,93	1.556,825	2.018,705	90.700,411	4.075.169,473	69.948,125									
15.00	34,30	44,40	1.522,920	1.971,360	87.528,384	3.886.260,250	67.617,648									
16.00	35,70	44,20	1.577,940	1.953,640	86.350,888	3.816.709,250	69.744,948									
17.00	34,90	44,80	1.563,520	2.007,040	89.915,392	4.028.209,562	70.045,696									
18.00	33,70	44,80	1.509,760	2.007,040	89.915,392	4.028.209,562	67.637,248									
19.00	33,50	44,60	1.494,100	1.989,160	88.716,536	3.956.757,506	66.636,860									
20.00	34,50	45,10	1.555,950	2.034,010	91.733,851	4.137.196,680	70.173,345									
21.00	34,9	44,00	1.535,600	1.936,000	85.184,000	3.748.096,000	67.566,400									
22.00	34,2	43,90	1.501,380	1.927,210	84.604,519	3.714.138,384	65.910,582								γ	0,44497
23.00	34,0	44,8	1.523,200	2.007,040	89.915,392	4.028.209,562	68.239,360									
24.00	34,5	44,4	1.531,800	1.971,360	87.528,384	3.886.260,250	68.011,920									
Total	824,440	1074,20	36898,77	48084,67	2152661,89	96381258,47	1651629,03									

Lampiran 3a. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 1 (Lanjutan)

28 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> ton/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	33,30	44,30	1.475,190	1.962,490	86.938,307	3.851.367,000	65.350,917									
02.00	33,40	44,50	1.486,300	1.980,250	88.121,125	3.921.390,063	66.140,350									
03.00	34,90	44,00	1.535,600	1.936,000	85.184,000	3.748.096,000	67.566,400									
04.00	36,80	45,30	1.667,040	2.052,090	92.959,677	4.211.073,368	75.516,912									
05.00	35,80	46,60	1.668,280	2.171,560	101.194,696	4.715.672,834	77.741,848								α	356,170
06.00	34,60	46,30	1.601,980	2.143,690	99.252,847	4.595.406,816	74.171,674									
07.00	35,83	46,48	1.665,378	2.160,390	100.414,946	4.667.286,680	77.406,788									
08.00	34,75	46,16	1.604,060	2.130,746	98.355,217	4.540.076,812	74.043,410									
09.00	34,45	45,68	1.573,676	2.086,662	95.318,738	4.354.159,972	71.885,520									
10.00	32,59	44,23	1.441,456	1.956,293	86.526,835	3.827.081,911	63.755,586									
11.00	33,51	45,07	1.510,296	2.031,305	91.550,912	4.126.199,597	68.069,027									
12.00	34,41	44,40	1.527,804	1.971,360	87.528,384	3.886.260,250	67.834,498									
13.00	34,04	44,75	1.523,290	2.002,563	89.614,672	4.010.256,566	68.167,228	10.702,670	3.811.953,876	356,168	-157.791,409	-14,7432	1.805,833	0,1687	β	-14,743
14.00	35,18	44,94	1.580,989	2.019,604	90.760,986	4.078.798,701	71.049,655									
15.00	34,60	43,20	1.494,720	1.866,240	80.621,568	3.482.851,738	64.571,904									
16.00	34,80	44,00	1.531,200	1.936,000	85.184,000	3.748.096,000	67.372,800									
17.00	33,00	44,00	1.452,000	1.936,000	85.184,000	3.748.096,000	63.888,000									
18.00	34,60	43,90	1.518,940	1.927,210	84.604,519	3.714.138,384	66.681,466									
19.00	35,40	44,80	1.585,920	2.007,040	89.915,392	4.028.209,562	71.049,216									
20.00	33,50	44,30	1.484,050	1.962,490	86.938,307	3.851.367,000	65.743,415									
21.00	35,00	44,90	1.571,500	2.016,010	90.518,849	4.064.296,320	70.560,350								γ	0,16873
22.00	34,10	43,30	1.476,530	1.874,890	81.182,737	3.515.212,512	63.933,749									
23.00	33,40	45,60	1.523,040	2.079,360	94.818,816	4.323.738,010	69.450,624									
24.00	35,30	45,00	1.588,500	2.025,000	91.125,000	4.100.625,000	71.482,500									
Total	827,260	1075,71	37087,74	48235,24	2163814,53	97109757,09	1663433,83									

Lampiran 3a. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 1 (Lanjutan)

29 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> ton/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
10.00	33,40	43,80	1.462,920	1.918,440	84.027,672	3.680.412,034	64.075,896									
11.00	35,10	43,50	1.526,850	1.892,250	82.312,875	3.580.610,063	66.417,975								α	60,573
12.00	34,10	43,30	1.476,530	1.874,890	81.182,737	3.515.212,512	63.933,749									
13.00	34,80	43,60	1.517,280	1.900,960	82.881,856	3.613.648,922	66.153,408									
15.00	36,60	45,10	1.650,660	2.034,010	91.733,851	4.137.196,680	74.444,766									
19.00	29,50	37,20	1.097,400	1.383,840	51.478,848	1.915.013,146	40.823,280									
20.00	28,90	36,63	1.058,607	1.341,757	49.148,555	1.800.311,579	38.776,774	255.666,092	15.486.568,923	60,573	-553.772,891	-2,1660	9.203,956	0,0360	β	-2,166
21.00	30,60	36,70	1.123,020	1.346,890	49.430,863	1.814.112,672	41.214,834									
22.00	29,50	37,50	1.106,250	1.406,250	52.734,375	1.977.539,063	41.484,375									
23.00	31,50	38,40	1.209,600	1.474,560	56.623,104	2.174.327,194	46.448,640									
24.00	29,50	37,40	1.103,300	1.398,760	52.313,624	1.956.529,538	41.263,420								γ	0,036
Total	353,500	443,13	14332,42	17972,61	733868,36	30164913,40	585037,12									

Lampiran 3a. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 1 (Lanjutan)

30 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> ton/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	30,70	38,20	1.172,740	1.459,240	55.742,968	2.129.381,378	44.798,668									
02.00	28,60	35,60	1.018,160	1.267,360	45.118,016	1.606.201,370	36.246,496									
03.00	29,60	35,10	1.038,960	1.232,010	43.243,551	1.517.848,640	36.467,496									
04.00	29,70	35,80	1.063,260	1.281,640	45.882,712	1.642.601,090	38.064,708									
05.00	31,60	37,40	1.181,840	1.398,760	52.313,624	1.956.529,538	44.200,816								α	28,629
06.00	29,90	37,30	1.115,270	1.391,290	51.895,117	1.935.687,864	41.599,571									
07.00	30,9	38,00	1.174,200	1.444,000	54.872,000	2.085.136,000	44.619,600									
08.00	31,70	38,80	1.229,960	1.505,440	58.411,072	2.266.349,594	47.722,448									
09.00	32,40	39,90	1.292,760	1.592,010	63.521,199	2.534.495,840	51.581,124									
10.00	32,10	42,90	1.377,090	1.840,410	78.953,589	3.387.108,968	59.077,161									
11.00	33,90	43,70	1.481,430	1.909,690	83.453,453	3.646.915,896	64.738,491									
12.00	35,20	44,20	1.555,840	1.953,640	86.350,888	3.816.709,250	68.768,128									
13.00	35,40	45,00	1.593,000	2.025,000	91.125,000	4.100.625,000	71.685,000	8.665.688,589	248.087.102,181	28,629	-3.735.594,290	-0,4311	111.322,365	0,0128	β	-0,431
14.00	35,10	45,00	1.579,500	2.025,000	91.125,000	4.100.625,000	71.077,500									
15.00	35,80	44,20	1.582,360	1.953,640	86.350,888	3.816.709,250	69.940,312									
16.00	32,10	41,60	1.335,360	1.730,560	71.991,296	2.994.837,914	55.550,976									
17.00	32,90	40,50	1.332,450	1.640,250	66.430,125	2.690.420,063	53.964,225									
18.00	31,90	40,90	1.304,710	1.672,810	68.417,929	2.798.293,296	53.362,639									
19.00	31,70	39,80	1.261,660	1.584,040	63.044,792	2.509.182,722	50.214,068									
20.00	32,40	40,20	1.302,480	1.616,040	64.964,808	2.611.585,282	52.359,696									
21.00	32,1	39,90	1.280,790	1.592,010	63.521,199	2.534.495,840	51.103,521								γ	0,012846
22.00	31,6	39,20	1.238,720	1.536,64	60.236,288	2.361.262,490	48.557,824									
23.00	31,2	39,4	1.229,280	1.552,360	61.162,984	2.409.821,570	48.433,632									
24.00	32,0	39,8	1.273,600	1.584,040	63.044,792	2.509.182,722	50.689,280									
Total	770,500	962,40	31015,42	38787,88	1571173,29	63962006,57	1254823,38									

Lampiran 3b. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 2

01 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	35,80	38,99	1.395,842	1.520,220	59.273,382	2.311.069,152	54.423,880									
02.00	36,20	38,99	1.411,438	1.520,220	59.273,382	2.311.069,152	55.031,968								α	1303,677
04.00	37,52	39,40	1.478,288	1.552,360	61.162,984	2.409.821,570	58.244,547									
11.00	35,80	39,10	1.399,780	1.528,810	59.776,471	2.337.260,016	54.731,398									
13.00	36,20	39,20	1.419,040	1.536,640	60.236,288	2.361.262,490	55.626,368	0,083	107,834	1.302,987	-5,820	-70,323	0,080	0,970	β	-70,362
14.00	37,60	39,30	1.477,680	1.544,490	60.698,457	2.385.449,360	58.072,824									
16.00	34,87	38,97	1.358,884	1.518,661	59.182,215	2.306.330,929	52.955,706									
20.00	34,79	39,03	1.357,854	1.523,341	59.455,995	2.320.567,498	52.997,030								γ	0,9703
21.00	33,71	38,67	1.303,566	1.495,369	57.825,915	2.236.128,147	50.408,886									
Total	322,490	351,65	12.602,371	13.740,111	536.885,089	20.978.958,314	492.492,606									

Lampiran 3b. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 2 (Lanjutan)

02 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	33,62	38,44	1.292,487	1.477,941	56.817,969	2.184.310,001	49.688,381									
02.00	35,33	40,09	1.416,380	1.607,208	64.432,973	2.583.117,877	56.782,662									
05.00	26,42	29,11	769,113	847,450	24.670,126	718.172,047	22.389,637									
06.00	30,50	34,81	1.061,705	1.211,736	42.180,534	1.468.304,376	36.957,951								α	22,691
07.00	31,70	35,00	1.109,500	1.225,000	42.875,000	1.500.625,000	38.832,500									
08.00	35,80	38,60	1.381,880	1.489,960	57.512,456	2.219.980,802	53.340,568									
09.00	36,80	39,60	1.457,280	1.568,160	62.099,136	2.459.125,786	57.708,288									
10.00	34,80	39,40	1.371,120	1.552,360	61.162,984	2.409.821,570	54.022,128									
11.00	35,40	39,40	1.394,760	1.552,360	61.162,984	2.409.821,570	54.953,544									
12.00	35,80	39,10	1.399,780	1.528,810	59.776,471	2.337.260,016	54.731,398	2.628.764,059	59.574.094,633	22,662	-1.176.648,035	-0,448	51.977,471	0,0198	β	-0,44923
13.00	35,90	39,30	1.410,870	1.544,490	60.698,457	2.385.449,360	55.447,191									
15.00	35,70	39,01	1.392,657	1.521,780	59.364,642	2.315.814,673	54.327,550									
17.00	35,28	38,89	1.372,039	1.512,432	58.818,484	2.287.450,857	53.358,604									
18.00	36,91	39,07	1.442,074	1.526,465	59.638,984	2.330.095,091	56.341,819									
20.00	33,47	38,75	1.296,963	1.501,563	58.185,547	2.254.689,941	50.257,297									
21.00	34,19	38,25	1.307,768	1.463,063	55.962,141	2.140.551,879	50.022,107									
22.00	36,50	39,50	1.441,750	1.560,250	61.629,875	2.434.380,063	56.949,125								γ	0,019796
23.00	35,00	38,80	1.358,000	1.505,440	58.411,072	2.266.349,594	52.690,400									
24.00	34,00	37,70	1.281,800	1.421,290	53.582,633	2.020.065,264	48.323,860									
Total	653,120	722,83	24.957,925	27.617,758	1.058.982,467	40.725.385,765	957.125,011									

Lampiran 3b. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 2 (Lanjutan)

03 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	34,70	37,50	1.301,250	1.406,250	52.734,375	1.977.539,063	48.796,875									
02.00	34,90	37,80	1.319,220	1.428,840	54.010,152	2.041.583,746	49.866,516									
03.00	34,70	37,90	1.315,130	1.436,410	54.439,939	2.063.273,688	49.843,427									
04.00	34,20	37,60	1.285,920	1.413,760	53.157,376	1.998.717,338	48.350,592								α	691,3813
05.00	33,30	37,60	1.252,080	1.413,760	53.157,376	1.998.717,338	47.078,208									
06.00	35,00	37,20	1.302,000	1.383,840	51.478,848	1.915.013,146	48.434,400									
07.00	33,50	38,80	1.299,800	1.505,440	58.411,072	2.266.349,594	50.432,240									
08.00	36,31	39,15	1.421,537	1.532,723	60.006,086	2.349.238,262	55.653,154									
09.00	34,20	38,98	1.333,116	1.519,440	59.227,787	2.308.699,129	51.964,862									
10.00	35,92	40,16	1.442,547	1.612,826	64.771,076	2.601.206,416	57.932,696									
11.00	35,02	39,30	1.376,286	1.544,490	60.698,457	2.385.449,360	54.088,040	2.339,852	1.617.725,752	691,380	-80.586,562	-34,4409	1.055,894	0,4513	β	-34,441
12.00	34,60	39,70	1.373,620	1.576,090	62.570,773	2.484.059,688	54.532,714									
13.00	35,20	39,20	1.379,840	1.536,640	60.236,288	2.361.262,490	54.089,728									
14.00	34,90	38,80	1.354,120	1.505,440	58.411,072	2.266.349,594	52.539,856									
15.00	34,60	39,40	1.363,240	1.552,360	61.162,984	2.409.821,570	53.711,656									
16.00	35,70	39,30	1.403,010	1.544,490	60.698,457	2.385.449,360	55.138,293									
17.00	33,40	38,80	1.295,920	1.505,440	58.411,072	2.266.349,594	50.281,696									
18.00	34,20	38,20	1.306,440	1.459,240	55.742,968	2.129.381,378	49.906,008								γ	0,45127
19.00	34,50	38,80	1.338,600	1.505,440	58.411,072	2.266.349,594	51.937,680									
20.00	34,20	38,60	1.320,120	1.489,960	57.512,456	2.219.980,802	50.956,632									
21.00	33,90	38,60	1.308,540	1.489,960	57.512,456	2.219.980,802	50.509,644									
Total	726,950	811,39	28.092,336	31.362,839	1.212.762,142	46.914.771,947	1.086.044,916									

Lampiran 3b. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 2 (Lanjutan)

04 Juni 2016																		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	34,40	39,20	1.348,480	1.536,640	60.236,288	2.361.262,490	52.860,416									
02.00	32,70	39,00	1.275,300	1.521,000	59.319,000	2.313.441,000	49.736,700									
03.00	34,90	39,00	1.361,100	1.521,000	59.319,000	2.313.441,000	53.082,900									
04.00	34,80	39,00	1.357,200	1.521,000	59.319,000	2.313.441,000	52.930,800									
05.00	34,70	40,20	1.394,940	1.616,040	64.964,808	2.611.585,282	56.076,588								α	65,819
06.00	33,50	39,10	1.309,850	1.528,810	59.776,471	2.337.260,016	51.215,135									
07.00	35,06	37,80	1.325,268	1.428,840	54.010,152	2.041.583,746	50.095,130									
08.00	35,45	38,22	1.354,899	1.460,768	55.830,568	2.133.844,318	51.784,240									
09.00	33,98	38,45	1.306,531	1.478,403	56.844,576	2.185.673,952	50.236,117									
10.00	35,78	38,70	1.384,686	1.497,690	57.960,603	2.243.075,336	53.587,348									
11.00	34,27	39,15	1.341,671	1.532,723	60.006,086	2.349.238,262	52.526,400									
12.00	34,44	40,23	1.385,521	1.618,453	65.110,360	2.619.389,790	55.739,518									
13.00	33,19	38,50	1.277,815	1.482,250	57.066,625	2.197.065,063	49.195,878	291.264,351	19.170.737,602	65,819	-537.237,314	-1,8445	7.757,062	0,0266	β	-1,8445
14.00	34,54	39,04	1.348,442	1.524,122	59.501,707	2.322.946,652	52.643,160									
15.00	33,00	37,80	1.247,400	1.428,840	54.010,152	2.041.583,746	47.151,720									
16.00	33,60	37,00	1.243,200	1.369,000	50.653,000	1.874.161,000	45.998,400									
17.00	34,20	37,50	1.282,500	1.406,250	52.734,375	1.977.539,063	48.093,750									
18.00	33,60	37,60	1.263,360	1.413,760	53.157,376	1.998.717,338	47.502,336									
19.00	35,10	39,80	1.396,980	1.584,040	63.044,792	2.509.182,722	55.599,804									
20.00	34,90	37,10	1.294,790	1.376,410	51.064,811	1.894.504,488	48.036,709									
21.00	33,40	37,80	1.262,520	1.428,840	54.010,152	2.041.583,746	47.723,256									
22.00	34,50	37,50	1.293,750	1.406,250	52.734,375	1.977.539,063	48.515,625								γ	0,026632
23.00	33,90	33,50	1.135,650	1.122,250	37.595,375	1.259.445,063	38.044,275									
24.00	35,30	39,30	1.387,290	1.544,490	60.698,457	2.385.449,360	54.520,497									
Total	823,210	920,49	31.579,142	35.347,868	1.358.968,110	52.302.953,491	1.212.896,702									

Lampiran 3b. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 2 (Lanjutan)

07 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	35,80	39,60	1.417,680	1.568,160	62.099,136	2.459.125,786	56.140,128									
02.00	35,90	39,70	1.425,230	1.576,090	62.570,773	2.484.059,688	56.581,631									
03.00	35,60	38,70	1.377,720	1.497,690	57.960,603	2.243.075,336	53.317,764									
04.00	35,90	39,60	1.421,640	1.568,160	62.099,136	2.459.125,786	56.296,944								α	668,4461
05.00	36,80	40,10	1.475,680	1.608,010	64.481,201	2.585.696,160	59.174,768									
06.00	36,90	37,30	1.376,370	1.391,290	51.895,117	1.935.687,864	51.338,601									
07.00	35,40	40,30	1.426,620	1.624,090	65.450,827	2.637.668,328	57.492,786									
08.00	35,60	40,40	1.438,240	1.632,160	65.939,264	2.663.946,266	58.104,896									
09.00	35,50	39,30	1.395,150	1.544,490	60.698,457	2.385.449,360	54.829,395									
10.00	36,60	39,80	1.456,680	1.584,040	63.044,792	2.509.182,722	57.975,864									
11.00	35,10	40,20	1.411,020	1.616,040	64.964,808	2.611.585,282	56.723,004									
12.00	35,70	39,80	1.420,860	1.584,040	63.044,792	2.509.182,722	56.550,228									
13.00	37,70	40,40	1.523,080	1.632,160	65.939,264	2.663.946,266	61.532,432	4.356,557	2.912.128,475	668,447	-141.212,290	-32,414	1.808,050	0,415	β	-32,4137
14.00	35,20	39,40	1.386,880	1.552,360	61.162,984	2.409.821,570	54.643,072									
15.00	34,80	38,90	1.353,720	1.513,210	58.863,869	2.289.804,504	52.659,708									
16.00	35,80	38,80	1.389,040	1.505,440	58.411,072	2.266.349,594	53.894,752									
17.00	35,50	38,50	1.366,750	1.482,250	57.066,625	2.197.065,063	52.619,875									
18.00	35,10	38,60	1.354,860	1.489,960	57.512,456	2.219.980,802	52.297,596									
19.00	36,00	39,40	1.418,400	1.552,360	61.162,984	2.409.821,570	55.884,960									
20.00	35,00	38,90	1.361,500	1.513,210	58.863,869	2.289.804,504	52.962,350									
21.00	37,00	38,40	1.420,800	1.474,560	56.623,104	2.174.327,194	54.558,720									
22.00	37,00	39,10	1.446,700	1.528,810	59.776,471	2.337.260,016	56.565,970								γ	0,41502
23.00	35,06	39,82	1.396,089	1.585,632	63.139,882	2.514.230,108	55.592,272									
24.00	34,60	38,54	1.333,484	1.485,332	57.244,680	2.206.209,962	51.392,473									
Total	859,560	943,56	33.794,193	37.109,544	1.460.016,166	57.462.406,448	1.329.130,189									

Lampiran 3b. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 2 (Lanjutan)

08 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	34,39	38,34	1.318,513	1.469,956	56.358,098	2.160.769,466	50.551,773									
02.00	36,22	38,08	1.379,258	1.450,086	55.219,290	2.102.750,567	52.522,129									
03.00	34,39	39,70	1.365,283	1.576,090	62.570,773	2.484.059,688	54.201,735									
04.00	36,38	39,61	1.441,012	1.568,952	62.146,193	2.461.610,692	57.078,477								α	472,1824
05.00	35,85	38,94	1.395,999	1.516,324	59.045,641	2.299.237,260	54.360,201									
06.00	37,40	39,25	1.467,950	1.540,563	60.467,078	2.373.332,816	57.617,038									
07.00	35,40	38,50	1.362,900	1.482,250	57.066,625	2.197.065,063	52.471,650									
08.00	38,70	41,00	1.586,700	1.681,000	68.921,000	2.825.761,000	65.054,700									
09.00	34,40	38,00	1.307,200	1.444,000	54.872,000	2.085.136,000	49.673,600									
10.00	36,90	38,70	1.428,030	1.497,690	57.960,603	2.243.075,336	55.264,761									
11.00	37,00	37,80	1.398,600	1.428,840	54.010,152	2.041.583,746	52.867,080									
12.00	37,60	39,90	1.500,240	1.592,010	63.521,199	2.534.495,840	59.859,576									
13.00	39,20	40,70	1.595,440	1.656,490	67.419,143	2.743.959,120	64.934,408	7.395,217	3.491.889,771	472,182	-168.479,606	-22,7822	2.199,886	0,2975	β	-22,7823
14.00	38,90	39,60	1.540,440	1.568,160	62.099,136	2.459.125,786	61.001,424									
15.00	35,00	40,50	1.417,500	1.640,250	66.430,125	2.690.420,063	57.408,750									
16.00	35,30	38,90	1.373,170	1.513,210	58.863,869	2.289.804,504	53.416,313									
17.00	37,10	38,70	1.435,770	1.497,690	57.960,603	2.243.075,336	55.564,299									
18.00	36,70	40,00	1.468,000	1.600,000	64.000,000	2.560.000,000	58.720,000									
19.00	36,00	39,90	1.436,400	1.592,010	63.521,199	2.534.495,840	57.312,360									
20.00	36,50	38,10	1.390,650	1.451,610	55.306,341	2.107.171,592	52.983,765									
21.00	36,80	38,60	1.420,480	1.489,960	57.512,456	2.219.980,802	54.830,528								γ	0,29747
22.00	35,90	37,90	1.360,610	1.436,410	54.439,939	2.063.273,688	51.567,119									
23.00	36,54	40,07	1.464,158	1.605,605	64.336,588	2.577.967,095	58.668,803									
24.00	36,18	38,37	1.388,227	1.472,257	56.490,497	2.167.540,380	53.266,255									
Total	874,750	939,16	34.242,528	36.771,412	1.440.538,548	56.465.691,679	1.341.196,744									

Lampiran 3b. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 2 (Lanjutan)

09 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	35,19	39,41	1.386,838	1.553,148	61.209,567	2.412.269,021	54.655,282									
02.00	34,70	38,72	1.343,584	1.499,238	58.050,511	2.247.715,780	52.023,572									
03.00	36,64	37,86	1.387,190	1.433,380	54.267,752	2.054.577,078	52.519,029									
04.00	35,71	39,42	1.407,688	1.553,936	61.256,173	2.414.718,335	55.491,069								α	907,8709
05.00	35,39	39,84	1.409,938	1.587,226	63.235,068	2.519.285,105	56.171,914									
06.00	35,53	38,86	1.380,696	1.510,100	58.682,470	2.280.400,802	53.653,839									
07.00	36,51	39,25	1.433,018	1.540,563	60.467,078	2.373.332,816	56.245,937									
08.00	36,00	38,90	1.400,400	1.513,210	58.863,869	2.289.804,504	54.475,560									
09.00	35,00	38,93	1.362,550	1.515,545	59.000,163	2.296.876,344	53.044,072									
10.00	34,71	39,23	1.361,673	1.538,993	60.374,691	2.368.499,146	53.418,444									
11.00	36,38	40,02	1.455,928	1.601,600	64.096,048	2.565.123,841	58.266,223									
12.00	37,92	39,37	1.492,910	1.549,997	61.023,378	2.402.490,390	58.775,882									
13.00	36,83	40,00	1.473,200	1.600,000	64.000,000	2.560.000,000	58.928,000	744,599	675.995,291	907,865	-33.586,998	-45,1075	434,324	0,5833	β	-45,1078
14.00	36,30	38,02	1.380,126	1.445,520	54.958,686	2.089.529,227	52.472,391									
15.00	36,36	39,38	1.431,857	1.550,784	61.069,890	2.404.932,255	56.386,521									
16.00	37,56	39,67	1.490,005	1.573,709	62.429,032	2.476.559,702	59.108,506									
17.00	36,75	39,60	1.455,300	1.568,160	62.099,136	2.459.125,786	57.629,880									
18.00	37,99	39,83	1.513,142	1.586,429	63.187,463	2.516.756,655	60.268,434									
19.00	36,85	38,71	1.426,464	1.498,464	58.005,545	2.245.394,659	55.218,402									
20.00	35,19	38,58	1.357,630	1.488,416	57.423,105	2.215.383,380	52.377,373									
21.00	35,31	38,13	1.346,370	1.453,897	55.437,089	2.113.816,196	51.337,100								γ	0,5833
22.00	36,70	38,90	1.427,630	1.513,210	58.863,869	2.289.804,504	55.534,807									
23.00	36,40	38,90	1.415,960	1.513,210	58.863,869	2.289.804,504	55.080,844									
24.00	35,40	39,70	1.405,380	1.576,090	62.570,773	2.484.059,688	55.793,586									
Total	867,320	939,23	33.945,476	36.764,825	1.439.435,224	56.370.259,718	1.328.876,664									

Lampiran 3b. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 2 (Lanjutan)

10 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
03.00	36,70	39,30	1.442,310	1.544,490	60.698,457	2.385.449,360	56.682,783									
06.00	37,38	38,99	1.457,446	1.520,220	59.273,382	2.311.069,152	56.825,827								α	52,318
07.00	36,14	37,80	1.366,092	1.428,840	54.010,152	2.041.583,746	51.638,278									
08.00	37,20	39,00	1.450,800	1.521,000	59.319,000	2.313.441,000	56.581,200									
10.00	35,20	36,50	1.284,800	1.332,250	48.627,125	1.774.890,063	46.895,200									
11.00	35,40	37,20	1.316,880	1.383,840	51.478,848	1.915.013,146	48.987,936									
12.00	35,83	38,29	1.371,931	1.466,124	56.137,892	2.149.519,877	52.531,227								β	-1,4618
13.00	36,35	38,97	1.416,560	1.518,661	59.182,215	2.306.330,929	55.203,324	636,403	33.295,337	52,318	-930,280	-1,462	17,288	0,0272		
15.00	36,40	38,82	1.413,048	1.506,992	58.501,445	2.271.026,094	54.854,523									
16.00	36,20	38,78	1.403,836	1.503,888	58.320,792	2.261.680,320	54.440,760									
18.00	36,60	39,05	1.429,230	1.524,903	59.547,443	2.325.327,635	55.811,432									
19.00	36,71	39,44	1.447,842	1.555,514	61.349,456	2.419.622,560	57.102,904								γ	0,00272
20.00	36,49	38,98	1.422,380	1.519,440	59.227,787	2.308.699,129	55.444,380									
Total	472,600	501,12	18.223,155	19.326,162	745.673,994	28.783.653,009	702.999,774									

Lampiran 3b. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 2 (Lanjutan)

11 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	34,10	37,80	1.288,980	1.428,840	54.010,152	2.041.583,746	48.723,444									
02.00	35,10	38,10	1.337,310	1.451,610	55.306,341	2.107.171,592	50.951,511									
03.00	38,80	38,00	1.474,400	1.444,000	54.872,000	2.085.136,000	56.027,200									
04.00	37,00	38,10	1.409,700	1.451,610	55.306,341	2.107.171,592	53.709,570								α	215,1461
05.00	38,00	39,60	1.504,800	1.568,160	62.099,136	2.459.125,786	59.590,080									
06.00	36,70	38,20	1.401,940	1.459,240	55.742,968	2.129.381,378	53.554,108									
07.00	35,80	37,12	1.328,896	1.377,894	51.147,440	1.898.592,978	49.328,620									
08.00	39,20	40,37	1.582,504	1.629,737	65.792,479	2.656.042,363	63.885,686									
09.00	37,60	38,01	1.429,176	1.444,760	54.915,331	2.087.331,747	54.322,980									
10.00	38,90	39,38	1.531,882	1.550,784	61.069,890	2.404.932,255	60.325,513									
11.00	36,49	38,22	1.394,648	1.460,768	55.830,568	2.133.844,318	53.303,439									
12.00	35,40	39,03	1.381,662	1.523,341	59.455,995	2.320.567,498	53.926,268									
13.00	37,90	38,22	1.448,538	1.460,768	55.830,568	2.133.844,318	55.363,122	8.006,980	1.722.668,271	215,146	-79.175,968	-9,8884	1.093,736	0,1366	β	-9,8884
14.00	38,60	39,40	1.520,840	1.552,360	61.162,984	2.409.821,570	59.921,096									
15.00	36,60	39,80	1.456,680	1.584,040	63.044,792	2.509.182,722	57.975,864									
16.00	39,20	40,40	1.583,680	1.632,160	65.939,264	2.663.946,266	63.980,672									
17.00	38,00	40,10	1.523,800	1.608,010	64.481,201	2.585.696,160	61.104,380									
18.00	37,10	39,70	1.472,870	1.576,090	62.570,773	2.484.059,688	58.472,939									
19.00	37,60	37,80	1.421,280	1.428,840	54.010,152	2.041.583,746	53.724,384									
20.00	37,60	39,50	1.485,200	1.560,250	61.629,875	2.434.380,063	58.665,400									
21.00	35,80	38,70	1.385,460	1.497,690	57.960,603	2.243.075,336	53.617,302									
22.00	36,60	37,40	1.368,840	1.398,760	52.313,624	1.956.529,538	51.194,616								γ	0,1366
23.00	38,40	38,80	1.489,920	1.505,440	58.411,072	2.266.349,594	57.808,896									
24.00	37,70	40,00	1.508,000	1.600,000	64.000,000	2.560.000,000	60.320,000									
Total	894,190	931,75	34.731,006	36.195,154	1.406.903,550	54.719.350,250	1.349.797,090									

Lampiran 3b. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 2 (Lanjutan)

12 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	37,20	41,00	1.525,200	1.681,000	68.921,000	2.825.761,000	62.533,200									
02.00	36,30	40,50	1.470,150	1.640,250	66.430,125	2.690.420,063	59.541,075									
03.00	36,20	38,90	1.408,180	1.513,210	58.863,869	2.289.804,504	54.778,202									
04.00	36,60	39,90	1.460,340	1.592,010	63.521,199	2.534.495,840	58.267,566								α	186,1786
05.00	37,10	40,00	1.484,000	1.600,000	64.000,000	2.560.000,000	59.360,000									
06.00	37,70	38,60	1.455,220	1.489,960	57.512,456	2.219.980,802	56.171,492									
07.00	38,40	41,30	1.585,920	1.705,690	70.444,997	2.909.378,376	65.498,496									
08.00	37,10	38,50	1.428,350	1.482,250	57.066,625	2.197.065,063	54.991,475									
09.00	36,80	39,00	1.435,200	1.521,000	59.319,000	2.313.441,000	55.972,800									
10.00	36,10	38,90	1.404,290	1.513,210	58.863,869	2.289.804,504	54.626,881									
11.00	36,20	38,90	1.408,180	1.513,210	58.863,869	2.289.804,504	54.778,202									
12.00	36,20	39,60	1.433,520	1.568,160	62.099,136	2.459.125,786	56.767,392									
13.00	36,00	39,90	1.436,400	1.592,010	63.521,199	2.534.495,840	57.312,360	15.781,727	2.938.222,000	186,179	-119.177,282	-7,552	1.496,101	0,095	β	-7,5516
14.00	36,10	37,60	1.357,360	1.413,760	53.157,376	1.998.717,338	51.036,736									
15.00	34,60	39,00	1.349,400	1.521,000	59.319,000	2.313.441,000	52.626,600									
16.00	35,80	41,20	1.474,960	1.697,440	69.934,528	2.881.302,554	60.768,352									
17.00	35,60	38,50	1.370,600	1.482,250	57.066,625	2.197.065,063	52.768,100									
18.00	34,50	41,10	1.417,950	1.689,210	69.426,531	2.853.430,424	58.277,745									
19.00	32,60	40,50	1.320,300	1.640,250	66.430,125	2.690.420,063	53.472,150									
20.00	34,50	40,70	1.404,150	1.656,490	67.419,143	2.743.959,120	57.148,905									
21.00	35,00	39,40	1.379,000	1.552,360	61.162,984	2.409.821,570	54.332,600								γ	0,0948
22.00	35,00	40,10	1.403,500	1.608,010	64.481,201	2.585.696,160	56.280,350									
23.00	35,70	40,50	1.445,850	1.640,250	66.430,125	2.690.420,063	58.556,925									
24.00	34,20	38,10	1.303,020	1.451,610	55.306,341	2.107.171,592	49.645,062									
Total	861,500	951,70	34.161,040	37.764,590	1.499.561,323	59.585.022,226	1.355.512,666									

Lampiran 3b. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 2 (Lanjutan)

13 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
02.00	32,90	39,40	1.296,260	1.552,360	61.162,984	2.409.821,570	51.072,644									
03.00	34,50	39,50	1.362,750	1.560,250	61.629,875	2.434.380,063	53.828,625									
04.00	34,20	40,40	1.381,680	1.632,160	65.939,264	2.663.946,266	55.819,872								α	64,686
08.00	33,80	39,50	1.335,100	1.560,250	61.629,875	2.434.380,063	52.736,450									
09.00	33,50	39,70	1.329,950	1.576,090	62.570,773	2.484.059,688	52.799,015									
10.00	30,20	34,90	1.053,980	1.218,010	42.508,549	1.483.548,360	36.783,902									
13.00	33,70	39,70	1.337,890	1.576,090	62.570,773	2.484.059,688	53.114,233								β	-2,4916
16.00	34,70	40,60	1.408,820	1.648,360	66.923,416	2.717.090,690	57.198,092	22.721,009	1.469.733,452	64,686	-56.611,327	-2,492	979,061	0,043		
17.00	35,10	40,70	1.428,570	1.656,490	67.419,143	2.743.959,120	58.142,799									
19.00	33,10	40,20	1.330,620	1.616,040	64.964,808	2.611.585,282	53.490,924									
21.00	34,70	40,60	1.408,820	1.648,360	66.923,416	2.717.090,690	57.198,092									
22.00	34,60	39,90	1.380,540	1.592,010	63.521,199	2.534.495,840	55.083,546									
23.00	34,20	39,90	1.364,580	1.592,010	63.521,199	2.534.495,840	54.446,742									0,0431
24.00	32,70	39,90	1.304,730	1.592,010	63.521,199	2.534.495,840	52.058,727									
Total	471,900	554,90	18.724,290	22.020,490	874.806,473	34.787.408,998	743.773,663									

Lampiran 3b. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 2 (Lanjutan)

15 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	32,80	37,90	1.243,120	1.436,410	54.439,939	2.063.273,688	47.114,248									
02.00	33,10	37,90	1.254,490	1.436,410	54.439,939	2.063.273,688	47.545,171								α	495,039
03.00	31,50	36,83	1.160,145	1.356,449	49.958,013	1.839.953,618	42.728,140									
05.00	38,06	39,67	1.509,840	1.573,709	62.429,032	2.476.559,702	59.895,361									
06.00	36,78	38,26	1.407,203	1.463,828	56.006,044	2.142.791,243	53.839,579									
10.00	33,00	37,00	1.221,000	1.369,000	50.653,000	1.874.161,000	45.177,000	672,316	332.822,680	495,039	-17.401,951	-25,884	243,045	0,3615	β	-25,884
11.00	32,20	38,20	1.230,040	1.459,240	55.742,968	2.129.381,378	46.987,528									
14.00	34,50	38,80	1.338,600	1.505,440	58.411,072	2.266.349,594	51.937,680									
15.00	37,60	39,60	1.488,960	1.568,160	62.099,136	2.459.125,786	58.962,816								γ	0,3615
21.00	34,90	39,50	1.378,550	1.560,250	61.629,875	2.434.380,063	54.452,725									
Total	344,440	383,66	13.231,948	14.728,895	565.809,018	21.749.249,758	508.640,248									

Lampiran 3b. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 2 (Lanjutan)

16 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	34,20	40,42	1.382,364	1.633,776	66.037,242	2.669.225,325	55.875,153									
02.00	33,50	40,86	1.368,810	1.669,540	68.217,388	2.787.362,476	55.929,577									
03.00	33,70	40,25	1.356,425	1.620,063	65.207,516	2.624.602,504	54.596,106									
04.00	33,30	40,62	1.352,646	1.649,984	67.022,366	2.722.448,520	54.944,481								α	564,6111
05.00	32,60	39,29	1.280,854	1.543,704	60.652,134	2.383.022,348	50.324,754									
06.00	33,20	40,05	1.329,660	1.604,003	64.240,300	2.572.824,020	53.252,883									
07.00	32,50	40,10	1.303,250	1.608,010	64.481,201	2.585.696,160	52.260,325									
08.00	32,10	39,60	1.271,160	1.568,160	62.099,136	2.459.125,786	50.337,936									
09.00	33,10	39,90	1.320,690	1.592,010	63.521,199	2.534.495,840	52.695,531									
10.00	32,20	39,90	1.284,780	1.592,010	63.521,199	2.534.495,840	51.262,722									
11.00	33,10	39,20	1.297,520	1.536,640	60.236,288	2.361.262,490	50.862,784									
12.00	33,90	39,90	1.352,610	1.592,010	63.521,199	2.534.495,840	53.969,139									
13.00	34,80	40,90	1.423,320	1.672,810	68.417,929	2.798.293,296	58.213,788	203,891	115.125,077	564,640	-5.513,867	-27,043	70,140	0,344	β	-27,0418
14.00	34,80	40,60	1.412,880	1.648,360	66.923,416	2.717.090,690	57.362,928									
15.00	32,00	40,60	1.299,200	1.648,360	66.923,416	2.717.090,690	52.747,520									
16.00	33,50	40,10	1.343,350	1.608,010	64.481,201	2.585.696,160	53.868,335									
17.00	34,00	39,20	1.332,800	1.536,640	60.236,288	2.361.262,490	52.245,760									
18.00	33,00	39,60	1.306,800	1.568,160	62.099,136	2.459.125,786	51.749,280									
19.00	33,50	39,70	1.329,950	1.576,090	62.570,773	2.484.059,688	52.799,015									
20.00	34,70	39,70	1.377,590	1.576,090	62.570,773	2.484.059,688	54.690,323									
21.00	32,80	39,50	1.295,600	1.560,250	61.629,875	2.434.380,063	51.176,200									
22.00	32,90	39,70	1.306,130	1.576,090	62.570,773	2.484.059,688	51.853,361								γ	0,34399
23.00	34,31	40,06	1.374,459	1.604,804	64.288,432	2.575.394,595	55.060,812									
24.00	33,92	40,04	1.358,157	1.603,202	64.192,192	2.570.255,370	54.380,598									
Total	801,630	959,79	32.061,004	38.388,775	1.535.661,373	61.439.825,351	1.282.459,310									

Lampiran 3b. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 2 (Lanjutan)

17 Juni 2016																		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	34,00	40,61	1.380,740	1.649,172	66.972,879	2.719.768,615	56.071,851									
02.00	35,50	40,89	1.451,595	1.671,992	68.367,757	2.795.557,582	59.355,720									
03.00	33,10	40,56	1.342,536	1.645,114	66.725,808	2.706.398,757	54.453,260									
04.00	34,60	40,14	1.388,844	1.611,220	64.674,355	2.596.028,599	55.748,198								α	2151,6384
05.00	34,30	40,25	1.380,575	1.620,063	65.207,516	2.624.602,504	55.568,144									
06.00	34,20	40,69	1.391,598	1.655,676	67.369,461	2.741.263,348	56.624,123									
07.00	32,60	40,14	1.308,564	1.611,220	64.674,355	2.596.028,599	52.525,759									
08.00	32,10	39,60	1.271,160	1.568,160	62.099,136	2.459.125,786	50.337,936									
09.00	33,10	39,80	1.317,380	1.584,040	63.044,792	2.509.182,722	52.431,724									
10.00	33,90	39,40	1.335,660	1.552,360	61.162,984	2.409.821,570	52.625,004									
11.00	35,70	39,30	1.403,010	1.544,490	60.698,457	2.385.449,360	55.138,293									
12.00	33,90	39,90	1.352,610	1.592,010	63.521,199	2.534.495,840	53.969,139									
13.00	34,80	40,80	1.419,840	1.664,640	67.917,312	2.771.026,330	57.929,472	210,124	452.119,297	2.151,674	-22.270,291	-105,986	278,653	1,326	β	-105,9844
14.00	34,80	40,60	1.412,880	1.648,360	66.923,416	2.717.090,690	57.362,928									
15.00	33,56	40,18	1.348,441	1.614,432	64.867,894	2.606.391,974	54.180,351									
16.00	35,08	39,90	1.399,692	1.592,010	63.521,199	2.534.495,840	55.847,711									
17.00	34,77	40,21	1.398,102	1.616,844	65.013,301	2.614.184,844	56.217,669									
18.00	35,76	41,13	1.470,809	1.691,677	69.578,671	2.861.770,734	60.494,366									
19.00	35,23	40,55	1.428,577	1.644,303	66.676,466	2.703.730,712	57.928,777									
20.00	35,22	40,35	1.421,127	1.628,123	65.694,743	2.650.782,875	57.342,474									
21.00	34,90	40,32	1.407,168	1.625,702	65.548,321	2.642.908,293	56.737,014									
22.00	34,50	40,50	1.397,250	1.640,250	66.430,125	2.690.420,063	56.588,625								γ	1,3261
23.00	35,30	39,40	1.390,820	1.552,360	61.162,984	2.409.821,570	54.798,308									
24.00	35,50	40,30	1.430,650	1.624,090	65.450,827	2.637.668,328	57.655,195									
Total	826,420	965,52	33.249,627	38.848,306	1.563.303,956	62.918.015,534	1.337.932,041									

Lampiran 3b. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 2 (Lanjutan)

18 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	36,00	39,80	1.432,800	1.584,040	63.044,792	2.509.182,722	57.025,440									
02.00	34,70	38,60	1.339,420	1.489,960	57.512,456	2.219.980,802	51.701,612									
03.00	34,40	39,20	1.348,480	1.536,640	60.236,288	2.361.262,490	52.860,416									
04.00	34,80	39,30	1.367,640	1.544,490	60.698,457	2.385.449,360	53.748,252								α	682,6953
05.00	34,70	38,80	1.346,360	1.505,440	58.411,072	2.266.349,594	52.238,768									
06.00	34,10	39,10	1.333,310	1.528,810	59.776,471	2.337.260,016	52.132,421									
07.00	33,10	39,20	1.297,520	1.536,640	60.236,288	2.361.262,490	50.862,784									
08.00	33,90	39,20	1.328,880	1.536,640	60.236,288	2.361.262,490	52.092,096									
09.00	34,80	40,90	1.423,320	1.672,810	68.417,929	2.798.293,296	58.213,788									
10.00	34,80	40,30	1.402,440	1.624,090	65.450,827	2.637.668,328	56.518,332									
11.00	33,80	39,70	1.341,860	1.576,090	62.570,773	2.484.059,688	53.271,842									
12.00	34,90	38,90	1.357,610	1.513,210	58.863,869	2.289.804,504	52.811,029									
13.00	34,40	39,40	1.355,360	1.552,360	61.162,984	2.409.821,570	53.401,184	2.233,900	1.525.070,979	682,694	-74.057,455	-33,152	947,033	0,424	β	-33,1517
14.00	34,00	39,50	1.343,000	1.560,250	61.629,875	2.434.380,063	53.048,500									
15.00	35,90	37,90	1.360,610	1.436,410	54.439,939	2.063.273,688	51.567,119									
16.00	35,50	39,60	1.405,800	1.568,160	62.099,136	2.459.125,786	55.669,680									
17.00	36,60	39,60	1.449,360	1.568,160	62.099,136	2.459.125,786	57.394,656									
18.00	35,70	39,70	1.417,290	1.576,090	62.570,773	2.484.059,688	56.266,413									
19.00	35,90	40,60	1.457,540	1.648,360	66.923,416	2.717.090,690	59.176,124									
20.00	36,40	39,60	1.441,440	1.568,160	62.099,136	2.459.125,786	57.081,024									
21.00	36,60	40,10	1.467,660	1.608,010	64.481,201	2.585.696,160	58.853,166								γ	0,42394
22.00	32,90	39,70	1.306,130	1.576,090	62.570,773	2.484.059,688	51.853,361									
23.00	34,30	38,90	1.334,270	1.513,210	58.863,869	2.289.804,504	51.903,103									
24.00	33,10	39,20	1.297,520	1.536,640	60.236,288	2.361.262,490	50.862,784									
Total	835,300	946,80	32.955,620	37.360,760	1.474.632,036	58.218.661,675	1.300.553,894									

Lampiran 3b. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 2 (Lanjutan)

19 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	32,90	39,30	1.292,970	1.544,490	60.698,457	2.385.449,360	50.813,721									
02.00	34,20	38,20	1.306,440	1.459,240	55.742,968	2.129.381,378	49.906,008									
03.00	33,30	39,20	1.305,360	1.536,640	60.236,288	2.361.262,490	51.170,112									
04.00	33,60	39,20	1.317,120	1.536,640	60.236,288	2.361.262,490	51.631,104								α	141,8815
05.00	35,00	39,60	1.386,000	1.568,160	62.099,136	2.459.125,786	54.885,600									
06.00	34,10	40,00	1.364,000	1.600,000	64.000,000	2.560.000,000	54.560,000									
07.00	36,01	37,84	1.362,618	1.431,866	54.181,794	2.050.239,096	51.561,480									
08.00	34,56	40,80	1.410,048	1.664,640	67.917,312	2.771.026,330	57.529,958									
09.00	34,83	40,52	1.411,312	1.641,870	66.528,589	2.695.738,410	57.186,346									
10.00	34,46	40,77	1.404,934	1.662,193	67.767,605	2.762.885,237	57.279,167									
11.00	36,37	40,52	1.473,712	1.641,870	66.528,589	2.695.738,410	59.714,826									
12.00	33,87	40,13	1.359,203	1.610,417	64.626,030	2.593.442,592	54.544,820									
13.00	34,11	40,36	1.376,680	1.628,930	65.743,599	2.653.411,642	55.562,789	25.987,957	3.687.207,727	141,881	-146.184,107	-5,6251	1.908,828	0,0735	β	-5,6251
14.00	34,24	40,29	1.379,530	1.623,284	65.402,116	2.635.051,269	55.581,248									
15.00	34,52	40,31	1.391,501	1.624,896	65.499,562	2.640.287,336	56.091,413									
16.00	34,16	40,03	1.367,425	1.602,401	64.144,108	2.567.688,644	54.738,015									
17.00	34,01	39,79	1.353,258	1.583,244	62.997,283	2.506.661,880	53.846,132									
18.00	34,05	39,57	1.347,359	1.565,785	61.958,108	2.451.682,353	53.314,976									
19.00	34,11	37,47	1.278,102	1.404,001	52.607,914	1.971.218,527	47.890,471									
20.00	33,56	36,70	1.231,652	1.346,890	49.430,863	1.814.112,672	45.201,628									
21.00	34,54	37,76	1.304,230	1.425,818	53.838,873	2.032.955,828	49.247,740									
22.00	35,15	39,34	1.382,801	1.547,636	60.883,985	2.395.175,950	54.399,391								γ	0,073451
23.00	34,40	38,90	1.338,160	1.513,210	58.863,869	2.289.804,504	52.054,424									
24.00	34,70	39,40	1.367,180	1.552,360	61.162,984	2.409.821,570	53.866,892									
Total	824,750	946,00	32.511,594	37.316,480	1.473.096,318	58.193.423,754	1.282.578,262									

Lampiran 3b. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 2 (Lanjutan)

20 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
05.00	35,50	39,70	1.409,350	1.576,090	62.570,773	2.484.059,688	55.951,195									
11.00	32,36	34,12	1.104,123	1.164,174	39.721,631	1.355.302,034	37.672,684								α	43,564
12.00	34,23	38,45	1.316,144	1.478,403	56.844,576	2.185.673,952	50.605,718									
15.00	35,70	39,60	1.413,720	1.568,160	62.099,136	2.459.125,786	55.983,312									
16.00	35,50	38,80	1.377,400	1.505,440	58.411,072	2.266.349,594	53.443,120									
17.00	34,80	38,50	1.339,800	1.482,250	57.066,625	2.197.065,063	51.582,300									
18.00	33,90	38,40	1.301,760	1.474,560	56.623,104	2.174.327,194	49.987,584									
19.00	36,80	38,60	1.420,480	1.489,960	57.512,456	2.219.980,802	54.830,528	24.845,132	1.082.345,798	43,564	-29.457,915	-1,1857	624,215	0,0251	β	-1,1857
20.00	34,40	37,80	1.300,320	1.428,840	54.010,152	2.041.583,746	49.152,096									
21.00	34,70	37,30	1.294,310	1.391,290	51.895,117	1.935.687,864	48.277,763									
22.00	35,60	39,00	1.388,400	1.521,000	59.319,000	2.313.441,000	54.147,600									
23.00	36,00	39,20	1.411,200	1.536,640	60.236,288	2.361.262,490	55.319,040								γ	0,025
24.00	36,80	39,20	1.442,560	1.536,640	60.236,288	2.361.262,490	56.548,352									
Total	456,290	498,67	17.519,567	19.153,447	736.546,218	28.355.121,700	673.501,291									

Lampiran 3b. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 2 (Lanjutan)

21 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	36,10	38,80	1.400,680	1.505,440	58.411,072	2.266.349,594	54.346,384									
02.00	35,00	40,20	1.407,000	1.616,040	64.964,808	2.611.585,282	56.561,400									
03.00	35,10	38,20	1.340,820	1.459,240	55.742,968	2.129.381,378	51.219,324									
04.00	35,50	39,30	1.395,150	1.544,490	60.698,457	2.385.449,360	54.829,395									
05.00	38,40	41,10	1.578,240	1.689,210	69.426,531	2.853.430,424	64.865,664								α	164,136
06.00	36,60	40,40	1.478,640	1.632,160	65.939,264	2.663.946,266	59.737,056									
07.00	37,00	40,10	1.483,700	1.608,010	64.481,201	2.585.696,160	59.496,370									
08.00	36,70	39,70	1.456,990	1.576,090	62.570,773	2.484.059,688	57.842,503									
09.00	35,50	38,60	1.370,300	1.489,960	57.512,456	2.219.980,802	52.893,580									
10.00	36,40	39,50	1.437,800	1.560,250	61.629,875	2.434.380,063	56.793,100	7.847,084	1.287.989,052	164,136	-56.396,323	-7,187	783,973	0,0999		
11.00	35,60	39,10	1.391,960	1.528,810	59.776,471	2.337.260,016	54.425,636									
12.00	35,40	37,80	1.338,120	1.428,840	54.010,152	2.041.583,746	50.580,936								β	-7,1869
13.00	35,40	38,40	1.359,360	1.474,560	56.623,104	2.174.327,194	52.199,424									
14.00	35,40	39,20	1.387,680	1.536,640	60.236,288	2.361.262,490	54.397,056									
15.00	34,70	37,10	1.287,370	1.376,410	51.064,811	1.894.504,488	47.761,427									
16.00	36,50	39,40	1.438,100	1.552,360	61.162,984	2.409.821,570	56.661,140									
22.00	37,40	38,90	1.454,860	1.513,210	58.863,869	2.289.804,504	56.594,054								γ	0,0999
23.00	35,80	40,00	1.432,000	1.600,000	64.000,000	2.560.000,000	57.280,000									
Total	648,500	705,80	25.438,770	27.691,720	1.087.115,084	42.702.823,022	998.484,449									

Lampiran 3b. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 2 (Lanjutan)

22 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	37,00	39,60	1.465,200	1.568,160	62.099,136	2.459.125,786	58.021,920									
02.00	37,50	39,30	1.473,750	1.544,490	60.698,457	2.385.449,360	57.918,375									
03.00	36,60	39,20	1.434,720	1.536,640	60.236,288	2.361.262,490	56.241,024									
05.00	36,10	40,20	1.451,220	1.616,040	64.964,808	2.611.585,282	58.339,044								α	549,06
06.00	37,80	40,40	1.527,120	1.632,160	65.939,264	2.663.946,266	61.695,648									
07.00	36,60	40,30	1.474,980	1.624,090	65.450,827	2.637.668,328	59.441,694									
08.00	37,30	40,20	1.499,460	1.616,040	64.964,808	2.611.585,282	60.278,292									
11.00	36,40	40,20	1.463,280	1.616,040	64.964,808	2.611.585,282	58.823,856									
12.00	37,10	40,70	1.509,970	1.656,490	67.419,143	2.743.959,120	61.455,779									
13.00	34,80	40,20	1.398,960	1.616,040	64.964,808	2.611.585,282	56.238,192									
14.00	36,80	39,80	1.464,640	1.584,040	63.044,792	2.509.182,722	58.292,672	2.939,859	1.614.157,079	549,059	-79.954,167	-27,1966	1.056,387	0,3593	β	-27,197
15.00	36,20	40,30	1.458,860	1.624,090	65.450,827	2.637.668,328	58.792,058									
16.00	35,20	40,00	1.408,000	1.600,000	64.000,000	2.560.000,000	56.320,000									
17.00	33,00	38,20	1.260,600	1.459,240	55.742,968	2.129.381,378	48.154,920									
18.00	34,50	40,00	1.380,000	1.600,000	64.000,000	2.560.000,000	55.200,000									
19.00	36,00	40,30	1.450,800	1.624,090	65.450,827	2.637.668,328	58.467,240									
20.00	32,70	39,10	1.278,570	1.528,810	59.776,471	2.337.260,016	49.992,087									
21.00	38,50	40,70	1.566,950	1.656,490	67.419,143	2.743.959,120	63.774,865								γ	0,0359
23.00	34,00	37,90	1.288,600	1.436,410	54.439,939	2.063.273,688	48.837,940									
24.00	35,60	37,70	1.342,120	1.421,290	53.582,633	2.020.065,264	50.597,924									
Total	719,700	794,30	28.597,800	31.560,650	1.254.609,947	49.896.211,319	1.136.883,530									

Lampiran 3b. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 2 (Lanjutan)

23 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	35,04	39,56	1.386,182	1.564,994	61.911,147	2.449.204,968	54.837,376									
02.00	32,97	37,22	1.227,143	1.385,328	51.561,923	1.919.134,776	45.674,277									
03.00	35,64	37,62	1.340,777	1.415,264	53.242,247	2.002.973,322	50.440,023									
04.00	33,90	40,30	1.366,170	1.624,090	65.450,827	2.637.668,328	55.056,651								α	75,2872
05.00	35,10	39,20	1.375,920	1.536,640	60.236,288	2.361.262,490	53.936,064									
06.00	32,30	37,70	1.217,710	1.421,290	53.582,633	2.020.065,264	45.907,667									
07.00	36,30	39,60	1.437,480	1.568,160	62.099,136	2.459.125,786	56.924,208									
08.00	35,20	39,40	1.386,880	1.552,360	61.162,984	2.409.821,570	54.643,072									
09.00	36,40	40,90	1.488,760	1.672,810	68.417,929	2.798.293,296	60.890,284									
10.00	35,30	40,70	1.436,710	1.656,490	67.419,143	2.743.959,120	58.474,097									
11.00	35,70	39,30	1.403,010	1.544,490	60.698,457	2.385.449,360	55.138,293									
12.00	35,70	36,80	1.313,760	1.354,240	49.836,032	1.833.965,978	48.346,368									
13.00	37,10	41,90	1.554,490	1.755,610	73.560,059	3.082.166,472	65.133,131	127.251,530	9.580.408,251	75,287	-338.303,767	-2,6585	5.339,852	0,0420	β	-2,6585
14.00	36,70	40,80	1.497,360	1.664,640	67.917,312	2.771.026,330	61.092,288									
15.00	35,10	38,70	1.358,370	1.497,690	57.960,603	2.243.075,336	52.568,919									
16.00	35,50	37,90	1.345,450	1.436,410	54.439,939	2.063.273,688	50.992,555									
17.00	36,20	39,70	1.437,140	1.576,090	62.570,773	2.484.059,688	57.054,458									
18.00	35,20	39,10	1.376,320	1.528,810	59.776,471	2.337.260,016	53.814,112									
19.00	34,90	39,70	1.385,530	1.576,090	62.570,773	2.484.059,688	55.005,541									
20.00	35,80	40,00	1.432,000	1.600,000	64.000,000	2.560.000,000	57.280,000									
21.00	43,50	40,30	1.753,050	1.624,090	65.450,827	2.637.668,328	70.647,915								γ	0,041963
22.00	36,50	38,30	1.397,950	1.466,890	56.181,887	2.151.766,272	53.541,485									
23.00	34,10	36,30	1.237,830	1.317,690	47.832,147	1.736.306,936	44.933,229									
24.00	34,80	39,45	1.372,860	1.556,303	61.396,134	2.422.077,472	54.159,327									
Total	854,950	940,45	33.528,853	36.896,469	1.449.275,670	56.993.664,483	1.316.491,340									

Lampiran 3b. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 2 (Lanjutan)

24 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	36,64	40,37	1.479,157	1.629,737	65.792,479	2.656.042,363	59.713,560									
02.00	36,44	39,63	1.444,117	1.570,537	62.240,377	2.466.586,154	57.230,365									
03.00	36,71	40,43	1.484,185	1.634,585	66.086,268	2.671.867,795	60.005,612									
04.00	34,45	39,69	1.367,321	1.575,296	62.523,502	2.481.557,803	54.268,951								α	25,2608
05.00	34,62	39,25	1.358,835	1.540,563	60.467,078	2.373.332,816	53.334,274									
06.00	35,82	38,60	1.382,652	1.489,960	57.512,456	2.219.980,802	53.370,367									
07.00	34,00	39,10	1.329,400	1.528,810	59.776,471	2.337.260,016	51.979,540									
08.00	36,90	40,10	1.479,690	1.608,010	64.481,201	2.585.696,160	59.335,569									
09.00	34,40	40,30	1.386,320	1.624,090	65.450,827	2.637.668,328	55.868,696									
10.00	37,20	40,90	1.521,480	1.672,810	68.417,929	2.798.293,296	62.228,532									
11.00	33,80	38,90	1.314,820	1.513,210	58.863,869	2.289.804,504	51.146,498									
12.00	36,30	41,20	1.495,560	1.697,440	69.934,528	2.881.302,554	61.617,072									
13.00	32,00	39,80	1.273,600	1.584,040	63.044,792	2.509.182,722	50.689,280	4.807,462	121.440,004	25,261	-759,952	-0,15808	50,028	0,01041	β	-0,15808
14.00	35,00	40,60	1.421,000	1.648,360	66.923,416	2.717.090,690	57.692,600									
15.00	34,10	39,80	1.357,180	1.584,040	63.044,792	2.509.182,722	54.015,764									
16.00	32,60	37,90	1.235,540	1.436,410	54.439,939	2.063.273,688	46.826,966									
17.00	36,60	38,70	1.416,420	1.497,690	57.960,603	2.243.075,336	54.815,454									
18.00	34,10	39,70	1.353,770	1.576,090	62.570,773	2.484.059,688	53.744,669									
19.00	37,30	40,20	1.499,460	1.616,040	64.964,808	2.611.585,282	60.278,292									
20.00	35,00	38,90	1.361,500	1.513,210	58.863,869	2.289.804,504	52.962,350									
21.00	36,10	39,50	1.425,950	1.560,250	61.629,875	2.434.380,063	56.325,025								γ	0,010406
22.00	36,80	38,90	1.431,520	1.513,210	58.863,869	2.289.804,504	55.686,128									
23.00	33,16	38,96	1.291,914	1.517,882	59.136,667	2.303.964,552	50.332,954									
24.00	37,80	38,99	1.473,822	1.520,220	59.273,382	2.311.069,152	57.464,320									
Total	847,840	950,42	33.585,212	37.652,489	1.492.263,770	59.165.865,493	1.330.932,837									

Lampiran 3b. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 2 (Lanjutan)

25 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	33,10	39,70	1.314,070	1.576,090	62.570,773	2.484.059,688	52.168,579									
02.00	35,70	39,00	1.392,300	1.521,000	59.319,000	2.313.441,000	54.299,700									
04.00	33,00	40,90	1.349,700	1.672,810	68.417,929	2.798.293,296	55.202,730								α	45,237
06.00	36,90	41,50	1.531,350	1.722,250	71.473,375	2.966.145,063	63.551,025									
07.00	34,90	39,80	1.389,020	1.584,040	63.044,792	2.509.182,722	55.282,996									
09.00	36,00	39,80	1.432,800	1.584,040	63.044,792	2.509.182,722	57.025,440									
10.00	30,30	36,90	1.118,070	1.361,610	50.243,409	1.853.981,792	41.256,783									
11.00	36,00	42,10	1.515,600	1.772,410	74.618,461	3.141.437,208	63.806,760									
12.00	35,70	39,30	1.403,010	1.544,490	60.698,457	2.385.449,360	55.138,293								β	-0,998898
15.00	34,80	39,40	1.371,120	1.552,360	61.162,984	2.409.821,570	54.022,128	330.557,573	14.953.515,219	45,237	-330.220,466	-0,9990	6.136,887	0,0186		
16.00	34,19	35,20	1.203,488	1.239,040	43.614,208	1.535.220,122	42.362,778									
17.00	33,51	36,58	1.225,796	1.338,096	48.947,566	1.790.501,976	44.839,610									
18.00	33,24	35,71	1.187,000	1.275,204	45.537,538	1.626.145,497	42.387,784									
19.00	33,50	38,76	1.298,460	1.502,338	58.230,605	2.257.018,264	50.328,310									
20.00	35,11	39,07	1.371,748	1.526,465	59.638,984	2.330.095,091	53.594,183									
21.00	35,45	38,49	1.364,471	1.481,480	57.022,169	2.194.783,287	52.518,470								γ	0,018565
22.00	33,80	38,50	1.301,300	1.482,250	57.066,625	2.197.065,063	50.100,050									
23.00	34,80	37,80	1.315,440	1.428,840	54.010,152	2.041.583,746	49.723,632									
24.00	35,40	39,20	1.387,680	1.536,640	60.236,288	2.361.262,490	54.397,056									
Total	655,400	737,71	25.472,422	28.701,453	1.118.898,108	43.704.669,953	992.006,306									

Lampiran 3b. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 2 (Lanjutan)

26 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
03.00	33,90	38,20	1.294,980	1.459,240	55.742,968	2.129.381,378	49.468,236									
04.00	32,70	37,60	1.229,520	1.413,760	53.157,376	1.998.717,338	46.229,952								α	571,102
10.00	35,90	38,72	1.390,048	1.499,238	58.050,511	2.247.715,780	53.822,659									
11.00	34,70	38,39	1.332,133	1.473,792	56.578,879	2.172.063,154	51.140,586									
12.00	35,00	38,60	1.351,000	1.489,960	57.512,456	2.219.980,802	52.148,600								β	-30,791
21.00	36,15	38,70	1.399,005	1.497,690	57.960,603	2.243.075,336	54.141,494	3,317	1.894,141	571,086	-102,122	-30,79	1,453	0,438		
22.00	35,60	38,80	1.381,280	1.505,440	58.411,072	2.266.349,594	53.593,664									
23.00	36,50	39,00	1.423,500	1.521,000	59.319,000	2.313.441,000	55.516,500									
24.00	35,60	38,80	1.381,280	1.505,440	58.411,072	2.266.349,594	53.593,664								γ	0,43804
Total	316,050	346,81	12.182,746	13.365,561	515.143,937	19.857.073,974	469.655,354									

Lampiran 3b. Perhitungan Manual Karakteristik Input-Output Harian PLTU Barru Unit 2 (Lanjutan)

27 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
05.00	36,56	38,87	1.421,087	1.510,877	58.727,785	2.282.749,007	55.237,659									
06.00	35,82	39,15	1.402,353	1.532,723	60.006,086	2.349.238,262	54.902,120								α	8,0057
07.00	36,84	39,28	1.447,075	1.542,918	60.605,835	2.380.597,189	56.841,114									
09.00	35,88	39,77	1.426,948	1.581,653	62.902,336	2.501.625,896	56.749,706									
10.00	35,89	38,96	1.398,274	1.517,882	59.136,667	2.303.964,552	54.476,771								β	0,059
11.00	34,35	37,67	1.293,965	1.419,029	53.454,819	2.013.643,019	48.743,643	14.005.590,468	112.123.954,884	8,006	8.257.474,683	0,5896	46.952,101	0,0034		
14.00	37,18	38,98	1.449,276	1.519,440	59.227,787	2.308.699,129	56.492,794									
15.00	36,00	39,20	1.411,200	1.536,640	60.236,288	2.361.262,490	55.319,040									
16.00	36,10	38,80	1.400,680	1.505,440	58.411,072	2.266.349,594	54.346,384								γ	0,00034
17.00	14,70	10,70	157,290	114,490	1.225,043	13.107,960	1.683,003									
Total	339,320	361,380	12.808,148	13.781,092	533.933,717	20.781.237,097	494.792,234									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1

01 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	47,28	70,29	3.323,311	4.940,684	347.280,685	24.410.359,376	233.595,544									
02.00	48,64	72,10	3.506,944	5.198,410	374.805,361	27.023.466,528	252.850,662									
03.00	48,69	72,65	3.537,329	5.278,023	383.448,335	27.857.521,511	256.986,916									
04.00	48,98	71,20	3.487,376	5.069,440	360.944,128	25.699.221,914	248.301,171									
05.00	50,62	72,70	3.680,074	5.285,290	384.240,583	27.934.290,384	267.541,380								α	97,5778
06.00	50,78	72,71	3.692,214	5.286,744	384.399,164	27.949.663,179	268.460,865									
07.00	50,39	70,61	3.558,038	4.985,772	352.045,368	24.857.923,433	251.233,056									
08.00	48,85	75,56	3.691,106	5.709,314	431.395,736	32.596.261,783	278.899,969									
09.00	53,20	85,06	4.525,192	7.235,204	615.426,418	52.348.171,133	384.912,832									
10.00	52,74	89,97	4.745,018	8.094,601	728.271,243	65.522.563,730	426.909,251									
11.00	68,13	109,45	7.456,829	11.979,303	1.311.134,659	143.503.688,387	816.149,879									
12.00	67,66	109,50	7.408,770	11.990,250	1.312.932,375	143.766.095,063	811.260,315									
13.00	68,98	108,69	7.497,436	11.813,516	1.284.011,065	139.559.162,645	814.896,341	45.353.142.798,063	4.425.460.125.195,000	97,578	-66.943.600.881,500	-1,4761	504.082.753,036	0,0111	β	-1,4761
14.00	70,55	108,19	7.632,805	11.705,076	1.266.372,183	137.008.806,507	825.793,119									
15.00	70,53	112,19	7.912,761	12.586,596	1.412.090,216	158.422.401,385	887.732,623									
16.00	69,82	110,08	7.685,786	12.117,606	1.333.906,113	146.836.384,865	846.051,279									
17.00	70,00	108,69	7.608,300	11.813,516	1.284.011,065	139.559.162,645	826.946,127									
18.00	70,03	109,97	7.701,199	12.093,401	1.329.911,297	146.250.345,328	846.900,865									
19.00	69,74	110,77	7.725,100	12.269,993	1.359.147,114	150.552.725,766	855.709,305									
20.00	69,45	109,94	7.635,333	12.086,804	1.328.823,188	146.090.821,265	839.428,510									
21.00	69,05	108,97	7.524,379	11.874,461	1.293.960,004	141.002.821,666	819.931,525									
22.00	67,64	108,89	7.365,320	11.857,032	1.291.112,225	140.589.210,220	802.009,651								γ	0,011115
23.00	69,28	108,07	7.487,090	11.679,125	1.262.163,028	136.401.958,430	809.129,773									
24.00	46,72	71,49	3.340,013	5.110,820	365.372,529	26.120.482,095	238.777,515									
Total	1.447,750	2.247,740	139.727,719	218.060,980	21.797.204,081	2.231.863.509,236	13.910.408,474									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

02 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^3)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	49,22	72,15	3.551,223	5.205,623	375.585,663	27.098.505,613	256.220,739									
02.00	49,43	70,61	3.490,252	4.985,772	352.045,368	24.857.923,433	246.446,715									
03.00	49,37	71,78	3.543,779	5.152,368	369.837,004	26.546.900,129	254.372,428									
04.00	49,47	71,83	3.553,430	5.159,549	370.610,397	26.620.944,851	255.242,884								α	41,924
05.00	49,31	70,88	3.495,093	5.023,974	356.099,305	25.240.318,772	247.732,178									
06.00	49,84	70,76	3.526,678	5.006,978	354.293,735	25.069.824,687	249.547,764									
07.00	50,19	71,40	3.583,566	5.097,960	363.994,344	25.989.196,162	255.866,612									
08.00	50,17	71,83	3.603,711	5.159,549	370.610,397	26.620.944,851	258.854,568									
09.00	51,42	100,44	5.164,625	10.088,194	1.013.258,165	101.771.650,111	518.734,915									
10.00	73,85	109,29	8.071,067	11.944,304	1.305.392,995	142.666.400,433	882.086,858									
11.00	73,72	108,40	7.991,248	11.750,560	1.273.760,704	138.075.660,314	866.251,283	22.956.314.226,500	962.421.224.979,000	41,924	-4.335.996.086,469	-0,189	94.461.629,189	0,0041		
12.00	73,19	108,58	7.946,970	11.789,616	1.280.116,549	138.995.054,859	862.882,024									
13.00	74,36	106,33	7.906,699	11.306,069	1.202.174,306	127.827.193,972	840.719,283								β	-0,1888
14.00	73,06	105,12	7.680,067	11.050,214	1.161.598,538	122.107.238,286	807.328,664									
15.00	72,93	104,82	7.644,523	10.987,232	1.151.681,700	120.719.275,812	801.298,859									
16.00	73,17	107,79	7.886,994	11.618,684	1.252.377,959	134.993.820,216	850.139,116									
17.00	70,77	112,19	7.939,686	12.586,596	1.412.090,216	158.422.401,385	890.753,406									
18.00	70,01	110,80	7.757,108	12.276,640	1.360.251,712	150.715.889,690	859.487,566									
22.00	62,17	111,24	6.915,791	12.374,338	1.376.521,315	153.124.231,039	769.312,569								γ	0,0041
23.00	64,79	109,23	7.077,012	11.931,193	1.303.244,200	142.353.364,017	773.021,988									
24.00	50,28	77,23	3.883,124	5.964,473	460.636,242	35.574.936,975	299.893,697									
Total	1.280,720	1.942,700	122.212,646	186.459,886	18.466.180,816	1.875.391.675,605	12.046.194,117									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

03 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^3)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	46,46	72,71	3.378,107	5.286,744	384.399,164	27.949.663,179	245.622,131									
02.00	48,36	69,72	3.371,659	4.860,878	338.900,442	23.628.138,820	235.072,079									
03.00	48,92	72,22	3.533,002	5.215,728	376.679,905	27.203.822,743	255.153,433								α	37,844
04.00	50,40	72,30	3.643,920	5.227,290	377.933,067	27.324.560,744	263.455,416									
05.00	48,17	73,81	3.555,428	5.447,916	402.110,687	29.679.789,833	262.426,119									
06.00	47,34	72,86	3.449,192	5.308,580	386.783,110	28.181.017,370	251.308,158									
07.00	47,18	74,30	3.505,474	5.520,490	410.172,407	30.475.809,840	260.456,718									
08.00	53,19	83,24	4.427,536	6.928,898	576.761,436	48.009.621,951	368.548,063									
09.00	52,82	87,04	4.597,453	7.575,962	659.411,698	57.395.194,165	400.162,292									
10.00	65,56	100,18	6.567,801	10.036,032	1.005.409,726	100.721.946,334	657.962,284	10.890.865.688,516	412.154.730.885,562	37,844	-1.682.696.383,734	-0,1545	44.390.949,938	0,0041	β	-0,1545
11.00	67,00	101,50	6.800,500	10.302,250	1.045.678,375	106.136.355,063	690.250,750									
12.00	68,75	104,33	7.172,688	10.884,749	1.135.605,853	118.477.758,616	748.326,487									
13.00	67,46	105,27	7.101,514	11.081,773	1.166.578,233	122.805.690,607	747.576,400									
15.00	66,70	106,88	7.128,896	11.423,334	1.220.925,981	130.492.568,814	761.936,404									
16.00	66,85	107,52	7.187,712	11.560,550	1.242.990,379	133.646.325,551	772.822,794									
17.00	64,32	105,84	6.807,629	11.202,106	1.185.630,857	125.487.169,874	720.519,432								γ	0,004076
24.00	66,62	105,96	7.059,055	11.227,522	1.189.668,189	126.057.241,278	747.977,489									
Total	976,100	1.515,680	89.287,565	139.090,802	13.105.639,507	1.263.672.674,780	8.389.576,450									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

04 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	43,56	85,38	3.719,153	7.289,744	622.398,377	53.140.373,417	317.541,266									
02.00	45,39	72,60	3.295,314	5.270,760	382.657,176	27.780.910,978	239.239,796									
03.00	45,18	73,23	3.308,531	5.362,633	392.705,607	28.757.831,620	242.283,754									
04.00	45,00	71,60	3.222,000	5.126,560	367.061,696	26.281.617,434	230.695,200									
05.00	45,58	72,01	3.282,216	5.185,440	373.403,542	26.888.789,031	236.352,360								α	89,842
06.00	46,92	71,55	3.357,126	5.119,403	366.293,249	26.208.281,957	240.202,365									
07.00	48,35	72,86	3.522,781	5.308,580	386.783,110	28.181.017,370	256.669,824									
08.00	46,42	72,26	3.354,309	5.221,508	377.306,139	27.264.141,617	242.382,383									
09.00	55,57	85,38	4.744,567	7.289,744	622.398,377	53.140.373,417	405.091,096									
10.00	55,89	88,61	4.952,413	7.851,732	695.741,981	61.649.696,970	438.833,307									
11.00	55,91	89,11	4.982,140	7.940,592	707.586,162	63.053.002,899	443.958,504									
12.00	44,71	73,92	3.304,963	5.464,166	403.911,180	29.857.114,447	244.302,880									
13.00	44,69	75,34	3.366,945	5.676,116	427.638,549	32.218.288,305	253.665,606	67.201.418.749,031	6.037.507.896.366,250	89,842	-91.926.815.117,922	-1,3679	702.964.084,896	0,0105	β	-1,3679
14.00	45,77	77,62	3.552,667	6.024,864	467.649,975	36.298.991,038	275.758,044									
15.00	48,72	88,06	4.290,283	7.754,564	682.866,871	60.133.256,626	377.802,339									
16.00	48,70	88,55	4.312,385	7.841,103	694.329,626	61.482.888,416	381.861,692									
17.00	43,32	84,74	3.670,937	7.180,868	608.506,720	51.564.859,489	311.075,184									
18.00	65,95	111,94	7.382,443	12.530,564	1.402.671,289	157.015.024,134	826.390,669									
19.00	69,94	110,78	7.747,953	12.272,208	1.359.515,247	150.607.099,013	858.318,255									
20.00	64,94	109,42	7.105,735	11.972,736	1.310.056,817	143.346.416,904	777.509,502									
21.00	65,73	107,81	7.086,351	11.622,996	1.253.075,210	135.094.038,341	763.979,534									
22.00	65,73	109,56	7.201,379	12.003,394	1.315.091,803	144.081.457,917	788.983,061								γ	0,010461
23.00	60,88	107,81	6.563,473	11.622,996	1.253.075,210	135.094.038,341	707.608,003									
24.00	61,21	105,56	6.461,328	11.142,914	1.176.245,960	124.164.523,497	682.057,741									
Total	1.264,060	2.105,700	113.787,392	190.076,184	17.648.969,872	1.683.304.033,175	10.542.562,366									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

05 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	50,39	71,70	3.612,963	5.140,890	368.601,813	26.428.749,992	259.049,447									
02.00	50,38	70,94	3.573,957	5.032,484	357.004,387	25.325.891,184	253.536,524									
03.00	50,81	72,86	3.702,017	5.308,580	386.783,110	28.181.017,370	269.728,929									
04.00	50,82	70,21	3.568,072	4.929,444	346.096,270	24.299.419,135	250.514,349								α	124,6174
05.00	50,91	72,07	3.669,084	5.194,085	374.337,699	26.978.517,948	264.430,862									
06.00	50,85	69,69	3.543,737	4.856,696	338.463,151	23.587.497,008	246.962,997									
07.00	50,75	67,31	3.415,983	4.530,636	304.957,116	20.526.663,471	229.929,782									
08.00	48,21	77,01	3.712,652	5.930,540	456.710,893	35.171.305,878	285.911,338									
09.00	51,08	81,45	4.160,466	6.634,103	540.347,649	44.011.315,981	338.869,956									
10.00	42,71	79,64	3.401,424	6.342,530	505.119,057	40.227.681,727	270.889,439									
11.00	43,35	73,21	3.173,654	5.359,704	392.383,937	28.726.428,040	232.343,173									
12.00	45,58	73,96	3.371,097	5.470,082	404.567,235	29.921.792,711	249.326,319									
13.00	45,49	73,58	3.347,154	5.414,016	398.363,327	29.311.573,579	246.283,606	35.574.359.278,203	4.433.182.622.073,500	124,617	-73.401.946.091,195	-2,0633	491.437.270,954	0,0138	β	-2,0633
14.00	45,58	71,38	3.253,500	5.095,104	363.688,552	25.960.088,847	232.234,859									
15.00	44,73	69,93	3.127,969	4.890,205	341.972,029	23.914.103,964	218.738,865									
16.00	43,93	70,19	3.083,447	4.926,636	345.800,588	24.271.743,262	216.427,124									
17.00	43,43	71,46	3.103,508	5.106,532	364.912,748	26.076.664,982	221.776,667									
18.00	55,38	90,61	5.017,982	8.210,172	743.923,694	67.406.925,912	454.679,331									
19.00	58,85	97,57	5.741,995	9.519,905	928.857,121	90.628.589,305	560.246,403									
20.00	62,61	106,01	6.637,286	11.238,120	1.191.353,112	126.295.343,382	703.618,699									
21.00	62,84	108,40	6.811,856	11.750,560	1.273.760,704	138.075.660,314	738.405,190								γ	0,013814
22.00	62,45	109,41	6.832,655	11.970,548	1.309.697,668	143.294.021,814	747.560,729									
23.00	47,85	94,82	4.537,137	8.990,832	852.510,728	80.835.067,245	430.211,330									
24.00	48,96	71,48	3.499,661	5.109,390	365.219,226	26.105.870,260	250.155,754									
Total	1.207,940	1.914,890	97.899,253	156.951,794	13.255.431,813	1.155.561.933,308	8.171.831,674									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

06 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	40,56	72,71	2.949,118	5.286,744	384.399,164	27.949.663,179	214.430,341									
02.00	40,59	73,81	2.995,948	5.447,916	402.110,687	29.679.789,833	221.130,914									
03.00	40,69	73,03	2.971,591	5.333,381	389.496,807	28.444.951,824	217.015,269								α	41,358
04.00	41,31	73,70	3.044,547	5.431,690	400.315,553	29.503.256,256	224.383,114									
05.00	41,22	73,75	3.039,975	5.439,063	401.130,859	29.583.400,879	224.198,156									
06.00	40,59	74,85	3.038,162	5.602,523	419.348,809	31.388.258,363	227.406,388									
07.00	41,02	73,44	3.012,509	5.393,434	396.093,764	29.089.125,998	221.238,646									
16.00	61,02	110,48	6.741,490	12.205,830	1.348.500,143	148.982.295,754	744.799,771	541.898.128,617	22.412.045.786,539	41,358	-200.933.573,059	-0,371	2.676.519,418	0,005	β	-0,3708
17.00	60,86	110,39	6.718,335	12.185,952	1.345.207,252	148.497.428,583	741.637,045									
18.00	62,34	112,28	6.999,535	12.606,798	1.415.491,324	158.931.365,898	785.907,812									
19.00	61,88	111,51	6.900,239	12.434,480	1.386.568,876	154.616.295,357	769.445,629									
20.00	60,26	111,76	6.734,658	12.490,298	1.395.915,660	156.007.534,137	752.665,333								γ	0,0049
24.00	40,21	72,45	2.913,215	5.249,003	380.290,231	27.552.027,245	211.062,391									
Total	632,550	1.144,160	58.059,320	105.107,111	10.064.869,129	1.000.225.393,306	5.555.320,809									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

07 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	40,79	73,76	3.008,670	5.440,538	401.294,053	29.599.449,377	221.919,529									
02.00	40,57	71,15	2.886,556	5.062,323	360.184,246	25.627.109,094	205.378,424									
03.00	40,65	72,73	2.956,475	5.289,653	384.716,455	27.980.427,802	215.024,390									
04.00	40,97	72,18	2.957,215	5.209,952	376.054,364	27.143.604,010	213.451,750								α	10,1273
05.00	40,71	72,13	2.936,412	5.202,737	375.273,413	27.068.471,251	211.803,419									
06.00	41,91	72,79	3.050,629	5.298,384	385.669,379	28.072.874,071	222.055,278									
07.00	41,71	73,05	3.046,916	5.336,303	389.816,898	28.476.124,372	222.577,177									
08.00	41,77	75,56	3.156,141	5.709,314	431.395,736	32.596.261,783	238.478,029									
09.00	46,25	83,68	3.870,200	7.002,342	585.956,012	49.032.799,087	323.858,336									
10.00	61,50	110,55	6.798,825	12.221,303	1.351.064,991	149.360.234,797	751.610,104									
11.00	60,73	110,92	6.736,172	12.303,246	1.364.676,091	151.369.871,979	747.176,154									
12.00	60,67	110,89	6.727,696	12.296,592	1.363.569,098	151.206.177,274	746.034,243									
13.00	60,13	109,79	6.601,673	12.053,844	1.323.391,544	145.295.157,587	724.797,646	25.905.197.535,000	262.348.786.965,000	10,127	9.516.767.658,125	0,3674	19.609.937,816	0,0008	β	0,36737
14.00	60,60	110,02	6.667,212	12.104,400	1.331.726,132	146.516.509,044	733.526,664									
15.00	60,31	111,93	6.750,498	12.528,325	1.402.295,406	156.958.924,800	755.583,275									
16.00	59,75	111,77	6.678,258	12.492,533	1.396.290,402	156.063.378,258	746.428,841									
17.00	59,62	110,95	6.614,839	12.309,903	1.365.783,682	151.533.699,560	733.916,387									
18.00	59,76	110,51	6.604,078	12.212,460	1.349.598,966	149.144.181,694	729.816,616									
19.00	60,19	112,69	6.782,811	12.699,036	1.431.054,378	161.265.517,869	764.354,983									
20.00	60,55	110,08	6.665,344	12.117,606	1.333.906,113	146.836.384,865	733.721,068									
21.00	60,77	109,32	6.643,376	11.950,862	1.306.468,278	142.823.112,104	726.253,908									
22.00	59,35	110,17	6.538,590	12.137,429	1.337.180,542	147.317.180,303	720.356,405								γ	0,00075699
23.00	59,16	112,89	6.678,572	12.744,152	1.438.687,331	162.413.412,748	753.944,038									
24.00	40,98	77,72	3.184,966	6.040,398	469.459,764	36.486.412,831	247.535,526									
Total	1.259,400	2.297,230	124.542,122	227.763,635	23.255.513,272	2.430.187.276,558	12.689.602,189									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

08 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
02.00	41,70	70,80	2.952,360	5.012,640	354.894,912	25.126.559,770	209.027,088									
03.00	41,54	72,31	3.003,757	5.228,736	378.089,907	27.339.681,203	217.201,698									
04.00	45,82	83,03	3.804,435	6.893,981	572.407,234	47.526.972,650	315.882,205								α	25,439
05.00	45,52	83,90	3.819,128	7.039,210	590.589,719	49.550.477,424	320.424,839									
06.00	40,25	71,80	2.889,950	5.155,240	370.146,232	26.576.499,458	207.498,410									
07.00	40,15	74,74	3.000,811	5.586,068	417.502,692	31.204.151,232	224.280,614									
15.00	58,34	109,39	6.381,813	11.966,172	1.308.979,566	143.189.274,727	698.106,480	7.976.683.638,766	202.920.011.612,250	25,439	495.788.876,910	0,0622	16.906.338,380	0,00212	β	0,062
16.00	59,13	111,93	6.618,421	12.528,325	1.402.295,406	156.958.924,800	740.799,851									
17.00	59,24	112,70	6.676,348	12.701,290	1.431.435,383	161.322.767,664	752.424,420									
21.00	58,29	111,16	6.479,516	12.356,546	1.373.553,609	152.684.219,165	720.263,043									
22.00	58,47	111,48	6.518,236	12.427,790	1.385.450,074	154.449.974,226	726.652,905								γ	0,002
23.00	58,28	111,19	6.480,153	12.363,216	1.374.665,998	152.849.112,335	720.528,234									
Total	606,730	1.124,430	58.624,928	109.259,214	10.960.010,733	1.128.778.614,653	5.853.089,787									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

09 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	58,46	99,95	5.843,077	9.990,003	998.500,750	99.800.149,950	584.015,546								α	27,884
02.00	58,66	101,31	5.942,845	10.263,716	1.039.817,078	105.343.868,181	602.069,586									
03.00	59,06	100,80	5.953,248	10.160,640	1.024.192,512	103.238.605,210	600.087,398								β	0,19932
04.00	58,63	101,80	5.968,534	10.363,240	1.054.977,832	107.396.743,298	607.596,761	1.528.283,034	42.615.194,730	27,884	304.621,894	0,1993	1.599,976	0,0010		
07.00	56,82	96,64	5.491,085	9.339,290	902.548,947	87.222.330,233	530.658,435								γ	0,00105
08.00	62,86	110,84	6.967,402	12.285,506	1.361.725,441	150.933.647,848	772.266,882									
Total	354,490	611,340	36.166,191	62.402,394	6.381.762,560	653.935.344,719	3.696.694,609									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

10 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	60,07	109,97	6.605,898	12.093,401	1.329.911,297	146.250.345,328	726.450,592									
02.00	60,86	111,70	6.798,062	12.476,890	1.393.668,613	155.672.784,072	759.343,525									
03.00	61,20	109,93	6.727,716	12.084,605	1.328.460,617	146.037.675,589	739.577,820								α	11,284
04.00	61,01	110,34	6.731,843	12.174,916	1.343.380,187	148.228.569,867	742.791,601									
05.00	59,20	104,57	6.190,544	10.934,885	1.143.460,914	119.571.707,776	647.345,186									
06.00	41,75	72,68	3.034,390	5.282,382	383.923,553	27.903.563,820	220.539,465									
07.00	42,37	72,85	3.086,655	5.307,123	386.623,874	28.165.549,230	224.862,780									
08.00	42,20	73,21	3.089,462	5.359,704	392.383,937	28.726.428,040	226.179,513									
09.00	57,83	101,17	5.850,661	10.235,369	1.035.512,272	104.762.776,519	591.911,383	8.154.248.501,594	92.014.205.945,219	11,284	2.849.518.490,766	0,3495	8.230.030,468	0,0010	β	0,34945
11.00	62,88	112,55	7.077,144	12.667,503	1.425.727,406	160.465.619,588	796.532,557									
12.00	62,20	111,38	6.927,836	12.405,504	1.381.725,080	153.896.539,418	771.622,374									
13.00	64,22	111,93	7.188,145	12.528,325	1.402.295,406	156.958.924,800	804.569,025									
14.00	65,26	111,91	7.303,247	12.523,848	1.401.543,841	156.846.771,232	817.306,327									
15.00	64,63	113,68	7.347,138	12.923,142	1.469.102,828	167.007.609,491	835.222,693								γ	0,001
16.00	64,23	112,29	7.212,387	12.609,044	1.415.869,562	158.987.993,116	809.878,903									
17.00	64,12	112,63	7.221,836	12.685,517	1.428.769,768	160.922.339,020	813.395,344									
Total	934,030	1.652,790	98.392,963	174.292,158	18.662.359,156	2.020.405.196,906	10.527.529,089									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

11 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^3)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	42,45	81,91	3.477,080	6.709,248	549.554,512	45.014.010,067	284.807,582									
02.00	40,90	72,89	2.981,201	5.312,952	387.261,079	28.227.460,017	217.299,741									
03.00	40,50	72,59	2.939,895	5.269,308	382.499,075	27.765.607,853	213.406,978									
04.00	50,03	93,11	4.658,293	8.669,472	807.214,547	75.159.746,493	433.733,689									
05.00	49,25	93,36	4.597,980	8.716,090	813.734,125	75.970.217,915	429.267,413								α	35,2429
06.00	49,25	92,90	4.575,325	8.630,410	801.765,089	74.483.976,768	425.047,693									
07.00	40,45	73,37	2.967,817	5.383,157	394.962,222	28.978.378,210	217.748,697									
08.00	40,40	74,36	3.004,144	5.529,410	411.166,898	30.574.370,525	223.388,148									
09.00	46,39	73,37	3.403,634	5.383,157	394.962,222	28.978.378,210	249.724,649									
10.00	47,52	87,91	4.177,483	7.728,168	679.383,258	59.724.582,182	367.242,548									
11.00	62,16	108,16	6.723,226	11.698,586	1.265.319,018	136.856.905,041	727.184,081									
12.00	61,16	111,79	6.837,076	12.497,004	1.397.040,088	156.175.111,475	764.316,771									
13.00	61,19	112,57	6.888,158	12.672,005	1.426.487,592	160.579.708,186	775.399,980	74.988.698.936,125	2.642.817.400.526,750	35,243	-13.489.241.482,375	-0,1799	270.502.834,160	0,0036	β	-0,17988
14.00	60,85	112,65	6.854,753	12.690,023	1.429.531,035	161.036.671,051	772.187,869									
15.00	61,11	111,61	6.820,487	12.456,792	1.390.302,566	155.171.669,423	761.234,565									
16.00	61,26	111,04	6.802,310	12.329,882	1.369.110,053	152.025.980,270	755.328,547									
17.00	61,00	114,18	6.964,980	13.037,072	1.488.572,927	169.965.256,763	795.261,416									
18.00	60,41	113,94	6.883,115	12.982,324	1.479.205,951	168.540.726,055	784.262,169									
19.00	59,69	112,34	6.705,575	12.620,276	1.417.761,761	159.271.356,220	753.304,251									
20.00	59,82	113,33	6.779,401	12.843,689	1.455.575,263	164.960.344,560	768.309,470									
21.00	60,71	113,79	6.908,191	12.948,164	1.473.371,593	167.654.953,561	786.083,043									
22.00	60,77	112,99	6.866,402	12.766,740	1.442.513,964	162.989.652,781	775.834,796								γ	0,0036072
23.00	59,31	110,45	6.550,790	12.199,203	1.347.401,916	148.820.541,636	723.534,700									
24.00	57,71	110,37	6.369,453	12.181,537	1.344.476,228	148.389.841,246	702.996,494									
Total	1.294,290	2.384,980	131.736,768	243.254,666	25.349.172,980	2.687.315.446,506	13.706.905,288									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

12 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^3)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	44,51	72,16	3.211,842	5.207,066	375.741,854	27.113.532,163	231.766,490									
02.00	45,41	70,73	3.211,849	5.002,733	353.843,298	25.027.336,469	227.174,101									
03.00	46,63	72,01	3.357,826	5.185,440	373.403,542	26.888.789,031	241.797,072									
04.00	46,81	72,92	3.413,385	5.317,326	387.739,441	28.273.960,044	248.904,049								α	47,9564
05.00	46,69	70,97	3.313,589	5.036,741	357.457,502	25.368.758,894	235.165,433									
06.00	47,54	72,56	3.449,502	5.264,954	382.025,033	27.719.736,410	250.295,894									
07.00	47,90	70,68	3.385,572	4.995,662	353.093,418	24.956.642,815	239.292,229									
08.00	47,60	72,56	3.453,856	5.264,954	382.025,033	27.719.736,410	250.611,791									
09.00	49,14	75,89	3.729,235	5.759,292	437.072,677	33.169.445,493	283.011,614									
10.00	50,23	85,16	4.277,587	7.252,226	617.599,532	52.594.776,153	364.279,292									
11.00	64,67	108,39	7.009,581	11.748,392	1.273.408,220	138.024.716,935	759.768,517									
12.00	65,80	107,70	7.086,660	11.599,290	1.249.243,533	134.543.528,504	763.233,282									
13.00	66,89	108,97	7.289,003	11.874,461	1.293.960,004	141.002.821,666	794.282,690	52.696.234.041,875	2.527.123.446.112,500	47,956	-18.439.454.905,563	-0,3499	241.526.071,571	0,0046	β	-0,34992
14.00	66,92	109,94	7.357,185	12.086,804	1.328.823,188	146.090.821,265	808.848,897									
15.00	66,94	111,07	7.435,026	12.336,545	1.370.220,042	152.190.340,070	825.808,316									
16.00	67,19	111,85	7.515,202	12.510,423	1.399.290,757	156.510.671,129	840.575,288									
17.00	66,52	113,99	7.582,615	12.993,720	1.481.154,154	168.836.762,037	864.342,261									
18.00	65,68	111,39	7.316,095	12.407,732	1.382.097,279	153.951.815,865	814.939,844									
19.00	65,52	110,80	7.259,616	12.276,640	1.360.251,712	150.715.889,690	804.365,453									
20.00	65,62	112,23	7.364,533	12.595,573	1.413.601,147	158.648.456,679	826.521,494									
21.00	64,42	113,70	7.324,554	12.927,690	1.469.878,353	167.125.168,736	832.801,790									
22.00	64,37	112,81	7.261,580	12.726,096	1.435.630,901	161.953.521,946	819.178,806								γ	0,0045834
23.00	64,40	110,28	7.102,032	12.161,678	1.341.189,894	147.906.421,505	783.212,089									
24.00	46,50	81,84	3.805,560	6.697,786	548.146,774	44.860.331,944	311.447,030									
Total	1.373,900	2.260,600	133.513,485	221.229,222	22.366.897,287	2.321.193.981,852	13.421.623,720									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

13 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	46,29	71,15	3.293,534	5.062,323	360.184,246	25.627.109,094	234.334,909									
02.00	46,91	72,16	3.385,026	5.207,066	375.741,854	27.113.532,163	244.263,447									
03.00	46,81	71,49	3.346,447	5.110,820	365.372,529	26.120.482,095	239.237,489									
04.00	47,16	71,26	3.360,622	5.077,988	361.857,396	25.785.958,066	239.477,895									
05.00	49,21	72,22	3.553,946	5.215,728	376.679,905	27.203.822,743	256.665,995								α	18,004
06.00	48,74	71,90	3.504,406	5.169,610	371.694,959	26.724.867,552	251.966,791									
07.00	48,72	72,48	3.531,226	5.253,350	380.762,837	27.597.690,425	255.943,231									
08.00	48,76	73,60	3.588,736	5.416,960	398.688,256	29.343.455,642	264.130,970									
09.00	47,17	75,90	3.580,203	5.760,810	437.245,479	33.186.931,856	271.737,408	13.695.848.037,602	246.575.841.168,625	18,004	5.032.709.309,367	0,3675	8.259.999,433	0,0006	β	0,367
11.00	61,58	101,02	6.220,812	10.205,040	1.030.913,181	104.142.849,566	628.426,388									
12.00	61,42	103,47	6.355,127	10.706,041	1.107.754,052	114.619.311,752	657.565,032									
20.00	64,02	108,04	6.916,721	11.672,642	1.261.112,198	136.250.561,922	747.282,515									
21.00	66,24	110,68	7.331,443	12.250,062	1.355.836,906	150.064.028,804	811.444,133									
22.00	65,30	111,22	7.262,666	12.369,888	1.375.778,988	153.014.139,028	807.753,713								γ	0,000603
23.00	66,94	107,90	7.222,826	11.642,410	1.256.216,039	135.545.710,608	779.342,925									
24.00	56,86	90,85	5.165,731	8.253,723	749.850,689	68.123.935,107	469.306,661									
Total	872,130	1.385,340	77.619,470	124.374,461	11.565.689,515	1.110.464.386,422	7.158.879,502									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

14 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
02.00	46,90	72,80	3.414,320	5.299,840	385.828,352	28.088.304,026	248.562,496									
03.00	46,66	70,47	3.288,130	4.966,021	349.955,493	24.661.363,579	231.714,535								α	28,446
15.00	63,91	109,52	6.999,423	11.994,630	1.313.651,921	143.871.158,433	766.576,829									
17.00	65,35	112,90	7.378,015	12.746,410	1.439.069,689	162.470.967,888	832.977,894	407.344.239,207	11.587.200.792,375	28,446	51.392.556,279	0,1262	739.178,453	0,0018	β	0,1262
19.00	65,76	114,23	7.511,765	13.048,493	1.490.529,344	170.263.166,961	858.068,893									
20.00	66,32	112,40	7.454,368	12.633,760	1.420.034,624	159.611.891,738	837.870,963									
21.00	66,71	113,38	7.563,580	12.855,024	1.457.502,666	165.251.652,325	857.558,678								γ	0,0018
Total	421,610	705,700	43.609,601	73.544,179	7.856.572,090	854.218.504,949	4.633.330,288									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

15 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	46,30	71,55	3.312,765	5.119,403	366.293,249	26.208.281,957	237.028,336									
02.00	46,74	69,89	3.266,659	4.884,612	341.385,540	23.859.435,367	228.306,770									
03.00	46,77	73,47	3.436,192	5.397,841	396.579,371	29.136.686,382	252.457,019									
07.00	51,40	84,87	4.362,318	7.202,917	611.311,557	51.882.011,868	370.229,929								α	16,165
08.00	49,08	84,93	4.168,364	7.213,105	612.608,999	52.028.882,298	354.019,188									
10.00	63,95	108,72	6.952,644	11.820,038	1.285.074,575	139.713.307,777	755.891,456									
11.00	64,05	112,84	7.227,402	12.732,866	1.436.776,554	162.125.866,388	815.540,042									
12.00	64,61	110,87	7.163,311	12.292,157	1.362.831,436	151.097.121,254	794.196,257									
13.00	65,06	111,36	7.245,082	12.401,050	1.380.980,883	153.786.031,182	806.812,287									
14.00	63,53	114,67	7.284,985	13.149,209	1.507.819,785	172.901.694,696	835.369,241									
15.00	62,79	113,73	7.141,107	12.934,513	1.471.042,152	167.301.623,960	812.158,065	28.413.228.011,719	459.301.142.032,750	16,165	10.391.502.474,922	0,3657	16.265.481,301	0,0006	β	0,366
16.00	62,81	113,06	7.101,299	12.782,564	1.445.196,641	163.393.932,188	802.872,820									
17.00	62,85	111,04	6.978,864	12.329,882	1.369.110,053	152.025.980,270	774.933,059									
18.00	63,71	110,95	7.068,625	12.309,903	1.365.783,682	151.533.699,560	784.263,888									
19.00	63,75	111,03	7.078,163	12.327,661	1.368.740,190	151.971.223,265	785.888,382									
20.00	63,79	113,57	7.244,630	12.898,145	1.464.842,316	166.362.141,861	822.772,663									
21.00	63,71	109,55	6.979,431	12.001,203	1.314.731,734	144.028.861,446	764.596,611								γ	0,00057
22.00	65,63	108,83	7.142,513	11.843,969	1.288.979,135	140.279.599,304	777.319,679									
23.00	68,67	110,84	7.611,383	12.285,506	1.361.725,441	150.933.647,848	843.645,670									
24.00	43,23	75,26	3.253,490	5.664,068	426.277,728	32.081.661,777	244.857,642									
Total	1.182,430	2.021,030	122.019,224	209.590,608	22.178.091,020	2.382.651.690,650	12.863.159,004									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

16 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	48,94	79,95	3.912,753	6.392,003	511.040,600	40.857.695,960	312.824,602									
02.00	46,58	71,80	3.344,444	5.155,240	370.146,232	26.576.499,458	240.131,079									
03.00	48,45	72,22	3.499,059	5.215,728	376.679,905	27.203.822,743	252.702,041									
04.00	48,07	72,89	3.503,822	5.312,952	387.261,079	28.227.460,017	255.393,607								α	27,693
05.00	47,75	72,48	3.460,920	5.253,350	380.762,837	27.597.690,425	250.847,482									
06.00	48,02	71,43	3.430,069	5.102,245	364.453,353	26.032.903,020	245.009,800									
07.00	48,04	71,60	3.439,664	5.126,560	367.061,696	26.281.617,434	246.279,942									
12.00	67,02	110,71	7.419,784	12.256,704	1.356.939,711	150.226.795,395	821.444,309									
13.00	62,94	111,32	7.006,481	12.392,142	1.379.493,292	153.565.193,262	779.961,443									
14.00	61,45	112,95	6.940,778	12.757,703	1.440.982,497	162.758.973,079	783.960,819								β	0,19611
15.00	60,60	109,82	6.655,092	12.060,432	1.324.476,686	145.454.029,675	730.862,203	13.626.150.868,063	377.342.861.324,500	27,693	2.672.236.867,313	0,1961	15.280.146,544	0,0011		
16.00	61,46	109,84	6.750,766	12.064,826	1.325.200,444	145.560.016,758	741.504,181									
17.00	62,45	109,84	6.859,508	12.064,826	1.325.200,444	145.560.016,758	753.448,359									
18.00	64,13	109,65	7.031,855	12.023,123	1.318.335,382	144.555.474,650	771.042,846									
19.00	63,45	113,28	7.187,616	12.832,358	1.453.649,560	164.669.422,106	814.213,140									
20.00	63,39	109,77	6.958,320	12.049,453	1.322.668,445	145.189.315,189	763.814,819									
21.00	63,45	112,14	7.115,283	12.575,380	1.410.203,068	158.140.172,084	797.907,836									
22.00	63,41	110,91	7.032,803	12.301,028	1.364.307,027	151.315.292,317	780.008,192								γ	0,00112
23.00	65,23	112,87	7.362,510	12.739,637	1.437.922,817	162.298.348,344	831.006,515									
24.00	63,14	107,38	6.779,973	11.530,464	1.238.141,267	132.951.609,280	728.033,522									
Total	1.157,970	1.952,850	115.691,500	197.206,154	20.454.926,342	2.165.022.347,953	11.900.396,738									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

17 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	50,21	84,64	4.249,774	7.163,930	606.355,001	51.321.887,314	359.700,905									
02.00	43,78	73,00	3.195,940	5.329,000	389.017,000	28.398.241,000	233.303,620									
03.00	43,85	73,18	3.208,943	5.355,312	391.901,761	28.679.370,902	234.830,449								α	8,3848
05.00	61,40	101,32	6.221,048	10.265,742	1.040.125,020	105.385.467,023	630.316,583									
07.00	45,81	72,13	3.304,275	5.202,737	375.273,413	27.068.471,251	238.337,377									
08.00	52,61	87,18	4.586,540	7.600,352	662.598,722	57.765.356,604	399.854,540									
09.00	68,05	109,90	7.478,695	12.078,010	1.327.373,299	145.878.325,560	821.908,581									
15.00	63,94	110,43	7.060,894	12.194,785	1.346.670,097	148.712.778,757	779.734,547									
16.00	63,46	111,44	7.071,982	12.418,874	1.383.959,274	154.228.421,493	788.101,719	16.022.938.850,328	134.349.608.776,759	8,385	6.747.302.533,844	0,4211	15.904.201,008	0,0010	β	0,4211
17.00	66,26	109,07	7.226,978	11.896,265	1.297.525,613	141.521.118,571	788.246,512									
18.00	68,07	109,91	7.481,574	12.080,208	1.327.735,672	145.931.427,739	822.299,765									
19.00	68,25	108,77	7.423,553	11.830,913	1.286.848,396	139.970.500,047	807.459,805									
20.00	67,27	107,39	7.224,125	11.532,612	1.238.487,213	133.001.141,849	775.798,816									
21.00	66,56	109,64	7.297,638	12.020,930	1.317.974,721	144.502.748,448	800.113,074									
22.00	65,75	108,40	7.127,300	11.750,560	1.273.760,704	138.075.660,314	772.599,320									
23.00	67,30	109,82	7.390,886	12.060,432	1.324.476,686	145.454.029,675	811.667,101								γ	0,00099
24.00	53,51	90,08	4.820,181	8.114,406	730.945,729	65.843.591,224	434.201,886									
Total	1.016,080	1.676,300	102.370,327	168.895,069	17.321.028,322	1.801.738.537,771	10.498.474,600									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

18 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	55,44	93,91	5.206,370	8.819,088	828.200,563	77.776.314,916	488.930,244									
02.00	55,04	92,15	5.071,936	8.491,623	782.503,013	72.107.652,683	467.378,902									
03.00	48,93	82,97	4.059,722	6.884,021	571.167,214	47.389.743,752	336.835,143									
04.00	48,91	82,97	4.058,063	6.884,021	571.167,214	47.389.743,752	336.697,462								α	29,4115
05.00	48,79	81,68	3.985,167	6.671,622	544.938,118	44.510.545,448	325.508,457									
06.00	42,67	72,65	3.099,976	5.278,023	383.448,335	27.857.521,511	225.213,220									
07.00	43,23	72,71	3.143,253	5.286,744	384.399,164	27.949.663,179	228.545,947									
08.00	43,90	70,38	3.089,682	4.953,344	348.616,379	24.535.620,745	217.451,819									
09.00	46,36	72,57	3.364,345	5.266,405	382.183,004	27.735.020,571	244.150,531									
10.00	45,19	73,43	3.318,302	5.391,965	395.931,983	29.073.285,483	243.662,894									
11.00	50,84	81,68	4.152,611	6.671,622	544.938,118	44.510.545,448	339.185,283									
12.00	50,70	82,97	4.206,579	6.884,021	571.167,214	47.389.743,752	349.019,860									
13.00	50,72	82,64	4.191,501	6.829,370	564.379,104	46.640.289,133	346.385,626	69.288.267.381,688	2.037.872.811.637,550	29,412	-2.695.928.286,000	-0,03891	234.823.273,352	0,00339	β	-0,038909
14.00	49,64	84,19	4.179,192	7.087,956	596.735,024	50.239.121,676	351.846,141									
15.00	49,58	85,01	4.214,796	7.226,700	614.341,776	52.225.194,335	358.299,791									
16.00	49,63	84,75	4.206,143	7.182,563	608.722,172	51.589.204,066	356.470,577									
17.00	49,53	85,35	4.227,386	7.284,623	621.742,530	53.065.724,968	360.807,352									
18.00	67,28	111,73	7.517,194	12.483,593	1.394.791,835	155.840.091,693	839.896,130									
19.00	64,47	111,21	7.169,709	12.367,664	1.375.407,925	152.959.115,290	797.343,305									
20.00	65,52	111,29	7.291,721	12.385,464	1.378.378,300	153.399.720,972	811.495,608									
21.00	66,30	108,55	7.196,865	11.783,103	1.279.055,776	138.841.504,526	781.219,696								γ	0,0033891
22.00	68,27	109,71	7.489,902	12.036,284	1.320.500,729	144.872.134,936	821.717,116									
23.00	68,77	112,23	7.718,057	12.595,573	1.413.601,147	158.648.456,679	866.197,548									
24.00	67,07	111,29	7.464,220	12.385,464	1.378.378,300	153.399.720,972	830.693,077									
Total	1.296,780	2.158,020	119.622,691	199.130,854	18.854.694,933	1.829.945.680,484	11.324.951,729									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

19 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	50,42	96,80	4.880,656	9.370,240	907.039,232	87.801.397,658	472.447,501									
02.00	54,02	86,14	4.653,283	7.420,100	639.167,380	55.057.878,074	400.833,780									
03.00	50,49	86,22	4.353,248	7.433,888	640.949,858	55.262.696,744	375.337,025									
04.00	50,74	86,43	4.385,458	7.470,145	645.644,624	55.803.064,827	379.035,152									
05.00	52,18	84,26	4.396,687	7.099,748	598.224,733	50.406.415,984	370.464,830								α	8,4053
06.00	44,90	72,65	3.261,985	5.278,023	383.448,335	27.857.521,511	236.983,210									
07.00	45,75	72,19	3.302,693	5.211,396	376.210,684	27.158.649,311	238.421,372									
08.00	45,64	73,61	3.359,560	5.418,432	398.850,787	29.359.406,422	247.297,241									
09.00	44,78	75,38	3.375,516	5.682,144	428.320,045	32.286.764,982	254.446,426									
10.00	44,13	73,93	3.262,531	5.465,645	404.075,127	29.873.274,173	241.198,909									
11.00	44,31	71,29	3.158,860	5.082,264	362.314,608	25.829.408,382	225.195,122									
12.00	45,00	72,71	3.271,950	5.286,744	384.399,164	27.949.663,179	237.903,485									
13.00	45,05	73,58	3.314,779	5.414,016	398.363,327	29.311.573,579	243.901,439	78.698.538.048,875	661.487.887.878,875	8,405	35.943.325.362,969	0,45672	49.058.903,420	0,00062	β	0,45672
14.00	42,25	71,67	3.028,058	5.136,589	368.139,326	26.384.545,528	217.020,881									
15.00	45,11	71,98	3.247,018	5.181,120	372.937,046	26.844.008,599	233.720,341									
16.00	49,84	82,00	4.086,880	6.724,000	551.368,000	45.212.176,000	335.124,160									
17.00	58,85	83,10	4.890,435	6.905,610	573.856,191	47.687.449,472	406.395,149									
18.00	68,92	107,26	7.392,359	11.504,708	1.233.994,937	132.358.296,961	792.904,448									
19.00	69,47	111,88	7.772,304	12.517,134	1.400.416,997	156.678.653,588	869.565,327									
20.00	66,75	110,95	7.405,913	12.309,903	1.365.783,682	151.533.699,560	821.685,992									
21.00	66,71	112,08	7.476,857	12.561,926	1.407.940,711	157.801.994,879	838.006,110									
22.00	66,63	110,29	7.348,623	12.163,884	1.341.554,777	147.960.076,398	810.479,598								γ	0,00062338
23.00	57,54	93,37	5.372,510	8.717,957	813.995,636	76.002.772,510	501.631,240									
24.00	64,94	112,34	7.295,360	12.620,276	1.417.761,761	159.271.356,220	819.560,697									
Total	1.274,420	2.092,110	114.293,520	187.975,892	17.414.756,967	1.661.692.744,541	10.569.559,435									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

20 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	46,27	71,54	3.310,156	5.117,972	366.139,688	26.193.633,298	236.808,546									
02.00	46,27	71,87	3.325,425	5.165,297	371.229,888	26.680.292,065	238.998,288									
03.00	46,22	72,41	3.346,790	5.243,208	379.660,699	27.491.231,180	242.341,078									
04.00	46,26	70,93	3.281,222	5.031,065	356.853,433	25.311.614,028	232.737,062								α	11,6926
05.00	46,20	71,09	3.284,358	5.053,788	359.273,796	25.540.774,160	233.485,010									
06.00	46,35	72,07	3.340,445	5.194,085	374.337,699	26.978.517,948	240.745,835									
07.00	46,55	72,15	3.358,583	5.205,623	375.585,663	27.098.505,613	242.321,727									
08.00	45,80	74,27	3.401,566	5.516,033	409.675,763	30.426.618,954	252.634,307									
09.00	45,87	72,45	3.323,282	5.249,003	380.290,231	27.552.027,245	240.771,745									
10.00	49,85	83,76	4.175,436	7.015,738	587.638,181	49.220.574,072	349.734,519									
11.00	60,69	101,54	6.162,463	10.310,372	1.046.915,132	106.303.762,530	625.736,452									
12.00	60,78	101,35	6.160,053	10.271,823	1.041.049,210	105.510.337,472	624.321,372									
13.00	60,68	101,69	6.170,549	10.340,856	1.051.561,657	106.933.304,881	627.483,148	66.185.222.532,500	773.878.933.202,500	11,693	29.190.583.601,156	0,4410	33.742.022,251	0,0005	β	0,44104
14.00	65,84	111,03	7.310,215	12.327,661	1.368.740,190	151.971.223,265	811.653,194									
15.00	65,42	109,71	7.177,228	12.036,284	1.320.500,729	144.872.134,936	787.413,706									
16.00	64,94	111,88	7.265,487	12.517,134	1.400.416,997	156.678.653,588	812.862,708									
17.00	64,75	112,69	7.296,678	12.699,036	1.431.054,378	161.265.517,869	822.262,587									
18.00	66,08	111,42	7.362,634	12.414,416	1.383.214,275	154.117.734,553	820.344,636									
19.00	67,75	110,01	7.453,178	12.102,200	1.331.363,033	146.463.247,260	819.924,057									
20.00	68,39	109,10	7.461,349	11.902,810	1.298.596,571	141.676.885,896	814.033,176									
21.00	69,08	108,91	7.523,503	11.861,388	1.291.823,778	140.692.527,659	819.384,690									
22.00	69,78	107,94	7.532,053	11.651,044	1.257.613,646	135.746.816,969	813.009,822								γ	0,00050981
23.00	59,70	95,11	5.678,067	9.045,912	860.356,700	81.828.525,721	540.040,952									
24.00	45,96	71,31	3.277,408	5.085,116	362.619,629	25.858.405,750	233.711,936									
Total	1.355,480	2.196,230	127.978,125	208.357,862	20.406.510,967	2.052.412.866,912	12.482.760,554									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

21 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	43,66	72,90	3.182,814	5.314,410	387.420,489	28.242.953,648	232.027,141									
02.00	43,11	73,10	3.151,341	5.343,610	390.617,891	28.554.167,832	230.363,027									
03.00	42,37	72,50	3.071,825	5.256,250	381.078,125	27.628.164,063	222.707,313								α	34,549
04.00	43,41	71,50	3.103,815	5.112,250	365.525,875	26.135.100,063	221.922,773									
05.00	45,03	71,80	3.233,154	5.155,240	370.146,232	26.576.499,458	232.140,457									
06.00	45,17	71,27	3.219,266	5.079,413	362.009,757	25.800.435,409	229.437,081									
07.00	45,61	70,53	3.216,873	4.974,481	350.850,138	24.745.460,224	226.886,074									
08.00	47,04	71,98	3.385,939	5.181,120	372.937,046	26.844.008,599	243.719,904									
17.00	66,76	107,62	7.184,711	11.582,064	1.246.461,771	134.144.215,766	773.218,619	2.262.604.070,250	78.170.672.024,242	34,549	-385.853.444,078	-0,1705	9.715.774,284	0,0043	β	-0,1705
18.00	68,62	110,02	7.549,572	12.104,400	1.331.726,132	146.516.509,044	830.603,955									
19.00	67,35	112,09	7.549,262	12.564,168	1.408.317,602	157.858.320,045	846.196,722									
20.00	66,21	109,35	7.240,064	11.957,423	1.307.544,150	142.979.952,844	791.700,944									
21.00	67,29	109,30	7.354,797	11.946,490	1.305.751,357	142.718.623,320	803.879,312									
22.00	67,67	109,23	7.391,594	11.931,193	1.303.244,200	142.353.364,017	807.383,824								γ	0,0043
23.00	68,28	109,19	7.455,493	11.922,456	1.301.812,982	142.144.959,456	814.065,303									
24.00	45,44	73,31	3.331,206	5.374,356	393.994,046	28.883.703,490	244.210,741									
Total	873,020	1.415,690	80.621,727	130.799,325	12.579.437,794	1.252.126.437,276	7.750.463,187									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

22 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	45,62	74,25	3.387,285	5.513,063	409.344,891	30.393.858,129	251.505,911									
02.00	45,37	74,74	3.390,954	5.586,068	417.502,692	31.204.151,232	253.439,887									
03.00	44,53	73,04	3.252,471	5.334,842	389.656,830	28.460.534,897	237.560,496									
04.00	44,33	73,86	3.274,214	5.455,300	402.928,428	29.760.293,726	241.833,431								α	44,785
05.00	44,18	74,41	3.287,434	5.536,848	411.996,867	30.656.686,882	244.617,949									
06.00	43,25	73,52	3.179,740	5.405,190	397.389,598	29.216.083,260	233.774,485									
07.00	43,07	72,83	3.136,788	5.304,209	386.305,534	28.134.632,055	228.452,277									
08.00	42,87	72,92	3.126,080	5.317,326	387.739,441	28.273.960,044	227.953,783									
10.00	64,95	112,89	7.332,206	12.744,152	1.438.687,331	162.413.412,748	827.732,679									
11.00	64,52	112,20	7.239,144	12.588,840	1.412.467,848	158.478.892,546	812.231,957									
12.00	63,48	111,85	7.100,238	12.510,423	1.399.290,757	156.510.671,129	794.161,620									
13.00	61,94	111,77	6.923,034	12.492,533	1.396.290,402	156.063.378,258	773.787,488	3.402.337.627,688	152.372.334.602,000	44,785	-1.116.556.369,281	-0,3282	14.893.476,207	0,0044	β	-0,328
14.00	61,05	111,90	6.831,495	12.521,610	1.401.168,159	156.790.716,992	764.444,291									
15.00	61,10	110,63	6.759,493	12.238,997	1.354.000,227	149.793.045,118	747.802,711									
16.00	60,98	110,77	6.754,755	12.269,993	1.359.147,114	150.552.725,766	748.224,167									
17.00	61,40	110,72	6.798,208	12.258,918	1.357.307,445	150.281.080,338	752.697,590									
18.00	61,17	109,59	6.703,620	12.009,968	1.316.172,404	144.239.333,763	734.649,749									
19.00	62,51	111,01	6.939,235	12.323,220	1.368.000,663	151.861.753,633	770.324,488									
20.00	63,07	111,44	7.028,521	12.418,874	1.383.959,274	154.228.421,493	783.258,358									
21.00	62,97	111,27	7.006,672	12.381,013	1.377.635,305	153.289.480,430	779.632,382									
22.00	62,90	112,20	7.057,380	12.588,840	1.412.467,848	158.478.892,546	791.838,036								γ	0,0044
23.00	63,00	110,58	6.966,540	12.227,936	1.352.165,207	149.522.428,602	770.359,993									
24.00	46,50	74,15	3.447,975	5.498,223	407.693,198	30.230.450,660	255.667,346									
Total	1.274,760	2.222,540	126.923,481	222.526,384	22.939.317,465	2.418.834.884,245	13.025.951,074									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

23 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
06.00	48,10	73,54	3.537,274	5.408,132	397.713,998	29.247.887,403	260.131,130									
07.00	46,30	74,74	3.460,462	5.586,068	417.502,692	31.204.151,232	258.634,930									
08.00	46,25	75,66	3.499,275	5.724,436	433.110,797	32.769.162,939	264.755,147									
09.00	44,88	75,03	3.367,346	5.629,501	422.381,453	31.691.280,383	252.652,000								α	82,583
10.00	52,20	93,57	4.884,354	8.755,345	819.237,622	76.656.064,318	457.029,004									
11.00	66,71	111,59	7.444,169	12.452,328	1.389.555,293	155.060.475,110	830.694,808									
12.00	65,54	111,65	7.317,541	12.465,723	1.391.797,917	155.394.237,447	817.003,453									
13.00	65,03	113,19	7.360,746	12.811,976	1.450.187,575	164.146.731,587	833.162,806									
14.00	64,71	114,02	7.378,234	13.000,560	1.482.323,897	169.014.570,714	841.266,263									
15.00	63,50	112,46	7.141,210	12.647,252	1.422.309,915	159.952.973,034	803.100,477	10.215.139.729,703	843.594.870.086,500	82,583	-11.371.107.728,992	-1,1132	86.012.501,619	0,0084	β	-1,1132
16.00	62,45	112,31	7.013,760	12.613,536	1.416.626,239	159.101.292,946	787.715,329									
17.00	62,48	110,93	6.930,906	12.305,465	1.365.045,221	151.424.466,405	768.845,447									
18.00	63,03	110,63	6.973,009	12.238,997	1.354.000,227	149.793.045,118	771.423,975									
19.00	63,09	112,46	7.095,101	12.647,252	1.422.309,915	159.952.973,034	797.915,103									
20.00	63,24	111,77	7.068,335	12.492,533	1.396.290,402	156.063.378,258	790.027,781									
21.00	62,60	112,05	7.014,330	12.555,203	1.406.810,440	157.633.109,816	785.955,677								γ	0,0084
22.00	61,59	111,85	6.888,842	12.510,423	1.399.290,757	156.510.671,129	770.516,922									
23.00	61,61	110,40	6.801,744	12.188,160	1.345.572,864	148.551.244,186	750.912,538									
Total	1.063,310	1.847,850	111.176,638	194.032,887	20.732.067,225	2.244.167.715,057	11.841.742,787									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

24 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	44,56	73,09	3.256,890	5.342,148	390.457,605	28.538.546,322	238.046,119									
02.00	45,51	70,48	3.207,545	4.967,430	350.104,495	24.675.364,779	226.067,758									
03.00	53,00	73,15	3.876,950	5.350,923	391.419,981	28.632.371,601	283.598,893									
04.00	60,28	99,73	6.011,724	9.946,073	991.921,850	98.924.366,132	599.549,274								α	99,6412
05.00	47,29	96,93	4.583,820	9.395,425	910.698,536	88.274.009,052	444.309,644									
06.00	40,45	73,49	2.972,671	5.400,780	396.903,330	29.168.425,689	218.461,555									
07.00	39,90	73,50	2.932,650	5.402,250	397.065,375	29.184.305,063	215.549,775									
08.00	40,44	73,61	2.976,788	5.418,432	398.850,787	29.359.406,422	219.121,394									
09.00	48,60	87,44	4.249,584	7.645,754	668.544,695	58.457.548,112	371.583,625									
10.00	49,44	87,22	4.312,157	7.607,328	663.511,183	57.871.445,385	376.106,316									
11.00	49,45	86,58	4.281,381	7.496,096	649.012,026	56.191.461,238	370.681,967									
12.00	48,31	89,11	4.304,904	7.940,592	707.586,162	63.053.002,899	383.610,004									
13.00	47,86	87,70	4.197,322	7.691,290	674.526,133	59.155.941,864	368.105,139	79.642.257.817,313	7.935.647.666.850,750	99,641	-126.313.041.247,797	-1,5860	900.152.839,593	0,0113	β	-1,586
14.00	47,79	87,45	4.179,236	7.647,503	668.774,094	58.484.294,488	365.474,144									
15.00	47,74	86,92	4.149,561	7.555,086	656.688,110	57.079.330,511	360.679,825									
16.00	42,89	87,92	3.770,889	7.729,926	679.615,129	59.751.762,149	331.536,543									
17.00	52,44	97,58	5.117,095	9.521,856	929.142,748	90.665.749,302	499.326,150									
18.00	67,82	111,19	7.540,906	12.363,216	1.374.665,998	152.849.112,335	838.473,316									
19.00	62,88	111,24	6.994,771	12.374,338	1.376.521,315	153.124.231,039	778.098,348									
20.00	61,52	112,17	6.900,698	12.582,109	1.411.335,155	158.309.464,371	774.051,340									
21.00	61,40	111,07	6.819,698	12.336,545	1.370.220,042	152.190.340,070	757.463,857								γ	0,011302
22.00	61,13	111,03	6.787,264	12.327,661	1.368.740,190	151.971.223,265	753.589,911									
23.00	61,68	109,48	6.752,726	11.985,870	1.312.213,091	143.661.089,246	739.288,486									
24.00	45,82	89,92	4.120,134	8.085,606	727.057,727	65.377.030,856	370.482,485									
Total	1.228,200	2.188,000	114.297,365	204.114,238	19.465.575,755	1.894.949.822,190	10.883.255,868									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

25 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	43,76	70,94	3.104,334	5.032,484	357.004,387	25.325.891,184	220.221,482									
02.00	44,81	72,94	3.268,441	5.320,244	388.058,568	28.304.991,963	238.400,116									
03.00	44,94	70,99	3.190,291	5.039,580	357.759,791	25.397.367,584	226.478,730									
04.00	52,37	78,72	4.122,566	6.196,838	487.815,119	38.400.806,156	324.528,427									
05.00	52,71	85,51	4.507,232	7.311,960	625.245,708	53.464.760,504	385.413,417								α	25,28
06.00	51,53	71,60	3.689,548	5.126,560	367.061,696	26.281.617,434	264.171,637									
07.00	53,06	72,41	3.842,075	5.243,208	379.660,699	27.491.231,180	278.204,622									
08.00	52,96	77,25	4.091,160	5.967,563	460.994,203	35.611.802,191	316.042,110									
09.00	61,66	79,70	4.914,302	6.352,090	506.261,573	40.349.047,368	391.669,869									
10.00	55,32	86,41	4.780,201	7.466,688	645.196,519	55.751.431,183	413.057,186									
11.00	55,38	86,23	4.775,417	7.435,613	641.172,900	55.288.339,199	411.784,242									
12.00	52,66	86,16	4.537,186	7.423,546	639.612,689	55.109.029,275	390.923,911									
13.00	52,40	90,14	4.723,336	8.125,220	732.407,295	66.019.193,548	425.761,507	71.033.990.597,438	1.795.739.211.369,500	25,280	17.889.052.356,063	0,2518	64.110.527,574	0,0009	β	0,25184
14.00	52,11	92,12	4.800,373	8.486,094	781.739,016	72.013.798,166	442.210,379									
15.00	52,10	91,43	4.763,503	8.359,445	764.304,047	69.880.319,036	435.527,079									
16.00	52,28	87,86	4.593,321	7.719,380	678.224,692	59.588.821,409	403.569,165									
17.00	54,08	84,75	4.583,280	7.182,563	608.722,172	51.589.204,066	388.432,980									
18.00	60,46	101,92	6.162,083	10.387,686	1.058.712,998	107.904.028,745	628.039,520									
19.00	66,61	109,99	7.326,434	12.097,800	1.330.637,033	146.356.767,260	805.834,465									
20.00	64,57	110,49	7.134,339	12.208,040	1.348.866,351	149.036.243,083	788.273,149									
21.00	64,71	109,30	7.072,803	11.946,490	1.305.751,357	142.718.623,320	773.057,368									
22.00	63,55	110,69	7.034,350	12.252,276	1.356.204,442	150.118.269,631	778.632,146								γ	0,00090253
23.00	62,54	110,02	6.880,651	12.104,400	1.331.726,132	146.516.509,044	757.009,201									
24.00	42,47	70,94	3.012,822	5.032,484	357.004,387	25.325.891,184	213.729,578									
Total	1.309,040	2.108,510	116.910,048	189.818,251	17.510.143,772	1.653.843.983,713	10.700.972,287									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

26 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
02.00	49,95	85,28	4.259,736	7.272,678	620.214,014	52.891.851,110	363.270,286									
05.00	43,28	74,63	3.229,986	5.569,637	415.662,002	31.020.855,198	241.053,885								α	12,2
07.00	42,15	72,60	3.060,090	5.270,760	382.657,176	27.780.910,978	222.162,534	178.605.052,450	-864.269.344,727	-4,839	119.717.508,694	0,670	-58.714,998	-0,00033	β	0,3059
24.00	63,80	108,14	6.899,332	11.694,260	1.264.617,233	136.755.707,592	746.093,762								γ	0,00158
Total	199,180	340,650	17.449,144	29.807,335	2.683.150,425	248.449.324,877	1.572.580,468									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

27 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^3)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	51,60	88,73	4.578,468	7.873,013	698.572,435	61.984.332,124	406.247,466									
02.00	47,24	71,05	3.356,402	5.048,103	358.667,683	25.483.338,851	238.472,362									
03.00	45,57	72,02	3.281,951	5.186,880	373.559,126	26.903.728,284	236.366,140									
04.00	44,01	72,38	3.185,444	5.238,864	379.189,005	27.445.700,202	230.562,422									
05.00	43,89	73,25	3.214,943	5.365,563	393.027,453	28.789.260,941	235.494,538								α	21,1305
06.00	43,98	73,05	3.212,739	5.336,303	389.816,898	28.476.124,372	234.690,584									
07.00	43,92	72,89	3.201,329	5.312,952	387.261,079	28.227.460,017	233.344,856									
08.00	42,59	74,62	3.178,066	5.568,144	415.494,935	31.004.232,059	237.147,270									
09.00	47,28	82,78	3.913,838	6.852,528	567.252,301	46.957.145,473	323.987,543									
10.00	50,31	85,83	4.318,107	7.366,789	632.291,491	54.269.578,697	370.623,150									
11.00	55,66	88,31	4.915,335	7.798,656	688.699,320	60.819.036,966	434.073,199									
12.00	66,73	107,70	7.186,821	11.599,290	1.249.243,533	134.543.528,504	774.020,622									
13.00	68,14	108,42	7.387,739	11.754,896	1.274.465,868	138.177.589,375	800.978,641	44.253.747.399,031	935.101.872.253,750	21,130	2.674.814.874,031	0,06044	156.464.338,288	0,00354	β	0,060443
14.00	66,98	103,49	6.931,760	10.710,180	1.108.396,539	114.707.957,774	717.367,863									
15.00	67,13	103,03	6.916,404	10.615,181	1.093.682,088	112.682.065,540	712.597,094									
16.00	64,22	103,31	6.634,568	10.672,956	1.102.623,095	113.911.991,913	685.417,241									
17.00	69,47	106,91	7.427,038	11.429,748	1.221.954,369	130.639.141,629	794.024,601									
18.00	70,55	109,47	7.723,109	11.983,681	1.311.853,548	143.608.607,913	845.448,687									
19.00	70,20	109,97	7.719,894	12.093,401	1.329.911,297	146.250.345,328	848.956,743									
20.00	68,40	106,11	7.257,924	11.259,332	1.194.727,729	126.772.559,338	770.138,316									
21.00	67,72	103,38	7.000,894	10.687,424	1.104.865,934	114.221.040,306	723.752,380									
22.00	65,47	103,75	6.792,513	10.764,063	1.116.771,484	115.865.041,504	704.723,172								γ	0,0035356
23.00	65,65	98,28	6.452,082	9.658,958	949.282,432	93.295.477,373	634.110,619									
24.00	64,81	108,98	7.062,994	11.876,640	1.294.316,271	141.054.587,191	769.725,064									
Total	1.391,520	2.227,710	132.850,360	212.053,546	20.635.925,913	2.046.089.871,672	12.962.270,571									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

28 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^3)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	51,47	73,64	3.790,251	5.422,850	399.338,645	29.407.297,784	279.114,069									
02.00	50,66	71,46	3.620,164	5.106,532	364.912,748	26.076.664,982	258.696,891									
03.00	50,08	71,17	3.564,194	5.065,169	360.488,071	25.655.935,986	253.663,659									
04.00	50,57	70,18	3.549,003	4.925,232	345.652,810	24.257.914,194	249.069,002								α	14,5068
05.00	50,34	71,90	3.619,446	5.169,610	371.694,959	26.724.867,552	260.238,167									
06.00	50,29	71,28	3.584,671	5.080,838	362.162,161	25.814.918,847	255.515,363									
07.00	50,61	71,29	3.607,987	5.082,264	362.314,608	25.829.408,382	257.213,386									
09.00	70,47	106,05	7.473,344	11.246,603	1.192.702,195	126.486.067,793	792.548,078									
10.00	69,33	109,79	7.611,741	12.053,844	1.323.391,544	145.295.157,587	835.693,011									
11.00	70,75	109,26	7.730,145	11.937,748	1.304.318,303	142.509.817,761	844.595,643									
12.00	70,04	110,43	7.734,517	12.194,785	1.346.670,097	148.712.778,757	854.122,734									
13.00	67,34	110,39	7.433,663	12.185,952	1.345.207,252	148.497.428,583	820.602,014								β	0,54278
14.00	66,61	110,71	7.374,393	12.256,704	1.356.939,711	150.226.795,395	816.419,060	19.532.039.699,531	841.534.878.623,000	43,085	-2.353.914.254,641	-0,12052	61.357.288,084	0,00314		
15.00	67,73	109,30	7.402,889	11.946,490	1.305.751,357	142.718.623,320	809.135,768									
16.00	68,02	109,67	7.459,753	12.027,509	1.319.056,901	144.660.970,340	818.111,155									
17.00	66,98	108,84	7.290,103	11.846,146	1.289.334,487	140.331.165,576	793.454,832									
18.00	67,18	109,73	7.371,661	12.040,673	1.321.223,037	144.977.803,885	808.892,405									
19.00	66,76	111,09	7.416,368	12.340,988	1.370.960,368	152.299.987,284	823.884,366									
20.00	66,18	109,10	7.220,238	11.902,810	1.298.596,571	141.676.885,896	787.727,966									
21.00	66,02	110,10	7.268,802	12.122,010	1.334.633,301	146.943.126,440	800.295,100								γ	-0,0005334
22.00	66,05	109,70	7.245,685	12.034,090	1.320.139,673	144.819.322,128	794.851,645									
23.00	66,15	108,34	7.166,691	11.737,556	1.271.646,774	137.770.211,463	776.439,303									
24.00	59,13	98,18	5.805,383	9.639,312	946.387,691	92.916.343,545	569.972,542									
Total	1.428,760	2.241,600	142.341,092	225.365,714	23.213.523,263	2.434.609.493,481	14.560.256,161									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

29 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	47,38	72,04	3.413,255	5.189,762	373.870,426	26.933.625,465	245.890,905									
02.00	48,80	69,25	3.379,400	4.795,563	332.092,703	22.997.419,691	234.023,450									
03.00	51,27	70,77	3.628,378	5.008,393	354.443,966	25.083.999,441	256.780,304									
04.00	49,69	71,25	3.540,413	5.076,563	361.705,078	25.771.486,816	252.254,391								α	70,8161
05.00	51,04	71,14	3.630,986	5.060,900	360.032,398	25.612.704,761	258.308,316									
06.00	51,04	71,37	3.642,725	5.093,677	363.535,720	25.945.544,362	259.981,269									
07.00	51,24	69,90	3.581,676	4.886,010	341.532,099	23.873.093,720	250.359,152									
08.00	51,19	68,18	3.490,134	4.648,512	316.935,575	21.608.667,533	237.957,350									
09.00	47,82	66,50	3.180,030	4.422,250	294.079,625	19.556.295,063	211.471,995									
10.00	49,48	71,48	3.536,830	5.109,390	365.219,226	26.105.870,260	252.812,637									
11.00	55,27	85,16	4.706,793	7.252,226	617.599,532	52.594.776,153	400.830,509									
12.00	55,25	83,73	4.626,083	7.010,713	587.006,991	49.150.095,366	387.341,888									
13.00	55,44	85,44	4.736,794	7.299,994	623.711,453	53.289.906,560	404.711,645	35.872.116.670,328	2.540.323.216.709,250	70,816	-29.934.214.989,898	-0,8345	274.207.178,972	0,0076	β	-0,83447
14.00	60,85	92,64	5.637,144	8.582,170	795.052,192	73.653.635,043	522.225,020									
15.00	59,45	94,65	5.626,943	8.958,623	847.933,620	80.256.917,098	532.590,108									
16.00	59,72	94,62	5.650,706	8.952,944	847.127,599	80.155.213,429	534.669,840									
17.00	56,66	91,17	5.165,692	8.311,969	757.802,205	69.088.826,995	470.956,158									
18.00	65,44	100,15	6.553,816	10.030,023	1.004.506,753	100.601.351,351	656.364,672									
19.00	66,70	104,14	6.946,138	10.845,140	1.129.412,838	117.617.052,943	723.370,811									
20.00	66,06	103,24	6.820,034	10.658,498	1.100.383,292	113.603.571,089	704.100,351									
21.00	65,91	103,90	6.848,049	10.795,210	1.121.622,319	116.536.558,944	711.512,291								γ	0,007644
22.00	65,88	101,79	6.705,925	10.361,204	1.054.666,965	107.354.550,402	682.596,126									
23.00	66,13	103,73	6.859,665	10.759,913	1.116.125,765	115.775.725,616	711.553,040									
24.00	58,69	92,50	5.428,825	8.556,250	791.453,125	73.209.414,063	502.166,313									
Total	1.356,400	2.038,740	117.336,434	177.665,893	15.857.851,465	1.446.376.302,163	10.404.828,540									

Lampiran 3c. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 1 (Lanjutan)

30 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	49,04	71,03	3.483,311	5.045,261	358.364,882	25.454.657,549	247.419,595									
02.00	49,80	69,81	3.476,538	4.873,436	340.214,574	23.750.379,421	242.697,118								α	410,815
03.00	49,96	69,48	3.471,221	4.827,470	335.412,643	23.304.470,463	241.180,421	171.151,907	70.311.774,717	410,815	-1.636.707,763	-9,5629	10.768,460	0,0629	β	-9,5629
04.00	50,48	69,25	3.495,740	4.795,563	332.092,703	22.997.419,691	242.079,995									
24.00	50,10	82,49	4.132,749	6.804,600	561.311,462	46.302.582,521	340.910,465								γ	0,063
Total	249,380	362,060	18.059,559	26.346,330	1.927.396,265	141.809.509,645	1.314.287,594									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2

01 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	59,37	70,74	4.199,834	5.004,148	353.993,401	25.041.493,203	297.096,243									
02.00	58,37	69,50	4.056,715	4.830,250	335.702,375	23.331.315,063	281.941,693									
03.00	59,20	70,23	4.157,616	4.932,253	346.392,121	24.327.118,670	291.989,372									
04.00	60,22	70,20	4.227,444	4.928,040	345.948,408	24.285.578,242	296.766,569								α	81,33
05.00	62,45	70,10	4.377,745	4.914,010	344.472,101	24.147.494,280	306.879,925									
06.00	60,50	72,08	4.360,840	5.195,526	374.493,543	26.993.494,573	314.329,347									
07.00	62,70	69,32	4.346,364	4.805,262	333.100,790	23.090.546,733	301.289,952									
08.00	63,13	74,20	4.684,246	5.505,640	408.518,488	30.312.071,810	347.571,053									
09.00	67,40	82,87	5.585,438	6.867,437	569.104,496	47.161.689,575	462.865,247									
10.00	66,92	86,26	5.772,519	7.440,788	641.842,338	55.365.320,108	497.937,506									
11.00	67,44	86,26	5.817,374	7.440,788	641.842,338	55.365.320,108	501.806,716									
12.00	67,09	84,47	5.667,092	7.135,181	602.708,731	50.910.806,476	478.699,287									
13.00	67,48	87,11	5.878,183	7.588,152	661.003,929	57.580.052,293	512.048,504	370.407.308,625	30.125.053.509,625	81,330	-333.656.288,115	-0,9008	3.168.667,227	0,0086	β	-0,90078
14.00	68,09	84,90	5.780,841	7.208,010	611.960,049	51.955.408,160	490.793,401									
15.00	65,78	86,04	5.659,711	7.402,882	636.943,933	54.802.655,984	486.961,552									
16.00	65,12	84,14	5.479,197	7.079,540	595.672,462	50.119.880,948	461.019,619									
17.00	63,99	81,21	5.196,628	6.595,064	535.585,156	43.494.870,483	422.018,152									
18.00	63,69	79,10	5.037,879	6.256,810	494.913,671	39.147.671,376	398.496,229									
19.00	63,96	79,83	5.105,927	6.372,829	508.742,931	40.612.948,189	407.606,136									
21.00	61,74	77,41	4.779,293	5.992,308	463.864,570	35.907.756,365	369.965,102									
22.00	62,02	79,21	4.912,604	6.274,224	496.981,291	39.365.888,057	389.127,379								γ	0,0086
23.00	64,46	78,09	5.033,681	6.098,048	476.196,576	37.186.190,630	393.080,181									
24.00	58,60	70,94	4.157,084	5.032,484	357.004,387	25.325.891,184	294.903,539									
Total	1.459,720	1.794,210	114.274,256	140.899,673	11.136.988,085	885.831.462,509	9.005.192,701									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

02 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	63,45	71,49	4.536,041	5.110,820	365.372,529	26.120.482,095	324.281,535									
02.00	61,68	70,86	4.370,645	5.021,140	355.797,952	25.211.842,883	309.703,891									
03.00	61,94	71,73	4.442,956	5.145,193	369.064,687	26.473.009,978	318.693,248								α	73,943
04.00	61,00	70,04	4.272,440	4.905,602	343.588,336	24.064.927,058	299.241,698									
05.00	62,45	70,43	4.398,354	4.960,385	349.359,909	24.605.418,356	309.776,037									
06.00	62,42	71,79	4.481,132	5.153,804	369.991,596	26.561.696,701	321.700,452									
07.00	61,89	71,15	4.403,474	5.062,323	360.184,246	25.627.109,094	313.307,140									
08.00	63,14	74,20	4.684,988	5.505,640	408.518,488	30.312.071,810	347.626,110									
09.00	62,00	70,70	4.383,400	4.998,490	353.393,243	24.984.902,280	309.906,380									
10.00	67,18	74,93	5.033,797	5.614,505	420.694,852	31.522.665,272	377.182,439									
11.00	70,18	81,22	5.700,020	6.596,688	535.783,032	43.516.297,847	462.955,592	15.916.507,947	1.176.916.676,414	73,943	-14.499.555,756	-0,9110	166.231,3486	0,0104	β	-0,911
12.00	70,70	81,19	5.740,133	6.591,816	535.189,549	43.452.039,496	466.041,398									
13.00	69,13	81,56	5.638,243	6.652,034	542.539,860	44.249.551,016	459.855,083									
14.00	69,49	80,02	5.560,590	6.403,200	512.384,096	41.000.975,363	444.958,396									
15.00	67,07	81,13	5.441,389	6.582,077	534.003,899	43.323.736,318	441.459,898									
16.00	68,62	79,21	5.435,390	6.274,224	496.981,291	39.365.888,057	430.537,258									
17.00	66,93	82,08	5.493,614	6.737,126	552.983,335	45.388.872,130	450.915,870								γ	0,01044
23.00	60,42	75,61	4.568,356	5.716,872	432.252,699	32.682.626,608	345.413,412									
24.00	61,31	71,65	4.392,862	5.133,723	367.831,217	26.355.106,707	314.748,526									
Total	1.231,000	1.430,990	92.977,822	108.165,661	8.205.914,816	624.819.219,066	7.048.304,362									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

03 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	59,87	70,78	4.237,599	5.009,808	354.594,239	25.098.180,205	299.937,229									
02.00	60,53	73,70	4.461,061	5.431,690	400.315,553	29.503.256,256	328.780,196									
03.00	58,17	72,87	4.238,848	5.310,037	386.942,389	28.196.491,879	308.884,846								α	685,579
04.00	59,47	72,52	4.312,764	5.259,150	381.393,587	27.658.662,930	312.761,674									
05.00	58,58	72,39	4.240,606	5.240,312	379.346,193	27.460.870,905	306.977,483									
06.00	58,78	72,89	4.284,474	5.312,952	387.261,079	28.227.460,017	312.295,324									
07.00	59,50	72,39	4.307,205	5.240,312	379.346,193	27.460.870,905	311.798,570									
08.00	58,74	72,72	4.271,573	5.288,198	384.557,788	27.965.042,318	310.628,774									
09.00	63,20	78,37	4.952,984	6.141,857	481.337,325	37.722.406,180	388.165,356									
10.00	62,16	76,84	4.776,374	5.904,386	453.692,990	34.861.769,313	367.016,609	638.777,769	437.932.543,344	685,579	-11.000.530,660	-17,221	75.606,833	0,118	β	-17,221
11.00	62,88	76,29	4.797,115	5.820,164	444.020,319	33.874.310,151	365.971,919									
12.00	61,90	76,51	4.735,969	5.853,780	447.872,715	34.266.741,459	362.348,988									
13.00	59,99	73,45	4.406,266	5.394,903	396.255,589	29.104.972,985	323.640,201									
14.00	59,11	73,18	4.325,670	5.355,312	391.901,761	28.679.370,902	316.552,516									
15.00	59,51	73,90	4.397,789	5.461,210	403.583,419	29.824.814,664	324.996,607									
16.00	57,64	75,76	4.366,806	5.739,578	434.830,399	32.942.751,026	330.829,253									
17.00	58,74	77,53	4.554,112	6.010,901	466.025,147	36.130.929,630	353.080,319								γ	0,11836
24.00	64,14	78,78	5.052,949	6.206,288	488.931,400	38.518.015,704	398.071,338									
Total	1.082,910	1.340,870	80.720,165	99.980,839	7.462.208,084	557.496.917,429	6.022.737,202									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

04 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	54,98	74,86	4.115,803	5.604,020	419.516,907	31.405.035,677	308.108,998									
02.00	54,81	71,44	3.915,626	5.103,674	364.606,442	26.047.484,215	279.732,350									
03.00	55,54	72,52	4.027,761	5.259,150	381.393,587	27.658.662,930	292.093,213									
04.00	57,78	74,88	4.326,566	5.607,014	419.853,238	31.438.610,482	323.973,292								α	99,414
05.00	57,23	72,68	4.159,476	5.282,382	383.923,553	27.903.563,820	302.310,745									
06.00	58,89	71,84	4.230,658	5.160,986	370.765,206	26.635.772,363	303.930,442									
07.00	57,71	73,19	4.223,795	5.356,776	392.062,443	28.695.050,186	309.139,549									
08.00	57,93	70,94	4.109,554	5.032,484	357.004,387	25.325.891,184	291.531,775									
09.00	63,38	80,40	5.095,752	6.464,160	519.718,464	41.785.364,506	409.698,461									
10.00	64,43	80,72	5.200,790	6.515,718	525.948,789	42.454.586,268	419.807,737									
11.00	63,33	79,25	5.018,903	6.280,563	497.734,578	39.445.465,316	397.748,023									
12.00	56,32	72,40	4.077,568	5.241,760	379.503,424	27.476.047,898	295.215,923	11.875.841,982	1.180.629.790,469	99,414	-17.350.539,823	-1,461	142.890,429	0,012	β	-1,461
13.00	55,73	74,81	4.169,161	5.596,536	418.676,866	31.321.216,319	311.894,957									
14.00	56,65	74,54	4.222,691	5.556,212	414.160,013	30.871.487,344	314.759,387									
16.00	57,63	81,83	4.715,863	6.696,149	547.945,864	44.838.410,091	385.899,061									
17.00	57,32	80,44	4.610,821	6.470,594	520.494,549	41.868.581,536	370.894,425									
19.00	58,61	81,65	4.785,507	6.666,723	544.337,892	44.445.188,892	390.736,606									
20.00	58,75	79,22	4.654,175	6.275,808	497.169,541	39.385.771,074	368.703,744									
21.00	59,79	81,01	4.843,588	6.562,620	531.637,854	43.067.982,577	392.379,056									
22.00	59,44	81,47	4.842,577	6.637,361	540.745,793	44.054.559,717	394.524,732								γ	0,012
23.00	59,55	79,21	4.716,956	6.274,224	496.981,291	39.365.888,057	373.630,045									
24.00	57,72	79,47	4.587,008	6.315,481	501.891,267	39.885.298,998	364.529,558									
Total	1.283,520	1.688,770	98.650,598	129.960,394	10.026.071,948	775.375.919,449	7.601.242,077									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

05 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	53,88	59,76	3.219,869	3.571,258	213.418,354	12.753.880,846	192.419,359									
02.00	55,19	70,36	3.883,168	4.950,530	348.319,263	24.507.743,320	273.219,729									
03.00	56,49	70,52	3.983,675	4.973,070	350.700,925	24.731.429,203	280.928,747									
04.00	58,47	72,95	4.265,387	5.321,703	388.218,197	28.320.517,499	311.159,945									
05.00	57,58	72,04	4.148,063	5.189,762	373.870,426	26.933.625,465	298.826,473								α	80,8358
06.00	58,57	68,92	4.036,644	4.749,966	327.367,684	22.562.180,801	278.205,532									
07.00	55,18	69,58	3.839,424	4.841,376	336.862,970	23.438.925,446	267.147,150									
08.00	54,47	68,43	3.727,382	4.682,665	320.434,759	21.927.350,566	255.064,757									
09.00	53,81	71,82	3.864,634	5.158,112	370.455,633	26.606.123,531	277.558,028									
10.00	52,48	74,69	3.919,731	5.578,596	416.665,343	31.120.734,447	292.764,723									
11.00	51,24	69,76	3.574,502	4.866,458	339.484,082	23.682.409,573	249.357,287									
12.00	53,36	67,87	3.621,543	4.606,337	312.632,085	21.218.339,636	245.794,137									
13.00	54,32	67,41	3.661,711	4.544,108	306.318,327	20.648.918,424	246.835,952	957.228.940,701	77.378.385.057,250	80,836	-897.550.161,893	-0,938	7.704.604,538	0,008	β	-0,93765
14.00	52,43	65,98	3.459,331	4.353,360	287.234,719	18.951.746,772	228.246,686									
15.00	53,36	64,80	3.457,728	4.199,040	272.097,792	17.631.936,922	224.060,774									
16.00	54,42	66,28	3.606,958	4.393,038	291.170,585	19.298.786,384	239.069,150									
17.00	53,97	68,43	3.693,167	4.682,665	320.434,759	21.927.350,566	252.723,425									
18.00	53,28	69,96	3.727,469	4.894,402	342.412,336	23.955.167,022	260.773,717									
19.00	54,61	74,92	4.091,381	5.613,006	420.526,439	31.505.840,846	306.526,280									
20.00	56,68	78,75	4.463,550	6.201,563	488.373,047	38.459.377,441	351.504,563									
21.00	59,02	84,67	4.997,223	7.169,009	606.999,984	51.394.688,608	423.114,905									
22.00	59,62	82,38	4.911,496	6.786,464	559.068,937	46.056.099,052	404.609,008								γ	0,0080489
23.00	57,95	83,25	4.824,338	6.930,563	576.969,328	48.032.696,566	401.626,097									
24.00	54,55	71,47	3.898,689	5.107,961	365.065,966	26.091.264,556	278.639,267									
Total	1.324,930	1.715,000	94.877,064	123.365,011	8.935.101,940	651.757.133,494	6.840.175,691									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

06 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	50,27	71,82	3.610,391	5.158,112	370.455,633	26.606.123,531	259.298,310									
02.00	49,55	71,17	3.526,474	5.065,169	360.488,071	25.655.935,986	250.979,119									
03.00	49,50	72,63	3.595,185	5.275,117	383.131,740	27.826.858,309	261.118,287								α	73,52
04.00	50,65	71,27	3.609,826	5.079,413	362.009,757	25.800.435,409	257.272,263									
05.00	49,50	71,55	3.541,725	5.119,403	366.293,249	26.208.281,957	253.410,424									
06.00	48,27	70,60	3.407,862	4.984,360	351.895,816	24.843.844,610	240.595,057									
07.00	49,13	70,43	3.460,226	4.960,385	349.359,909	24.605.418,356	243.703,710	41.887.458,604	3.079.556.135,578	73,520	-42.431.031,020	-1,0130	398.830,736	0,0095	β	-1,013
19.00	64,22	95,56	6.136,863	9.131,714	872.626,552	83.388.193,272	586.438,647									
21.00	63,37	94,34	5.978,326	8.900,036	839.629,359	79.210.633,681	563.995,256									
22.00	62,60	94,24	5.899,424	8.881,178	836.962,177	78.875.315,563	555.961,718									
23.00	61,63	94,56	5.827,733	8.941,594	845.517,091	79.952.096,108	551.070,414								γ	0,00952
24.00	50,93	71,35	3.633,856	5.090,823	363.230,185	25.916.473,727	259.275,590									
Total	649,620	949,520	52.227,890	76.587,301	6.301.599,538	528.889.610,507	4.283.118,795									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

07 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	50,41	72,37	3.648,172	5.237,417	379.031,861	27.430.535,784	264.018,186	162.833.673,977	27.701.346.136,250	170,121	-535.277.068,252	-3,2873	3.742.649,978	0,023	α	170,121
02.00	53,65	73,12	3.922,888	5.346,534	390.938,595	28.585.430,090	286.841,571									
03.00	51,11	75,09	3.837,850	5.638,508	423.395,573	31.792.773,594	288.184,149									
04.00	52,32	74,69	3.907,781	5.578,596	416.665,343	31.120.734,447	291.872,148									
05.00	57,51	72,63	4.176,951	5.275,117	383.131,740	27.826.858,309	303.371,973									
06.00	52,75	73,04	3.852,860	5.334,842	389.656,830	28.460.534,897	281.412,894									
07.00	52,17	73,76	3.848,059	5.440,538	401.294,053	29.599.449,377	283.832,847									
08.00	52,25	72,80	3.803,800	5.299,840	385.828,352	28.088.304,026	276.916,640									
14.00	61,61	89,89	5.538,123	8.080,212	726.330,266	65.289.827,581	497.821,867									
15.00	61,26	91,03	5.576,498	8.286,461	754.316,536	68.665.434,247	507.628,595									
16.00	61,20	92,36	5.652,432	8.530,370	787.864,936	72.767.205,513	522.058,620								β	-3,2873
17.00	60,23	90,86	5.472,498	8.255,540	750.098,328	68.153.934,087	497.231,150									
18.00	61,76	91,96	5.679,450	8.456,642	777.672,762	71.514.787,151	522.282,185									
19.00	62,16	91,66	5.697,586	8.401,556	770.086,586	70.586.136,500	522.240,696									
20.00	62,55	90,42	5.655,771	8.175,776	739.253,702	66.843.319,743	511.394,814									
21.00	63,34	92,63	5.867,184	8.580,317	794.794,754	73.621.838,104	543.477,272									
22.00	62,32	93,03	5.797,630	8.654,581	805.135,661	74.901.770,555	539.353,482								γ	0,02298
23.00	61,40	90,30	5.544,420	8.154,090	736.314,327	66.489.183,728	500.661,126									
24.00	51,38	74,13	3.808,799	5.495,257	407.363,394	30.197.848,397	282.346,300									
Total	1.091,380	1.575,770	91.288,751	132.222,192	11.219.173,601	961.935.906,130	7.722.946,514									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

08 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
02.00	51,36	69,82	3.585,955	4.874,832	340.360,798	23.763.990,928	250.371,392	3.607.021.615,281	113.366.428.023,750	31,429	572.884.474,732	0,159	6.118.234,974	0,00170	α	31,429
03.00	52,20	71,50	3.732,300	5.112,250	365.525,875	26.135.100,063	266.859,450									
05.00	54,94	78,89	4.334,217	6.223,632	490.982,336	38.733.596,516	341.926,348									
06.00	51,90	73,16	3.797,004	5.352,386	391.580,530	28.648.031,611	277.788,813									
07.00	50,87	74,87	3.808,637	5.605,517	419.685,050	31.421.819,716	285.152,645									
08.00	63,84	95,78	6.114,595	9.173,808	878.667,369	84.158.760,560	585.655,928									
09.00	62,89	97,93	6.158,818	9.590,285	939.176,600	91.973.564,463	603.133,017									
10.00	63,54	98,39	6.251,701	9.680,592	952.473,457	93.713.863,407	615.104,822									
11.00	63,85	100,08	6.390,108	10.016,006	1.002.401,921	100.320.384,205	639.522,009									
12.00	63,21	99,03	6.259,686	9.806,941	971.181,357	96.176.089,816	619.896,734								β	0,1588
13.00	63,80	99,00	6.316,200	9.801,000	970.299,000	96.059.601,000	625.303,800									
14.00	62,88	95,73	6.019,502	9.164,233	877.292,016	83.983.164,645	576.246,965									
18.00	58,53	90,99	5.325,645	8.279,180	753.322,597	68.544.823,128	484.580,411									
20.00	59,85	89,84	5.376,924	8.071,226	725.118,908	65.144.682,686	483.062,852									
21.00	59,31	91,32	5.416,189	8.339,342	761.548,748	69.544.631,664	494.606,398									
22.00	58,54	89,16	5.219,426	7.949,506	708.777,919	63.194.639,284	465.364,058								γ	0,0017
23.00	60,41	88,80	5.364,408	7.885,440	700.227,072	62.180.163,994	476.359,430									
24.00	56,62	83,37	4.720,409	6.950,557	579.467,929	48.310.241,220	393.540,532									
Total	1.058,540	1.587,660	94.191,725	141.876,733	12.828.089,482	1.172.007.148,907	8.484.475,603									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

09 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	58,83	80,00	4.706,400	6.400,000	512.000,000	40.960.000,000	376.512,000									
02.00	61,05	80,31	4.902,926	6.449,696	517.975,094	41.598.579,782	393.753,947									
03.00	60,22	81,82	4.927,200	6.694,512	547.745,005	44.816.496,274	403.143,537									
04.00	60,00	80,40	4.824,000	6.464,160	519.718,464	41.785.364,506	387.849,600								α	71,147
05.00	61,57	87,68	5.398,458	7.687,782	674.064,761	59.101.998,230	473.336,762									
06.00	60,59	83,08	5.033,817	6.902,286	573.441,954	47.641.557,548	418.209,533									
07.00	60,79	81,97	4.982,956	6.719,081	550.763,061	45.146.048,141	408.452,928									
09.00	65,24	93,58	6.105,159	8.757,216	819.500,311	76.688.839,076	571.320,798									
10.00	65,15	91,84	5.983,376	8.434,586	774.632,342	71.142.234,244	549.513,252									
11.00	65,41	93,17	6.094,250	8.680,649	808.776,058	75.353.665,325	567.801,245	55.889.056,932	3.976.328.360,313	71,147	-32.508.459,254	-0,5817	307.232,701	0,005	β	-0,58166
12.00	65,98	93,05	6.139,439	8.658,303	805.655,048	74.966.202,182	571.274,799									
13.00	65,40	94,50	6.180,300	8.930,250	843.908,625	79.749.365,063	584.038,350									
14.00	63,86	92,74	5.922,376	8.600,708	797.629,623	73.972.171,221	549.241,187									
15.00	64,43	90,82	5.851,533	8.248,272	749.108,099	68.033.997,585	531.436,191									
16.00	61,96	89,80	5.564,008	8.064,040	724.150,792	65.028.741,122	499.647,918									
17.00	64,42	92,74	5.974,311	8.600,708	797.629,623	73.972.171,221	554.057,584								γ	0,0055
23.00	63,97	95,32	6.097,620	9.085,902	866.068,217	82.553.622,422	581.225,177									
24.00	62,02	87,45	5.423,649	7.647,503	668.774,094	58.484.294,488	474.298,105									
Total	1.130,890	1.590,270	100.111,778	141.025,654	12.551.541,169	1.120.995.348,426	8.895.112,912									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

10 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	63,41	89,07	5.647,929	7.933,465	706.633,719	62.939.865,320	503.061,009									
02.00	63,38	86,58	5.487,440	7.496,096	649.012,026	56.191.461,238	475.102,590									
03.00	62,59	89,83	5.622,460	8.069,429	724.876,798	65.115.682,772	505.065,555									
04.00	61,09	88,21	5.388,749	7.781,004	686.362,372	60.544.024,804	475.341,540								α	102,38
05.00	51,60	79,37	4.095,492	6.299,597	499.999,006	39.684.921,102	325.059,200									
06.00	50,92	70,04	3.566,437	4.905,602	343.588,336	24.064.927,058	249.793,233									
07.00	50,75	71,12	3.609,340	5.058,054	359.728,829	25.583.914,313	256.696,261									
08.00	50,72	70,00	3.550,400	4.900,000	343.000,000	24.010.000,000	248.528,000									
10.00	62,27	86,89	5.410,640	7.549,872	656.008,387	57.000.568,726	470.130,536									
11.00	64,00	89,50	5.728,000	8.010,250	716.917,375	64.164.105,063	512.656,000									
12.00	63,57	88,92	5.652,644	7.906,766	703.069,668	62.516.954,904	502.633,140	209.934.235,158	21.493.103.163,944	102,380	-392.471.497,627	-1,87	3.376.744,918	0,0161	β	-1,869
13.00	65,03	87,91	5.716,787	7.728,168	679.383,258	59.724.582,182	502.562,772									
14.00	64,82	88,93	5.764,443	7.908,545	703.306,898	62.545.082,435	512.631,880									
15.00	65,36	88,95	5.813,772	7.912,103	703.781,517	62.601.365,971	517.135,019									
16.00	64,90	88,56	5.747,544	7.842,874	694.564,886	61.510.666,306	509.002,497									
17.00	63,97	88,81	5.681,176	7.887,216	700.463,662	62.208.177,808	504.545,214									
18.00	63,69	90,52	5.765,219	8.193,870	741.709,149	67.139.512,132	521.867,606								γ	0,0161
19.00	61,17	88,81	5.432,508	7.887,216	700.463,662	62.208.177,808	482.461,009									
20.00	61,99	90,61	5.616,914	8.210,172	743.923,694	67.406.925,912	508.948,568									
Total	1.155,230	1.622,630	99.297,893	139.480,300	12.056.793,241	1.047.160.915,854	8.583.221,629									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

11 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	56,16	86,64	4.865,702	7.506,490	650.362,259	56.347.386,115	421.564,456									
02.00	50,78	72,62	3.687,644	5.273,664	382.973,509	27.811.536,204	267.796,678									
03.00	50,82	73,73	3.746,959	5.436,113	400.804,604	29.551.323,462	276.263,258									
04.00	49,59	73,61	3.650,320	5.418,432	398.850,787	29.359.406,422	268.700,048								α	24,853
05.00	50,77	74,10	3.762,057	5.490,810	406.869,021	30.148.994,456	278.768,424									
06.00	50,27	74,24	3.732,045	5.511,578	409.179,521	30.377.487,641	277.067,006									
07.00	51,61	73,34	3.785,077	5.378,756	394.477,936	28.931.011,805	277.597,577									
08.00	51,33	74,73	3.835,891	5.584,573	417.335,133	31.187.454,475	286.656,127									
09.00	50,72	74,53	3.780,162	5.554,721	413.993,349	30.854.924,277	281.735,444									
11.00	62,73	91,95	5.768,024	8.454,803	777.419,090	71.483.685,314	530.369,761	834.437.750,691	20.738.483.908,859	24,853	111.531.830,398	0,1337	2.449.011,113	0,0029	β	0,1337
17.00	60,76	88,38	5.369,969	7.811,024	690.338,336	61.012.102,177	474.597,843									
18.00	62,34	91,97	5.733,410	8.458,481	777.926,488	71.545.899,136	527.301,699									
19.00	62,56	93,25	5.833,720	8.695,563	810.861,203	75.612.807,191	543.994,390									
20.00	64,06	96,54	6.184,352	9.319,972	899.750,058	86.861.870,625	597.037,381									
21.00	65,19	95,68	6.237,379	9.154,662	875.918,098	83.807.843,658	596.792,442								γ	0,0029
22.00	63,66	94,97	6.045,790	9.019,301	856.563,006	81.347.788,725	574.168,695									
23.00	61,13	89,07	5.444,849	7.933,465	706.633,719	62.939.865,320	484.972,709									
24.00	60,28	89,53	5.396,868	8.015,621	717.638,539	64.250.178,413	483.181,628									
Total	1.024,760	1.508,880	86.860,218	128.018,027	10.987.894,657	953.431.565,414	7.448.565,564									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

12 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	50,94	70,06	3.568,856	4.908,404	343.882,756	24.092.425,900	250.034,079									
02.00	56,37	69,57	3.921,661	4.839,985	336.717,749	23.425.453,832	272.829,949									
03.00	58,36	70,59	4.119,632	4.982,948	351.746,306	24.829.771,767	290.804,851								α	45,79
04.00	58,75	72,41	4.254,088	5.243,208	379.660,699	27.491.231,180	308.038,476									
05.00	58,33	71,51	4.171,178	5.113,680	365.679,264	26.149.724,165	298.280,960									
06.00	57,52	68,48	3.938,970	4.689,510	321.137,672	21.991.507,792	269.740,638									
10.00	62,71	82,17	5.152,881	6.751,909	554.804,354	45.588.273,794	423.412,207									
11.00	63,65	84,00	5.346,600	7.056,000	592.704,000	49.787.136,000	449.114,400									
12.00	63,64	85,15	5.418,946	7.250,523	617.381,991	52.570.076,523	461.423,252									
13.00	63,79	82,74	5.277,985	6.845,908	566.430,395	46.866.450,868	436.700,446	69.578.118,470	3.185.959.110,031	45,790	-8.584.352,128	-0,1234	273.997,424	0,0039	β	-0,1234
14.00	62,81	84,20	5.288,602	7.089,640	596.947,688	50.262.995,330	445.300,288									
15.00	61,70	82,08	5.064,336	6.737,126	552.983,335	45.388.872,130	415.680,699									
16.00	60,77	79,72	4.844,584	6.355,278	506.642,794	40.389.563,542	386.210,268									
17.00	60,70	79,91	4.850,537	6.385,608	510.273,943	40.775.990,807	387.606,412									
18.00	60,93	80,94	4.931,674	6.551,284	530.260,895	42.919.316,808	399.169,710									
19.00	61,11	80,48	4.918,133	6.477,030	521.271,407	41.951.922,803	395.811,328								γ	0,00394
21.00	61,33	79,85	4.897,201	6.376,023	509.125,397	40.653.662,921	391.041,460									
24.00	61,24	80,49	4.929,208	6.478,640	521.465,742	41.972.777,545	396.751,920									
Total	1.084,650	1.404,350	84.895,071	110.132,704	8.679.116,386	687.107.153,705	6.677.951,343									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

13 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	59,80	71,96	4.303,208	5.178,242	372.626,266	26.814.186,068	309.658,848									
02.00	58,99	70,96	4.185,930	5.035,322	357.306,421	25.354.463,615	297.033,621									
03.00	58,96	71,38	4.208,565	5.095,104	363.688,552	25.960.088,847	300.407,355									
04.00	57,89	69,34	4.014,093	4.808,036	333.389,189	23.117.206,331	278.337,181								α	82,495
05.00	58,63	70,10	4.109,963	4.914,010	344.472,101	24.147.494,280	288.108,406									
06.00	57,93	70,33	4.074,217	4.946,309	347.873,905	24.465.971,734	286.539,675									
07.00	59,33	72,12	4.278,880	5.201,294	375.117,352	27.053.463,435	308.592,797									
08.00	59,83	73,52	4.398,702	5.405,190	397.389,598	29.216.083,260	323.392,542									
09.00	57,74	75,08	4.335,119	5.637,006	423.226,441	31.775.841,154	325.480,750									
12.00	62,17	82,86	5.151,406	6.865,780	568.898,498	47.138.929,516	426.845,518									
13.00	61,08	84,34	5.151,487	7.113,236	599.930,291	50.598.120,701	434.476,430	195.475.924,621	16.125.813.161,625	82,495	-157.920.317,461	-0,8079	1.297.470,172	0,0066	β	-0,80788
14.00	60,37	85,60	5.167,672	7.327,360	627.222,016	53.690.204,570	442.352,723									
15.00	59,28	85,06	5.042,357	7.235,204	615.426,418	52.348.171,133	428.902,869									
16.00	61,78	83,85	5.180,253	7.030,823	589.534,467	49.432.465,027	434.364,214									
17.00	63,85	87,39	5.579,852	7.637,012	667.398,487	58.323.953,816	487.623,223									
18.00	62,49	88,32	5.519,117	7.800,422	688.933,306	60.846.589,618	487.448,396									
19.00	63,31	86,98	5.506,704	7.565,520	658.048,964	57.237.098,923	478.973,097									
20.00	62,38	85,88	5.357,194	7.375,374	633.397,153	54.396.147,540	460.075,855								γ	0,00664
22.00	62,89	83,96	5.280,244	7.049,282	591.857,683	49.692.371,076	443.329,320									
24.00	57,70	71,73	4.138,821	5.145,193	369.064,687	26.473.009,978	296.877,630									
Total	1.206,400	1.570,760	94.983,783	124.365,718	9.924.801,794	798.081.860,623	7.538.820,449									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

14 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	59,48	75,27	4.477,060	5.665,573	426.447,672	32.098.716,285	336.988,276									
02.00	58,10	70,39	4.089,659	4.954,752	348.765,000	24.549.568,372	287.871,097									
04.00	58,07	71,99	4.180,459	5.182,560	373.092,502	26.858.929,190	300.951,265								α	82,047
05.00	57,87	71,02	4.109,927	5.043,840	358.213,545	25.440.325,981	291.887,044									
06.00	58,42	71,31	4.165,930	5.085,116	362.619,629	25.858.405,750	297.072,483									
07.00	57,93	70,16	4.064,369	4.922,426	345.357,380	24.230.273,788	285.156,115									
08.00	57,56	74,33	4.278,435	5.524,949	410.669,452	30.525.060,348	318.016,059									
11.00	63,83	88,46	5.646,402	7.825,172	692.214,680	61.233.310,569	499.480,703								β	-0,875
12.00	64,17	89,71	5.756,691	8.047,884	721.975,683	64.768.438,487	516.432,723	168.140.478,924	13.790.760.949,125	82,019	-147.098.177,333	-0,875	1.270.254,608	0,0076		
13.00	65,19	90,85	5.922,512	8.253,723	749.850,689	68.123.935,107	538.060,170									
14.00	63,39	90,58	5.741,866	8.204,736	743.185,023	67.317.699,393	520.098,240									
15.00	65,05	89,97	5.852,549	8.094,601	728.271,243	65.522.563,730	526.553,789									
16.00	63,45	88,37	5.607,077	7.809,257	690.104,032	60.984.493,330	495.497,350									
17.00	64,20	88,35	5.672,070	7.805,723	689.635,583	60.929.303,747	501.127,385								γ	0,0076
18.00	64,43	89,50	5.766,485	8.010,250	716.917,375	64.164.105,063	516.100,408									
19.00	63,74	87,73	5.591,910	7.696,553	675.218,586	59.236.926,542	490.578,282									
Total	984,880	1.307,990	80.923,400	108.127,114	9.032.538,074	761.842.055,684	6.721.871,387									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

15 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	59,34	71,77	4.258,832	5.150,933	369.682,454	26.532.109,740	305.656,358									
02.00	57,40	69,46	3.987,004	4.824,692	335.123,079	23.277.649,035	276.937,298									
03.00	58,29	72,24	4.210,870	5.218,618	376.992,935	27.233.969,655	304.193,220									
04.00	57,59	73,26	4.219,043	5.367,028	393.188,442	28.804.985,259	309.087,119									
05.00	59,67	71,80	4.284,306	5.155,240	370.146,232	26.576.499,458	307.613,171								α	43,4048
06.00	59,84	73,32	4.387,469	5.375,822	394.155,298	28.899.466,476	321.689,212									
07.00	56,68	74,30	4.211,324	5.520,490	410.172,407	30.475.809,840	312.901,373									
08.00	55,61	73,66	4.096,233	5.425,796	399.664,104	29.439.257,893	301.728,493									
09.00	55,31	81,09	4.485,088	6.575,588	533.214,439	43.238.358,861	363.695,778									
10.00	60,73	87,10	5.289,583	7.586,410	660.776,311	57.553.616,688	460.722,679									
11.00	61,89	85,89	5.315,732	7.377,092	633.618,440	54.421.487,852	456.568,230									
12.00	62,89	87,34	5.492,813	7.628,276	666.253,591	58.190.588,630	479.742,252									
13.00	61,54	89,14	5.485,676	7.945,940	708.301,056	63.137.956,127	488.993,123	865.515.847,250	37.567.582.101,750	43,405	132.954.295,189	0,15361	592.519,225	0,00068	β	0,15361
14.00	63,22	89,76	5.674,627	8.056,858	723.183,538	64.912.954,387	509.354,537									
15.00	62,05	90,35	5.606,218	8.163,123	737.538,118	66.636.568,950	506.521,751									
16.00	63,42	89,53	5.677,993	8.015,621	717.638,539	64.250.178,413	508.350,677									
17.00	61,48	89,42	5.497,542	7.995,936	714.996,633	63.934.998,913	491.590,170									
18.00	62,91	88,95	5.595,845	7.912,103	703.781,517	62.601.365,971	497.750,368									
19.00	62,84	90,14	5.664,398	8.125,220	732.407,295	66.019.193,548	510.588,800									
20.00	62,80	91,43	5.741,804	8.359,445	764.304,047	69.880.319,036	524.973,140									
21.00	62,16	85,74	5.329,598	7.351,348	630.304,543	54.042.311,536	456.959,767								γ	0,00068459
22.00	64,50	84,04	5.420,580	7.062,722	593.551,123	49.882.036,399	455.545,543									
23.00	64,34	82,71	5.321,561	6.840,944	565.814,487	46.798.516,179	440.146,343									
24.00	59,69	78,46	4.683,277	6.155,972	482.997,532	37.895.986,340	367.449,945									
Total	1.456,190	1.970,900	119.937,414	163.191,212	13.617.806,161	1.144.636.185,185	9.958.759,350									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

16 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	61,55	76,72	4.722,116	5.885,958	451.570,728	34.644.506,287	362.280,740									
02.00	59,40	71,57	4.251,258	5.122,265	366.600,499	26.237.597,706	304.262,535								α	143,917
03.00	59,13	72,42	4.282,195	5.244,656	379.818,016	27.506.420,754	310.116,533									
04.00	59,03	72,73	4.293,252	5.289,653	384.716,455	27.980.427,802	312.248,211									
05.00	59,31	71,75	4.255,493	5.148,063	369.373,484	26.502.547,504	305.331,587									
06.00	59,21	71,52	4.234,699	5.115,110	365.832,696	26.164.354,404	302.865,687								β	-2,6553
07.00	60,73	70,41	4.275,999	4.957,568	349.062,370	24.577.481,466	301.073,111	1.956.195,518	281.529.170,895	143,917	-5.194.320,305	-2,6553	40.362,537	0,0206		
10.00	63,53	77,35	4.914,046	5.983,023	462.786,790	35.796.558,236	380.101,419									
11.00	63,39	81,16	5.144,732	6.586,946	534.596,505	43.387.852,337	417.546,482									
12.00	63,98	80,91	5.176,622	6.546,428	529.671,498	42.855.720,868	418.840,470								γ	0,02063
24.00	64,73	80,91	5.237,304	6.546,428	529.671,498	42.855.720,868	423.750,291									
Total	673,990	827,450	50.787,716	62.426,098	4.723.700,540	358.509.188,233	3.838.417,064									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

17 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	54,91	73,29	4.024,354	5.371,424	393.671,672	28.852.196,862	294.944,897									
02.00	54,95	72,89	4.005,306	5.312,952	387.261,079	28.227.460,017	291.946,718									
03.00	54,76	72,82	3.987,623	5.302,752	386.146,430	28.119.183,016	290.378,721									
04.00	60,07	73,01	4.385,711	5.330,460	389.176,892	28.413.804,878	320.200,738								α	49,354
05.00	61,89	81,62	5.051,462	6.661,824	543.738,108	44.379.904,336	412.300,312									
06.00	57,10	73,34	4.187,714	5.378,756	394.477,936	28.931.011,805	307.126,945									
07.00	57,23	72,12	4.127,428	5.201,294	375.117,352	27.053.463,435	297.670,079									
08.00	56,85	74,77	4.250,675	5.590,553	418.005,640	31.254.281,728	317.822,932									
09.00	66,52	87,66	5.831,143	7.684,276	673.603,599	59.048.091,497	511.158,013	102.867.079,523	5.076.863.985,000	49,354	-32.538.443,065	-0,3163	586.635,076	0,0057	β	-0,316
10.00	65,61	88,99	5.838,634	7.919,220	704.731,397	62.714.046,992	519.580,031									
17.00	66,26	87,68	5.809,677	7.687,782	674.064,761	59.101.998,230	509.392,462									
18.00	61,25	77,75	4.762,188	6.045,063	470.003,609	36.542.780,629	370.260,078									
19.00	56,29	71,70	4.035,993	5.140,890	368.601,813	26.428.749,992	289.380,698									
21.00	64,11	85,44	5.477,558	7.299,994	623.711,453	53.289.906,560	468.002,590								γ	0,0057
22.00	62,29	85,06	5.298,387	7.235,204	615.426,418	52.348.171,133	450.680,832									
23.00	62,72	84,34	5.289,805	7.113,236	599.930,291	50.598.120,701	446.142,137									
24.00	59,85	79,90	4.782,015	6.384,010	510.082,399	40.755.583,680	382.082,999									
Total	1.022,660	1.342,380	81.145,671	106.659,689	8.527.750,848	686.058.755,491	6.479.071,182									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

18 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	59,67	80,46	4.801,048	6.473,812	520.882,881	41.910.236,632	386.292,338									
02.00	55,76	78,13	4.356,529	6.104,297	476.928,717	37.262.440,643	340.375,595									
03.00	53,25	73,06	3.890,445	5.337,764	389.977,009	28.491.720,249	284.235,912									
04.00	53,94	71,55	3.859,407	5.119,403	366.293,249	26.208.281,957	276.140,571								α	44,8638
05.00	53,24	72,41	3.855,108	5.243,208	379.660,699	27.491.231,180	279.148,399									
06.00	54,43	71,64	3.899,365	5.132,290	367.677,227	26.340.396,538	279.350,523									
07.00	54,21	72,15	3.911,252	5.205,623	375.585,663	27.098.505,613	282.196,796									
08.00	54,71	70,29	3.845,566	4.940,684	347.280,685	24.410.359,376	270.304,827									
09.00	55,45	70,25	3.895,363	4.935,063	346.688,141	24.354.841,879	273.649,216									
10.00	55,46	69,37	3.847,260	4.812,197	333.822,099	23.157.239,004	266.884,440									
11.00	56,11	73,43	4.120,157	5.391,965	395.931,983	29.073.285,483	302.543,151									
12.00	57,13	72,92	4.165,920	5.317,326	387.739,441	28.273.960,044	303.778,857									
13.00	58,14	73,40	4.267,476	5.387,560	395.446,904	29.025.802,754	313.232,738	970.850.392,590	43.556.062.098,000	44,864	-224.322.958,646	-0,2311	5.037.648,934	0,0052	β	-0,23106
14.00	61,91	82,40	5.101,384	6.789,760	559.476,224	46.100.840,858	420.354,042									
15.00	61,56	82,20	5.060,232	6.756,840	555.412,248	45.654.886,786	415.951,070									
16.00	61,20	84,22	5.154,264	7.093,008	597.373,167	50.310.768,162	434.092,114									
17.00	60,75	85,21	5.176,508	7.260,744	618.688,005	52.718.404,886	441.090,204									
18.00	64,98	86,63	5.629,217	7.504,757	650.137,090	56.321.376,128	487.659,103									
19.00	65,63	92,12	6.045,836	8.486,094	781.739,016	72.013.798,166	556.942,375									
20.00	65,87	90,35	5.951,355	8.163,123	737.538,118	66.636.568,950	537.704,879									
21.00	65,34	87,89	5.742,733	7.724,652	678.919,673	59.670.250,066	504.728,768								γ	0,0051889
22.00	65,89	86,32	5.687,625	7.451,142	643.182,612	55.519.523,065	490.955,773									
23.00	65,19	86,76	5.655,884	7.527,298	653.068,340	56.660.209,159	490.704,531									
24.00	64,63	86,20	5.571,106	7.430,440	640.503,928	55.211.438,594	480.229,337									
Total	1.424,450	1.899,360	113.491,038	151.589,048	12.199.953,118	989.916.366,172	9.118.545,560									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

19 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	54,92	78,68	4.321,106	6.190,542	487.071,876	38.322.815,206	339.984,589									
02.00	53,59	71,83	3.849,370	5.159,549	370.610,397	26.620.944,851	276.500,226									
03.00	53,60	70,68	3.788,448	4.995,662	353.093,418	24.956.642,815	267.767,505									
04.00	55,42	73,18	4.055,636	5.355,312	391.901,761	28.679.370,902	296.791,413								α	28,6678
05.00	56,41	71,90	4.055,879	5.169,610	371.694,959	26.724.867,552	291.617,700									
06.00	55,27	71,84	3.970,597	5.160,986	370.765,206	26.635.772,363	285.247,674									
07.00	55,64	71,61	3.984,380	5.127,992	367.215,514	26.296.302,978	285.321,480									
08.00	57,04	70,90	4.044,136	5.026,810	356.400,829	25.268.818,776	286.729,242									
09.00	56,33	74,59	4.201,655	5.563,668	414.994,004	30.954.402,727	313.401,424									
10.00	56,92	70,85	4.032,782	5.019,723	355.647,339	25.197.613,977	285.722,605									
11.00	57,72	69,45	4.008,654	4.823,303	334.978,359	23.264.247,007	278.401,020									
12.00	55,86	73,40	4.100,124	5.387,560	395.446,904	29.025.802,754	300.949,102									
13.00	56,43	71,73	4.047,724	5.145,193	369.064,687	26.473.009,978	290.343,235	977.334.273,363	28.018.010.667,938	28,668	184.732.050,414	0,1890	2.646.303,852	0,0027	β	0,18902
14.00	57,28	70,35	4.029,648	4.949,123	348.170,768	24.493.813,520	283.485,737									
15.00	57,29	73,29	4.198,784	5.371,424	393.671,672	28.852.196,862	307.728,887									
16.00	62,08	77,96	4.839,757	6.077,762	473.822,294	36.939.186,066	377.307,440									
17.00	67,15	81,88	5.498,242	6.704,334	548.950,901	44.948.099,747	450.196,055									
18.00	68,71	86,02	5.910,434	7.399,440	636.499,863	54.751.718,233	508.415,550									
19.00	68,96	88,02	6.069,859	7.747,520	681.936,746	60.024.072,348	534.269,007									
20.00	67,90	92,21	6.261,059	8.502,684	784.032,501	72.295.636,904	577.332,250									
21.00	67,35	91,16	6.139,626	8.310,146	757.552,873	69.058.519,893	559.688,306								γ	0,0027077
22.00	66,05	89,45	5.908,173	8.001,303	715.716,509	64.020.841,697	528.486,030									
23.00	57,56	73,18	4.212,241	5.355,312	391.901,761	28.679.370,902	308.251,782									
24.00	61,37	85,03	5.218,291	7.230,101	614.775,480	52.274.359,024	443.711,292									
Total	1.426,850	1.849,190	110.746,603	143.775,059	11.285.916,621	894.758.427,083	8.677.649,551									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

20 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	58,09	72,45	4.208,621	5.249,003	380.290,231	27.552.027,245	304.914,555									
02.00	57,71	73,83	4.260,729	5.450,869	402.437,651	29.711.971,765	314.569,644									
03.00	57,47	70,83	4.070,600	5.016,889	355.346,241	25.169.174,235	288.320,605									
04.00	57,81	70,70	4.087,167	4.998,490	353.393,243	24.984.902,280	288.962,707								α	88,971
05.00	58,07	71,14	4.131,100	5.060,900	360.032,398	25.612.704,761	293.886,440									
06.00	57,17	70,83	4.049,351	5.016,889	355.346,241	25.169.174,235	286.815,538									
07.00	58,08	71,37	4.145,170	5.093,677	363.535,720	25.945.544,362	295.840,754									
08.00	57,19	73,05	4.177,730	5.336,303	389.816,898	28.476.124,372	305.183,140									
09.00	57,22	74,77	4.278,339	5.590,553	418.005,640	31.254.281,728	319.891,437									
10.00	60,83	78,34	4.765,422	6.137,156	480.784,770	37.664.678,859	373.323,175									
11.00	61,88	82,95	5.132,946	6.880,703	570.754,272	47.344.066,894	425.777,871	611.085.354,973	54.368.795.230,813	88,971	-720.047.685,553	-1,178	6.306.255,966	0,0103	β	-1,1783
12.00	61,89	82,02	5.076,218	6.727,280	551.771,538	45.256.301,580	416.351,384									
13.00	62,45	81,74	5.104,663	6.681,428	546.139,892	44.641.474,774	417.255,154									
14.00	66,78	90,01	6.010,868	8.101,800	729.243,027	65.639.164,860	541.038,211									
15.00	65,56	89,98	5.899,089	8.096,400	728.514,108	65.551.699,437	530.800,010									
16.00	67,39	91,22	6.147,316	8.321,088	759.049,684	69.240.512,161	560.758,147									
17.00	66,56	91,01	6.057,626	8.282,820	753.819,457	68.605.108,809	551.304,506									
18.00	66,94	88,60	5.930,884	7.849,960	695.506,456	61.621.872,002	525.476,322								γ	0,01032
23.00	57,88	74,77	4.327,688	5.590,553	418.005,640	31.254.281,728	323.581,202									
24.00	57,50	73,14	4.205,550	5.349,460	391.259,475	28.616.718,012	307.593,927									
Total	1.214,470	1.572,750	96.067,075	124.832,219	10.003.052,583	809.311.784,097	7.671.644,730									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

21 Juni 2016																		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	54,26	73,60	3.993,536	5.416,960	398.688,256	29.343.455,642	293.924,250									
02.00	52,27	71,40	3.732,078	5.097,960	363.994,344	25.989.196,162	266.470,369									
03.00	54,65	71,34	3.898,731	5.089,396	363.077,482	25.901.947,573	278.135,470									
04.00	53,54	68,20	3.651,428	4.651,240	317.214,568	21.634.033,538	249.027,390									
05.00	56,66	68,70	3.892,542	4.719,690	324.242,703	22.275.473,696	267.417,635								α	174,8458
06.00	57,69	70,70	4.078,683	4.998,490	353.393,243	24.984.902,280	288.362,888									
07.00	58,70	70,15	4.117,805	4.921,023	345.209,728	24.216.462,446	288.864,021									
08.00	58,42	70,45	4.115,689	4.963,203	349.657,616	24.633.379,056	289.950,290									
09.00	59,05	69,96	4.131,138	4.894,402	342.412,336	23.955.167,022	289.014,414									
10.00	58,78	70,39	4.137,524	4.954,752	348.765,000	24.549.568,372	291.240,328									
11.00	58,85	70,16	4.128,916	4.922,426	345.357,380	24.230.273,788	289.684,747									
12.00	58,48	70,45	4.119,916	4.963,203	349.657,616	24.633.379,056	290.248,082									
13.00	58,64	72,52	4.252,573	5.259,150	381.393,587	27.658.662,930	308.396,579	194.666.867,680	34.036.690.634,000	174,846	-696.873.048,650	-3,5798	5.265.850,444	0,0271	β	-3,5798
14.00	62,57	82,26	5.147,008	6.766,708	556.629,367	45.788.331,744	423.392,895									
15.00	63,12	80,78	5.098,834	6.525,408	527.122,491	42.580.954,787	411.883,778									
16.00	64,21	81,94	5.261,367	6.714,164	550.158,565	45.079.992,848	431.116,445									
17.00	66,10	83,45	5.516,045	6.963,903	581.137,664	48.495.938,030	460.313,955									
18.00	64,88	84,17	5.460,950	7.084,589	596.309,848	50.191.399,882	459.648,128									
19.00	66,01	85,15	5.620,752	7.250,523	617.381,991	52.570.076,523	478.606,990									
20.00	66,52	86,01	5.721,385	7.397,720	636.277,906	54.726.262,678	492.096,341									
21.00	64,62	85,21	5.506,270	7.260,744	618.688,005	52.718.404,886	469.189,284								γ	0,027051
22.00	64,73	83,5	5.404,955	6.972,250	582.182,875	48.612.270,063	451.313,743									
23.00	65,24	82,97	5.412,963	6.884,021	571.167,214	47.389.743,752	449.113,524									
24.00	56,60	71,78	4.062,748	5.152,368	369.837,004	26.546.900,129	291.624,051									
Total	1.444,590	1.825,240	110.463,836	139.824,290	10.789.956,789	838.706.176,880	8.509.035,596									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

22 Juni 2016																		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	54,87	71,44	3.919,913	5.103,674	364.606,442	26.047.484,215	280.038,570									
02.00	54,83	72,06	3.951,050	5.192,644	374.181,898	26.963.547,557	284.712,649								α	27,169
03.00	52,72	70,79	3.732,049	5.011,224	354.744,554	25.112.366,980	264.191,735									
04.00	53,62	69,98	3.752,328	4.897,200	342.706,084	23.982.571,758	262.587,885									
05.00	52,88	71,52	3.781,978	5.115,110	365.832,696	26.164.354,404	270.487,038									
06.00	53,50	72,15	3.860,025	5.205,623	375.585,663	27.098.505,613	278.500,804								β	0,2975
07.00	52,37	73,55	3.851,814	5.409,603	397.876,264	29.263.799,208	283.300,883	563.742.806,779	15.316.340.153,656	27,169	167.723.382,629	0,2975	534.447,393	0,0009		
08.00	51,83	72,54	3.759,748	5.262,052	381.709,223	27.689.187,041	272.732,134									
09.00	62,37	89,54	5.584,610	8.017,412	717.879,035	64.278.888,764	500.045,961									
15.00	65,53	98,36	6.445,531	9.674,690	951.602,469	93.599.618,856	633.982,409									
16.00	65,48	99,15	6.492,342	9.830,723	974.716,136	96.643.104,872	643.715,709								γ	0,00095
17.00	65,63	98,01	6.432,396	9.605,960	941.480,149	92.274.469,443	630.439,161									
Total	685,630	959,090	55.563,782	78.325,913	6.542.920,613	559.117.898,711	4.604.734,940									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

23 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P²	P³	P⁴	H(P²)	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
02.00	58,12	72,35	4.204,982	5.234,523	378.717,703	27.400.225,803	304.230,448									
03.00	55,98	75,08	4.202,978	5.637,006	423.226,441	31.775.841,154	315.559,618									
04.00	55,60	72,53	4.032,668	5.260,601	381.551,383	27.673.921,829	292.489,410									
05.00	57,48	72,59	4.172,473	5.269,308	382.499,075	27.765.607,853	302.879,830								α	41,048
06.00	57,08	71,32	4.070,946	5.086,542	362.772,204	25.872.913,587	290.339,840									
07.00	54,98	72,44	3.982,751	5.247,554	380.132,783	27.536.818,785	288.510,497									
08.00	55,09	72,01	3.967,031	5.185,440	373.403,542	26.888.789,031	285.665,895									
09.00	55,38	71,96	3.985,145	5.178,242	372.626,266	26.814.186,068	286.771,020									
13.00	61,30	86,58	5.307,354	7.496,096	649.012,026	56.191.461,238	459.510,709									
14.00	59,31	86,67	5.140,398	7.511,689	651.038,077	56.425.470,130	445.518,269	222.967.925,270	9.152.295.006,750	41,048	21.825.007,921	0,0979	343.594,999	0,0015	β	0,0979
15.00	60,43	86,23	5.210,879	7.435,613	641.172,900	55.288.339,199	449.334,088									
16.00	61,95	89,56	5.548,242	8.020,994	718.360,187	64.336.338,331	496.900,554									
17.00	62,15	87,66	5.448,069	7.684,276	673.603,599	59.048.091,497	477.577,729									
18.00	62,34	87,47	5.452,880	7.651,001	669.233,049	58.537.814,772	476.963,396									
19.00	63,43	88,20	5.594,526	7.779,240	686.128,968	60.516.574,978	493.437,193									
20.00	61,32	89,60	5.494,272	8.028,160	719.323,136	64.451.352,986	492.286,771									
21.00	62,88	88,98	5.595,062	7.917,440	704.493,847	62.685.862,488	497.848,652									
22.00	62,08	91,92	5.706,394	8.449,286	776.658,406	71.390.440,669	524.531,700								γ	0,00154
23.00	62,29	89,31	5.563,120	7.976,276	712.361,218	63.620.980,423	496.842,238									
Total	1.129,190	1.552,460	92.680,169	128.049,287	10.656.314,809	894.221.030,819	7.677.197,856									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

24 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P²	P³	P⁴	H(P²)	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	52,92	71,00	3.757,320	5.041,000	357.911,000	25.411.681,000	266.769,720									
02.00	54,20	70,27	3.808,634	4.937,873	346.984,329	24.382.588,777	267.632,711									
03.00	55,84	70,19	3.919,410	4.926,636	345.800,588	24.271.743,262	275.103,360									
04.00	56,46	71,44	4.033,502	5.103,674	364.606,442	26.047.484,215	288.153,411									
05.00	53,74	72,99	3.922,483	5.327,540	388.857,152	28.382.683,517	286.302,005								α	54,0637
06.00	52,41	73,98	3.877,292	5.473,040	404.895,529	29.954.171,220	286.842,047									
07.00	51,36	71,51	3.672,754	5.113,680	365.679,264	26.149.724,165	262.638,610									
08.00	54,50	70,47	3.840,615	4.966,021	349.955,493	24.661.363,579	270.648,139									
09.00	54,76	75,98	4.160,665	5.772,960	438.629,531	33.327.071,780	316.127,312									
10.00	59,20	83,96	4.970,432	7.049,282	591.857,683	49.692.371,076	417.317,471									
11.00	61,01	85,73	5.230,387	7.349,633	630.084,029	54.017.103,765	448.401,103									
12.00	60,11	80,89	4.862,298	6.543,192	529.278,809	42.813.362,858	393.311,277									
13.00	58,31	87,07	5.077,052	7.581,185	660.093,769	57.474.364,488	442.058,892	982.303.604,598	53.107.010.125,250	54,064	-290.858.063,387	-0,2961	4.068.408,597	0,0041	β	-0,2961
14.00	59,88	86,93	5.205,368	7.556,825	656.914,789	57.105.602,569	452.502,675									
15.00	60,75	86,81	5.273,708	7.535,976	654.198,085	56.790.935,780	457.810,548									
16.00	59,61	86,40	5.150,304	7.464,960	644.972,544	55.725.627,802	444.986,266									
17.00	59,69	87,37	5.215,115	7.633,517	666.940,372	58.270.580,263	455.644,624									
18.00	61,39	90,18	5.536,150	8.132,432	733.382,754	66.136.456,741	499.250,025									
19.00	61,74	92,26	5.696,132	8.511,908	785.308,595	72.452.570,991	525.525,175									
20.00	60,12	86,60	5.206,392	7.499,560	649.461,896	56.243.400,194	450.873,547									
21.00	59,47	90,01	5.352,895	8.101,800	729.243,027	65.639.164,860	481.814,052									
22.00	58,12	85,21	4.952,405	7.260,744	618.688,005	52.718.404,886	421.994,447								γ	0,0041417
23.00	58,93	86,12	5.075,052	7.416,654	638.722,277	55.006.762,489	437.063,444									
24.00	55,20	80,89	4.465,128	6.543,192	529.278,809	42.813.362,858	361.184,204									
Total	1.379,720	1.944,260	112.261,492	158.843,285	13.081.744,769	1.085.488.583,132	9.209.955,065									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

25 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	53,52	68,93	3.689,134	4.751,345	327.510,204	22.575.278,359	254.291,979									
02.00	55,07	69,06	3.803,134	4.769,284	329.366,725	22.746.066,057	262.644,448								α	82,047
03.00	55,27	70,21	3.880,507	4.929,444	346.096,270	24.299.419,135	272.450,375									
12.00	64,91	85,85	5.572,524	7.370,223	632.733,602	54.320.179,700	478.401,142									
13.00	62,82	85,47	5.369,225	7.305,121	624.368,683	53.364.791,364	458.907,695									
14.00	62,32	86,47	5.388,810	7.477,061	646.541,456	55.906.439,702	465.970,435								β	-1,1637
15.00	62,18	85,80	5.335,044	7.361,640	631.628,712	54.193.743,490	457.746,775									
16.00	62,86	82,84	5.207,322	6.862,466	568.486,650	47.093.434,111	431.374,588									
17.00	62,27	81,79	5.093,063	6.689,604	547.142,719	44.750.803,015	416.561,647	95.533.663,067	7.838.279.179,234	82,047	-111.171.121,151	-1,1637	1.049.043,985	0,0110		
18.00	62,86	82,05	5.157,663	6.732,203	552.377,215	45.322.550,501	423.186,249									
19.00	62,21	84,32	5.245,547	7.109,862	599.503,598	50.550.143,347	442.304,540									
20.00	62,00	83,29	5.163,980	6.937,224	577.801,395	48.125.078,214	430.107,894									
21.00	62,45	84,16	5.255,792	7.082,906	596.097,335	50.167.551,739	442.327,455									
22.00	61,19	85,86	5.253,773	7.371,940	632.954,734	54.345.493,466	451.088,984								γ	0,011
23.00	62,65	86,99	5.449,924	7.567,260	658.275,956	57.263.425,421	474.088,845									
24.00	52,01	77,09	4.009,451	5.942,868	458.135,702	35.317.681,254	309.088,570									
Total	966,590	1.300,180	78.874,894	106.260,449	8.729.020,958	720.342.078,873	6.470.541,622									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

26 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
04.00	54,01	72,74	3.928,687	5.291,108	384.875,167	27.995.819,635	285.772,721									
05.00	52,45	71,06	3.727,097	5.049,524	358.819,147	25.497.688,587	264.847,513								α	-95,215
06.00	53,35	71,63	3.821,461	5.130,857	367.523,280	26.325.692,528	273.731,216	115.313,143	-10.979.553,927	-95,2151	374.821,508	3,2505	-1.898,656	-0,0165	β	3,2505
07.00	53,06	71,49	3.793,259	5.110,820	365.372,529	26.120.482,095	271.180,115									
24.00	61,49	83,68	5.145,483	7.002,342	585.956,012	49.032.799,087	430.574,034								γ	-0,0165
Total	274,360	370,600	20.415,988	27.584,651	2.062.546,135	154.972.481,931	1.526.105,599									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

27 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	59,14	80,25	4.745,985	6.440,063	516.815,016	41.474.405,004	380.865,296	67.935.890,047	5.832.074.258,695	85,847	-99.617.727,557	-1,466	990.373,715	0,015	α	85,847
02.00	58,23	72,44	4.218,181	5.247,554	380.132,783	27.536.818,785	305.565,046									
03.00	58,21	72,80	4.237,688	5.299,840	385.828,352	28.088.304,026	308.503,686									
04.00	55,70	73,60	4.099,520	5.416,960	398.688,256	29.343.455,642	301.724,672									
05.00	56,44	71,57	4.039,411	5.122,265	366.600,499	26.237.597,706	289.100,631									
06.00	55,84	73,86	4.124,342	5.455,300	402.928,428	29.760.293,726	304.623,930									
07.00	55,70	72,01	4.010,957	5.185,440	373.403,542	26.888.789,031	288.829,014									
08.00	54,10	74,30	4.019,630	5.520,490	410.172,407	30.475.809,840	298.658,509									
09.00	60,00	81,82	4.909,200	6.694,512	547.745,005	44.816.496,274	401.670,744								β	-1,4663
10.00	63,93	85,47	5.464,097	7.305,121	624.368,683	53.364.791,364	467.016,379									
11.00	65,30	84,93	5.545,929	7.213,105	612.608,999	52.028.882,298	471.015,750									
12.00	67,73	86,31	5.845,776	7.449,416	642.959,104	55.493.800,231	504.548,952									
13.00	67,94	84,26	5.724,624	7.099,748	598.224,733	50.406.415,984	482.356,852									
14.00	67,72	83,42	5.649,202	6.958,896	580.511,138	48.426.239,106	471.256,464									
15.00	67,81	82,95	5.624,840	6.880,703	570.754,272	47.344.066,894	466.580,437									
16.00	67,00	86,28	5.780,760	7.444,238	642.288,889	55.416.685,356	498.763,973									
17.00	67,72	84,66	5.733,175	7.167,316	606.784,939	51.370.412,910	485.370,612									
18.00	68,07	86,12	5.862,188	7.416,654	638.722,277	55.006.762,489	504.851,665								γ	0,0146
19.00	67,84	84,12	5.706,701	7.076,174	595.247,791	50.072.244,139	480.047,671									
20.00	67,33	82,35	5.544,626	6.781,523	558.458,378	45.989.047,418	456.599,910									
24.00	64,25	85,71	5.506,868	7.346,204	629.643,153	53.966.714,679	471.993,613									
Total	1.316,000	1.689,230	106.393,701	136.521,521	11.082.886,642	903.508.032,899	8.639.943,807									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

28 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	61,10	73,67	4.501,237	5.427,269	399.826,900	29.455.247,713	331.606,130	14.901.005,160	746.702.087,813	50,111	-1.894.148,613	-0,1271	57.308,759	0,0038	α	50,111
02.00	59,88	69,48	4.160,462	4.827,470	335.412,643	23.304.470,463	289.068,928									
03.00	60,89	70,96	4.320,754	5.035,322	357.306,421	25.354.463,615	306.600,732									
04.00	59,59	70,97	4.229,102	5.036,741	357.457,502	25.368.758,894	300.139,390									
05.00	60,87	71,28	4.338,814	5.080,838	362.162,161	25.814.918,847	309.270,633									
06.00	60,84	70,97	4.317,815	5.036,741	357.457,502	25.368.758,894	306.435,316								β	-0,127
07.00	61,34	70,91	4.349,619	5.028,228	356.551,655	25.283.077,826	308.431,512									
08.00	59,98	72,68	4.359,346	5.282,382	383.923,553	27.903.563,820	316.837,296									
09.00	67,12	83,35	5.594,452	6.947,223	579.050,995	48.263.900,465	466.297,574									
10.00	65,32	83,36	5.445,075	6.948,890	579.259,437	48.287.066,673	453.901,469								γ	0,00385
11.00	66,41	84,58	5.616,958	7.153,776	605.066,408	51.176.516,781	475.082,291									
22.00	65,15	80,22	5.226,333	6.435,248	516.235,627	41.412.421,970	419.256,433									
23.00	65,57	80,89	5.303,957	6.543,192	529.278,809	42.813.362,858	429.037,106									
Total	814,060	983,320	61.763,926	74.783,321	5.718.989,612	439.806.528,817	4.711.964,810									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

29 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	61,07	68,13	4.160,699	4.641,697	316.238,810	21.545.350,111	283.468,430									
02.00	63,41	70,22	4.452,650	4.930,848	346.244,175	24.313.265,944	312.665,097									
03.00	63,20	71,32	4.507,424	5.086,542	362.772,204	25.872.913,587	321.469,480									
04.00	62,47	71,32	4.455,360	5.086,542	362.772,204	25.872.913,587	317.756,304								α	251,6671
05.00	63,03	70,70	4.456,221	4.998,490	353.393,243	24.984.902,280	315.054,825									
06.00	63,05	71,08	4.481,594	5.052,366	359.122,204	25.526.406,240	318.551,702									
07.00	64,74	69,51	4.500,077	4.831,640	335.847,303	23.344.746,056	312.800,380									
08.00	62,22	72,86	4.533,349	5.308,580	386.783,110	28.181.017,370	330.299,823									
09.00	61,20	73,90	4.522,680	5.461,210	403.583,419	29.824.814,664	334.226,052									
10.00	65,63	75,56	4.959,003	5.709,314	431.395,736	32.596.261,783	374.702,252									
11.00	68,60	86,25	5.916,750	7.439,063	641.619,141	55.339.650,879	510.319,688									
12.00	65,56	82,23	5.390,999	6.761,773	556.020,586	45.721.572,751	443.301,831									
13.00	65,37	81,55	5.330,924	6.650,403	542.340,324	44.227.853,412	434.736,811	396.971.337,680	99.904.617.345,500	251,667	-1.938.893.049,905	-4,8842	12.547.831,028	0,0316	β	-4,8842
14.00	65,31	85,94	5.612,741	7.385,684	634.725,649	54.548.322,239	482.358,996									
15.00	66,62	87,56	5.833,247	7.666,754	671.300,945	58.779.110,763	510.759,125									
16.00	63,90	85,71	5.476,869	7.346,204	629.643,153	53.966.714,679	469.422,442									
17.00	62,24	82,17	5.114,261	6.751,909	554.804,354	45.588.273,794	420.238,810									
18.00	62,29	82,17	5.118,369	6.751,909	554.804,354	45.588.273,794	420.576,405									
19.00	62,22	83,65	5.204,703	6.997,323	585.326,027	48.962.522,169	435.373,406									
20.00	62,59	80,95	5.066,661	6.552,903	530.457,457	42.940.531,175	410.146,167									
21.00	62,05	80,40	4.988,820	6.464,160	519.718,464	41.785.364,506	401.101,128									
22.00	63,41	80,94	5.132,405	6.551,284	530.260,895	42.919.316,808	415.416,893								γ	0,031609
23.00	62,88	78,16	4.914,701	6.108,986	477.478,314	37.319.705,061	384.133,015									
24.00	77,98	70,58	5.503,828	4.981,536	351.596,839	24.815.704,905	388.460,208									
Total	1.541,040	1.862,860	119.634,336	145.517,117	11.438.248,909	904.565.508,555	9.347.339,269									

Lampiran 3d. Perhitungan Manual Karakteristik Input-Output Harian PLTU Jene'ponto Unit 2 (Lanjutan)

30 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> Ton	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	62,02	70,62	4.379,852	4.987,184	352.194,962	24.872.008,240	309.305,176									
02.00	62,34	69,98	4.362,553	4.897,200	342.706,084	23.982.571,758	305.291,473									
03.00	61,69	69,48	4.286,221	4.827,470	335.412,643	23.304.470,463	297.806,649								α	100,475
04.00	62,73	69,17	4.339,034	4.784,489	330.943,097	22.891.334,034	300.130,989									
05.00	64,77	69,13	4.477,550	4.778,957	330.369,290	22.838.429,052	309.533,038									
08.00	70,61	79,65	5.624,087	6.344,123	505.309,357	40.247.890,295	447.958,490									
09.00	68,09	83,62	5.693,686	6.992,304	584.696,494	48.892.320,822	476.106,007									
13.00	64,78	80,42	5.209,608	6.467,376	520.106,410	41.826.957,499	418.956,643								β	-1,2301
14.00	64,71	81,78	5.291,984	6.687,968	546.942,056	44.728.921,319	432.778,435									
17.00	63,20	81,41	5.145,112	6.627,588	539.551,947	43.924.924,023	418.863,568	36.274.966,134	3.644.726.727,656	100,475	-44.622.305,409	-1,2301	358.552,437	0,0099		
18.00	63,47	78,23	4.965,258	6.119,933	478.762,351	37.453.578,701	388.432,141									
19.00	64,65	81,39	5.261,864	6.624,332	539.154,390	43.881.775,771	428.263,070									
20.00	65,55	79,85	5.234,168	6.376,023	509.125,397	40.653.662,921	417.948,275									
21.00	65,52	78,19	5.123,009	6.113,676	478.028,334	37.377.035,456	400.568,058								γ	0,00988
22.00	65,81	76,16	5.012,090	5.800,346	441.754,321	33.644.009,079	381.720,744									
23.00	65,81	75,06	4.939,699	5.634,004	422.888,310	31.741.996,565	370.773,777									
24.00	59,65	75,27	4.489,856	5.665,573	426.447,672	32.098.716,285	337.951,423									
Total	1.095,400	1.299,410	83.835,628	99.728,547	7.684.393,116	594.360.602,283	6.442.387,957									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I

01 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	900,400	59,40	53.482,613	3.528,207	209.570,947	12.448.244,231	3.176.798,315									
02.00	898,576	58,37	52.450,058	3.407,079	198.871,839	11.608.186,771	3.061.519,784									
03.00	898,825	58,39	52.482,655	3.409,427	199.077,505	11.624.195,843	3.064.478,127									
04.00	898,472	58,37	52.441,209	3.406,720	198.840,447	11.605.743,696	3.060.842,183								α	706,9550
05.00	898,227	58,34	52.401,365	3.403,398	198.549,604	11.583.114,995	3.057.024,656									
06.00	897,963	58,31	52.358,066	3.399,778	198.232,972	11.558.492,355	3.052.874,076									
07.00	898,898	58,37	52.465,642	3.406,666	198.835,698	11.605.374,120	3.062.243,872									
08.00	899,066	58,37	52.476,742	3.406,833	198.850,286	11.606.509,368	3.062.966,651									
09.00	904,692	60,13	54.395,943	3.615,191	217.368,661	13.069.608,356	3.270.635,549									
10.00	920,347	65,07	59.887,577	4.234,185	275.521,009	17.928.321,317	3.896.921,418									
11.00	1035,096	97,94	101.376,222	9.592,032	939.433,284	92.007.082,105	9.928.677,736									
12.00	1082,581	112,19	121.455,843	12.586,828	1.412.129,178	158.428.229,569	13.626.256,342	2.220.774.247.399,870	1.570.119.363.405.310,000	707,014	7.002.757.864.215,250	3,1533	4.451.085.197,672	0,0020	β	3,1546
13.00	1082,517	112,22	121.475,216	12.592,316	1.413.052,914	158.566.424,444	13.631.400,866									
14.00	1082,203	112,22	121.442,141	12.592,778	1.413.130,593	158.578.046,946	13.627.938,969									
15.00	1059,604	106,36	112.703,717	11.313,294	1.203.326,798	127.990.612,619	11.987.614,464									
16.00	980,191	84,20	82.531,406	7.089,526	596.933,341	50.261.384,675	6.949.088,697									
17.00	980,598	84,18	82.549,421	7.086,731	596.580,318	50.221.756,103	6.949.235,082									
18.00	999,894	89,26	89.247,729	7.966,843	711.097,869	63.470.585,282	7.965.999,942									
19.00	1122,725	126,69	142.233,596	16.049,345	2.033.227,441	257.581.469,497	18.019.006,580									
20.00	1136,036	129,87	147.532,141	16.865,114	2.190.200,701	284.432.063,139	19.159.372,623									
21.00	1167,846	129,93	151.735,496	16.881,200	2.193.335,020	284.974.913,413	19.714.639,769								γ	0,0020
22.00	1151,355	129,07	148.608,152	16.659,693	2.150.307,114	277.545.371,325	19.181.215,724									
23.00	1111,309	108,66	120.749,357	11.805,922	1.282.773,083	139.379.783,114	13.120.028,367									
Total	23.007,422	2.015,877	2.078.482,304	194.299,105	20.229.246,622	2.228.075.513,283	205.626.779,793									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

02 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	1.137,690	66,30	75.432,940	4.396,169	291.481,900	19.326.303,184	5.001.476,489									
02.00	1.037,710	49,25	51.109,383	2.425,766	119.474,007	5.884.341,982	2.517.242,859									
03.00	996,332	43,23	43.074,784	1.869,123	80.808,476	3.493.621,782	1.862.267,548									
04.00	957,279	37,29	35.694,791	1.390,377	51.844,063	1.933.149,203	1.330.978,936								α	809,6758
05.00	956,770	37,28	35.667,601	1.389,737	51.808,232	1.931.367,981	1.329.658,630									
06.00	956,740	37,27	35.662,119	1.389,399	51.789,329	1.930.428,481	1.329.292,565									
07.00	957,109	37,28	35.677,239	1.389,503	51.795,163	1.930.718,397	1.329.906,076									
08.00	956,834	37,26	35.654,123	1.388,501	51.739,132	1.927.934,118	1.328.564,981									
09.00	989,850	41,97	41.543,010	1.761,398	73.924,106	3.102.521,318	1.743.518,875									
10.00	1.121,150	61,62	69.087,435	3.797,263	233.994,727	14.419.208,715	4.257.301,678									
11.00	1.122,991	62,28	69.934,796	3.878,233	241.518,726	15.040.689,517	4.355.221,486									
12.00	1.121,421	62,26	69.819,786	3.876,319	241.340,004	15.025.851,296	4.346.986,413									
13.00	1.135,102	65,43	74.275,123	4.281,706	280.172,325	18.333.004,526	4.860.173,709	8.699.640.984,676	7.044.743.057.144,000	809,774	26.174.823.367,172	3,0087	236.033.159,464	0,0271	β	3,0129
14.00	1.142,298	67,04	76.575,921	4.493,920	301.257,578	20.195.315,427	5.133.397,419									
15.00	1.142,107	67,04	76.568,191	4.494,516	301.317,505	20.200.672,006	5.133.219,558									
16.00	1.141,818	67,04	76.550,057	4.494,667	301.332,681	20.202.028,554	5.132.089,964									
17.00	1.141,254	67,03	76.502,511	4.493,522	301.217,528	20.191.735,727	5.128.248,997									
18.00	1.140,593	67,04	76.460,302	4.493,770	301.242,533	20.193.970,685	5.125.561,400									
19.00	1.141,112	67,04	76.499,372	4.494,273	301.293,064	20.198.487,328	5.128.467,209									
20.00	1.141,213	67,03	76.494,387	4.492,891	301.154,174	20.186.073,450	5.127.344,884									
21.00	1.141,824	67,09	76.610,432	4.501,711	302.041,358	20.265.401,808	5.140.160,901									
22.00	1.141,932	67,00	76.506,708	4.488,677	300.730,523	20.148.219,787	5.125.764,925								γ	0,027092
23.00	1.111,568	61,16	67.982,864	3.740,474	228.765,190	13.991.144,909	4.157.792,124									
24.00	926,957	63,96	59.287,750	4.090,820	261.646,867	16.734.807,371	3.792.015,907									
Total	25.759,655	1.367,200	1.488.671,623	81.512,733	5.023.689,192	316.786.997,553	89.716.653,531									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

03 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	915,115	63,78	58.361,497	4.067,255	259.389,308	16.542.561,636	3.722.006,365									
02.00	915,574	63,73	58.348,451	4.061,366	258.826,152	16.494.691,875	3.718.479,447									
03.00	915,646	63,75	58.370,837	4.063,837	259.062,463	16.514.774,734	3.721.037,832									
04.00	926,649	67,41	62.468,149	4.544,511	306.359,037	20.652.577,510	4.211.164,495								α	693,0846
05.00	919,283	64,78	59.546,871	4.195,846	271.787,406	17.605.124,634	3.857.169,501									
06.00	930,424	68,60	63.828,215	4.706,131	322.846,411	22.147.665,265	4.378.694,948									
07.00	926,474	67,21	62.266,698	4.516,954	303.576,748	20.402.873,611	4.184.838,216									
08.00	926,524	67,23	62.287,399	4.519,464	303.829,820	20.425.554,843	4.187.392,388									
09.00	925,873	67,23	62.246,401	4.519,870	303.870,738	20.429.222,621	4.184.824,105									
10.00	933,813	69,62	65.015,568	4.847,465	337.498,593	23.497.912,858	4.526.626,750									
11.00	981,689	83,74	82.203,218	7.011,806	587.144,282	49.165.423,116	6.883.412,035									
12.00	1.080,847	110,90	119.865,008	12.298,610	1.363.904,681	151.255.796,346	13.292.921,094									
13.00	1.126,810	123,08	138.682,694	15.147,586	1.864.297,096	229.449.349,432	17.068.445,817	1.045.407.126.380,500	724.453.250.895.744,000	692,987	3.623.378.887.934,000	3,466	64.409.203,359	0,0001	β	3,4637
14.00	1.127,667	124,56	140.458,201	15.514,303	1.932.406,169	240.693.606,125	17.494.971,534									
15.00	1.127,790	129,45	145.991,013	16.756,972	2.169.168,727	280.796.126,695	18.898.350,498									
16.00	1.128,044	130,41	147.105,854	17.006,235	2.217.748,363	289.212.031,694	19.183.773,781									
17.00	1.127,730	130,94	147.662,690	17.144,765	2.244.901,541	293.942.960,682	19.334.660,063									
18.00	1.127,411	131,16	147.875,404	17.203,925	2.256.531,050	295.975.038,067	19.395.890,093									
19.00	1.132,117	131,26	148.599,809	17.228,756	2.261.418,172	296.830.030,676	19.504.966,587									
20.00	1.170,731	131,29	153.704,596	17.236,908	2.263.023,340	297.110.986,155	20.179.784,840									
21.00	1.161,701	131,24	152.458,181	17.223,151	2.260.314,785	296.636.941,251	20.008.154,917									
22.00	1.189,881	131,56	156.535,628	17.306,893	2.276.819,806	299.528.543,229	20.593.148,663								γ	0,000073291
23.00	1.132,817	123,85	140.296,250	15.338,146	1.899.587,556	235.258.733,492	17.375.307,623									
24.00	960,170	78,58	75.445,411	6.174,039	485.125,482	38.118.761,628	5.928.127,321									
Total	24.810,779	2.355,319	2.509.624,045	252.634,793	29.009.437,727	3.488.687.288,176	275.834.148,915									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

04 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	903,886	60,07	54.294,425	3.608,135	216.732,547	13.018.636,895	3.261.344,067									
02.00	903,980	60,08	54.312,921	3.609,845	216.886,612	13.030.977,445	3.263.227,912									
03.00	904,383	60,05	54.308,399	3.606,026	216.542,545	13.003.421,797	3.261.229,877									
04.00	904,463	60,05	54.312,739	3.605,971	216.537,598	13.003.025,667	3.261.465,675								α	756,8634
05.00	905,082	60,24	54.522,091	3.628,848	218.601,541	13.168.539,948	3.284.406,553									
06.00	930,937	68,09	63.391,889	4.636,893	315.747,965	21.500.773,354	4.316.653,768									
07.00	948,611	73,95	70.147,759	5.468,281	404.367,517	29.902.099,452	5.187.274,376									
08.00	924,333	66,89	61.827,491	4.474,106	299.267,377	20.017.622,908	4.135.564,008									
09.00	913,751	63,06	57.620,545	3.976,481	250.754,255	15.812.398,442	3.633.513,706									
10.00	924,281	66,15	61.144,720	4.376,324	289.510,424	19.152.211,983	4.044.954,999									
11.00	959,646	77,40	74.275,631	5.990,607	463.667,025	35.887.368,497	5.748.860,302									
12.00	975,333	82,75	80.705,891	6.847,074	566.575,188	46.882.425,112	6.678.174,393									
13.00	975,131	82,73	80.671,472	6.844,057	566.200,782	46.841.121,720	6.673.855,548	2.000.378.759.805,310	1.513.993.285.534.210,000	756,853	3.938.161.225.715,000	1,969	16.422.492.203,766	0,0082	β	1,9685
14.00	994,406	88,05	87.560,152	7.753,278	682.697,006	60.113.313,075	7.709.907,575									
15.00	1.010,688	92,70	93.693,805	8.593,840	796.674,393	73.854.077,474	8.685.693,417									
16.00	1.010,365	92,66	93.624,151	8.586,559	795.662,224	73.728.995,834	8.675.559,118									
17.00	1.010,233	92,48	93.429,635	8.553,159	791.024,315	73.156.532,290	8.640.680,173									
18.00	1.012,204	93,06	94.192,304	8.659,544	805.828,359	74.987.705,125	8.765.222,299									
19.00	1.124,369	128,70	144.705,701	16.563,554	2.131.720,658	274.351.322,751	18.623.547,285									
20.00	1.135,833	130,84	148.615,257	17.119,758	2.239.991,749	293.086.101,914	19.445.190,508									
21.00	1.172,344	129,71	152.061,282	16.823,908	2.182.178,806	283.043.885,857	19.723.414,074								γ	0,008211
22.00	1.173,645	130,58	153.259,083	17.052,131	2.226.732,299	290.775.187,731	20.013.155,053									
23.00	1.062,965	108,54	115.369,180	11.779,901	1.278.534,486	138.766.061,489	12.521.622,958									
24.00	932,175	69,68	64.954,284	4.855,347	338.322,125	23.574.393,745	4.526.035,252									
Total	23.713,047	2.038,517	2.063.000,808	187.013,625	18.510.757,796	1.960.658.200,505	194.080.552,895									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

05 Juni 2016																		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	915,787	63,68	58.317,293	4.055,136	258.230,810	16.444.124,034	3.713.642,043									
02.00	906,403	60,77	55.079,798	3.692,684	224.395,046	13.635.917,094	3.347.059,463									
03.00	905,004	60,20	54.483,859	3.624,386	218.198,486	13.136.176,575	3.280.085,076									
04.00	905,197	60,19	54.479,633	3.622,282	218.008,480	13.120.926,860	3.278.878,347									
05.00	924,612	65,91	60.936,561	4.343,470	286.256,398	18.865.729,522	4.016.024,378								α	796,191
06.00	976,505	81,89	79.969,012	6.706,473	549.213,633	44.976.785,409	6.548.907,189									
07.00	1.012,253	92,80	93.938,066	8.612,027	799.204,801	74.167.011,369	8.717.547,283									
08.00	954,837	76,81	73.337,471	5.899,205	453.096,036	34.800.622,829	5.632.778,606									
09.00	951,098	74,41	70.768,968	5.536,502	411.958,206	30.652.851,198	5.265.754,150									
10.00	960,469	78,22	75.128,587	6.118,485	478.592,441	37.435.857,068	5.876.614,000									
11.00	958,937	77,76	74.570,911	6.047,263	470.260,302	36.569.393,558	5.798.943,645									
12.00	958,694	77,76	74.549,504	6.046,860	470.213,245	36.564.514,469	5.797.085,550									
13.00	958,601	77,76	74.541,812	6.046,784	470.204,382	36.563.595,514	5.796.451,006	1.120.463.369.273,370	892.157.287.892.800,000	796,240	964.368.977.411,500	0,861	17.812.086.695,078	0,0159	β	0,8617
14.00	958,579	77,76	74.535,540	6.046,042	470.117,891	36.554.628,301	5.795.607,875									
15.00	958,232	77,75	74.503,741	6.045,259	470.026,488	36.545.152,391	5.792.759,870									
16.00	958,004	77,72	74.459,467	6.040,945	469.523,503	36.493.018,111	5.787.251,697									
17.00	925,368	67,76	62.704,853	4.591,700	311.143,122	21.083.705,440	4.249.011,358									
18.00	967,690	78,69	76.150,697	6.192,628	487.317,981	38.348.635,465	5.992.545,758									
19.00	1.149,246	130,39	149.854,405	17.002,502	2.217.018,230	289.085.085,185	19.540.061,848									
20.00	1.176,984	127,11	149.604,795	16.156,595	2.053.642,085	261.035.560,322	19.016.055,288									
21.00	1.183,779	126,42	149.652,941	15.981,921	2.020.428,359	255.421.788,080	18.919.068,172								γ	0,015893
22.00	1.160,641	126,38	146.684,254	15.972,440	2.018.630,727	255.118.825,140	18.538.266,548									
23.00	1.080,993	112,35	121.449,841	12.622,588	1.418.151,421	159.329.724,773	13.644.924,994									
24.00	1.014,960	93,77	95.177,708	8.793,725	824.630,410	77.329.605,630	8.925.276,718									
Total	23.822,872	2.044,272	2.074.879,717	185.797,901	18.068.462,484	1.873.279.234,340	193.270.600,864									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

06 Juni 2016																		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	953,606	76,24	72.703,224	5.812,589	443.153,794	33.786.195,873	5.542.918,515									
02.00	897,735	58,28	52.321,911	3.396,804	197.972,864	11.538.275,083	3.049.431,040									
03.00	917,260	63,58	58.322,894	4.042,901	257.063,064	16.345.049,457	3.708.391,896									
04.00	943,607	72,55	68.454,739	5.262,892	381.800,676	27.698.032,765	4.966.103,299									
05.00	944,107	72,54	68.489,969	5.262,739	381.784,051	27.696.424,590	4.968.586,951								α	713,1908
06.00	944,077	72,54	68.480,857	5.261,669	381.667,597	27.685.161,017	4.967.420,760									
07.00	924,894	66,74	61.723,341	4.453,633	297.215,669	19.834.850,661	4.119.140,994									
08.00	929,856	67,86	63.096,227	4.604,429	312.437,841	21.200.763,595	4.281.453,810									
09.00	945,868	73,16	69.201,503	5.352,660	391.610,641	28.650.968,862	5.062.911,695									
10.00	949,601	74,40	70.646,924	5.534,827	411.771,344	30.634.314,065	5.255.878,294									
11.00	999,058	89,05	88.965,613	7.929,818	706.146,531	62.882.013,570	7.922.345,631									
12.00	1.066,548	107,52	114.671,683	11.559,844	1.242.876,392	133.629.984,623	12.329.122,464									
13.00	1.089,385	113,89	124.066,203	12.970,134	1.477.123,167	168.224.383,775	14.129.465,280	1.438.174.685.387,250	1.025.676.183.103.230,000	713,179	4.345.757.180.577,500	3,0217	3.207.590.080,750	0,0022	β	3,0214
14.00	1.102,723	118,20	130.337,590	13.970,316	1.651.236,715	195.169.724,304	15.405.393,537									
15.00	1.108,547	122,85	136.181,613	15.091,365	1.853.927,751	227.749.312,130	16.729.491,599									
16.00	1.108,417	122,83	136.144,626	15.086,714	1.853.070,686	227.608.939,178	16.722.370,184									
17.00	1.070,585	110,01	117.779,722	12.103,161	1.331.521,644	146.486.512,740	12.957.461,743									
18.00	1.075,496	110,23	118.554,144	12.151,107	1.339.441,498	147.649.393,211	13.068.467,298									
19.00	1.129,170	131,09	148.021,537	17.184,272	2.252.665,492	295.299.203,183	19.403.964,766									
20.00	1.167,723	132,18	154.353,801	17.472,490	2.309.575,619	305.287.893,044	20.403.032,585									
21.00	1.149,406	132,16	151.902,408	17.465,543	2.308.198,431	305.045.195,154	20.075.007,007									
22.00	1.155,419	132,07	152.597,666	17.442,821	2.303.695,574	304.252.006,131	20.153.767,983								γ	0,002232
23.00	1.123,387	120,03	134.840,369	14.407,238	1.729.303,015	207.568.508,671	16.184.910,309									
24.00	938,000	71,69	67.242,980	5.139,118	368.411,237	26.410.532,503	4.820.490,615									
Total	24.634,476	2.311,673	2.429.101,541	238.959,085	26.183.671,293	2.998.333.638,185	256.227.528,254									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

07 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	913,009	62,91	57.435,521	3.957,411	248.952,680	15.661.105,235	3.613.151,487									
02.00	906,203	60,88	55.168,534	3.706,223	225.630,246	13.736.088,771	3.358.591,724									
03.00	897,831	58,02	52.091,432	3.366,230	195.306,079	11.331.507,296	3.022.304,514									
04.00	939,789	70,89	66.625,112	5.025,917	356.305,838	25.259.839,382	4.723.300,731								α	790,3584
05.00	956,170	76,13	72.791,625	5.795,525	441.203,753	33.588.112,369	5.541.506,046									
06.00	951,839	75,34	71.708,613	5.675,654	427.586,425	32.213.052,382	5.402.307,388									
07.00	952,516	75,38	71.799,025	5.681,882	428.290,386	32.283.784,077	5.412.085,556									
08.00	946,214	73,65	69.689,417	5.424,443	399.514,656	29.424.580,994	5.132.682,506									
09.00	957,127	76,77	73.477,539	5.893,458	452.434,090	34.732.850,510	5.640.787,134									
10.00	987,403	86,15	85.065,079	7.421,875	639.396,775	55.084.226,505	7.328.382,449									
11.00	1.035,575	99,24	102.775,574	9.849,556	977.518,529	97.013.758,685	10.199.954,712									
12.00	1.073,131	109,76	117.788,798	12.047,662	1.322.373,591	145.146.162,057	12.928.715,512									
13.00	1.089,602	114,10	124.321,081	13.018,284	1.485.356,242	169.475.725,194	14.184.748,912	1.711.079.925.469,000	1.352.392.629.913.540,000	790,374	1.989.318.124.965,000	1,1626	21.957.087.068,031	0,013	β	1,1629
14.00	1.089,688	114,07	124.296,839	13.011,152	1.484.135,789	169.290.082,747	14.178.097,644									
15.00	1.089,607	114,05	124.267,280	13.006,895	1.483.407,453	169.179.320,262	14.172.406,862									
16.00	1.101,869	117,67	129.656,531	13.846,156	1.629.272,910	191.716.039,573	15.256.643,969									
17.00	1.110,711	123,36	137.021,582	15.218,633	1.877.428,763	231.606.791,130	16.903.506,317									
18.00	1.118,400	125,13	139.943,654	15.657,120	1.959.150,617	245.145.410,529	17.510.927,606									
19.00	1.140,470	131,71	150.211,923	17.347,660	2.284.869,302	300.941.316,871	19.784.489,987									
20.00	1.161,101	132,04	153.315,686	17.435,454	2.302.236,247	303.995.053,156	20.244.321,243									
21.00	1.186,923	130,56	154.960,462	17.044,981	2.225.331,895	290.531.386,560	20.231.084,684								γ	0,012831
22.00	1.191,531	129,30	154.068,778	16.719,327	2.161.863,167	279.535.907,728	19.921.591,871									
23.00	1.158,234	128,95	149.350,307	16.627,211	2.144.021,291	276.464.130,071	19.258.205,603									
24.00	1.036,990	101,38	105.133,323	10.278,537	1.042.070,167	105.648.325,227	10.658.744,312									
Total	24.991,933	2.387,437	2.542.963,716	253.057,249	28.193.656,892	3.259.004.557,311	274.608.538,771									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

08 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	971,379	81,54	79.201,497	6.647,971	542.042,870	44.195.513,237	6.457.701,032									
02.00	919,409	65,32	60.058,132	4.267,038	278.733,901	18.207.614,782	3.923.151,545									
03.00	913,813	63,15	57.705,568	3.987,688	251.815,138	15.901.659,348	3.643.999,708									
04.00	940,795	71,20	66.984,359	5.069,404	360.940,266	25.698.855,317	4.769.269,339								α	742,4949
05.00	945,979	73,09	69.142,872	5.342,348	390.479,480	28.540.678,191	5.053.746,867									
06.00	916,281	64,24	58.859,587	4.126,454	265.072,969	17.027.618,931	3.780.991,400									
07.00	900,011	58,77	52.893,260	3.453,862	202.981,966	11.929.162,060	3.108.513,966									
08.00	928,361	67,12	62.313,184	4.505,327	302.405,337	20.297.969,807	4.182.568,785									
09.00	977,027	82,39	80.499,125	6.788,431	559.312,017	46.082.800,848	6.632.478,877									
10.00	1.049,274	102,67	107.728,644	10.541,065	1.082.247,812	111.114.044,330	11.060.466,135									
11.00	1.116,780	125,33	139.962,751	15.706,877	1.968.496,999	246.705.979,720	17.541.122,779									
12.00	1.121,226	128,79	144.399,824	16.586,211	2.136.096,048	275.102.393,338	18.596.887,170									
13.00	1.121,197	128,83	144.444,651	16.597,359	2.138.250,080	275.472.338,640	18.608.911,171	1.163.295.796.311,250	863.676.461.165.440,000	742,439	2.762.277.760.534,500	2,375	6.382.792.507,750	0,0055	β	2,3733
14.00	1.121,286	128,94	144.577,740	16.625,332	2.143.657,878	276.401.650,667	18.641.746,134									
15.00	1.121,106	128,87	144.479,300	16.608,019	2.140.310,383	275.826.302,521	18.619.351,370									
16.00	1.121,262	128,88	144.510,939	16.610,687	2.140.826,035	275.914.910,383	18.624.924,283									
17.00	1.120,880	129,01	144.606,925	16.644,095	2.147.287,832	277.025.884,822	18.656.027,738									
18.00	1.120,438	129,27	144.840,482	16.711,061	2.160.260,099	279.259.566,113	18.723.713,080									
19.00	1.137,700	129,35	147.156,411	16.730,276	2.163.987,116	279.902.145,651	19.034.029,789									
20.00	1.160,616	129,39	150.172,459	16.741,851	2.166.233,132	280.289.562,179	19.430.860,005									
21.00	1.184,974	129,37	153.297,791	16.736,091	2.165.115,370	280.096.742,029	19.831.835,478								γ	0,005493
22.00	1.185,898	129,32	153.361,941	16.724,015	2.162.772,402	279.692.674,741	19.832.975,219									
23.00	1.176,560	129,54	152.408,759	16.779,988	2.173.639,312	281.568.006,984	19.742.663,923									
24.00	1.107,355	120,95	133.931,992	14.628,347	1.769.265,064	213.988.550,074	16.198.767,099									
Total	25.379,604	2.525,320	2.737.538,191	285.159,796	33.812.229,506	4.136.242.624,713	314.696.702,892									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

09 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	991,666	87,43	86.698,058	7.643,417	668.238,268	58.421.825,554	7.579.719,761									
02.00	1.023,890	96,20	98.499,123	9.254,613	890.302,142	85.647.868,200	9.475.704,362									
03.00	958,826	77,88	74.675,985	6.065,715	472.414,254	36.792.897,461	5.815.967,303									
04.00	1.011,056	91,66	92.671,822	8.401,275	770.048,018	70.581.422,941	8.494.157,438								α	784,3966
05.00	1.075,698	110,59	118.963,843	12.230,638	1.352.613,377	149.588.510,485	13.156.474,971									
06.00	931,988	69,85	65.097,853	4.878,794	340.775,800	23.802.632,685	4.546.978,613									
07.00	906,931	60,98	55.307,360	3.718,926	226.791,288	13.830.413,260	3.372.808,781									
08.00	922,886	65,20	60.176,016	4.251,581	277.220,697	18.075.939,076	3.923.725,811									
09.00	1.020,516	94,33	96.264,617	8.898,023	839.344,635	79.174.821,275	9.080.577,322									
10.00	1.118,050	124,95	139.699,212	15.612,236	1.950.732,264	243.741.917,120	17.455.267,643									
11.00	1.124,301	129,73	145.850,541	16.828,717	2.183.114,501	283.205.719,002	18.920.540,934									
12.00	1.131,025	129,81	146.821,192	16.851,297	2.187.509,693	283.966.198,807	19.059.232,521									
13.00	1.139,216	129,74	147.803,010	16.832,726	2.183.894,605	283.340.659,662	19.176.109,610	1.164.169.282.649,500	913.157.274.824.448,000	784,385	1.516.689.173.599,500	1,3028	14.147.254.363,063	0,0122	β	1,3027
14.00	1.146,260	129,80	148.779,981	16.847,000	2.186.673,150	283.821.416,341	19.311.045,667									
15.00	1.175,104	129,71	152.419,127	16.823,882	2.182.173,792	283.043.018,646	19.769.813,890									
16.00	1.178,732	129,63	152.801,261	16.804,432	2.178.390,568	282.388.927,444	19.807.919,160									
17.00	1.181,705	129,83	153.414,917	16.854,536	2.188.140,447	284.075.377,166	19.917.094,609									
18.00	1.124,896	123,78	139.237,104	15.320,946	1.896.393,173	234.731.393,872	17.234.463,750									
19.00	1.139,912	129,70	147.845,871	16.821,940	2.181.795,978	282.977.680,520	19.175.524,180									
20.00	1.175,395	129,15	151.802,258	16.679,712	2.154.184,214	278.212.807,505	19.605.255,652									
21.00	1.176,804	129,40	152.276,269	16.743,879	2.166.626,735	280.357.468,813	19.704.265,946									
22.00	1.172,565	129,35	151.674,852	16.732,196	2.164.359,568	279.966.380,783	19.619.595,601								γ	0,012152
23.00	1.171,864	129,37	151.607,425	16.737,329	2.165.355,637	280.138.186,720	19.613.881,659									
24.00	1.079,241	112,72	121.655,427	12.706,502	1.432.316,477	161.455.180,371	13.713.379,111									
Total	26.078,529	2.670,788	2.952.043,123	310.540,314	37.239.409,281	4.561.338.663,709	347.529.504,294									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

10 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	1.017,898	94,84	96.537,041	8.994,547	853.039,109	80.901.875,556	9.155.532,970									
02.00	976,078	82,97	80.981,543	6.883,404	571.090,401	47.381.246,372	6.718.737,433									
03.00	958,184	77,33	74.095,155	5.979,729	462.404,690	35.757.156,418	5.729.682,470									
04.00	962,417	78,36	75.410,640	6.139,578	481.069,484	37.694.421,107	5.908.835,474									
05.00	991,555	87,09	86.354,854	7.584,723	660.555,878	57.528.018,524	7.520.671,297								α	701,627
06.00	959,006	77,69	74.500,717	6.035,013	468.832,072	36.421.381,708	5.787.614,002									
07.00	971,498	81,06	78.749,563	6.570,719	532.622,309	43.174.349,603	6.383.437,432									
08.00	978,095	82,93	81.111,723	6.877,092	570.305,096	47.294.394,544	6.726.451,914									
09.00	1.045,112	101,86	106.459,109	10.376,246	1.056.964,489	107.666.483,440	10.844.335,798									
10.00	1.086,929	113,11	122.941,057	12.793,557	1.447.061,491	163.675.112,585	13.905.691,974									
14.00	1.143,114	133,13	152.185,970	17.724,357	2.359.694,288	314.152.838,672	20.260.952,699	241.000.102.603,375	169.171.406.399.808,000	701,956	741.838.461.067,500	3,0782	697.462.093,891	0,0029	β	3,0848
15.00	1.149,340	132,05	151.769,915	17.437,116	2.302.565,486	304.053.019,540	20.041.167,716									
16.00	1.165,399	131,03	152.703,377	17.169,131	2.249.688,949	294.779.062,447	20.008.880,986									
17.00	1.165,534	130,92	152.589,271	17.139,493	2.243.866,217	293.762.223,384	19.976.664,874									
18.00	1.137,544	130,81	148.798,800	17.110,482	2.238.171,468	292.768.584,789	19.463.930,619									
19.00	1.146,728	128,73	147.623,531	16.572,595	2.133.466,199	274.650.897,321	19.004.254,814									
21.00	1.116,646	121,02	135.134,895	14.645,492	1.772.376,279	214.490.422,717	16.353.830,199									
22.00	1.173,957	130,07	152.692,520	16.917,295	2.200.373,439	286.194.879,071	19.860.182,153								γ	0,002861
23.00	1.152,489	128,92	148.584,527	16.621,619	2.142.939,784	276.278.203,637	19.156.238,816									
24.00	1.012,947	94,15	95.371,687	8.864,730	834.638,156	78.583.429,786	8.979.501,170									
Total	21.310,470	2.138,062	2.314.595,897	238.436,917	27.581.725,283	3.287.208.001,220	261.786.594,813									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

11 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^3)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	947,094	73,97	70.054,170	5.471,190	404.690,239	29.933.923,180	5.181.731,465									
02.00	943,596	72,55	68.460,277	5.263,874	381.907,503	27.708.366,309	4.966.968,202									
03.00	943,416	72,55	68.445,971	5.263,673	381.885,682	27.706.255,486	4.965.835,744									
04.00	943,591	72,58	68.488,634	5.268,285	382.387,684	27.754.827,174	4.971.107,271								α	732,7512
05.00	943,974	72,58	68.510,565	5.267,381	382.289,269	27.745.303,263	4.972.272,444									
06.00	944,031	72,56	68.500,004	5.265,122	382.043,412	27.721.514,487	4.970.439,994									
07.00	946,725	73,39	69.484,147	5.386,714	395.353,800	29.016.691,357	5.099.736,136									
08.00	952,540	75,01	71.447,950	5.626,176	422.007,362	31.653.861,916	5.359.156,630									
09.00	947,935	74,13	70.268,719	5.494,986	407.333,247	30.194.868,721	5.208.891,659									
10.00	941,881	72,19	67.995,329	5.211,536	376.225,871	27.160.111,045	4.908.648,830									
11.00	950,046	74,54	70.818,961	5.556,605	414.203,952	30.875.854,455	5.279.031,995									
12.00	973,412	82,11	79.922,982	6.741,403	553.509,931	45.446.511,982	6.562.160,012									
13.00	973,110	82,10	79.889,262	6.739,893	553.324,009	45.426.159,367	6.558.656,957	676.796.745.328,125	495.920.990.624.064,000	732,747	1.736.314.184.135,250	2,5655	3.135.085.943,555	0,0046	β	2,5654
14.00	1.002,869	90,35	90.610,809	8.163,404	737.576,315	66.641.170,457	8.186.827,891									
15.00	1.011,404	93,17	94.233,228	8.680,784	808.795,002	75.356.018,715	8.779.778,358									
16.00	1.029,305	97,80	100.667,318	9.565,085	935.477,280	91.490.849,279	9.845.389,719									
17.00	1.085,438	113,18	122.847,774	12.809,273	1.449.728,581	164.077.463,923	13.903.672,332									
18.00	1.093,820	115,23	126.044,782	13.278,776	1.530.160,734	176.325.884,369	14.524.590,283									
19.00	1.121,710	128,93	144.617,345	16.621,864	2.142.987,335	276.286.377,623	18.644.908,294									
20.00	1.138,866	128,88	146.781,572	16.611,068	2.140.899,836	275.927.592,614	18.917.786,445									
21.00	1.155,380	130,90	151.240,319	17.135,060	2.242.995,664	293.610.272,005	19.797.502,052									
22.00	1.156,899	130,50	150.977,998	17.030,867	2.222.568,425	290.050.434,454	19.702.985,756								γ	0,004635
23.00	1.150,164	132,05	151.874,579	17.436,160	2.302.376,113	304.019.677,826	20.054.438,665									
24.00	995,733	89,60	89.213,301	8.027,379	719.218,107	64.438.805,853	7.993.122,731									
Total	24.292,939	2.220,849	2.291.395,996	217.916,559	22.669.945,354	2.486.568.795,859	229.355.639,864									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

12 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^3)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	917,329	64,46	59.133,632	4.155,459	267.872,720	17.267.838,667	3.811.922,414									
02.00	918,004	64,44	59.156,282	4.152,524	267.588,979	17.243.455,376	3.812.035,607									
03.00	917,686	64,40	59.098,966	4.147,354	267.089,438	17.200.548,091	3.805.970,839									
04.00	917,743	64,43	59.128,029	4.150,921	267.434,011	17.230.141,721	3.809.479,268								α	920,2798
05.00	949,492	70,78	67.206,727	5.010,056	354.620,494	25.100.658,070	4.757.009,537									
06.00	972,929	48,71	47.395,094	2.373,037	115.599,682	5.631.302,429	2.308.796,203									
07.00	966,827	47,35	45.779,835	2.242,080	106.163,824	5.026.921,127	2.167.702,819									
08.00	867,407	42,46	36.832,806	1.803,118	76.566,073	3.251.236,009	1.564.036,662									
09.00	882,662	52,95	46.736,005	2.803,590	148.447,147	7.860.119,319	2.474.622,012									
10.00	899,080	57,82	51.983,066	3.342,928	193.281,597	11.175.166,647	3.005.559,922									
11.00	968,158	79,95	77.408,871	6.392,769	511.132,513	40.867.494,245	6.189.210,208									
12.00	983,763	85,11	83.732,036	7.244,406	616.600,897	52.481.415,063	7.126.774,826									
13.00	992,481	87,64	86.983,124	7.681,146	673.192,129	59.000.003,800	7.623.387,814	5.388.050.586.766,370	4.958.581.691.620.290,000	920,292	-7.579.728.878.172,500	-1,407	133.354.330.448,031	0,0248	β	-1,4064
14.00	992,462	87,63	86.965,123	7.678,252	672.811,696	58.955.552,055	7.620.374,148									
15.00	1.004,638	90,99	91.407,794	8.278,421	753.218,966	68.532.250,812	8.316.813,778									
16.00	1.016,134	94,12	95.642,805	8.859,364	833.880,557	78.488.337,568	9.002.302,232									
17.00	1.079,628	111,02	119.865,405	12.326,479	1.368.543,423	151.942.094,547	13.308.018,115									
18.00	1.129,408	125,86	142.146,123	15.840,484	1.993.667,278	250.920.941,139	17.890.366,783									
19.00	1.131,249	130,18	147.264,665	16.946,515	2.206.076,585	287.184.356,985	19.170.734,344									
20.00	1.155,678	128,34	148.324,559	16.472,239	2.114.116,757	271.334.671,059	19.036.600,157									
21.00	1.176,338	129,81	152.695,499	16.849,557	2.187.170,874	283.907.556,486	19.820.767,766									
22.00	1.144,557	131,07	150.013,625	17.178,565	2.251.543,461	295.103.105,233	19.661.839,708								γ	0,024747
23.00	1.100,522	116,09	127.760,319	13.477,030	1.564.556,698	181.630.345,206	14.831.773,636									
24.00	936,741	71,21	66.707,265	5.071,154	361.127,203	25.716.603,331	4.750.360,166									
Total	24.020,916	2.046,836	2.109.367,656	194.477,448	20.172.303,003	2.233.052.114,987	205.866.458,966									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

13 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	917,463	64,17	58.872,989	4.117,700	264.229,912	16.955.449,470	3.777.838,719									
02.00	905,996	60,59	54.891,934	3.670,828	222.405,813	13.474.981,553	3.325.757,496									
03.00	904,173	59,90	54.162,722	3.588,378	214.954,907	12.876.460,020	3.244.513,635									
04.00	900,678	60,24	54.252,630	3.628,296	218.551,675	13.164.534,849	3.267.925,733								α	777,8293
05.00	943,416	72,06	67.981,580	5.192,491	374.165,451	26.961.967,351	4.898.680,858									
06.00	945,951	73,13	69.179,786	5.348,369	391.139,859	28.605.053,622	5.059.293,892									
07.00	958,754	76,93	73.754,927	5.917,904	455.252,005	35.021.587,103	5.673.812,686									
08.00	971,104	81,04	78.701,644	6.568,039	532.296,468	43.139.136,367	6.378.251,888									
09.00	990,522	86,31	85.488,361	7.448,787	642.877,603	55.484.421,395	7.378.188,697									
10.00	1.013,199	93,03	94.254,973	8.654,035	805.059,541	74.892.328,818	8.768.263,829									
11.00	1.028,963	97,45	100.268,169	9.495,693	925.315,815	90.168.181,978	9.770.716,481									
12.00	1.028,556	97,46	100.244,748	9.498,778	925.766,817	90.226.784,426	9.770.020,991									
13.00	1.028,221	97,45	100.200,016	9.496,476	925.430,240	90.183.049,323	9.764.477,768	1.725.784.169.735,250	1.342.378.080.581.570,000	777,837	2.250.119.036.229,500	1,304	22.882.802.193,297	0,0133	β	1,3039
14.00	1.028,123	97,39	100.128,513	9.484,748	923.716,460	89.960.441,227	9.751.482,808									
15.00	1.028,000	97,38	100.101,724	9.481,930	923.304,866	89.906.998,486	9.747.425,639									
16.00	1.051,568	103,65	108.995,294	10.743,374	1.113.553,409	115.420.088,411	11.297.389,397									
17.00	1.092,869	114,60	125.245,207	13.133,659	1.505.145,879	172.492.993,173	14.353.373,238									
18.00	1.114,141	122,47	136.450,959	14.999,364	1.837.000,420	224.980.912,670	16.711.406,800									
19.00	1.119,854	130,81	146.483,747	17.110,250	2.238.125,937	292.760.643,891	19.160.975,381									
20.00	1.168,927	129,73	151.645,856	16.830,083	2.183.380,324	283.251.698,573	19.673.139,768									
21.00	1.191,759	126,23	150.434,338	15.933,727	2.011.296,337	253.883.659,864	18.989.156,250								γ	0,013259
22.00	1.188,888	125,65	149.389,478	15.789,116	1.983.977,480	249.296.195,519	18.771.497,548									
23.00	1.169,489	125,16	146.372,443	15.664,864	1.960.604,189	245.387.951,463	18.319.880,228									
24.00	1.011,927	92,63	93.730,882	8.579,603	794.695,515	73.609.581,659	8.681.930,258									
Total	24.702,541	2.285,444	2.401.232,920	230.376,492	24.372.246,924	2.682.105.101,211	246.535.399,987									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

14 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	944,311	73,06	68.992,536	5.337,949	389.997,294	28.493.696,349	5.040.682,066									
02.00	901,107	59,67	53.773,211	3.561,062	212.505,038	12.681.159,763	3.208.896,517									
03.00	898,310	58,11	52.202,050	3.376,937	196.238,624	11.403.705,347	3.033.535,313									
04.00	913,332	62,14	56.758,883	3.861,986	240.002,622	14.914.933,311	3.527.273,780								α	729,557
05.00	960,900	77,66	74.626,109	6.031,494	468.422,086	36.378.921,424	5.795.664,701									
06.00	967,606	79,76	77.176,043	6.361,629	507.402,343	40.470.318,651	6.155.547,129									
07.00	956,119	76,90	73.527,109	5.913,854	454.784,805	34.973.674,255	5.654.351,506									
08.00	921,706	65,39	60.265,737	4.275,199	279.533,876	18.277.323,357	3.940.475,420									
09.00	947,985	73,94	70.098,053	5.467,749	404.308,443	29.896.275,030	5.183.346,283									
10.00	958,362	76,64	73.448,546	5.873,639	450.153,728	34.499.632,418	5.629.072,175									
11.00	1.025,772	96,59	99.076,308	9.329,061	901.066,598	87.031.376,950	9.569.489,665	1.424.928.956.962,690	1.040.175.356.565.310,000	729,984	3.834.501.582.403,750	2,6910	5.098.269.140,883	0,0036	β	2,7031
12.00	1.054,571	104,45	110.145,327	10.908,890	1.139.385,898	119.003.879,632	11.504.198,191									
14.00	1.114,558	125,59	139.974,447	15.772,191	1.980.788,164	248.762.001,787	17.579.024,456									
15.00	1.111,471	130,06	144.559,104	16.915,891	2.200.099,492	286.147.371,530	18.801.516,807									
19.00	1.141,099	132,30	150.961,839	17.501,997	2.315.428,749	306.319.911,867	19.971.513,781									
20.00	1.153,294	132,30	152.583,434	17.503,899	2.315.806,117	306.386.478,862	20.187.139,459									
21.00	1.166,888	131,93	153.953,172	17.406,811	2.296.565,512	302.997.085,770	20.311.792,654									
22.00	1.175,217	131,55	154.597,312	17.304,855	2.276.417,658	299.458.005,450	20.336.954,662								γ	0,0035101
23.00	1.129,828	130,67	147.637,054	17.075,214	2.231.255,194	291.562.943,395	19.292.053,229									
24.00	1.036,103	100,22	103.842,930	10.044,953	1.006.750,502	100.901.078,086	10.407.607,007									
Total	20.478,537	1.918,943	2.018.199,201	199.825,259	22.266.912,741	2.610.559.773,235	215.130.134,802									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

15 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	975,212	82,56	80.517,348	6.816,809	562.822,747	46.468.878,189	6.647.831,635									
02.00	915,158	64,15	58.707,268	4.115,203	263.989,687	16.934.899,115	3.766.062,492									
03.00	901,753	59,15	53.334,593	3.498,183	206.901,606	12.237.287,056	3.154.498,106									
04.00	910,223	61,71	56.165,656	3.807,557	234.946,892	14.497.494,020	3.465.724,774									
05.00	916,858	63,91	58.598,516	4.084,785	261.068,130	16.685.471,263	3.745.167,449								α	781,7816
06.00	917,627	64,01	58.733,050	4.096,686	262.209,813	16.782.832,319	3.759.229,742									
07.00	915,484	63,61	58.234,664	4.046,335	257.390,683	16.372.830,393	3.704.354,270									
08.00	911,438	62,06	56.568,212	3.852,041	239.076,181	14.838.217,973	3.510.895,386									
09.00	914,865	63,49	58.082,872	4.030,719	255.902,053	16.246.694,989	3.687.562,049									
10.00	925,787	66,44	61.508,483	4.414,161	293.273,106	19.484.816,453	4.086.571,431									
11.00	1.004,303	90,35	90.736,583	8.162,734	737.485,489	66.630.228,942	8.197.855,246									
12.00	1.054,195	104,37	110.021,482	10.892,129	1.136.761,065	118.638.483,540	11.482.432,121									
13.00	1.068,657	108,44	115.881,108	11.758,402	1.275.036,032	138.260.018,414	12.565.702,995	2.268.735.544.952,750	1.773.716.521.990.270,000	781,808	2.976.875.762.677,000	1,3121	28.113.829.424,516	0,0124	β	1,3127
14.00	1.052,065	104,13	109.554,278	10.843,601	1.129.172,542	117.583.688,256	11.408.173,288									
15.00	1.049,981	103,58	108.757,729	10.728,950	1.111.311,623	115.110.376,746	11.265.195,881									
16.00	1.058,808	105,95	112.176,275	11.224,520	1.189.191,166	125.989.851,957	11.884.609,207									
17.00	1.059,852	106,22	112.577,681	11.282,723	1.198.452,675	127.299.838,406	11.958.019,658									
18.00	1.074,324	111,34	119.619,782	12.397,538	1.380.394,330	153.698.945,823	13.318.972,712									
19.00	1.133,472	133,20	150.976,311	17.741,730	2.363.164,559	314.768.999,144	20.109.755,792									
20.00	1.176,102	132,58	155.926,456	17.577,195	2.330.367,160	308.957.779,549	20.672.575,788									
21.00	1.179,680	128,36	151.418,782	16.475,216	2.114.689,843	271.432.745,194	19.435.481,614								γ	0,012389
22.00	1.179,766	127,07	149.909,902	16.146,151	2.051.651,128	260.698.191,086	19.048.677,363									
23.00	1.151,965	127,43	146.799,152	16.239,340	2.069.438,656	263.716.159,747	18.707.154,467									
24.00	1.050,807	106,43	111.842,150	11.328,299	1.205.721,681	128.330.364,308	11.903.861,505									
Total	24.498,382	2.240,527	2.346.648,332	225.561,009	24.130.418,844	2.701.665.092,881	241.486.364,972									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

16 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	922,985	66,97	61.810,535	4.484,720	300.332,974	20.112.714,492	4.139.331,201									
02.00	905,434	60,62	54.887,468	3.674,793	222.766,221	13.504.104,267	3.327.282,259									
03.00	905,764	60,63	54.920,026	3.676,472	222.918,938	13.516.449,292	3.330.016,504									
04.00	905,021	60,53	54.783,191	3.664,188	221.802,568	13.426.271,543	3.316.165,370								α	770,3652
05.00	910,240	61,90	56.347,715	3.832,134	237.225,337	14.685.252,871	3.488.162,145									
06.00	911,962	62,42	56.922,895	3.896,018	243.181,959	15.178.952,579	3.553.018,165									
07.00	954,859	75,30	71.898,512	5.669,716	426.915,518	32.145.677,828	5.413.779,315									
08.00	981,733	84,32	82.780,650	7.110,017	599.523,120	50.552.338,195	6.980.140,215									
09.00	994,580	88,18	87.705,059	7.776,247	685.732,994	60.470.012,920	7.734.097,792									
10.00	1021,274	95,57	97.607,472	9.134,434	873.016,591	83.437.893,177	9.328.759,526									
11.00	1081,019	111,61	120.650,437	12.456,351	1.390.228,743	155.160.683,653	13.465.556,883									
12.00	1103,549	117,74	129.929,687	13.862,237	1.632.112,068	192.161.612,591	15.297.661,674									
13.00	1103,932	117,70	129.930,658	13.852,824	1.630.450,048	191.900.746,371	15.292.581,491	2.083.135.951.031,120	1.604.712.737.034.370,000	770,335	3.342.847.065.232,500	1,605	21.904.552.875,875	0,0105	β	1,6041
14.00	1108,381	119,98	132.978,206	14.394,036	1.726.926,627	207.188.278,082	15.954.079,958									
15.00	1024,568	97,21	99.602,657	9.450,616	918.734,790	89.314.139,108	9.682.800,411									
16.00	982,338	84,64	83.141,617	7.163,325	606.278,247	51.313.225,503	7.036.809,494									
17.00	1044,333	101,88	106.396,482	10.379,507	1.057.462,817	107.734.170,927	10.839.659,424									
18.00	1058,467	105,86	112.046,565	11.205,792	1.186.216,180	125.569.777,496	11.860.959,680									
19.00	1120,268	129,08	144.604,696	16.661,771	2.150.709,479	277.614.619,089	18.665.644,099									
20.00	1155,803	129,46	149.633,010	16.760,505	2.169.854,724	280.914.534,824	19.371.844,081									
21.00	1161,936	129,53	150.502,063	16.777,226	2.173.102,601	281.475.311,683	19.494.070,446								γ	0,010518
22.00	1185,740	129,56	153.621,471	16.785,151	2.174.642,518	281.741.290,719	19.902.816,795									
23.00	1150,936	129,38	148.909,503	16.739,505	2.165.777,956	280.211.037,814	19.266.096,232									
24.00	999,281	90,55	90.482,060	8.198,782	742.376,173	67.220.029,605	8.192.890,555									
Total	24.694,404	2.310,615	2.432.092,636	237.606,369	25.758.289,188	2.906.549.124,630	254.934.223,713									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

17 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	900,031	59,06	53.156,686	3.488,197	206.016,278	12.167.519,436	3.139.484,961									
02.00	902,043	59,26	53.457,172	3.512,028	208.131,070	12.334.339,282	3.167.998,397									
03.00	901,576	59,23	53.400,178	3.508,174	207.788,591	12.307.285,185	3.162.884,042									
04.00	957,177	75,91	72.658,140	5.762,144	437.397,412	33.202.308,396	5.515.391,485								α	751,665
05.00	962,322	78,27	75.318,011	6.125,720	479.441,657	37.524.451,568	5.894.913,451									
06.00	942,043	72,45	68.255,086	5.249,628	380.358,175	27.558.590,833	4.945.375,496									
07.00	908,353	61,62	55.971,575	3.796,874	233.958,733	14.416.251,396	3.448.900,073									
08.00	916,173	63,44	58.119,881	4.024,337	255.294,515	16.195.286,918	3.686.989,319									
09.00	957,269	76,27	73.014,468	5.817,675	443.735,547	33.845.346,265	5.569.082,660									
10.00	987,213	85,67	84.574,466	7.339,332	628.759,887	53.865.798,639	7.245.486,318									
11.00	997,411	88,86	88.629,616	7.896,043	701.639,904	62.347.499,478	7.875.599,585									
12.00	994,766	88,12	87.656,437	7.764,719	684.208,706	60.290.857,536	7.724.078,505									
13.00	984,469	85,27	83.947,775	7.271,341	620.042,937	52.872.399,434	7.158.407,980	1.875.278.797.324,940	1.409.564.278.637.310,000	751,656	3.944.333.604.231,000	2,103	13.897.045.598,563	0,0074	β	2,1032
14.00	973,291	82,14	79.943,666	6.746,570	554.146,495	45.516.212,936	6.566.373,626									
15.00	980,170	83,98	82.310,996	7.052,013	592.201,702	49.730.886,555	6.912.169,922									
16.00	991,021	87,09	86.308,015	7.584,667	660.548,623	57.527.176,048	7.516.564,568									
17.00	990,830	87,07	86.272,183	7.581,288	660.107,295	57.475.934,774	7.511.770,262									
18.00	1.000,454	89,44	89.481,485	7.999,676	715.498,303	63.994.818,332	8.003.305,366									
19.00	1.122,172	128,69	144.414,254	16.561,559	2.131.335,485	274.285.229,406	18.584.918,724									
20.00	1.156,110	129,35	149.537,177	16.730,151	2.163.962,795	279.897.951,294	19.341.898,809									
21.00	1.154,112	129,36	149.296,799	16.734,191	2.164.746,634	280.033.140,371	19.313.138,449								γ	0,007411
22.00	1.165,228	129,45	150.838,048	16.757,153	2.169.203,740	280.802.169,815	19.525.898,142									
23.00	1.120,014	125,14	140.159,108	15.660,144	1.959.718,193	245.240.108,312	17.539.580,355									
24.00	1.019,572	95,76	97.637,183	9.170,530	878.196,338	84.098.612,250	9.350.018,066									
Total	23.983,819	2.120,898	2.164.358,405	200.134,155	20.136.439,017	2.147.530.174,458	208.700.228,561									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

18 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	944,018	73,392	69.283,015	5.386,325	395.310,992	29.012.502,249	5.084.790,609									
02.00	926,543	67,724	62.749,403	4.586,575	310.622,377	21.036.669,507	4.249.656,668									
03.00	910,015	62,198	56.600,740	3.868,540	240.613,844	14.965.600,496	3.520.429,463									
04.00	944,950	72,347	68.364,425	5.234,105	378.672,368	27.395.852,597	4.945.968,744								α	706,67
06.00	968,922	80,954	78.438,354	6.553,587	530.540,604	42.949.505,669	6.349.916,490									
07.00	943,301	72,592	68.475,907	5.269,563	382.526,779	27.768.289,278	4.970.786,084									
08.00	943,137	72,646	68.514,993	5.277,422	383.382,943	27.851.187,376	4.977.331,242									
09.00	920,950	66,104	60.878,298	4.369,716	288.854,989	19.094.421,145	4.024.288,689									
10.00	943,767	72,562	68.481,743	5.265,267	382.059,109	27.723.033,194	4.969.182,986									
11.00	945,672	73,612	69.612,319	5.418,653	398.875,210	29.361.803,502	5.124.267,381									
12.00	945,524	73,639	69.627,833	5.422,760	399.328,727	29.406.323,985	5.127.351,138	268.820.633.259,750	189.969.458.309.888,000	706,677	901.686.401.452,250	3,354	-383.662.138,328	-0,0014	β	3,3544
13.00	945,682	73,689	69.686,372	5.430,066	400.136,019	29.485.615,379	5.135.117,724									
14.00	945,653	73,677	69.672,681	5.428,270	399.937,545	29.466.116,478	5.133.259,813									
15.00	945,587	73,656	69.648,358	5.425,234	399.602,072	29.433.165,665	5.130.032,595									
16.00	945,965	73,691	69.708,659	5.430,298	400.161,712	29.488.139,746	5.136.869,976									
17.00	945,891	73,704	69.715,817	5.432,253	400.377,828	29.509.375,971	5.138.322,141									
19.00	1.127,494	130,325	146.940,944	16.984,674	2.213.532,142	288.479.159,190	19.150.117,239									
20.00	1.123,483	131,870	148.153,789	17.389,707	2.293.181,317	302.401.907,649	19.537.045,812									
21.00	1.119,686	131,252	146.960,806	17.227,041	2.261.080,489	296.770.933,905	19.288.873,497								γ	-0,00143
22.00	1.120,018	131,160	146.901,099	17.202,835	2.256.316,591	295.937.533,065	19.267.486,220									
23.00	1.103,048	125,712	138.666,577	15.803,555	1.986.699,461	249.752.339,572	17.432.079,008									
Total	20.659,307	1.806,505	1.817.082,130	168.406,447	17.101.813,117	1.877.289.475,617	173.693.173,520									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

19 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	944,825	73,42	69.371,596	5.390,896	395.814,228	29.061.757,056	5.093.451,251									
02.00	942,582	72,34	68.183,679	5.232,662	378.515,784	27.380.749,139	4.932.212,276									
03.00	942,691	72,36	68.210,545	5.235,573	378.831,662	27.411.219,576	4.935.527,870									
04.00	952,788	75,24	71.686,473	5.660,851	425.914,625	32.045.230,805	5.393.591,639									
05.00	1.011,177	92,56	93.594,495	8.567,347	792.993,300	73.399.430,508	8.663.103,035								α	713,4013
06.00	986,965	86,07	84.944,319	7.407,390	637.525,926	54.869.432,373	7.310.834,581									
07.00	943,237	73,10	68.949,184	5.343,391	390.593,921	28.551.831,575	5.040.082,217									
08.00	912,563	62,70	57.221,751	3.931,850	246.544,545	15.459.443,790	3.588.059,253									
09.00	920,147	64,85	59.667,345	4.204,930	272.670,494	17.681.435,715	3.869.154,707									
10.00	1.000,319	88,85	88.883,235	7.895,190	701.526,213	62.334.029,852	7.897.709,485									
11.00	1.041,321	101,39	105.582,513	10.280,505	1.042.369,393	105.688.775,873	10.705.309,141									
12.00	974,882	82,97	80.883,188	6.883,551	571.108,755	47.383.276,741	6.710.649,186									
13.00	975,238	82,95	80.893,288	6.880,239	570.696,604	47.337.688,932	6.709.872,267	1.092.737.927.757,750	779.441.241.514.112,000	713,292	3.366.426.449.012,500	3,0807	1.296.032.638,031	0,0012	β	3,0782
14.00	975,033	82,84	80.776,258	6.863,238	568.582,666	47.104.039,648	6.691.881,918									
15.00	974,854	82,95	80.860,446	6.880,071	570.675,729	47.335.380,244	6.707.066,309									
16.00	987,763	86,35	85.292,809	7.456,231	643.841,653	55.595.387,242	7.364.989,066									
17.00	1.010,426	92,82	93.783,583	8.614,796	799.590,212	74.214.703,884	8.704.609,855									
18.00	1.023,164	95,88	98.098,425	9.192,505	881.354,905	84.502.151,701	9.405.437,001									
19.00	1.143,960	132,03	151.039,589	17.432,498	2.301.650,904	303.892.003,201	19.942.087,274									
20.00	1.145,160	130,66	149.627,786	17.072,295	2.230.682,915	291.463.239,728	19.550.514,825									
21.00	1.149,401	131,98	151.701,379	17.419,505	2.299.077,993	303.439.144,928	20.021.998,782								γ	0,001199
22.00	1.123,706	132,40	148.783,548	17.530,896	2.321.165,762	307.332.301,208	19.699.579,814									
23.00	1.070,111	113,65	121.614,139	12.915,485	1.467.797,355	166.809.763,927	13.820.999,058									
24.00	939,731	72,42	68.052,476	5.244,219	379.770,532	27.501.835,770	4.928.154,907									
Total	24.092,044	2.182,770	2.227.702,050	209.536,114	21.269.296,076	2.277.794.253,418	217.686.875,718									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

20 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	911,370	62,535	56.992,682	3.910,645	244.552,811	15.293.147,527	3.564.046,086									
02.00	912,576	62,586	57.114,254	3.916,972	245.146,508	15.342.670,181	3.574.536,585									
03.00	912,608	62,603	57.132,240	3.919,169	245.352,792	15.359.886,508	3.576.664,931									
04.00	926,104	66,491	61.577,788	4.421,083	293.963,184	19.545.971,339	4.094.382,377									
05.00	970,699	80,707	78.342,131	6.513,614	525.693,986	42.427.164,887	6.322.755,468								α	704,4127
06.00	920,023	65,515	60.275,132	4.292,193	281.202,281	18.422.919,436	3.948.914,948									
07.00	915,695	63,618	58.254,405	4.047,211	257.474,194	16.379.913,734	3.706.010,762									
08.00	937,958	70,191	65.836,135	4.926,768	345.814,459	24.273.041,403	4.621.100,087									
09.00	946,470	73,701	69.755,634	5.431,813	400.329,099	29.504.587,376	5.141.048,180									
10.00	943,743	72,985	68.878,875	5.326,778	388.773,696	28.374.561,846	5.027.109,407									
11.00	927,610	67,764	62.858,978	4.592,017	311.175,367	21.086.618,832	4.259.602,299									
12.00	928,247	67,746	62.885,230	4.589,552	310.924,820	21.063.984,310	4.260.237,260									
13.00	927,878	67,660	62.780,345	4.577,892	309.740,742	20.957.096,424	4.247.725,848	847.971.226.699,625	603.352.868.381.312,000	711,525	2.677.895.056.124,750	3,1580	479.086.287,039	0,0006	β	3,3004
14.00	927,237	67,796	62.863,094	4.596,314	311.612,263	21.126.102,701	4.261.873,965									
15.00	926,912	67,798	62.842,963	4.596,594	311.640,742	21.128.677,080	4.260.638,905									
16.00	930,389	68,681	63.899,600	4.717,017	323.967,255	22.250.246,242	4.388.659,065									
17.00	942,334	72,671	68.480,532	5.281,103	383.784,126	27.890.053,278	4.976.562,505									
18.00	992,091	86,436	85.752,331	7.471,181	645.778,903	55.818.539,718	7.412.087,748									
19.00	1.127,185	124,788	140.659,423	15.572,098	1.943.214,331	242.490.245,373	17.552.638,140									
20.00	1.136,744	130,810	148.697,573	17.111,264	2.238.324,970	292.795.357,277	19.451.134,035									
21.00	1.136,432	131,450	149.383,604	17.279,011	2.271.320,023	298.564.228,354	19.636.422,936								γ	-0,00011
22.00	1.130,660	132,601	149.926,347	17.582,944	2.331.510,588	309.159.922,277	19.880.337,738									
23.00	1.051,442	107,996	113.551,227	11.663,065	1.259.560,513	136.027.082,304	12.263.040,859									
24.00	912,014	63,305	57.734,976	4.007,518	253.695,732	16.060.197,527	3.654.910,223									
Total	23.294,422	1.938,433	1.926.475,501	170.343,814	16.434.553,387	1.731.342.215,935	174.082.440,356									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

21 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	907,891	61,322	55.673,639	3.760,380	230.593,785	14.140.457,563	3.414.015,378									
02.00	907,726	61,321	55.662,474	3.760,237	230.580,651	14.139.383,736	3.413.265,936									
03.00	907,454	61,364	55.684,629	3.765,488	231.063,788	14.178.899,284	3.417.007,719									
04.00	954,962	74,950	71.574,288	5.617,480	421.029,321	31.556.085,412	5.364.482,282								α	730,1995
05.00	1.040,544	100,662	104.743,765	10.132,939	1.020.006,920	102.676.445,158	10.543.769,079									
06.00	932,733	69,860	65.160,551	4.880,392	340.943,186	23.818.222,853	4.552.103,062									
07.00	917,549	64,259	58.961,113	4.129,266	265.344,029	17.050.839,174	3.788.803,766									
08.00	928,610	67,587	62.761,673	4.567,956	308.732,859	20.866.221,137	4.241.851,508									
09.00	918,022	64,539	59.247,802	4.165,222	268.817,345	17.349.077,311	3.823.766,294									
10.00	930,036	68,262	63.485,684	4.659,636	318.073,848	21.712.205,961	4.333.629,601									
11.00	929,760	68,263	63.468,317	4.659,854	318.096,227	21.714.242,885	4.332.545,701									
12.00	943,784	72,409	68.338,868	5.243,124	379.651,577	27.490.350,544	4.948.377,788									
13.00	946,484	73,946	69.989,206	5.468,084	404.345,661	29.899.944,510	5.175.456,481	1.178.967.418.656,190	869.574.682.069.888,000	737,573	2.891.915.020.380,250	2,4529	6.234.144.915,367	0,005	β	2,6483
14.00	942,959	72,633	68.489,783	5.275,523	383.175,970	27.831.141,544	4.974.604,314									
15.00	943,304	72,774	68.648,115	5.296,068	385.416,547	28.048.338,642	4.995.804,120									
16.00	959,897	77,626	74.512,936	6.025,792	467.757,970	36.310.168,282	5.784.139,278									
17.00	975,569	82,745	80.723,275	6.846,710	566.529,979	46.877.437,353	6.679.435,183									
18.00	1.049,403	103,108	108.201,512	10.631,198	1.096.158,321	113.022.362,149	11.156.408,959									
19.00	1.137,436	130,844	148.827,160	17.120,276	2.240.093,451	293.103.844,700	19.473.211,171									
20.00	1.146,752	130,186	149.290,770	16.948,327	2.206.430,479	287.245.784,637	19.435.529,326									
21.00	1.166,586	128,387	149.774,673	16.483,260	2.116.238,835	271.697.873,726	19.229.143,494								γ	0,004202
22.00	1.129,442	128,084	144.663,477	16.405,507	2.101.282,767	269.140.671,614	18.529.074,683									
23.00	1.095,640	119,277	130.684,321	14.226,918	1.696.939,061	202.405.198,363	15.587.587,405									
24.00	984,274	85,650	84.303,361	7.335,978	628.328,852	53.816.568,552	7.220.610,018									
Total	23.696,820	2.040,057	2.062.871,390	187.405,616	18.625.631,428	1.986.091.765,088	194.414.622,545									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

22 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	946,251	73,665	69.705,161	5.426,466	399.738,158	29.446.531,222	5.134.799,295									
02.00	913,776	63,673	58.182,488	4.054,200	258.141,408	16.436.533,595	3.704.630,059									
03.00	898,408	58,319	52.393,985	3.401,070	198.345,957	11.567.276,986	3.055.548,735									
04.00	906,325	60,344	54.691,624	3.641,448	219.741,015	13.260.141,778	3.300.333,766								α	742,5574
05.00	944,038	72,477	68.420,847	5.252,881	380.711,834	27.592.761,575	4.958.921,581									
06.00	931,406	69,049	64.312,631	4.767,758	329.208,716	22.731.517,669	4.440.719,948									
07.00	915,324	63,701	58.307,192	4.057,836	258.488,801	16.466.032,794	3.714.234,921									
08.00	916,958	64,322	58.980,558	4.137,317	266.120,381	17.117.388,789	3.793.746,070									
09.00	917,436	64,588	59.255,512	4.171,628	269.437,707	17.402.480,898	3.827.203,439									
10.00	917,025	64,591	59.232,013	4.172,059	269.479,440	17.406.074,896	3.825.883,171									
11.00	916,830	64,597	59.224,047	4.172,715	269.542,980	17.411.547,311	3.825.669,285									
12.00	923,316	66,351	61.262,528	4.402,398	292.101,639	19.381.110,511	4.064.803,743									
13.00	929,572	68,627	63.793,588	4.709,639	323.207,548	22.180.704,000	4.377.950,631	1.767.237.805.981,870	1.312.286.544.843.520,000	742,564	3.954.441.385.092,000	2,2376	12.871.342.164,297	0,0073	β	2,2378
14.00	964,362	78,807	75.998,112	6.210,479	489.426,675	38.570.048,116	5.989.152,219									
15.00	1.013,631	93,483	94.757,402	8.739,104	816.959,210	76.371.941,427	8.858.222,835									
16.00	1.022,833	96,010	98.202,546	9.217,991	885.022,695	84.971.354,983	9.428.462,605									
17.00	1.049,595	103,407	108.535,906	10.693,087	1.105.744,217	114.342.118,816	11.223.414,335									
18.00	1.088,738	114,934	125.133,042	13.209,820	1.518.257,120	174.499.331,995	14.382.038,400									
19.00	1.130,233	132,994	150.313,838	17.687,327	2.352.303,296	312.841.545,540	19.990.795,192									
20.00	1.170,486	131,903	154.390,681	17.398,416	2.294.904,313	302.704.894,184	20.364.602,752									
21.00	1.191,924	128,070	152.649,391	16.401,861	2.100.582,235	269.021.042,264	19.549.769,373								γ	0,007283
22.00	1.184,938	127,865	151.512,042	16.349,449	2.090.521,744	267.304.488,902	19.373.081,951									
23.00	1.140,144	127,994	145.931,085	16.382,360	2.096.837,149	268.381.722,809	18.678.244,106									
24.00	1.118,951	127,705	142.895,295	16.308,490	2.082.670,764	265.966.840,461	18.248.400,475									
Total	24.052,501	2.117,474	2.188.081,517	204.965,799	21.567.494,999	2.423.375.431,519	218.110.628,887									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

23 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	1.059,716	106,513	112.873,442	11.344,999	1.208.388,878	128.709.012,707	12.022.478,448									
02.00	966,646	80,184	77.510,043	6.429,551	515.550,255	41.339.130,803	6.215.102,736									
03.00	932,143	69,266	64.565,489	4.797,727	332.317,550	23.018.182,928	4.472.168,959									
04.00	973,291	80,618	78.465,184	6.499,337	523.966,523	42.241.375,731	6.325.742,557								α	740,1868
05.00	1.011,630	93,000	94.081,311	8.648,957	804.350,984	74.804.455,047	8.749.540,098									
06.00	932,480	69,993	65.266,959	4.899,003	342.895,329	24.000.231,249	4.568.222,323									
07.00	900,225	58,768	52.903,992	3.453,620	202.960,617	11.927.489,186	3.109.035,654									
08.00	940,541	70,932	66.714,066	5.031,294	356.877,850	25.313.923,207	4.732.136,655									
09.00	964,816	79,325	76.534,386	6.292,517	499.156,305	39.595.765,917	6.071.119,576									
10.00	971,018	81,319	78.962,096	6.612,767	537.743,060	43.728.685,182	6.421.112,428									
11.00	1.023,527	96,093	98.353,356	9.233,784	887.298,114	85.262.764,833	9.451.027,689									
12.00	1.032,079	98,659	101.823,497	9.733,518	960.295,156	94.741.367,846	10.045.762,872									
13.00	1.031,897	98,655	101.802,142	9.732,878	960.200,425	94.728.906,773	10.043.325,671	1.371.389.155.232,370	1.015.091.440.746.110,000	740,192	3.167.150.956.049.000	2,309	9.140.532.801,109	0,0067	β	2,3096
14.00	1.057,724	105,358	111.439,852	11.100,344	1.169.511,874	123.217.628,876	11.741.098,714									
15.00	1.105,968	118,189	130.713,436	13.968,683	1.650.947,245	195.124.106,703	15.448.914,286									
16.00	1.106,774	118,543	131.200,311	14.052,433	1.665.817,032	197.470.881,251	15.552.873,185									
17.00	1.111,457	119,746	133.092,531	14.339,092	1.717.048,220	205.609.568,822	15.937.291,496									
18.00	1.113,779	122,044	135.930,194	14.894,769	1.817.819,172	221.854.157,951	16.589.482,212									
19.00	1.132,060	133,699	151.355,425	17.875,448	2.389.931,218	319.531.640,921	20.236.083,273									
20.00	1.168,486	132,814	155.191,388	17.639,593	2.342.787,145	311.155.233,275	20.611.608,973									
21.00	1.180,335	130,968	154.585,778	17.152,555	2.246.431,699	294.210.132,099	20.245.753,393								γ	0,006665
22.00	1.158,151	126,400	146.390,422	15.976,985	2.019.492,420	255.264.038,871	18.503.763,677									
23.00	1.152,382	129,014	148.673,273	16.644,574	2.147.380,548	277.041.833,651	19.180.911,495									
24.00	975,651	83,124	81.100,191	6.909,634	574.357,865	47.743.043,018	6.741.389,198									
Total	25.002,775	2.403,224	2.549.528,765	253.264,061	27.873.525,485	3.177.633.556,846	273.015.945,569									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

24 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	939,821	71,789	67.469,076	5.153,697	369.980,107	26.560.596,916	4.843.554,802									
02.00	914,548	63,540	58.110,143	4.037,302	256.529,223	16.299.806,921	3.692.304,921									
03.00	914,277	63,575	58.125,080	4.041,766	256.954,770	16.335.869,146	3.695.295,086									
04.00	927,062	67,079	62.186,511	4.499,609	301.829,874	20.246.484,672	4.171.416,917								α	740,1093
05.00	947,035	73,648	69.747,049	5.423,997	399.465,442	29.419.748,273	5.136.716,252									
06.00	910,551	62,657	57.052,635	3.925,936	245.988,467	15.412.969,810	3.574.763,293									
07.00	951,663	74,246	70.657,123	5.512,456	409.277,316	30.387.168,472	5.246.002,676									
08.00	979,147	82,870	81.141,852	6.867,424	569.102,836	47.161.506,145	6.724.218,726									
09.00	1.027,048	97,267	99.897,583	9.460,815	920.222,483	89.507.024,460	9.716.710,390									
10.00	1.011,626	93,069	94.151,151	8.661,869	806.152,863	75.027.970,885	8.762.568,672									
11.00	1.034,908	99,177	102.638,826	9.836,031	975.505,737	96.747.504,174	10.179.386,802									
12.00	1.068,684	108,284	115.721,318	11.725,405	1.269.672,772	137.485.134,101	12.530.756,990									
13.00	1.023,608	96,356	98.630,801	9.284,480	894.615,405	86.201.567,544	9.503.670,084	1.551.073.894.798,500	1.147.962.728.623.680,000	740,108	3.642.696.533.464,500	2,3485	9.666.589.968,641	0,00623	β	2,3485
14.00	1.020,058	94,666	96.564,848	8.961,653	848.363,864	80.311.218,564	9.141.408,480									
15.00	1.067,581	108,261	115.576,969	11.720,364	1.268.853,988	137.366.931,929	12.512.435,427									
16.00	1.077,321	110,816	119.384,925	12.280,282	1.360.857,027	150.805.321,587	13.229.811,524									
17.00	1.121,601	122,264	137.131,520	14.948,501	1.827.664,464	223.457.682,427	16.766.256,693									
18.00	1.121,049	122,603	137.443,599	15.031,415	1.842.891,566	225.943.426,134	16.850.952,242									
19.00	1.127,413	130,135	146.715,874	16.935,124	2.203.852,694	286.798.417,290	19.092.873,360									
20.00	1.164,975	130,675	152.232,628	17.075,833	2.231.376,546	291.584.086,676	19.892.927,442									
21.00	1.156,597	130,777	151.256,043	17.102,558	2.236.616,983	292.497.499,463	19.780.773,738									
22.00	1.168,193	130,681	152.660,336	17.077,455	2.231.694,484	291.639.483,139	19.949.765,467								γ	0,0062322
23.00	1.118,448	124,006	138.694,617	15.377,557	1.906.913,580	236.469.254,513	17.199.003,190									
24.00	934,255	70,556	65.917,541	4.978,185	351.242,049	24.782.322,434	4.650.894,608									
Total	24.727,472	2.328,996	2.449.108,047	239.919,713	25.985.624,539	2.928.448.995,675	256.844.467,781									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

25 Juni 2016																		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^3)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	910,459	62,130	56.567,043	3.860,166	239.833,018	14.900.881,568	3.514.523,628									
02.00	901,088	58,842	53.021,789	3.462,378	203.733,199	11.988.064,519	3.119.906,967									
03.00	902,485	59,307	53.524,100	3.517,377	208.606,787	12.371.943,060	3.174.379,516									
04.00	978,290	81,757	79.982,160	6.684,219	546.482,157	44.678.780,966	6.539.107,221								α	740,5423
05.00	1.003,381	90,628	90.933,927	8.213,348	744.355,370	67.459.083,181	8.241.116,556									
06.00	914,390	63,931	58.457,856	4.087,174	261.297,166	16.704.991,784	3.737.269,755									
07.00	947,897	73,387	69.563,461	5.385,680	395.239,885	29.005.544,276	5.105.066,869									
08.00	914,777	63,417	58.012,610	4.021,741	255.047,548	16.174.400,939	3.678.997,217									
09.00	960,750	76,972	73.950,952	5.924,701	456.036,545	35.102.080,875	5.692.158,512									
10.00	920,819	65,891	60.673,558	4.341,604	286.071,946	18.849.522,830	3.997.832,118									
11.00	914,760	63,560	58.142,416	4.039,912	256.778,047	16.320.890,688	3.695.549,609									
12.00	914,664	63,559	58.135,313	4.039,773	256.764,746	16.319.763,421	3.695.034,332									
13.00	914,595	63,566	58.137,277	4.040,654	256.848,764	16.326.883,964	3.695.562,161	1.635.608.553.227,120	1.211.228.997.199.680,000	740,537	3.889.239.502.785,750	2,3779	9.478.805.477,469	0,0058	β	2,3778
14.00	914,135	63,575	58.116,040	4.041,769	256.955,047	16.335.892,637	3.694.721,689									
15.00	928,046	67,445	62.592,379	4.548,878	306.800,758	20.692.290,730	4.221.566,155									
16.00	986,010	85,460	84.264,821	7.303,486	624.159,059	53.340.903,963	7.201.308,143									
17.00	1.033,081	98,711	101.976,441	9.743,853	961.825,031	94.942.668,400	10.066.192,002									
18.00	1.055,254	104,880	110.674,738	10.999,756	1.153.651,363	120.994.634,352	11.607.535,785									
19.00	1.124,266	129,251	145.312,382	16.705,792	2.159.238,513	279.083.497,633	18.781.754,539									
20.00	1.148,994	129,752	149.084,461	16.835,620	2.184.457,792	283.438.088,326	19.344.028,864									
21.00	1.182,193	129,652	153.273,371	16.809,566	2.179.388,892	282.561.493,509	19.872.154,384								γ	0,005796
22.00	1.136,616	129,401	147.078,984	16.744,572	2.166.761,399	280.380.702,782	19.032.141,218									
23.00	1.098,496	120,974	132.889,933	14.634,813	1.770.438,204	214.177.755,776	16.076.284,131									
24.00	941,400	72,686	68.426,953	5.283,305	384.024,133	27.913.311,160	4.973.705,189									
Total	23.646,846	2.018,736	2.042.792,963	185.270,136	18.514.795,371	1.990.064.071,340	192.757.896,559									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

26 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	911,399	62,37	56.843,693	3.889,978	242.616,686	15.131.926,472	3.545.323,242									
02.00	911,591	62,38	56.865,732	3.891,360	242.745,996	15.142.680,741	3.547.327,826									
03.00	911,408	62,38	56.851,353	3.890,953	242.707,964	15.139.517,584	3.546.245,605									
04.00	936,477	69,50	65.086,888	4.830,507	335.729,161	23.333.797,255	4.523.659,038								α	717,73
06.00	951,578	75,75	72.083,772	5.738,334	434.689,082	32.928.476,902	5.460.474,913									
07.00	911,362	62,24	56.721,285	3.873,562	241.082,511	15.004.479,744	3.530.216,115									
08.00	911,611	62,25	56.743,901	3.874,535	241.173,423	15.012.024,493	3.532.067,559									
09.00	922,729	65,67	60.597,553	4.312,825	283.232,332	18.600.463,707	3.979.568,905									
10.00	930,214	68,21	63.450,634	4.652,713	317.365,288	21.647.740,128	4.328.018,475									
11.00	930,317	68,25	63.498,006	4.658,632	317.971,045	21.702.849,804	4.334.003,694	254.101.316.489,625	182.382.550.530.784,000	717,755	795.936.149.135,375	3,1324	-85.997.615,434	-0,00034	β	3,133
12.00	930,060	68,23	63.457,925	4.655,320	317.632,048	21.672.004,754	4.329.728,265									
13.00	903,632	60,00	54.219,346	3.600,192	216.017,260	12.961.380,820	3.253.247,424									
14.00	912,630	62,59	57.123,307	3.917,757	245.220,247	15.348.823,814	3.575.461,582									
15.00	943,811	72,48	68.404,216	5.252,853	380.708,727	27.592.461,404	4.957.702,706									
20.00	1.126,895	132,35	149.146,543	17.516,985	2.318.403,518	306.844.754,135	19.739.805,439									
21.00	1.127,005	132,62	149.464,538	17.588,330	2.332.582,030	309.349.368,737	19.822.136,983									
22.00	1.126,545	132,48	149.241,022	17.550,090	2.324.978,989	308.005.668,930	19.770.966,119								γ	-0,00034
24.00	940,423	72,28	67.973,094	5.224,296	377.608,385	27.293.265,896	4.913.046,931									
Total	17.239,687	1.392,031	1.367.772,806	118.919,222	11.412.464,694	1.222.711.685,319	120.689.000,821									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

27 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	911,777	62,35	56.853,664	3.888,122	242.443,140	15.117.496,121	3.545.099,496									
02.00	911,867	62,35	56.857,455	3.887,867	242.419,219	15.115.507,444	3.545.219,251									
03.00	911,619	62,38	56.868,026	3.891,435	242.753,030	15.143.265,804	3.547.505,186									
04.00	910,822	62,41	56.846,967	3.895,363	243.120,634	15.173.849,068	3.547.980,622								α	765,4819
05.00	912,328	62,34	56.874,201	3.886,232	242.266,382	15.102.802,359	3.545.517,974									
06.00	912,484	62,33	56.873,444	3.884,799	242.132,319	15.091.660,109	3.544.816,693									
07.00	911,962	62,34	56.850,767	3.886,142	242.257,973	15.102.103,412	3.544.016,094									
08.00	940,886	70,96	66.761,355	5.034,732	357.243,676	25.348.527,337	4.737.108,404									
09.00	963,564	78,75	75.877,328	6.201,016	488.308,495	38.452.599,678	5.975.076,299									
10.00	963,023	79,18	76.252,620	6.269,552	496.426,311	39.307.285,683	6.037.720,913									
11.00	913,316	63,18	57.700,829	3.991,368	252.163,729	15.931.016,617	3.645.380,986									
12.00	913,791	63,21	57.764,660	3.996,044	252.607,016	15.968.368,416	3.651.550,873									
13.00	913,115	63,19	57.698,618	3.992,822	252.301,565	15.942.628,475	3.645.905,398	1.500.212.468.317,870	1.148.301.181.445.060,000	765,426	2.567.151.192.102,500	1,7112	15.225.464.948,797	0,01015	β	1,71
14.00	913,107	63,26	57.761,616	4.001,612	253.135,111	16.012.894,831	3.653.901,181									
15.00	948,830	74,32	70.513,398	5.522,890	410.439,963	30.502.318,634	5.240.284,400									
16.00	947,889	74,29	70.417,470	5.518,817	409.986,011	30.457.345,604	5.231.225,379									
17.00	959,062	77,50	74.329,094	6.006,538	465.517,819	36.078.495,033	5.760.642,727									
18.00	992,888	87,02	86.396,625	7.571,696	658.854,919	57.330.587,260	7.517.845,125									
19.00	1.135,914	131,19	149.019,089	17.210,462	2.257.817,306	296.200.006,316	19.549.613,180									
20.00	1.153,711	131,68	151.917,169	17.338,815	2.283.121,923	300.634.491,843	20.003.986,852									
21.00	1.162,942	131,91	153.403,530	17.400,209	2.295.259,057	302.767.284,887	20.235.437,137								γ	0,010155
22.00	1.190,870	130,76	155.713,217	17.097,080	2.235.542,508	292.310.159,337	20.360.406,926									
23.00	1.179,077	129,17	152.298,966	16.684,353	2.155.083,239	278.367.630,252	19.672.141,366									
24.00	1.070,794	110,24	118.044,892	12.152,981	1.339.751,400	147.694.943,173	13.013.334,819									
Total	23.645,640	1.996,292	2.029.894,998	183.210,948	18.560.952,747	2.045.153.267,694	192.751.717,280									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

28 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P^2	P^3	P^4	$H(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	H -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	928,905	68,57	63.690,919	4.701,245	322.343,767	22.101.701,132	4.367.007,519									
02.00	941,443	71,82	67.611,191	5.157,615	370.402,029	26.600.990,618	4.855.601,486									
03.00	948,602	73,97	70.166,171	5.471,257	404.697,621	29.934.651,185	5.190.047,480								α	784,845
04.00	1.002,049	89,69	89.869,366	8.043,504	721.386,421	64.697.964,525	8.059.986,865									
05.00	1.089,325	113,77	123.937,561	12.944,664	1.472.774,157	167.564.316,708	14.100.948,678									
06.00	1.088,914	113,76	123.880,076	12.942,435	1.472.393,805	167.506.619,991	14.093.194,894									
07.00	1.062,907	107,02	113.750,276	11.452,877	1.225.665,275	131.168.386,396	12.173.340,004								β	1,2955
08.00	1.018,033	94,74	96.445,253	8.975,066	850.269,255	80.551.809,519	9.136.917,072	162.089.476.280,312	127.228.849.071.032,000	784,930	209.771.521.425,312	1,2942	1.985.396.996,959	0,0122		
09.00	1.036,480	99,52	103.148,600	9.903,874	985.615,808	98.086.720,420	10.265.163,967									
10.00	1.094,619	115,04	125.927,974	13.234,829	1.522.570,826	175.160.699,953	14.487.097,570									
21.00	1.161,875	133,06	154.597,306	17.704,541	2.355.738,112	313.450.772,358	20.570.471,975								γ	0,012244
22.00	1.188,233	133,13	158.192,299	17.724,242	2.359.671,188	314.148.738,276	21.060.523,820									
24.00	1.004,642	91,15	91.573,379	8.308,366	757.309,492	69.028.939,339	8.346.935,185									
Total	13.566,028	1.305,232	1.382.790,372	136.564,513	14.820.837,757	1.660.002.310,419	146.707.236,515									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

29 Juni 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P²	P³	P⁴	H(P²)	Penyebut	α		β		γ		Hasil Matlab	
	H -> m³/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	962,622	78,61	75.672,032	6.179,584	485.779,153	38.187.259,995	5.948.603,462									
02.00	947,148	73,99	70.078,294	5.474,330	405.038,677	29.968.292,170	5.185.003,093									
03.00	956,707	75,97	72.681,032	5.771,444	438.456,716	33.309.565,637	5.521.579,448									
04.00	1.054,631	103,96	109.643,000	10.808,384	1.123.676,172	116.821.172,857	11.398.856,879								α	685,9121
05.00	1.123,717	127,08	142.803,615	16.149,715	2.052.330,434	260.813.287,745	18.147.701,647									
06.00	1.025,362	97,95	100.431,198	9.593,625	939.667,296	92.037.641,779	9.836.939,823									
07.00	920,256	66,08	60.809,979	4.366,493	288.535,395	19.066.257,839	4.018.289,473									
08.00	912,629	62,36	56.914,126	3.889,123	242.536,697	15.125.274,941	3.549.325,972									
09.00	947,967	72,86	69.069,505	5.308,680	386.794,066	28.182.081,702	5.032.451,638									
10.00	1.063,559	106,66	113.439,136	11.376,336	1.213.398,875	129.421.009,754	12.099.407,525									
11.00	1.084,466	112,69	122.212,490	12.699,877	1.431.196,486	161.286.870,396	13.772.581,313									
12.00	1.084,286	112,70	122.197,441	12.700,955	1.431.378,764	161.314.259,832	13.771.470,022									
13.00	1.084,456	112,70	122.214,573	12.700,537	1.431.308,166	161.303.651,448	13.773.174,380	1.063.346.117.456,500	729.318.588.481.536,000	685,871	3.740.713.419.647,500	3,518	501.944.458,734	0,0005	β	3,5171
14.00	1.100,418	116,65	128.362,006	13.606,849	1.587.217,194	185.146.346,309	14.973.222,601									
15.00	1.123,932	122,74	137.956,789	15.066,289	1.849.308,766	226.993.055,602	16.933.480,053									
16.00	1.123,587	122,79	137.964,946	15.077,331	1.851.342,178	227.325.904,342	16.940.685,773									
17.00	1.123,250	126,46	142.044,822	15.991,818	2.022.305,442	255.738.237,345	17.962.811,963									
18.00	1.122,793	132,44	148.703,251	17.540,476	2.323.068,766	307.668.301,694	19.694.327,355									
19.00	1.132,203	132,88	150.446,293	17.656,904	2.346.236,772	311.766.262,073	19.991.195,713									
20.00	1.165,755	131,64	153.459,757	17.329,040	2.281.191,632	300.295.639,858	20.201.413,655									
21.00	1.191,366	126,49	150.695,244	15.999,596	2.023.780,981	255.987.060,591	19.061.367,325								γ	0,000476
22.00	1.191,357	125,50	149.511,280	15.749,394	1.976.495,189	248.043.403,659	18.763.155,560									
23.00	1.145,642	125,15	143.373,597	15.661,745	1.960.018,817	245.290.269,842	17.942.760,601									
24.00	997,199	89,18	88.934,593	7.953,858	709.360,040	63.263.851,260	7.931.578,509									
Total	25.585,307	2.555,532	2.769.618,998	284.652,382	32.800.422,674	3.874.354.958,669	312.451.383,781									

Lampiran 3e. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok I (Lanjutan)

30 Juni 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PH	P²	P³	P⁴	H(P²)	Penyebut	α		β		γ		Hasil Matlab	
	H -> m³/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	913,691	63,69	58.191,631	4.056,227	258.335,091	16.452.978,732	3.706.138,692									
02.00	897,675	58,08	52.140,888	3.373,796	195.964,890	11.382.500,796	3.028.571,626									
03.00	897,895	58,07	52.144,369	3.372,593	195.860,068	11.374.383,525	3.028.233,671									
04.00	915,232	62,91	57.574,118	3.957,238	248.936,342	15.659.734,843	3.621.791,062								α	677,4348
05.00	948,615	73,73	69.937,949	5.435,582	400.745,898	29.545.552,383	5.156.273,183									
06.00	1048,217	102,45	107.384,668	10.494,984	1.075.158,967	110.144.692,554	11.001.025,568									
07.00	1029,351	97,93	100.802,254	9.589,880	939.117,156	91.965.802,713	9.871.356,444									
08.00	1012,186	93,11	94.244,416	8.669,434	807.209,261	75.159.090,236	8.775.078,387									
09.00	1085,430	113,03	122.690,099	12.776,604	1.444.186,027	163.241.603,327	13.868.108,489									
10.00	1132,360	132,21	149.707,713	17.479,100	2.310.886,406	305.518.934,195	19.792.639,162									
11.00	1127,197	132,12	148.923,523	17.455,275	2.306.163,198	304.686.620,108	19.675.539,451									
12.00	1128,682	132,32	149.347,703	17.508,703	2.316.759,611	306.554.689,676	19.761.756,201									
13.00	1139,522	132,70	151.215,997	17.609,620	2.336.818,499	310.098.721,704	20.066.550,864	1.816.704.586.701,250	1.230.481.799.127.680,000	677,315	6.665.232.494.679,000	3,6689	1.515.087.813,922	0,0008	β	3,6661
14.00	1160,473	131,99	153.173,048	17.421,855	2.299.543,276	303.521.026,853	20.217.597,651									
15.00	1172,082	129,83	152.175,876	16.856,832	2.188.587,713	284.152.801,555	19.757.582,158									
16.00	1190,025	127,86	152.152,702	16.347,334	2.090.116,049	267.235.325,658	19.453.741,304									
17.00	1194,721	128,35	153.345,873	16.474,470	2.114.546,282	271.408.176,290	19.682.389,600									
18.00	1194,202	128,03	152.892,593	16.391,442	2.098.580,941	268.679.356,309	19.574.695,831									
19.00	1197,448	127,56	152.740,554	16.270,287	2.075.357,017	264.722.236,682	19.482.826,642									
20.00	1191,958	127,41	151.869,399	16.233,740	2.068.368,357	263.534.319,269	19.349.937,642									
21.00	1190,701	127,92	152.310,162	16.362,595	2.093.043,640	267.734.524,870	19.482.961,613								γ	0,000848
22.00	1189,646	127,85	152.090,711	16.344,444	2.089.561,882	267.140.857,930	19.444.096,508									
23.00	1157,373	125,88	145.685,127	15.844,679	1.994.459,160	251.053.837,248	18.338.209,637									
24.00	1163,647	125,87	146.472,627	15.844,215	1.994.371,559	251.039.134,931	18.437.066,801									
Total	26.278,330	2.660,887	2.979.214,000	312.170,930	37.942.677,288	4.712.006.902,388	354.574.168,188									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II

Wednesday, June 01, 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	767.536	73.703	56,569.980	5,432.182	400,369.916	29,508,598.430	4,169,396.237									
02.00	767.713	73.695	56,576.399	5,430.906	400,228.869	29,494,738.463	4,169,379.583									
03.00	767.750	73.703	56,585.344	5,432.109	400,361.833	29,507,804.104	4,170,500.527									
04.00	766.719	73.684	56,495.163	5,429.377	400,059.873	29,478,134.073	4,162,806.901									
05.00	766.576	73.669	56,472.901	5,427.118	399,810.244	29,453,611.655	4,160,300.819								α	713.4621
06.00	766.415	73.678	56,467.632	5,428.390	399,950.817	29,467,420.330	4,160,400.175									
07.00	767.372	73.659	56,523.789	5,425.634	399,646.199	29,437,499.410	4,163,480.136									
08.00	766.892	73.625	56,462.459	5,420.641	399,094.666	29,383,344.785	4,157,048.532									
09.00	766.793	73.629	56,458.286	5,421.240	399,160.839	29,389,840.989	4,156,971.008									
10.00	766.436	73.637	56,438.215	5,422.441	399,293.517	29,402,866.973	4,155,953.597									
11.00	765.774	73.981	56,652.683	5,473.187	404,911.784	29,955,774.639	4,191,221.584									
12.00	774.981	78.600	60,913.292	6,177.917	485,582.559	38,166,655.618	4,787,767.993									
13.00	775.346	78.584	60,929.871	6,175.468	485,293.824	38,136,399.227	4,788,121.702	706,239,001,634.625	503,872,406,355,712.000	713.459	-421,056,575,224.250	-0.5962	12,566,581,913.820	0.0178	β	-0.59626
14.00	783.400	82.604	64,711.739	6,823.375	563,636.121	46,558,440.357	5,345,430.400									
15.00	795.097	88.604	70,448.856	7,850.687	695,603.109	61,633,290.229	6,242,057.720									
16.00	774.617	78.889	61,108.491	6,223.422	490,957.523	38,730,986.520	4,820,767.678									
17.00	765.488	73.561	56,310.272	5,411.264	398,059.629	29,281,782.583	4,142,256.677									
18.00	799.829	88.074	70,443.822	7,756.957	683,183.073	60,170,385.863	6,204,240.296									
19.00	930.170	133.797	124,453.882	17,901.612	2,395,180.359	320,467,723.755	16,651,544.524									
20.00	980.629	143.670	140,886.832	20,641.028	2,965,493.576	426,052,040.932	20,241,191.155									
21.00	1,010.914	142.304	143,857.240	20,250.448	2,881,721.157	410,080,646.386	20,471,470.557								γ	0.017794
22.00	930.050	123.167	114,551.043	15,170.001	1,868,436.764	230,128,923.157	14,108,857.541									
23.00	800.731	89.989	72,056.910	8,098.014	728,731.858	65,577,824.943	6,484,326.674									
24.00	767.530	73.552	56,453.226	5,409.865	397,905.249	29,266,641.740	4,152,235.586									
Total	19,324.759	2,086.056	1,718,828.326	193,633.282	19,442,673.359	2,118,731,375.159	164,257,727.604									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Thursday, June 02, 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	401.536	73.577	29,543.725	5,413.544	398,311.143	29,306,454.149	2,173,732.366									
02.00	400.983	73.560	29,496.208	5,411.025	398,033.168	29,279,187.321	2,169,731.208									
03.00	400.737	73.554	29,475.609	5,410.120	397,933.408	29,269,403.300	2,168,034.790									
04.00	397.366	71.395	28,370.138	5,097.304	363,924.119	25,982,510.958	2,025,497.606								α	313.002
05.00	394.934	69.934	27,619.497	4,890.823	342,036.877	23,920,150.603	1,931,553.504									
06.00	394.006	69.943	27,557.791	4,891.955	342,155.591	23,931,220.837	1,927,461.071									
07.00	394.262	69.928	27,569.779	4,889.859	341,935.735	23,910,719.988	1,927,886.427									
08.00	393.527	69.934	27,520.927	4,890.767	342,030.979	23,919,600.612	1,924,649.011									
09.00	413.045	80.311	33,172.161	6,449.889	517,998.352	41,601,070.263	2,664,096.148									
10.00	398.442	74.362	29,629.065	5,529.761	411,206.047	30,578,252.125	2,203,287.208									
11.00	398.116	74.178	29,531.297	5,502.314	408,148.324	30,275,455.738	2,190,560.210									
12.00	430.090	89.147	38,341.418	7,947.265	708,478.305	63,159,023.636	3,418,039.037									
13.00	438.467	93.641	41,058.687	8,768.716	821,115.106	76,890,388.637	3,844,793.947	13,278,015,584,398.500	4,156,070,451,980,860.000	313.004	5,849,510,504,103.000	0.4405	133,586,644,945.125	0.0101	β	0.44057
14.00	476.460	106.863	50,916.140	11,419.779	1,220,355.954	130,411,342.483	5,441,069.979									
15.00	507.462	118.673	60,222.135	14,083.317	1,671,311.662	198,339,824.566	7,146,750.588									
16.00	505.945	118.272	59,838.987	13,988.174	1,654,403.954	195,669,024.209	7,077,253.492									
17.00	452.140	99.966	45,198.738	9,993.271	998,990.810	99,865,463.928	4,518,352.823									
18.00	493.019	111.505	54,973.933	12,433.290	1,386,369.760	154,586,691.464	6,129,849.769									
19.00	647.348	161.357	104,454.060	26,036.024	4,201,090.169	677,874,562.842	16,854,375.307									
20.00	662.042	166.358	110,136.151	27,675.089	4,603,981.251	765,910,567.893	18,322,064.553									
21.00	666.208	167.152	111,357.962	27,939.756	4,670,183.078	780,629,946.776	18,613,694.332								γ	0.010061
22.00	667.714	167.195	111,638.359	27,954.122	4,673,785.634	781,432,948.732	18,665,360.157									
23.00	603.810	148.302	89,546.376	21,993.559	3,261,694.437	483,716,643.411	13,279,929.622									
24.00	455.645	99.699	45,427.246	9,939.826	990,987.551	98,800,148.762	4,529,036.372									
Total	11,393.307	2,448.806	1,242,596.388	278,549.549	35,126,461.413	4,819,260,603.233	151,147,059.528									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Friday, June 03, 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	818.136	72.549	59,354.879	5,263.348	381,850.242	27,702,827.267	4,306,133.046									
02.00	818.322	72.566	59,382.669	5,265.878	382,125.640	27,729,470.161	4,309,184.691									
03.00	817.818	72.557	59,338.298	5,264.499	381,975.597	27,714,953.766	4,305,401.199									
04.00	819.045	73.014	59,801.867	5,331.063	389,242.972	28,420,237.739	4,366,381.414								α	879.155
05.00	828.957	77.809	64,500.207	6,054.221	471,072.127	36,653,592.265	5,018,688.538									
06.00	825.175	76.420	63,059.963	5,840.033	446,295.963	34,105,986.137	4,819,049.280									
07.00	818.890	72.545	59,406.441	5,262.785	381,789.075	27,696,910.590	4,309,643.737									
08.00	814.248	70.193	57,154.627	4,927.079	345,847.191	24,276,104.793	4,011,863.507									
09.00	812.566	69.530	56,497.434	4,834.368	336,131.788	23,371,115.858	3,928,245.162									
10.00	813.227	70.823	57,595.326	5,015.924	355,243.680	25,159,488.894	4,079,084.447									
11.00	816.872	73.575	60,101.703	5,413.348	398,289.527	29,304,333.598	4,422,010.235									
12.00	816.239	73.580	60,059.215	5,414.083	398,370.717	29,312,298.607	4,419,184.362									
13.00	816.217	73.593	60,068.155	5,415.980	398,580.051	29,332,837.622	4,420,616.225	671,273,969,870.750	590,153,887,153,856.000	879.155	-2,190,496,330,168.500	-3.263	22,356,441,729.594	0.0333	β	-3.2632
14.00	816.429	73.589	60,080.031	5,415.306	398,505.721	29,325,544.288	4,421,215.313									
15.00	816.597	73.560	60,069.060	5,411.112	398,042.762	29,280,128.283	4,418,695.570									
16.00	816.139	73.589	60,058.559	5,415.295	398,504.406	29,325,415.172	4,419,630.379									
17.00	816.695	73.587	60,097.860	5,414.996	398,471.460	29,322,182.638	4,422,400.609									
18.00	827.338	76.934	63,650.591	5,918.875	455,364.077	35,033,082.807	4,896,908.951									
19.00	994.219	133.642	132,869.894	17,860.311	2,386,896.076	318,990,694.355	17,757,061.206									
20.00	1,099.765	147.553	162,273.910	21,771.960	3,212,523.430	474,018,259.883	23,944,042.212									
21.00	1,143.551	148.487	169,802.407	22,048.372	3,273,895.392	486,130,718.499	25,213,440.330								γ	0.033305
22.00	1,134.400	143.084	162,314.180	20,472.965	2,929,349.049	419,142,305.612	23,224,524.805									
23.00	879.463	89.668	78,859.903	8,040.399	720,968.661	64,648,013.251	7,071,231.181									
24.00	819.236	72.573	59,454.141	5,266.794	382,225.363	27,739,119.328	4,314,746.429									
Total	20,799.543	2,055.022	1,845,851.323	192,338.994	20,021,560.968	2,313,735,621.416	180,819,382.829									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Saturday, June 04, 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	752.324	72.568	54,594.331	5,266.050	382,144.423	27,731,287.596	3,961,777.315									
02.00	751.743	72.566	54,550.780	5,265.789	382,115.908	27,728,528.616	3,958,518.440									
03.00	752.258	72.562	54,585.300	5,265.232	382,055.313	27,722,665.894	3,960,814.006									
04.00	751.709	72.541	54,529.987	5,262.247	381,730.535	27,691,248.328	3,955,678.881								α	699.8838
05.00	752.445	72.537	54,580.309	5,261.656	381,666.192	27,685,025.118	3,959,106.839									
06.00	751.686	72.539	54,526.686	5,261.936	381,696.642	27,687,970.172	3,955,322.340									
07.00	752.992	72.532	54,616.093	5,260.901	381,584.005	27,677,076.631	3,961,418.119									
08.00	752.231	72.518	54,550.457	5,258.894	381,365.740	27,655,970.389	3,955,902.873									
09.00	752.124	72.535	54,555.542	5,261.367	381,634.717	27,681,981.074	3,957,201.539									
10.00	750.538	72.542	54,445.461	5,262.336	381,740.165	27,692,179.763	3,949,580.476									
11.00	749.254	72.551	54,358.821	5,263.595	381,877.149	27,705,430.050	3,943,767.025									
12.00	747.353	72.566	54,232.193	5,265.782	382,115.150	27,728,455.250	3,935,397.317									
13.00	746.834	72.566	54,194.864	5,265.845	382,122.022	27,729,120.136	3,932,712.105	1,020,217,682,497.940	714,463,576,170,944.000	700.305	-966,352,772,567.000	-0.947	23,006,860,225.789	0.0226	β	-0.94262
14.00	746.072	72.559	54,134.352	5,264.834	382,011.987	27,718,474.221	3,927,943.874									
15.00	746.306	72.582	54,168.387	5,268.148	382,372.784	27,753,385.201	3,931,650.434									
16.00	746.461	72.583	54,180.421	5,268.299	382,389.236	27,754,977.435	3,932,580.274									
17.00	749.521	73.435	55,041.223	5,392.728	396,016.071	29,081,518.575	4,041,963.112									
18.00	750.325	73.554	55,189.243	5,410.162	397,938.001	29,269,853.763	4,059,378.783									
19.00	845.801	109.289	92,436.852	11,944.113	1,305,361.677	142,661,836.834	10,102,342.772									
20.00	979.720	142.112	139,229.972	20,195.806	2,870,065.420	407,870,593.432	19,786,242.853									
21.00	1,108.328	153.422	170,042.394	23,538.430	3,611,322.291	554,057,704.142	26,088,310.867								γ	0.02254
22.00	939.636	117.294	110,213.932	13,757.943	1,613,727.752	189,281,000.939	12,927,461.463									
23.00	758.339	74.567	56,546.704	5,560.170	414,602.673	30,915,489.667	4,216,492.482									
24.00	758.288	74.573	56,547.876	5,561.146	414,711.839	30,926,343.735	4,216,949.870									
Total	18,892.288	1,979.094	1,606,052.183	175,583.410	17,134,367.692	1,857,408,116.962	148,618,514.059									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Sunday, June 05, 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	767.664	74.167	56,935.275	5,500.729	407,972.022	30,258,020.143	4,222,712.825									
02.00	763.848	72.770	55,584.967	5,295.432	385,347.083	28,041,598.561	4,044,902.386									
03.00	764.290	72.754	55,604.829	5,293.077	385,090.068	28,016,664.133	4,045,447.938									
04.00	763.897	72.752	55,574.926	5,292.835	385,063.662	28,014,102.602	4,043,179.950								α	703.8045
05.00	763.936	72.738	55,566.867	5,290.758	384,837.040	27,992,121.937	4,041,800.469									
06.00	763.379	72.744	55,530.967	5,291.643	384,933.631	28,001,490.046	4,039,527.025									
07.00	764.127	72.743	55,584.910	5,291.554	384,923.900	28,000,546.201	4,043,417.027									
08.00	762.201	72.724	55,430.004	5,288.725	384,615.268	27,970,615.746	4,031,070.687									
09.00	762.121	72.718	55,419.808	5,287.888	384,523.934	27,961,759.877	4,030,010.200									
10.00	760.617	72.741	55,328.164	5,291.278	384,893.802	27,997,627.052	4,024,635.611									
11.00	760.206	72.731	55,290.260	5,289.741	384,726.120	27,981,364.984	4,021,294.274									
12.00	759.113	72.742	55,219.597	5,291.432	384,910.613	27,999,257.498	4,016,796.758									
13.00	758.420	72.744	55,170.441	5,291.678	384,937.378	28,001,853.425	4,013,314.082	1,899,215,514,477.500	1,336,685,834,825,220.000	703.809	-1,496,546,072,680.000	-0.788	41,108,137,254.844	0.0216	β	-0.78801
14.00	757.800	72.747	55,127.704	5,292.135	384,987.323	28,006,697.792	4,010,378.669									
15.00	757.348	72.746	55,093.710	5,291.915	384,963.286	28,004,366.381	4,007,822.285									
16.00	758.044	72.746	55,144.597	5,291.962	384,968.367	28,004,859.138	4,011,541.756									
17.00	758.802	72.758	55,208.748	5,293.692	385,157.162	28,023,172.722	4,016,864.867									
18.00	764.047	74.662	57,045.362	5,574.430	416,198.706	31,074,272.296	4,259,126.911									
19.00	1,018.495	153.050	155,880.719	23,424.318	3,585,093.152	548,698,693.311	23,857,552.123									
20.00	1,168.555	162.799	190,239.291	26,503.435	4,314,726.240	702,432,064.422	30,970,719.844									
21.00	1,125.750	152.247	171,391.759	23,179.053	3,528,934.064	537,268,516.427	26,093,827.244									
22.00	973.069	127.369	123,938.512	16,222.797	2,066,277.223	263,179,132.555	15,785,892.444								γ	0.021645
23.00	805.615	92.279	74,341.549	8,515.456	785,799.698	72,512,989.530	6,860,180.724									
24.00	764.347	74.103	56,640.352	5,491.245	406,917.369	30,153,771.382	4,197,216.294									
Total	19,565.690	2,074.571	1,772,293.315	199,077.211	21,670,797.111	2,663,595,558.162	180,689,232.393									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Monday, June 06, 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	825.597	73.558	60,729.669	5,410.851	398,013.997	29,277,307.057	4,467,182.510									
02.00	824.391	73.550	60,634.261	5,409.654	397,881.928	29,264,354.647	4,459,671.073									
03.00	824.423	73.561	60,645.068	5,411.160	398,048.152	29,280,656.887	4,461,086.985									
04.00	825.248	73.547	60,694.646	5,409.186	397,830.273	29,259,289.143	4,463,919.241								α	864.309
05.00	825.282	73.561	60,708.534	5,411.210	398,053.639	29,281,195.052	4,465,776.103									
06.00	825.379	73.557	60,712.067	5,410.567	397,982.637	29,274,231.326	4,465,770.406									
07.00	825.486	73.557	60,720.158	5,410.614	397,987.912	29,274,748.707	4,466,385.342									
08.00	827.808	74.759	61,886.096	5,588.908	417,821.179	31,235,893.538	4,626,542.653									
09.00	824.500	73.547	60,639.482	5,409.159	397,827.320	29,258,999.524	4,459,851.044									
10.00	822.608	73.569	60,518.301	5,412.376	398,182.304	29,293,815.391	4,452,261.957									
11.00	821.175	73.587	60,428.058	5,415.092	398,482.003	29,323,217.083	4,446,738.011									
12.00	821.136	73.591	60,428.247	5,415.644	398,542.926	29,329,194.770	4,446,978.506									
13.00	819.767	73.581	60,319.081	5,414.126	398,375.460	29,312,763.907	4,438,323.019	1,029,352,364,979.250	889,673,144,554,560.000	864.304	-2,992,090,861,589.000	-2.9068	32,834,429,836.906	0.0319	β	-2.9069
14.00	819.125	73.561	60,256.013	5,411.283	398,061.642	29,281,980.021	4,432,517.937									
15.00	819.958	73.573	60,326.683	5,412.971	398,248.003	29,300,260.105	4,438,408.988									
16.00	820.577	73.569	60,369.000	5,412.389	398,183.717	29,293,953.959	4,441,283.335									
17.00	819.259	72.714	59,571.181	5,287.256	384,454.947	27,955,071.299	4,331,630.112									
18.00	832.429	77.342	64,381.688	5,981.778	462,642.405	35,781,668.080	4,979,405.601									
19.00	1,013.263	137.196	139,016.120	18,822.863	2,582,429.871	354,300,187.443	19,072,516.896									
20.00	1,142.623	150.224	171,648.971	22,567.146	3,390,119.030	509,276,061.444	25,785,735.342									
21.00	1,123.793	142.457	160,091.582	20,293.860	2,890,992.564	411,840,734.245	22,806,089.358								γ	0.031899
22.00	1,108.550	140.716	155,990.480	19,800.929	2,786,302.998	392,076,780.194	21,950,320.975									
23.00	957.090	113.043	108,192.038	12,778.662	1,444,535.091	163,294,213.327	12,230,325.035									
24.00	866.992	93.610	81,158.987	8,762.802	820,284.533	76,786,704.710	7,597,279.870									
Total	21,036.459	2,105.529	1,910,066.412	201,060.485	21,151,284.530	2,441,853,281.863	190,186,000.298									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Tuesday, June 07, 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	887.520	91.194	80,936.280	8,316.308	758,395.709	69,160,982.851	7,380,886.485									
02.00	855.445	75.612	64,682.028	5,717.200	432,289.866	32,686,373.535	4,890,748.266									
03.00	855.600	75.566	64,654.498	5,710.258	431,502.760	32,607,044.563	4,885,697.861									
04.00	854.985	75.545	64,589.531	5,706.994	431,132.858	32,569,780.431	4,879,393.460								α	862.3632
05.00	855.548	75.583	64,665.192	5,712.839	431,795.402	32,636,533.101	4,887,610.369									
06.00	855.623	75.563	64,653.171	5,709.718	431,441.606	32,600,883.140	4,885,366.763									
07.00	855.279	75.555	64,620.523	5,708.544	431,308.475	32,587,470.827	4,882,397.464									
08.00	859.347	77.974	67,006.537	6,079.911	474,073.648	36,965,315.766	5,224,753.197									
09.00	859.740	78.560	67,541.352	6,171.703	484,850.159	38,089,919.631	5,306,061.291									
10.00	876.681	86.875	76,161.749	7,547.283	655,671.011	56,961,485.928	6,616,559.686									
11.00	878.281	88.605	77,819.984	7,850.823	695,621.174	61,635,424.367	6,895,229.605									
12.00	877.518	88.596	77,744.161	7,849.168	695,401.264	61,609,445.632	6,887,785.359									
13.00	877.140	88.590	77,705.383	7,848.105	695,259.894	61,592,746.573	6,883,883.294	2,200,328,387,389.750	1,897,470,659,796,100.000	862.358	-5,114,472,715,568.000	-2.3244	63,913,302,253.234	0.029	β	-2.3245
14.00	876.845	88.621	77,706.647	7,853.628	695,994.029	61,679,477.337	6,886,417.369									
15.00	876.786	88.620	77,700.795	7,853.509	695,978.125	61,677,598.175	6,885,846.281									
16.00	877.610	88.639	77,790.369	7,856.845	696,421.699	61,730,016.457	6,895,248.585									
17.00	879.735	88.634	77,974.691	7,856.030	696,313.281	61,717,203.296	6,911,228.017									
18.00	896.776	93.651	83,983.737	8,770.467	821,361.041	76,921,096.371	7,865,141.850									
19.00	1,100.825	150.282	165,434.216	22,584.687	3,394,072.502	510,068,088.609	24,861,789.012									
20.00	1,193.189	155.214	185,199.910	24,091.459	3,739,337.412	580,398,399.498	28,745,662.495									
21.00	1,223.719	154.267	188,779.793	23,798.398	3,671,314.389	566,363,732.590	29,122,547.615									
22.00	1,231.756	154.491	190,294.927	23,867.408	3,687,295.060	569,653,174.738	29,398,816.109								γ	0.029048
23.00	992.868	106.833	106,071.081	11,413.301	1,219,317.711	130,263,429.954	11,331,897.146									
24.00	854.817	75.007	64,117.304	5,626.054	421,993.558	31,652,481.353	4,809,248.231									
Total	22,253.633	2,298.076	2,207,833.857	237,500.640	26,788,142.633	3,293,828,104.721	238,220,215.812									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Wednesday, June 08, 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	893.578	75.073	67,083.840	5,636.003	423,113.451	31,764,530.667	5,036,206.440									
02.00	892.635	75.059	67,000.546	5,633.895	422,876.073	31,740,771.898	5,029,012.462									
03.00	893.488	75.047	67,053.685	5,632.072	422,670.852	31,720,235.255	5,032,186.739									
04.00	892.951	75.077	67,040.396	5,636.611	423,181.932	31,771,385.660	5,033,216.468								α	990.4138
05.00	892.417	75.070	66,993.580	5,635.479	423,054.394	31,758,619.339	5,029,196.309									
06.00	891.868	75.067	66,949.847	5,635.048	423,005.959	31,753,771.413	5,025,721.506									
07.00	891.646	74.602	66,518.615	5,565.467	415,195.296	30,974,423.572	4,962,425.550									
08.00	890.807	74.548	66,408.307	5,557.471	414,300.812	30,885,481.704	4,950,636.059									
09.00	895.563	76.969	68,930.801	5,924.266	455,986.286	35,096,922.893	5,305,552.125									
10.00	896.562	78.586	70,457.313	6,175.778	485,330.414	38,140,233.193	5,536,966.712									
11.00	897.253	78.929	70,818.973	6,229.732	491,704.357	38,809,562.119	5,589,646.071									
12.00	917.395	88.634	81,312.543	7,856.017	696,311.607	61,717,005.543	7,207,070.230									
13.00	916.471	88.619	81,216.819	7,853.338	695,955.460	61,674,920.094	7,197,358.317	1,974,833,609,573.500	1,955,893,058,599,680.000	990.409	-8,121,770,189,021.000	-4.113	73,786,568,686.922	0.0374	β	-4.1127
14.00	915.802	88.618	81,156.046	7,853.063	695,918.825	61,670,591.365	7,191,846.460									
15.00	917.164	88.623	81,281.491	7,853.968	696,039.172	61,684,811.608	7,203,378.255									
16.00	916.515	88.623	81,224.031	7,853.987	696,041.646	61,685,103.945	7,198,294.552									
17.00	917.683	88.618	81,323.340	7,853.171	695,933.291	61,672,300.560	7,206,721.626									
18.00	944.027	97.166	91,726.983	9,441.164	917,356.905	89,135,583.665	8,912,712.328									
19.00	1,120.985	144.913	162,445.443	20,999.796	3,043,144.862	440,991,449.165	23,540,467.066									
20.00	1,232.551	154.208	190,068.994	23,780.033	3,667,065.517	565,489,951.760	29,310,113.458									
21.00	1,249.107	152.641	190,664.706	23,299.212	3,556,410.218	542,853,279.492	29,103,212.057								γ	0.037364
22.00	1,249.938	152.409	190,501.734	23,228.504	3,540,233.166	539,563,407.158	29,034,179.392									
23.00	1,167.553	136.719	159,626.503	18,692.058	2,555,557.556	349,393,017.965	21,823,959.910									
24.00	907.694	78.974	71,684.039	6,236.854	492,547.816	38,898,351.493	5,661,157.842									
Total	23,201.652	2,282.792	2,289,488.574	236,062.987	26,748,935.870	3,300,845,711.528	247,121,237.932									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Thursday, June 09, 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^3)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	945.049	73.557	69,515.339	5,410.693	397,996.580	29,275,598.819	5,113,368.501									
02.00	946.077	73.546	69,580.016	5,408.991	397,808.853	29,257,188.656	5,117,321.173									
03.00	945.172	73.542	69,509.620	5,408.386	397,742.067	29,250,639.681	5,111,857.711									
04.00	944.590	73.544	69,469.118	5,408.751	397,782.355	29,254,590.255	5,109,051.601								α	1003.923
05.00	944.890	73.539	69,486.560	5,408.028	397,702.592	29,246,769.047	5,109,992.796									
06.00	943.977	73.557	69,435.880	5,410.597	397,986.013	29,274,562.449	5,107,478.535									
07.00	945.303	73.546	69,523.084	5,408.992	397,808.967	29,257,199.795	5,113,134.505									
08.00	944.685	73.531	69,463.988	5,406.867	397,574.484	29,234,208.441	5,107,784.274									
09.00	967.956	84.273	81,572.337	7,101.896	598,496.297	50,436,927.583	6,874,324.958									
10.00	1,003.947	100.361	100,756.864	10,072.277	1,010,861.075	101,450,758.491	10,112,032.710									
11.00	1,027.590	109.346	112,362.436	11,956.463	1,307,386.785	142,957,009.439	12,286,339.388									
12.00	1,056.376	115.650	122,170.242	13,375.009	1,546,824.874	178,890,878.294	14,129,034.455									
13.00	1,061.990	113.869	120,927.747	12,966.159	1,476,444.111	168,121,278.014	13,769,926.868	2,442,821,352,684.000	2,452,230,048,426,620.000	1.003.852	-7,793,029,156,115.000	-3.1902	79,156,816,658.406	0.0324	β	-3.1917
14.00	1,108.857	123.301	136,722.679	15,203.033	1,874,542.790	231,132,213.261	16,857,985.642									
15.00	1,165.166	133.329	155,349.977	17,776.508	2,370,116.495	316,004,250.121	20,712,590.805									
16.00	1,173.657	133.707	156,925.830	17,877.482	2,390,339.072	319,604,349.248	20,982,034.848									
17.00	1,170.340	133.647	156,413.060	17,861.653	2,387,165.116	319,038,635.478	20,904,213.531									
18.00	1,040.137	107.756	112,081.277	11,611.403	1,251,200.821	134,824,668.427	12,077,454.490									
19.00	1,166.027	141.214	164,659.672	19,941.470	2,816,020.076	397,662,216.556	23,252,295.162									
20.00	1,199.277	143.473	172,064.082	20,584.560	2,953,332.753	423,724,109.532	24,686,585.015									
21.00	1,212.550	143.593	174,114.224	20,619.091	2,960,767.271	425,146,911.388	25,001,669.446								γ	0.032412
22.00	1,219.289	143.394	174,839.239	20,561.973	2,948,473.059	422,794,716.900	25,070,979.187									
23.00	1,187.346	135.966	161,439.081	18,486.841	2,513,587.738	341,763,279.740	21,950,278.043									
24.00	1,019.489	103.763	105,785.294	10,766.764	1,117,191.917	115,923,204.975	10,976,601.350									
Total	25,339.736	2,555.005	2,764,167.647	290,033.887	34,705,152.162	4,323,526,164.591	320,534,334.995									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Friday, June 10, 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^3)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	1,021.376	88.962	90,863.178	7,914.161	704,056.230	62,633,948.967	8,083,331.160									
02.00	1,009.596	83.584	84,385.926	6,986.259	583,938.339	48,807,809.834	7,053,299.899									
03.00	990.007	74.235	73,493.485	5,510.886	409,102.507	30,369,864.525	5,455,814.010									
04.00	989.544	73.548	72,779.468	5,409.376	397,851.223	29,261,343.593	5,352,817.585								α	952.0665
05.00	990.241	73.569	72,851.209	5,412.427	398,187.971	29,294,371.258	5,359,605.330									
06.00	990.071	73.534	72,803.881	5,407.251	397,616.854	29,238,362.521	5,353,561.461									
07.00	989.863	73.544	72,798.435	5,408.716	397,778.477	29,254,209.977	5,353,886.226									
08.00	989.222	73.550	72,756.952	5,409.554	397,870.957	29,263,278.789	5,351,250.005									
09.00	988.573	73.547	72,706.946	5,409.217	397,833.778	29,259,632.870	5,347,405.515									
10.00	988.473	73.765	72,914.829	5,441.294	401,377.789	29,607,684.790	5,378,571.842									
11.00	1,019.015	86.992	88,646.019	7,567.589	658,318.932	57,268,410.049	7,711,485.042									
12.00	1,050.665	100.350	105,434.204	10,070.113	1,010,535.403	101,407,181.226	10,580,317.571									
13.00	1,043.503	96.649	100,853.815	9,341.082	902,808.782	87,255,812.397	9,747,447.901	2,811,644,391,199.620	2,676,874,378,979,330.000	952.067	-3,646,002,218,608.000	-1.2968	67,822,417,301.578	0.0241	β	-1.2967
14.00	1,106.614	112.276	124,246.615	12,605.996	1,415,356.159	158,911,131.000	13,949,965.929									
15.00	1,153.512	120.894	139,452.971	14,615.429	1,766,921.955	213,610,775.219	16,859,067.884									
16.00	1,174.408	123.584	145,137.826	15,272.959	1,887,490.489	233,263,271.595	17,936,685.957									
17.00	1,173.224	123.519	144,915.459	15,256.950	1,884,523.531	232,774,509.173	17,899,816.160									
18.00	1,130.474	115.147	130,170.674	13,258.836	1,526,715.359	175,796,719.452	14,988,764.853									
19.00	1,323.382	155.374	205,619.269	24,141.091	3,750,898.752	582,792,277.709	31,947,895.754									
20.00	1,269.237	139.755	177,381.795	19,531.360	2,729,598.278	381,474,032.827	24,789,929.374									
21.00	1,126.941	120.872	136,215.159	14,609.937	1,765,926.086	213,450,263.804	16,464,540.553								γ	0.024122
22.00	1,236.840	142.138	175,801.649	20,203.123	2,871,625.162	408,166,164.175	24,988,040.098									
23.00	1,076.870	101.786	109,610.257	10,360.389	1,054,542.480	107,337,655.634	11,156,789.066									
24.00	1,016.972	86.979	88,455.232	7,565.350	658,026.767	57,234,524.679	7,693,749.544									
Total	25,848.622	2,388.153	2,630,295.254	252,709.346	28,368,902.259	3,357,733,236.065	284,804,038.716									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Saturday, June 11, 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	825.495	74.552	61,542.356	5,558.010	414,361.052	30,891,469.615	4,588,109.331									
02.00	824.870	74.565	61,506.703	5,559.984	414,581.822	30,913,416.706	4,586,265.549									
03.00	823.966	74.538	61,417.014	5,555.950	414,130.777	30,868,581.700	4,577,916.494									
04.00	824.325	74.542	61,447.198	5,556.578	414,200.986	30,875,559.567	4,580,425.141								α	832.9065
05.00	824.315	74.569	61,468.676	5,560.597	414,650.431	30,920,237.970	4,583,682.884									
06.00	824.462	74.554	61,467.176	5,558.337	414,397.669	30,895,109.523	4,582,639.534									
07.00	823.968	74.538	61,417.159	5,555.951	414,130.910	30,868,594.952	4,577,927.811									
08.00	826.189	75.457	62,341.887	5,693.782	429,636.626	32,419,157.923	4,704,141.462									
09.00	848.722	87.585	74,335.128	7,671.097	671,871.444	58,845,724.052	6,510,627.123									
10.00	848.425	87.583	74,307.792	7,670.816	671,834.601	58,841,421.505	6,508,113.940									
11.00	846.004	87.607	74,116.118	7,675.035	672,388.870	58,906,156.617	6,493,111.151									
12.00	845.983	87.601	74,108.959	7,673.943	672,245.434	58,889,402.473	6,492,022.247									
13.00	846.036	87.609	74,120.012	7,675.271	672,419.977	58,909,790.290	6,493,552.418	1,848,297,151,949.370	1,539,458,733,508,100.000	832.907	-4,178,106,226,830.000	-2.2605	52,206,359,017.703	0.0282	β	-2.2605
14.00	845.281	87.614	74,058.203	7,676.158	672,536.517	58,923,403.940	6,488,512.249									
15.00	844.643	87.610	73,999.600	7,675.599	672,462.990	58,914,814.773	6,483,141.522									
16.00	844.597	87.635	74,016.574	7,679.964	673,036.705	58,981,842.183	6,486,472.214									
17.00	845.993	87.631	74,135.277	7,679.213	672,938.007	58,970,309.872	6,496,557.238									
18.00	848.303	88.318	74,920.622	7,800.115	688,892.566	60,841,792.029	6,616,858.897									
19.00	921.407	113.555	104,630.723	12,894.835	1,464,278.495	166,276,769.707	11,881,386.463									
20.00	1,104.222	153.196	169,162.870	23,469.156	3,595,391.590	550,801,267.531	25,915,153.076									
21.00	1,174.358	153.680	180,475.095	23,617.478	3,629,529.108	557,785,274.723	27,735,374.891									
22.00	1,098.382	137.414	150,933.228	18,882.647	2,594,742.713	356,554,346.262	20,740,360.188								γ	0.028246
23.00	905.187	96.279	87,150.771	9,269.707	892,481.020	85,927,462.108	8,390,816.599									
24.00	818.968	72.555	59,420.180	5,264.221	381,945.306	27,712,023.366	4,311,228.330									
Total	21,084.100	2,200.791	1,986,499.322	214,874.442	22,629,085.615	2,584,733,929.385	200,824,396.752									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Sunday, June 12, 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	792.236	72.564	57,487.896	5,265.548	382,089.733	27,725,996.038	4,171,557.234									
02.00	790.760	72.557	57,374.881	5,264.471	381,972.470	27,714,651.243	4,162,930.391									
03.00	790.732	72.551	57,368.452	5,263.662	381,884.476	27,706,138.821	4,162,144.332									
04.00	790.333	72.538	57,328.873	5,261.712	381,672.253	27,685,611.362	4,158,502.179								α	770.9804
05.00	792.339	72.556	57,489.022	5,264.390	381,963.721	27,713,804.801	4,171,180.240									
06.00	792.748	72.558	57,519.938	5,264.619	381,988.580	27,716,209.723	4,173,513.920									
07.00	792.135	72.542	57,463.078	5,262.347	381,741.317	27,692,291.231	4,168,488.465									
08.00	792.407	72.522	57,466.855	5,259.423	381,423.265	27,661,532.647	4,167,604.410									
09.00	789.516	72.538	57,269.801	5,261.738	381,675.079	27,685,884.641	4,154,227.494									
10.00	789.367	72.536	57,257.494	5,261.460	381,644.898	27,682,965.705	4,153,225.276									
11.00	788.777	72.937	57,530.681	5,319.745	388,004.033	28,299,688.352	4,196,091.282									
12.00	788.591	73.558	58,006.853	5,410.717	397,999.177	29,275,853.537	4,266,843.291									
13.00	788.523	73.530	57,979.777	5,406.603	397,545.353	29,231,352.371	4,263,230.012	733,057,355,771.750	565,188,392,318,528.000	771.002	-1,166,497,949,822.500	-1.591	18,818,214,661.422	0.0257	β	-1.5908
14.00	788.893	73.565	58,035.213	5,411.864	398,125.785	29,288,271.494	4,269,382.026									
15.00	788.636	73.555	58,007.977	5,410.307	397,953.972	29,271,420.078	4,266,764.475									
16.00	789.669	73.549	58,079.361	5,409.450	397,859.402	29,262,145.669	4,271,676.654									
17.00	792.861	73.542	58,308.834	5,408.470	397,751.380	29,251,552.907	4,288,165.960									
18.00	808.437	79.619	64,367.291	6,339.248	504,727.114	40,186,067.987	5,124,884.841									
19.00	998.707	139.513	139,332.729	19,463.928	2,715,474.464	378,844,480.450	19,438,752.250									
20.00	1,129.980	154.490	174,570.364	23,867.075	3,687,217.873	569,637,275.289	26,969,327.580									
21.00	1,133.485	149.838	169,838.818	22,451.348	3,364,059.226	504,063,028.303	25,448,264.424									
22.00	1,095.384	143.371	157,046.667	20,555.343	2,947,047.172	422,522,119.839	22,515,992.032								γ	0.025669
23.00	852.203	88.217	75,179.146	7,782.309	686,535.008	60,564,329.956	6,632,108.446									
24.00	792.481	72.548	57,492.602	5,263.152	381,828.989	27,700,771.443	4,170,949.462									
Total	20,249.200	2,067.293	1,817,802.601	196,128.928	20,880,184.743	2,484,383,443.888	181,765,806.675									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Monday, June 13, 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	848.675	72.554	61,574.714	5,264.078	381,929.688	27,710,512.421	4,467,489.486									
02.00	847.181	72.547	61,460.051	5,263.004	381,812.900	27,699,215.141	4,458,715.685									
03.00	847.435	72.548	61,480.165	5,263.285	381,843.390	27,702,164.381	4,460,293.606									
04.00	848.530	72.542	61,553.979	5,262.323	381,738.760	27,692,043.863	4,465,240.818								α	864.715
05.00	848.266	72.561	61,551.450	5,265.169	382,048.457	27,722,002.652	4,466,264.480									
06.00	847.882	72.533	61,499.046	5,260.974	381,591.991	27,677,848.965	4,460,684.071									
07.00	848.335	72.525	61,525.145	5,259.811	381,465.489	27,665,615.627	4,462,083.918									
08.00	848.240	72.505	61,501.373	5,256.930	381,152.054	27,635,310.733	4,459,137.855									
09.00	847.838	72.534	61,497.241	5,261.210	381,617.608	27,680,326.343	4,460,652.942									
10.00	847.651	72.563	61,508.264	5,265.417	382,075.500	27,724,619.013	4,463,236.160									
11.00	846.918	72.549	61,443.223	5,263.383	381,854.127	27,703,203.010	4,457,655.313									
12.00	845.588	72.571	61,365.314	5,266.577	382,201.758	27,736,835.220	4,453,353.677									
13.00	844.234	72.573	61,268.419	5,266.812	382,227.322	27,739,308.913	4,446,420.994	3,597,569,586,865.500	3,110,133,072,608,260.000	864.509	-8,464,367,526,543.000	-2.353	104,467,768,980.328	0.0290	β	-2.356
14.00	844.419	72.572	61,280.923	5,266.656	382,210.384	27,737,669.958	4,447,262.808									
15.00	844.638	72.591	61,313.229	5,269.473	382,517.065	27,767,349.029	4,450,797.034									
16.00	844.303	72.573	61,273.717	5,266.865	382,233.105	27,739,868.498	4,446,827.939									
17.00	844.740	72.579	61,310.714	5,267.767	382,331.314	27,749,372.033	4,449,893.989									
18.00	862.391	78.608	67,790.573	6,179.169	485,730.195	38,182,128.630	5,328,860.350									
19.00	1,019.496	132.151	134,727.560	17,463.938	2,307,880.216	304,989,123.878	17,804,407.757									
20.00	1,239.689	164.943	204,478.410	27,206.297	4,487,496.761	740,182,587.382	33,727,346.643									
21.00	1,232.423	156.910	193,379.301	24,620.680	3,863,225.556	606,177,883.717	30,343,104.127								γ	0.029051
22.00	1,226.874	156.829	192,409.172	24,595.255	3,857,242.868	604,926,550.362	30,175,288.514									
23.00	1,073.458	128.494	137,932.798	16,510.678	2,121,521.123	272,602,486.977	17,723,520.837									
24.00	895.861	95.279	85,357.080	9,078.165	864,962.189	82,413,083.539	8,132,771.892									
Total	21,945.065	2,146.634	2,060,481.860	215,143.916	24,480,909.820	3,120,557,110.284	219,011,310.893									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Tuesday, June 14, 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	874.096	81.212	70,987.330	6,595.428	535,629.436	43,499,665.240	5,765,039.918									
02.00	859.378	73.528	63,188.217	5,406.341	397,516.466	29,228,520.360	4,646,092.035									
03.00	860.026	73.554	63,258.636	5,410.241	397,946.669	29,270,703.768	4,652,947.074									
04.00	860.359	73.542	63,272.317	5,408.392	397,742.716	29,250,703.320	4,653,158.190								α	878.2815
05.00	859.199	73.553	63,196.713	5,410.057	397,926.381	29,268,714.085	4,648,313.406									
06.00	859.486	73.545	63,211.174	5,408.913	397,800.221	29,256,342.128	4,648,885.613									
07.00	859.598	73.540	63,214.645	5,408.104	397,710.899	29,247,583.551	4,648,792.904									
08.00	859.823	73.518	63,212.617	5,404.921	397,359.941	29,213,176.066	4,647,276.007									
09.00	858.415	73.525	63,114.712	5,405.885	397,466.157	29,223,588.288	4,640,491.562									
10.00	857.985	73.565	63,117.330	5,411.756	398,113.836	29,287,099.430	4,643,203.402									
11.00	856.930	73.560	63,036.114	5,411.127	398,044.499	29,280,298.645	4,636,959.535									
12.00	855.472	73.570	62,936.954	5,412.518	398,197.941	29,295,349.220	4,630,260.102									
13.00	854.742	73.574	62,886.635	5,413.112	398,263.544	29,301,784.629	4,626,812.257	730,192,827,263.375	641,322,533,275,136.000	878.292	-1,851,308,756,984.500	-2.5354	22,439,010,529.359	0.0307	β	-2.5352
14.00	854.836	73.573	62,892.576	5,412.945	398,245.031	29,299,968.589	4,627,177.639									
15.00	867.062	78.978	68,478.702	6,237.499	492,624.233	38,906,398.379	5,408,300.050									
16.00	863.786	77.584	67,015.880	6,019.261	466,997.695	36,231,500.137	5,199,352.997									
17.00	864.398	77.560	67,042.686	6,015.555	466,566.500	36,186,901.911	5,199,831.301									
18.00	899.727	90.496	81,421.985	8,189.590	741,128.068	67,069,388.762	7,368,392.863									
19.00	1,065.204	135.810	144,665.571	18,444.420	2,504,941.061	340,196,636.602	19,647,065.382									
20.00	1,174.967	147.594	173,417.725	21,783.898	3,215,165.985	474,538,221.371	25,595,362.403									
21.00	1,145.592	139.388	159,682.003	19,429.079	2,708,185.060	377,489,130.173	22,257,792.213									
22.00	1,061.459	127.125	134,938.115	16,160.807	2,054,445.233	261,171,685.082	17,154,029.908									
23.00	913.484	92.499	84,496.013	8,556.002	791,418.729	73,205,171.966	7,815,767.944									
24.00	862.675	74.551	64,313.345	5,557.864	414,344.812	30,889,855.296	4,794,629.674									
Total	21,748.697	2,078.944	1,936,997.994	193,313.715	19,563,781.111	2,159,808,386.997	186,555,934.379									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Wednesday, June 15, 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	779.171	74.551	58,087.843	5,557.828	414,340.727	30,889,449.240	4,330,497.479									
02.00	779.340	74.559	58,106.615	5,559.010	414,472.995	30,902,597.541	4,332,357.839									
03.00	779.284	74.530	58,080.227	5,554.760	413,997.665	30,855,353.176	4,328,734.374									
04.00	778.195	74.533	58,001.599	5,555.242	414,051.643	30,860,717.280	4,323,062.078								α	811.7867
05.00	778.648	74.558	58,054.768	5,558.961	414,467.442	30,902,045.466	4,328,472.895									
06.00	778.955	74.551	58,072.125	5,557.897	414,348.447	30,890,216.606	4,329,352.597									
07.00	778.136	74.540	58,001.928	5,556.153	414,153.462	30,870,836.290	4,323,440.902									
08.00	777.829	74.517	57,961.492	5,552.780	413,776.353	30,833,362.532	4,319,115.145									
09.00	780.376	76.191	59,457.289	5,805.000	442,286.153	33,698,025.716	4,530,083.599									
10.00	774.289	73.542	56,943.030	5,408.480	397,752.451	29,251,657.914	4,187,725.362									
11.00	773.134	73.561	56,872.421	5,411.198	398,052.324	29,281,066.083	4,183,583.482									
12.00	771.623	73.591	56,784.403	5,415.621	398,540.440	29,328,950.863	4,178,815.506									
13.00	771.069	73.572	56,728.802	5,412.784	398,227.315	29,298,230.686	4,173,630.112	1,627,521,131,241.000	1,321,216,390,571,140.000	811.797	-4,626,991,890,438.000	-2.8430	51,675,942,749.766	0.0318	β	-2.8428
14.00	770.216	73.575	56,668.955	5,413.342	398,288.894	29,304,271.465	4,169,441.962									
15.00	770.666	73.582	56,706.906	5,414.268	398,391.118	29,314,300.073	4,172,591.166									
16.00	770.778	73.590	56,721.272	5,415.432	398,519.612	29,326,907.201	4,174,096.904									
17.00	770.509	73.586	56,698.939	5,414.954	398,466.863	29,321,731.571	4,172,269.342									
18.00	779.920	76.609	59,748.679	5,868.903	449,609.401	34,444,020.954	4,577,272.500									
19.00	980.672	141.829	139,087.507	20,115.411	2,852,944.854	404,629,773.619	19,726,615.647									
20.00	1,134.827	157.283	178,488.735	24,737.865	3,890,839.489	611,961,950.204	28,073,199.759									
21.00	1,168.381	156.687	183,070.101	24,550.827	3,846,796.353	602,743,118.682	28,684,711.501								γ	0.03175
22.00	1,171.242	156.614	183,432.478	24,527.824	3,841,391.248	601,614,169.962	28,728,023.506									
23.00	966.992	120.176	116,209.514	14,442.339	1,735,626.575	208,581,148.724	13,965,627.338									
24.00	778.015	75.769	58,949.516	5,740.962	434,987.728	32,958,644.343	4,466,553.896									
Total	20,162.265	2,146.096	1,896,935.144	213,547.842	23,994,329.550	3,012,062,546.191	200,779,274.893									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Thursday, June 16, 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	C ->m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	834.681	74.542	62,219.013	5,556.552	414,198.052	30,875,267.970	4,637,947.218									
02.00	834.301	74.543	62,191.256	5,556.649	414,208.920	30,876,348.213	4,635,918.714									
03.00	834.033	74.553	62,179.617	5,558.141	414,375.742	30,892,929.849	4,635,673.232									
04.00	832.833	74.527	62,068.787	5,554.314	413,947.907	30,850,408.685	4,625,817.453								α	772.7479
05.00	835.638	75.377	62,988.059	5,681.729	428,273.084	32,282,045.154	4,747,866.325									
06.00	833.015	75.010	62,484.762	5,626.558	422,050.237	31,658,149.951	4,687,005.944									
07.00	833.250	74.528	62,100.680	5,554.463	413,964.504	30,852,057.887	4,628,256.195									
08.00	832.866	74.531	62,073.967	5,554.806	414,002.847	30,855,868.193	4,626,408.108									
09.00	831.706	74.546	62,000.713	5,557.169	414,267.118	30,882,132.633	4,621,931.533									
10.00	831.261	74.576	61,991.891	5,561.542	414,756.152	30,930,749.869	4,623,091.608									
11.00	832.553	74.597	62,106.027	5,564.720	415,111.670	30,966,105.557	4,632,926.323									
12.00	831.989	74.609	62,073.980	5,566.527	415,313.902	30,986,221.785	4,631,287.595									
13.00	831.032	74.586	61,983.240	5,563.046	414,924.356	30,947,476.228	4,623,071.239	1,333,612,717,164.620	1,030,658,273,467,900.000	772.832	-1,039,492,768,053.500	-0.779	28,345,291,937.047	0.0213	β	-0.77892
14.00	828.536	74.599	61,807.753	5,564.973	415,140.017	30,968,925.091	4,610,780.959									
15.00	828.767	74.460	61,709.633	5,544.232	412,821.316	30,738,510.478	4,594,874.676									
16.00	829.971	74.590	61,907.423	5,563.647	414,991.600	30,954,163.691	4,617,665.792									
17.00	832.113	74.603	62,077.850	5,565.563	415,206.049	30,975,493.129	4,631,175.331									
18.00	832.100	75.067	62,463.574	5,635.114	423,013.364	31,754,512.526	4,688,977.998									
19.00	1,009.486	135.796	137,084.481	18,440.640	2,504,170.956	340,057,192.942	18,615,567.619									
20.00	1,137.206	157.183	178,749.629	24,706.565	3,883,457.387	610,414,336.783	28,096,442.194									
21.00	1,190.772	156.116	185,899.049	24,372.321	3,804,918.280	594,010,030.049	29,021,884.712								γ	0.021255
22.00	1,196.481	152.854	182,887.371	23,364.452	3,571,358.172	545,897,631.930	27,955,130.278									
23.00	936.519	98.688	92,423.652	9,739.409	961,167.176	94,856,094.952	9,121,146.602									
24.00	832.090	73.554	61,203.784	5,410.239	397,946.474	29,270,684.666	4,501,803.067									
Total	21,283.198	2,118.037	1,956,676.193	206,363.370	22,613,585.281	2,773,753,338.212	200,812,650.714									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Friday, June 17, 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	772.003	73.566	56,793.091	5,411.945	398,134.731	29,289,148.974	4,178,036.173									
02.00	771.750	73.562	56,771.641	5,411.405	398,075.132	29,283,303.201	4,176,249.744									
03.00	771.404	73.553	56,739.440	5,410.109	397,932.159	29,269,280.736	4,173,381.226									
04.00	770.531	73.557	56,677.780	5,410.597	397,985.981	29,274,559.266	4,169,033.862								α	795.665
05.00	771.159	73.572	56,735.975	5,412.888	398,238.796	29,299,356.889	4,174,197.974									
06.00	770.615	73.553	56,680.720	5,409.980	397,917.941	29,267,886.407	4,169,012.479									
07.00	770.615	73.550	56,679.121	5,409.675	397,884.313	29,264,588.602	4,168,777.489									
08.00	770.235	73.535	56,639.632	5,407.468	397,640.798	29,240,710.121	4,165,023.004									
09.00	777.595	76.760	59,688.416	5,892.135	452,281.742	34,717,257.362	4,581,697.414									
10.00	804.718	90.303	72,668.289	8,154.588	736,381.796	66,497,307.120	6,562,146.927									
11.00	822.540	98.548	81,059.927	9,711.779	957,079.919	94,318,656.370	7,988,322.832									
12.00	822.299	98.638	81,109.563	9,729.362	959,680.239	94,660,487.403	8,000,446.888									
13.00	808.080	93.526	75,576.463	8,747.108	818,081.830	76,511,901.631	7,068,362.484	3,731,034,766,168.870	2,968,654,910,930,370.000	795.665	-8,596,154,897,840.500	-2.304	99,192,919,997.922	0.0266	β	-2.3039
14.00	797.327	88.628	70,665.780	7,854.977	696,173.319	61,700,663.340	6,262,988.529									
15.00	819.883	97.472	79,915.824	9,500.836	926,067.749	90,265,892.318	7,789,573.871									
16.00	822.143	98.671	81,121.821	9,736.006	960,663.454	94,789,818.702	8,004,387.676									
17.00	822.426	98.667	81,146.231	9,735.167	960,539.238	94,773,476.952	8,006,451.164									
18.00	827.333	100.031	82,759.190	10,006.272	1,000,940.915	100,125,474.997	8,278,513.850									
19.00	973.258	145.505	141,614.322	21,171.821	3,080,614.219	448,245,997.983	20,605,648.248									
20.00	1,069.945	157.512	168,529.081	24,809.984	3,907,866.452	615,535,282.286	26,545,327.742									
21.00	1,115.836	155.899	173,957.587	24,304.465	3,789,039.090	590,706,995.936	27,119,795.021								γ	0.026586
22.00	1,025.118	135.465	138,867.538	18,350.733	2,485,879.775	336,749,397.990	18,811,673.950									
23.00	836.676	99.255	83,044.167	9,851.531	977,812.459	97,052,655.326	8,242,538.534									
24.00	792.284	84.506	66,952.757	7,141.274	603,480.858	50,997,787.211	5,657,913.449									
Total	20,105.774	2,307.836	1,992,394.356	237,982.105	26,496,392.906	3,181,837,887.122	212,899,500.531									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Saturday, June 18, 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	791.681	73.583	58,254.175	5,414.447	398,410.902	29,316,241.083	4,286,512.836									
02.00	791.668	73.570	58,242.711	5,412.484	398,194.157	29,294,978.101	4,284,891.970									
03.00	791.375	73.546	58,202.669	5,409.054	397,815.766	29,257,866.528	4,280,589.343									
04.00	791.167	73.569	58,205.662	5,412.448	398,190.212	29,294,591.058	4,282,152.136								α	765.1795
05.00	790.586	73.581	58,172.075	5,414.160	398,379.130	29,313,124.040	4,280,357.905									
06.00	790.902	73.555	58,174.630	5,410.309	397,954.265	29,271,448.731	4,279,023.619									
07.00	791.017	73.550	58,179.527	5,409.640	397,880.370	29,264,201.861	4,279,118.927									
08.00	789.952	73.544	58,096.041	5,408.685	397,775.021	29,253,871.071	4,272,601.361									
09.00	789.094	73.555	58,041.424	5,410.271	397,950.012	29,271,031.677	4,269,210.446									
10.00	788.068	73.549	57,961.554	5,409.451	397,859.565	29,262,161.584	4,263,012.632									
11.00	787.508	73.567	57,934.551	5,412.096	398,151.422	29,290,786.138	4,262,068.251									
12.00	790.342	75.147	59,391.786	5,647.059	424,359.067	31,889,275.172	4,463,109.586									
13.00	806.238	83.614	67,412.810	6,991.309	584,571.648	48,878,401.854	5,636,657.955	188,920,943,302.000	144,557,480,750,368.000	765.174	-192,581,528,306.250	-1.019	3,485,755,335.641	0.0185	β	-1.0195
14.00	816.299	87.741	71,622.708	7,698.435	675,466.299	59,265,904.136	6,284,228.476									
15.00	849.917	100.963	85,810.385	10,193.577	1,029,176.657	103,909,017.045	8,663,695.101									
16.00	875.967	109.954	96,315.862	12,089.827	1,329,321.758	146,163,909.618	10,590,290.071									
17.00	860.973	105.714	91,016.841	11,175.446	1,181,400.863	124,890,588.356	9,621,752.608									
18.00	835.269	95.443	79,720.620	9,109.369	869,425.707	82,980,612.579	7,608,776.499									
19.00	883.081	111.572	98,527.493	12,448.419	1,388,901.088	154,963,145.784	10,992,957.183									
20.00	917.857	123.646	113,489.279	15,288.304	1,890,335.849	233,732,243.341	14,032,482.014									
21.00	922.336	123.591	113,992.818	15,274.846	1,887,840.383	233,320,928.447	14,088,537.551								γ	0.018452
22.00	870.787	106.068	92,362.420	11,250.372	1,193,301.852	126,570,866.376	9,796,675.962									
23.00	789.743	73.537	58,075.484	5,407.720	397,668.620	29,243,438.033	4,270,708.653									
24.00	790.455	72.612	57,396.576	5,272.518	382,848.616	27,799,443.873	4,167,686.206									
Total	19,702.281	2,078.771	1,724,600.102	187,370.247	17,613,179.228	1,725,698,076.488	157,257,097.290									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Sunday, June 19, 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	793.805	72.573	57,609.168	5,266.901	382,237.055	27,740,250.733	4,180,894.432									
02.00	794.495	72.587	57,670.169	5,268.898	382,454.419	27,761,285.865	4,186,114.677									
03.00	793.950	72.572	57,618.283	5,266.652	382,209.926	27,737,625.622	4,181,456.951									
04.00	794.335	72.561	57,637.610	5,265.078	382,038.522	27,721,041.431	4,182,234.204								α	740.0559
05.00	794.015	72.575	57,625.496	5,267.100	382,258.655	27,742,340.864	4,182,158.133									
06.00	793.500	72.571	57,585.293	5,266.590	382,203.164	27,736,971.284	4,179,038.191									
07.00	794.380	72.576	57,652.583	5,267.218	382,271.470	27,743,580.932	4,184,170.713									
08.00	793.825	72.547	57,589.308	5,263.005	381,812.932	27,699,218.195	4,177,906.685									
09.00	792.646	72.549	57,505.854	5,263.386	381,854.411	27,703,230.503	4,172,003.470									
10.00	791.690	73.096	57,869.656	5,343.083	390,560.103	28,548,535.539	4,230,063.213									
11.00	791.975	73.562	58,259.268	5,411.374	398,071.739	29,282,970.411	4,285,670.786									
12.00	791.529	73.553	58,219.372	5,410.045	397,925.033	29,268,581.974	4,282,209.745									
13.00	791.458	73.569	58,227.114	5,412.468	398,192.436	29,294,809.267	4,283,738.349	1,062,512,827,617.310	786,310,816,288,480.000	740.048	-563,624,401,216.250	-0.5305	18,231,293,771.742	0.0172	β	-0.53062
14.00	790.254	73.579	58,145.923	5,413.837	398,343.560	29,309,634.395	4,278,306.263									
15.00	792.787	74.699	59,220.228	5,579.913	416,812.853	31,135,425.334	4,423,680.770									
16.00	807.209	81.536	65,816.369	6,648.075	542,055.630	44,196,900.414	5,366,385.592									
17.00	811.552	83.585	67,833.777	6,986.488	583,967.115	48,811,016.902	5,669,900.820									
18.00	813.884	84.057	68,412.824	7,065.618	593,916.249	49,922,954.149	5,750,592.387									
19.00	939.886	127.433	119,772.137	16,239.066	2,069,386.355	263,707,273.271	15,262,874.287									
20.00	1,072.466	155.076	166,314.201	24,048.695	3,729,385.543	578,339,751.390	25,791,410.587									
21.00	899.457	107.369	96,573.430	11,528.014	1,237,746.621	132,895,109.518	10,368,952.995								γ	0.017159
22.00	834.623	92.646	77,324.709	8,583.333	795,213.865	73,673,605.604	7,163,846.548									
23.00	800.985	77.021	61,692.706	5,932.250	456,908.391	35,191,586.398	4,751,640.053									
24.00	793.811	72.564	57,602.194	5,265.548	382,089.701	27,725,992.982	4,179,851.032									
Total	19,668.517	1,976.456	1,649,777.673	172,262.634	16,229,915.750	1,680,889,692.977	147,715,100.883									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Monday, June 20, 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	749.056	72.578	54,364.663	5,267.508	382,303.122	27,746,643.818	3,945,656.863									
02.00	750.304	72.574	54,452.760	5,267.030	382,251.071	27,741,606.935	3,951,871.391									
03.00	750.025	72.555	54,418.061	5,264.228	381,946.033	27,712,093.644	3,948,302.301									
04.00	749.815	72.559	54,405.523	5,264.756	382,003.568	27,717,659.780	3,947,590.833								α	623.9806
05.00	748.947	72.578	54,357.440	5,267.638	382,317.249	27,748,010.959	3,945,181.212									
06.00	749.810	72.572	54,415.386	5,266.734	382,218.774	27,738,481.782	3,949,047.762									
07.00	749.582	72.549	54,381.684	5,263.413	381,857.316	27,703,511.549	3,945,357.455									
08.00	749.474	72.550	54,374.063	5,263.448	381,861.153	27,703,882.716	3,944,817.801									
09.00	748.866	72.558	54,336.014	5,264.630	381,989.843	27,716,331.960	3,942,500.090									
10.00	748.381	72.590	54,325.300	5,269.374	382,506.204	27,766,297.887	3,943,498.013									
11.00	747.545	72.570	54,249.651	5,266.468	382,189.892	27,735,687.104	3,936,920.798									
12.00	748.673	73.373	54,932.426	5,383.612	395,012.320	28,983,279.212	4,030,562.489									
13.00	748.165	73.601	55,065.815	5,417.137	398,707.822	29,345,375.771	4,052,910.309	53,186,472,221.750	33,186,394,099,360.000	623.963	65,000,803,143.438	1.222	356,429,241.898	0.0067	β	1.2217
14.00	747.361	73.580	54,991.119	5,414.071	398,369.369	29,312,166.349	4,046,266.978									
15.00	746.635	73.594	54,947.740	5,416.055	398,588.338	29,333,650.734	4,043,815.775									
16.00	746.208	73.618	54,934.038	5,419.552	398,974.470	29,371,546.131	4,044,112.509									
17.00	747.046	73.597	54,980.019	5,416.453	398,632.307	29,337,965.292	4,046,340.078									
18.00	747.914	73.609	55,053.045	5,418.249	398,830.566	29,357,421.791	4,052,386.149									
19.00	787.964	86.722	68,333.824	7,520.704	652,210.491	56,560,994.925	5,926,045.538									
20.00	864.927	119.075	102,991.061	14,178.812	1,688,339.492	201,038,717.721	12,263,641.824									
21.00	878.119	123.383	108,345.405	15,223.486	1,878,326.875	231,754,528.979	13,368,034.368								γ	0.006704
22.00	826.751	107.075	88,524.422	11,465.059	1,227,621.381	131,447,579.052	9,478,753.851									
23.00	759.216	78.293	59,441.086	6,129.758	479,915.702	37,573,929.187	4,653,807.224									
24.00	751.819	73.627	55,353.948	5,420.886	399,121.726	29,386,001.250	4,075,526.565									
Total	18,342.601	1,901.380	1,465,974.492	155,749.061	13,316,095.085	1,197,833,364.529	121,482,948.176									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Tuesday, June 21, 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	750.714	73.632	55,276.773	5,421.714	399,213.260	29,394,987.308	4,070,155.513									
02.00	750.439	73.609	55,238.710	5,418.219	398,827.217	29,357,093.156	4,066,041.381									
03.00	749.571	73.608	55,174.763	5,418.203	398,825.510	29,356,925.649	4,061,328.514									
04.00	749.363	73.609	55,159.735	5,418.257	398,831.443	29,357,507.939	4,060,242.445								α	661.1897
05.00	750.916	73.625	55,286.344	5,420.676	399,098.553	29,383,726.322	4,070,470.305									
06.00	750.976	73.615	55,283.351	5,419.216	398,937.385	29,367,906.057	4,069,701.974									
07.00	750.861	73.608	55,269.563	5,418.175	398,822.373	29,356,617.757	4,068,295.904									
08.00	750.943	73.592	55,263.619	5,415.820	398,562.390	29,331,104.635	4,066,974.279									
09.00	750.821	73.579	55,244.421	5,413.825	398,342.229	29,309,503.738	4,064,812.761									
10.00	750.821	73.603	55,262.304	5,417.331	398,729.193	29,347,473.031	4,067,444.810									
11.00	750.355	73.642	55,257.606	5,423.136	399,370.271	29,410,403.164	4,069,277.530									
12.00	749.470	73.634	55,186.160	5,421.904	399,234.226	29,397,045.706	4,063,554.579									
13.00	747.671	73.616	55,040.809	5,419.368	398,954.147	29,369,551.310	4,051,903.873	749,873,728,523.750	495,807,490,386,400.000	661.188	120,415,989,730.750	0.1606	10,600,922,416.477	0.014	β	0.165054
14.00	747.026	73.628	55,001.799	5,421.035	399,138.266	29,387,624.910	4,049,654.940									
15.00	747.815	73.608	55,045.473	5,418.194	398,824.454	29,356,821.955	4,051,808.077									
16.00	747.290	73.622	55,017.261	5,420.259	399,052.533	29,379,208.787	4,050,503.260									
17.00	748.706	73.593	55,099.760	5,415.977	398,579.775	29,332,810.519	4,054,974.512									
18.00	763.600	78.843	60,204.490	6,216.218	490,105.290	38,641,370.371	4,746,702.455									
19.00	872.553	121.633	106,130.980	14,794.525	1,799,498.645	218,877,959.804	12,909,002.434									
20.00	996.212	150.894	150,322.652	22,769.088	3,435,725.453	518,431,366.610	22,682,830.460									
21.00	980.057	138.923	136,152.920	19,299.729	2,681,185.244	372,479,544.399	18,914,835.402									
22.00	854.861	110.392	94,370.139	12,186.470	1,345,292.946	148,510,041.648	10,417,740.891								γ	0.014137
23.00	754.530	76.522	57,738.384	5,855.665	448,089.053	34,288,812.581	4,418,274.912									
24.00	750.116	73.576	55,190.626	5,413.451	398,300.928	29,305,452.011	4,060,714.227									
Total	18,715.686	2,002.208	1,598,218.643	178,656.455	17,379,540.784	1,859,730,859.368	147,207,245.436									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Wednesday, June 22, 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	794.227	73.588	58,445.309	5,415.148	398,488.192	29,323,824.375	4,300,855.087									
02.00	794.238	73.786	58,603.809	5,444.398	401,721.276	29,641,472.773	4,324,150.353									
03.00	794.261	73.589	58,448.671	5,415.302	398,505.250	29,325,498.061	4,301,163.893									
04.00	794.240	73.562	58,425.720	5,411.337	398,067.600	29,282,564.380	4,297,900.457								α	694.8094
05.00	794.746	73.565	58,465.495	5,411.812	398,120.087	29,287,712.530	4,301,015.378									
06.00	794.526	73.581	58,462.222	5,414.207	398,384.312	29,313,632.375	4,301,725.856									
07.00	793.591	73.555	58,372.492	5,410.317	397,955.109	29,271,531.506	4,293,580.338									
08.00	793.723	74.071	58,791.548	5,486.462	406,385.845	30,101,266.158	4,354,728.563									
09.00	793.624	74.561	59,173.063	5,559.275	414,502.614	30,905,542.062	4,411,975.983									
10.00	792.804	74.605	59,146.986	5,565.874	415,240.862	30,978,956.092	4,412,648.310									
11.00	791.981	74.576	59,062.635	5,561.549	414,756.920	30,930,826.185	4,404,642.840									
12.00	791.419	74.611	59,048.329	5,566.756	415,339.520	30,988,770.230	4,405,636.872									
13.00	790.404	74.606	58,969.028	5,566.076	415,263.471	30,981,205.098	4,399,451.624	1,574,154,711,814.120	1,093,711,161,352,960.000	694.793	-188,365,949,409.500	-0.1197	30,549,159,621.313	0.0194	β	-0.12
14.00	789.864	74.593	58,918.595	5,564.169	415,050.038	30,959,975.643	4,394,935.765									
15.00	790.755	74.616	59,003.261	5,567.598	415,433.766	30,998,146.337	4,402,607.267									
16.00	790.832	74.599	58,995.250	5,565.011	415,144.224	30,969,343.555	4,400,986.612									
17.00	791.097	74.596	59,012.278	5,564.493	415,086.262	30,963,578.434	4,402,051.994									
18.00	804.103	79.003	63,526.591	6,241.476	493,095.358	38,956,017.529	5,018,791.867									
19.00	978.751	137.595	134,670.895	18,932.299	2,604,983.773	358,431,934.679	18,530,000.053									
20.00	1,174.627	163.676	192,258.441	26,789.905	4,384,870.303	717,698,992.021	31,468,134.632									
21.00	1,162.830	151.732	176,438.311	23,022.559	3,493,255.792	530,038,216.295	26,771,314.057									
22.00	1,101.873	139.587	153,806.545	19,484.394	2,719,758.526	379,641,600.740	21,469,318.848								γ	0.019408
23.00	843.579	88.740	74,859.041	7,874.763	698,805.415	62,011,896.799	6,642,981.000									
24.00	810.139	81.295	65,859.923	6,608.816	537,261.203	43,676,447.485	5,354,057.713									
Total	20,352.233	2,102.285	1,860,764.439	202,443.994	21,865,475.720	2,644,678,951.341	189,364,655.360									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Thursday, June 23, 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	856.633	73.605	63,052.533	5,417.706	398,770.605	29,351,537.090	4,640,985.919									
02.00	857.021	73.575	63,055.513	5,413.320	398,286.474	29,304,034.086	4,639,326.266									
03.00	856.421	73.588	63,022.361	5,415.208	398,494.902	29,324,482.683	4,637,695.809									
04.00	856.808	73.562	63,028.709	5,411.407	398,075.376	29,283,327.085	4,636,534.752								α	846.2853
05.00	856.378	73.584	63,015.893	5,414.640	398,432.197	29,318,330.405	4,636,976.622									
06.00	856.534	73.582	63,025.298	5,414.273	398,391.621	29,314,349.474	4,637,511.245									
07.00	856.722	73.579	63,037.021	5,413.911	398,351.665	29,310,429.497	4,638,218.765									
08.00	856.060	73.542	62,956.002	5,408.365	397,739.779	29,250,415.355	4,629,884.452									
09.00	855.240	73.564	62,915.144	5,411.710	398,108.803	29,286,605.772	4,628,310.154									
10.00	853.448	73.619	62,829.890	5,419.742	398,995.477	29,373,608.086	4,625,467.422									
11.00	853.273	73.646	62,840.115	5,423.730	399,435.938	29,416,851.128	4,627,921.871									
12.00	852.101	73.601	62,715.740	5,417.153	398,709.529	29,345,543.229	4,615,960.571									
13.00	851.301	73.587	62,644.491	5,415.015	398,473.539	29,322,386.656	4,609,806.702	878,896,971,700.500	743,801,972,463,360.000	846.290	-1,614,902,560,562.000	-1.837	23,478,271,086.078	0.0267	β	-1.8373
14.00	850.927	73.606	62,633.765	5,417.914	398,793.571	29,353,791.006	4,610,251.007									
15.00	851.734	73.629	62,712.173	5,421.208	399,157.278	29,389,491.325	4,617,425.167									
16.00	852.610	73.627	62,774.875	5,420.897	399,123.011	29,386,127.372	4,621,909.608									
17.00	854.656	73.598	62,901.119	5,416.690	398,658.404	29,340,526.190	4,629,406.806									
18.00	871.065	79.051	68,858.151	6,248.989	493,986.035	39,049,867.237	5,443,274.612									
19.00	1,053.759	140.792	148,360.445	19,822.299	2,790,814.934	392,923,542.732	20,887,917.385									
20.00	1,174.939	154.835	181,921.201	23,973.771	3,711,970.683	574,741,711.207	28,167,706.912									
21.00	1,220.417	152.539	186,161.115	23,268.118	3,549,293.310	541,405,322.184	28,396,812.996								γ	0.026731
22.00	1,218.364	150.801	183,730.582	22,740.947	3,429,357.894	517,150,658.096	27,706,758.552									
23.00	940.747	93.647	88,097.847	8,769.707	821,254.300	76,907,768.190	8,250,074.015									
24.00	858.490	74.588	64,032.906	5,563.344	414,957.785	30,950,800.736	4,776,075.520									
Total	21,865.645	2,097.346	1,990,322.891	202,460.066	21,987,633.110	2,671,801,506.821	202,312,213.130									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Friday, June 24, 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	839.274	74.575	62,589.067	5,561.472	414,748.344	30,929,973.453	4,667,597.104									
02.00	838.591	74.584	62,545.242	5,562.739	414,890.011	30,944,060.712	4,664,859.854									
03.00	838.239	74.579	62,514.697	5,561.974	414,804.473	30,935,554.685	4,662,261.292									
04.00	838.134	74.582	62,509.523	5,562.444	414,857.036	30,940,781.552	4,662,072.310								α	573.8407
05.00	838.133	74.588	62,514.281	5,563.302	414,953.079	30,950,332.666	4,662,786.927									
06.00	838.045	74.581	62,502.197	5,562.317	414,842.852	30,939,371.062	4,661,472.778									
07.00	838.731	74.578	62,550.559	5,561.815	414,786.686	30,933,785.996	4,664,869.152									
08.00	837.744	74.570	62,470.969	5,560.758	414,668.414	30,922,025.982	4,658,490.659									
09.00	837.592	74.592	62,477.351	5,563.913	415,021.428	30,957,130.158	4,660,288.244									
10.00	836.992	74.603	62,442.143	5,565.616	415,212.010	30,976,086.047	4,658,374.909									
11.00	836.789	74.595	62,420.317	5,564.421	415,078.199	30,962,776.495	4,656,246.330									
12.00	835.805	74.596	62,347.462	5,564.519	415,089.250	30,963,875.637	4,650,852.931									
13.00	835.714	74.573	62,321.673	5,561.132	414,710.321	30,926,192.781	4,647,514.086	757,885,957,601.750	434,899,527,772,736.000	573.832	2,585,329,284,334.000	3.4112	1,205,510,493.406	0.00159	β	3.4111
14.00	834.415	74.599	62,246.401	5,564.983	415,141.119	30,969,034.689	4,643,507.656									
15.00	833.763	74.616	62,212.053	5,567.547	415,428.071	30,997,579.690	4,642,014.362									
16.00	834.299	74.622	62,256.920	5,568.412	415,524.887	31,007,212.096	4,645,723.005									
17.00	836.225	74.586	62,370.886	5,563.106	414,931.065	30,948,143.432	4,652,009.168									
18.00	841.145	75.989	63,918.181	5,774.403	438,793.908	33,343,725.277	4,857,109.982									
19.00	1,031.876	141.495	146,005.297	20,020.830	2,832,847.091	400,833,653.796	20,659,017.093									
20.00	1,146.238	156.505	179,392.158	24,493.847	3,833,412.016	599,948,538.509	28,075,787.940									
21.00	1,144.144	145.930	166,964.451	21,295.448	3,107,636.231	453,496,112.172	24,365,055.615								γ	0.0015914
22.00	1,061.308	129.308	137,235.405	16,720.514	2,162,093.348	279,575,592.553	17,745,612.059									
23.00	869.308	83.929	72,960.201	7,044.082	591,202.913	49,619,085.209	6,123,478.718									
24.00	837.739	73.599	61,656.990	5,416.848	398,675.938	29,342,246.837	4,537,907.727									
Total	21,160.243	2,074.773	1,889,424.425	195,346.442	20,419,348.684	2,372,362,871.487	185,524,909.903									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Saturday, June 25, 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	775.483	73.601	57,076.225	5,417.094	398,703.044	29,344,906.894	4,200,862.103									
02.00	775.643	73.608	57,093.668	5,418.161	398,820.829	29,356,466.205	4,202,559.672									
03.00	774.791	73.591	57,017.374	5,415.578	398,535.647	29,328,480.588	4,195,943.210									
04.00	774.467	73.595	56,996.685	5,416.182	398,602.328	29,335,023.496	4,194,654.646								α	617.666
05.00	774.627	73.614	57,023.039	5,418.955	398,908.561	29,365,076.896	4,197,668.570									
06.00	774.274	73.601	56,987.391	5,417.112	398,705.076	29,345,106.246	4,194,330.984									
07.00	774.656	73.599	57,013.671	5,416.767	398,666.903	29,341,360.192	4,196,131.274									
08.00	773.978	73.584	56,952.377	5,414.597	398,427.373	29,317,857.071	4,190,780.486									
09.00	773.204	73.579	56,891.351	5,413.827	398,342.407	29,309,521.265	4,185,992.312									
10.00	773.168	73.612	56,914.316	5,418.704	398,880.827	29,362,354.838	4,189,568.012									
11.00	772.334	73.604	56,847.255	5,417.615	398,760.593	29,350,554.531	4,184,210.970									
12.00	771.841	73.611	56,815.831	5,418.544	398,863.174	29,360,622.138	4,182,256.642									
13.00	770.488	73.618	56,721.554	5,419.563	398,975.608	29,371,657.844	4,175,709.075	496,515,317,112.937	306,514,512,825,568.000	617.331	752,381,439,605.000	1.5153	4,037,864,627.547	0.0081	β	1.5098
14.00	770.161	73.600	56,683.773	5,416.952	398,687.330	29,343,364.741	4,171,922.485									
15.00	770.191	73.610	56,694.092	5,418.496	398,857.874	29,360,102.024	4,173,276.804									
16.00	769.768	73.618	56,669.056	5,419.656	398,985.981	29,372,676.043	4,171,880.437									
17.00	769.441	73.602	56,632.667	5,417.308	398,726.626	29,347,221.035	4,168,297.993									
18.00	774.062	74.768	57,875.337	5,590.301	417,977.414	31,251,467.809	4,327,241.537									
19.00	927.742	130.733	121,286.829	17,091.210	2,234,391.239	292,109,463.009	15,856,234.133									
20.00	1,022.314	148.110	151,414.970	21,936.589	3,249,029.445	481,213,936.277	22,426,079.837									
21.00	970.141	127.978	124,156.663	16,378.352	2,096,067.746	268,250,425.988	15,889,313.592								γ	0.008155
22.00	848.185	99.727	84,587.186	9,945.526	991,840.096	98,913,495.117	8,435,648.288									
23.00	774.345	73.698	57,067.449	5,431.347	400,277.684	29,499,535.099	4,205,738.369									
24.00	774.872	73.596	57,027.115	5,416.298	398,615.213	29,336,287.883	4,196,939.348									
Total	19,230.179	1,979.856	1,620,445.875	173,884.735	16,566,649.018	1,729,486,963.230	146,513,240.780									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Sunday, June 26, 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	763.502	73.585	56,182.678	5,414.821	398,452.145	29,320,287.553	4,134,228.635									
02.00	763.215	73.583	56,159.994	5,414.520	398,418.877	29,317,023.570	4,132,444.439									
03.00	762.875	73.575	56,128.437	5,413.260	398,279.865	29,303,385.681	4,129,641.936									
04.00	763.046	73.578	56,143.070	5,413.666	398,324.623	29,307,776.565	4,130,873.269								α	645.6819
05.00	762.976	73.607	56,160.528	5,418.018	398,805.079	29,354,920.406	4,133,818.556									
06.00	762.580	73.598	56,124.398	5,416.666	398,655.804	29,340,271.049	4,130,643.631									
07.00	758.308	71.202	53,992.980	5,069.717	360,973.679	25,702,027.286	3,844,405.099									
08.00	754.284	68.572	51,722.722	4,702.107	322,432.419	22,109,806.165	3,546,725.724									
09.00	768.634	76.149	58,531.031	5,798.730	441,569.809	33,625,273.775	4,457,102.586									
10.00	762.215	73.655	56,140.591	5,424.988	399,574.910	29,430,498.233	4,135,008.283									
11.00	762.732	73.575	56,117.935	5,413.270	398,280.985	29,303,495.606	4,128,873.148									
12.00	761.819	73.588	56,060.357	5,415.124	398,485.609	29,323,570.937	4,125,343.100									
13.00	755.734	70.942	53,613.561	5,032.816	357,039.746	25,329,235.767	3,803,471.592	28,829,331,450.297	18,614,978,496,720.000	645.696	30,975,991,765.750	1.0745	198,610,831.508	0.00689	β	1.0748
14.00	752.574	69.975	52,661.259	4,896.483	342,630.795	23,975,547.055	3,684,965.015									
15.00	750.866	69.980	52,545.600	4,897.199	342,705.893	23,982,553.937	3,677,140.399									
16.00	750.435	69.985	52,519.475	4,897.948	342,784.558	23,989,894.169	3,675,593.337									
17.00	752.055	69.982	52,630.103	4,897.442	342,731.413	23,984,935.146	3,683,145.317									
18.00	752.596	69.981	52,667.210	4,897.304	342,716.971	23,983,587.555	3,685,690.358									
19.00	803.287	90.718	72,872.759	8,229.790	746,591.677	67,729,446.379	6,610,884.862									
20.00	860.998	114.847	98,883.037	13,189.843	1,514,814.380	173,971,947.727	11,356,424.139									
21.00	817.842	99.726	81,560.347	9,945.336	991,811.602	98,909,706.342	8,133,712.018								γ	0.006888
22.00	785.286	85.399	67,062.710	7,293.011	622,816.785	53,188,010.367	5,727,096.933									
23.00	756.332	69.584	52,628.288	4,841.870	336,914.461	23,443,702.528	3,662,062.812									
24.00	757.189	69.608	52,706.045	4,845.205	337,262.629	23,476,010.441	3,668,736.331									
Total	18,441.381	1,828.994	1,411,815.113	142,179.133	11,333,074.713	931,402,914.240	110,398,031.520									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Monday, June 27, 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	771.856	69.597	53,718.889	4,843.748	337,110,478	23,461,890,417	3,738,675.519									
02.00	771.307	69.603	53,684.941	4,844.514	337,190.493	23,469,315.819	3,736,608.426									
03.00	770.596	69.573	53,612.435	4,840.359	336,756.839	23,429,079.819	3,729,961.406									
04.00	770.512	69.565	53,600.961	4,839.339	336,650.396	23,419,206.323	3,728,770.232								α	803.399
05.00	770.369	69.606	53,622.273	4,844.984	337,239.517	23,473,865.524	3,732,427.404									
06.00	770.633	69.608	53,642.610	4,845.340	337,276.714	23,477,317.698	3,733,980.290									
07.00	770.262	69.583	53,597.409	4,841.839	336,911.279	23,443,407.393	3,729,486.000									
08.00	769.700	69.554	53,535.819	4,837.773	336,486.949	23,404,047.270	3,723,635.787									
09.00	769.616	69.581	53,550.748	4,841.537	336,879.717	23,440,479.097	3,726,122.822									
10.00	768.962	69.599	53,518.687	4,843.971	337,133.801	23,464,054.741	3,724,827.908									
11.00	767.504	69.582	53,404.301	4,841.624	336,888.794	23,441,321.308	3,715,966.188									
12.00	766.656	69.614	53,369.680	4,846.054	337,351.333	23,484,243.430	3,715,255.970									
13.00	765.619	69.602	53,288.495	4,844.411	337,179.753	23,468,319.100	3,708,975.377	1,540,709,502,883.870	1,237,807,969,877,120.000	803.401	-4,069,332,282,637.500	-2.6412	47,511,303,698.313	0.03084	β	-2.6412
14.00	764.405	69.593	53,197.407	4,843.213	337,054.710	23,456,715.525	3,702,177.709									
15.00	764.094	69.616	53,192.961	4,846.350	337,382.242	23,487,112.397	3,703,067.036									
16.00	772.101	73.026	56,383.188	5,332.743	389,426.955	28,438,150.262	4,117,418.027									
17.00	804.177	87.077	70,024.902	7,582.319	660,241.841	57,491,555.258	6,097,524.097									
18.00	842.172	103.676	87,313.174	10,748.754	1,114,389.887	115,535,704.320	9,052,297.719									
19.00	928.972	130.835	121,541.867	17,117.740	2,239,595.856	293,017,037.862	15,901,903.800									
20.00	1,017.303	143.605	146,090.289	20,622.517	2,961,505.165	425,288,193.119	20,979,357.339									
21.00	1,074.831	143.662	154,411.888	20,638.635	2,964,977.910	425,953,262.999	22,183,048.009								γ	0.030837
22.00	1,106.295	143.746	159,025.844	20,662.990	2,970,227.760	426,959,161.481	22,859,371.974									
23.00	981.721	118.160	116,000.397	13,961.843	1,649,734.723	194,933,054.079	13,706,634.963									
24.00	776.703	70.273	54,580.933	4,938.236	347,022.579	24,386,172.628	3,835,543.089									
Total	19,836.369	2,057.935	1,767,910.098	194,250.833	20,352,615.692	2,343,822,667.868	174,583,037.091									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Tuesday, June 28, 2016																	
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	924.597	69.593	64,345.293	4,843.159	337,049.015	23,456,187.028	4,477,969.551									
02.00	924.633	69.586	64,341.082	4,842.151	336,943.803	23,446,424.916	4,477,210.536									
03.00	924.690	69.589	64,348.254	4,842.631	336,993.965	23,451,079.130	4,477,931.837									
04.00	924.956	69.576	64,354.817	4,840.830	336,805.922	23,433,633.104	4,477,555.387								α	1011.097
05.00	924.590	69.582	64,334.445	4,841.596	336,885.875	23,441,050.450	4,476,492.131									
06.00	924.527	69.588	64,336.267	4,842.531	336,983.433	23,450,101.863	4,477,050.991									
07.00	924.387	69.557	64,297.419	4,838.152	336,526.456	23,407,711.155	4,472,324.177									
08.00	924.351	69.546	64,285.217	4,836.688	336,373.758	23,393,550.643	4,470,799.018									
09.00	923.936	69.555	64,263.997	4,837.840	336,493.901	23,404,691.985	4,469,855.329									
10.00	923.280	69.587	64,248.478	4,842.375	336,967.249	23,448,600.301	4,470,870.323									
11.00	936.245	76.555	71,674.428	5,860.697	448,666.746	34,347,767.095	5,487,049.315									
12.00	943.245	81.229	76,619.116	6,598.192	535,966.170	43,536,131.637	6,223,713.557									
13.00	946.331	83.637	79,148.502	6,995.190	585,058.483	48,932,684.387	6,619,763.274	1,044,135,359,502.870	1,055,788,920,118,980.000	1,011.161	-3,728,592,748,259.250	-3.5710	35,131,134,329.906	0.0336	β	-3.5698
14.00	964.079	90.571	87,317.335	8,203.053	742,956.258	67,290,072.027	7,908,392.556									
15.00	996.353	103.735	103,356.553	10,760.921	1,116,282.652	115,797,424.625	10,721,677.606									
16.00	996.662	103.717	103,371.109	10,757.290	1,115,717.702	115,719,291.222	10,721,378.221									
17.00	979.918	96.955	95,007.758	9,400.232	911,397.537	88,364,359.504	9,211,457.557									
18.00	956.293	83.704	80,045.685	7,006.391	586,464.214	49,089,509.051	6,700,158.840									
19.00	1,061.616	123.402	131,005.592	15,228.054	1,879,172.271	231,893,616.566	16,166,352.055									
20.00	1,121.845	133.555	149,828.238	17,836.987	2,382,222.050	318,158,101.891	20,010,337.786									
21.00	1,145.309	133.536	152,940.075	17,831.885	2,381,200.084	317,976,129.640	20,423,018.424								γ	0.033641
22.00	1,149.610	133.008	152,907.697	17,691.228	2,353,081.464	312,979,541.784	20,338,004.276									
23.00	982.610	89.219	87,667.881	7,960.105	710,195.967	63,363,272.942	7,821,677.583									
24.00	926.205	70.581	65,372.408	4,981.668	351,610.798	24,817,018.496	4,614,045.638									
Total	23,350.269	2,099.164	2,079,417.647	195,519.844	19,468,015.774	2,066,597,951.443	197,715,085.968									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Wednesday, June 29, 2016																		
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	875.726	70.583	61,811.004	4,981.905	351,635.876	24,819,378.592	4,362,782.146									
02.00	875.627	70.587	61,807.631	4,982.482	351,697.007	24,825,131.855	4,362,796.851									
03.00	874.901	70.559	61,732.280	4,978.595	351,285.470	24,786,407.365	4,355,777.773									
04.00	874.652	70.590	61,741.318	4,982.884	351,739.564	24,829,137.223	4,358,291.824								α	894.5648
05.00	874.830	70.567	61,733.898	4,979.670	351,399.234	24,797,110.659	4,356,362.083									
06.00	875.302	70.561	61,762.517	4,978.909	351,318.734	24,789,536.764	4,358,048.827									
07.00	875.372	70.573	61,778.053	4,980.615	351,499.275	24,806,523.876	4,359,891.643									
08.00	875.469	70.548	61,762.631	4,977.025	351,119.306	24,770,776.050	4,357,232.086									
09.00	875.245	70.549	61,747.677	4,977.167	351,134.402	24,772,196.007	4,356,239.497									
10.00	873.617	70.587	61,665.953	4,982.515	351,700.415	24,825,452.604	4,352,810.330									
11.00	872.510	70.627	61,623.124	4,988.229	352,305.570	24,882,423.575	4,352,280.546									
12.00	872.239	70.577	61,560.293	4,981.158	351,556.819	24,811,938.814	4,344,760.605									
13.00	871.576	70.578	61,514.267	4,981.284	351,570.104	24,813,188.973	4,341,566.921	2,518,647,071,766.000	2,253,109,633,262,460.000	894.571	-5,652,360,825,013.000	-2.244	69,982,544,118.406	0.0278	β	-2.2441
14.00	870.989	70.575	61,469.638	4,980.763	351,514.919	24,807,995.987	4,338,190.076									
15.00	870.857	70.588	61,472.106	4,982.669	351,716.753	24,826,990.274	4,339,194.462									
16.00	871.354	70.547	61,471.797	4,976.946	351,110.960	24,769,990.956	4,336,679.917									
17.00	872.054	70.580	61,549.564	4,981.537	351,596.929	24,815,713.343	4,344,168.586									
18.00	924.859	90.831	84,005.910	8,250.283	749,381.959	68,067,162.166	7,630,346.337									
19.00	1,108.735	148.628	164,788.589	22,090.152	3,283,205.464	487,974,823.603	24,492,126.209									
20.00	1,248.341	162.461	202,806.466	26,393.492	4,287,906.248	696,616,422.137	32,948,088.542									
21.00	1,279.858	160.410	205,301.912	25,731.334	4,127,560.574	662,101,554.210	32,932,457.907									
22.00	1,251.778	154.888	193,885.707	23,990.357	3,715,823.402	575,537,227.906	30,030,609.713								γ	0.027785
23.00	947.583	92.837	87,970.601	8,618.675	800,130.393	74,281,561.302	8,166,910.828									
24.00	881.242	73.582	64,843.208	5,414.251	398,389.250	29,314,116.814	4,771,266.755									
Total	22,494.717	2,083.412	2,051,806.145	205,162.897	23,338,298.627	3,015,642,761.056	214,948,880.463									

Lampiran 3f. Perhitungan Manual Karakteristik Input-Output Harian PLTGU Sengkang Blok II (Lanjutan)

Thursday, June 30, 2016																
Waktu	Pemakaian Bahan Bakar	Daya yang Dibangkitkan	PC	P^2	P^3	P^4	$C(P^2)$	Penyebut	α		β		γ		Hasil Matlab	
	C -> m^3/jam	P -> MW							Pembilang	Hasil	Pembilang	Hasil	Pembilang	Hasil		
01.00	979.590	73.590	72,088.489	5,415.560	398,533.714	29,328,290.885	5,305,027.136									
02.00	973.617	70.403	68,545.215	4,956.534	348,953.171	24,567,230.410	4,825,765.229									
03.00	971.938	69.549	67,597.144	4,837.036	336,410.078	23,396,918.599	4,701,300.536									
04.00	977.332	72.186	70,549.363	5,210.771	376,143.024	27,152,136.937	5,092,653.167								α	1157.136
05.00	984.223	75.891	74,693.806	5,759.464	437,092.236	33,171,424.602	5,668,597.488									
06.00	1,009.798	88.805	89,674.949	7,886.304	700,342.190	62,193,794.334	7,963,571.789									
07.00	977.632	73.666	72,018.357	5,426.698	399,763.811	29,449,050.885	5,305,313.321									
08.00	978.688	73.563	71,994.871	5,411.458	398,081.009	29,283,879.618	5,296,130.913									
09.00	985.675	76.960	75,857.346	5,922.813	455,818.567	35,079,711.665	5,837,967.161									
10.00	1,007.927	88.204	88,903.098	7,779.934	686,220.806	60,527,375.370	7,841,603.120									
11.00	1,037.349	99.109	102,811.133	9,822.689	973,521.543	96,485,211.911	10,189,557.700									
12.00	1,075.003	113.442	121,950.759	12,869.149	1,459,905.471	165,614,992.114	13,834,371.047									
13.00	1,124.240	122.689	137,932.086	15,052.630	1,846,794.528	226,581,669.360	16,922,771.741	6,155,413,337,333.500	7,122,661,849,093,890.000	1,157.138	-35,354,125,502,766.000	-5.7436	278,266,813,284.750	0.0452	β	-5.7436
14.00	1,192.337	134.990	160,953.677	18,222.310	2,459,830.204	332,052,565.311	21,727,142.466									
15.00	1,333.064	155.870	207,784.893	24,295.510	3,786,945.331	590,271,816.246	32,387,466.861									
16.00	1,348.384	154.185	207,900.641	23,773.022	3,665,444.053	565,156,586.548	32,055,165.676									
17.00	1,342.824	152.718	205,073.742	23,322.862	3,561,826.537	543,955,894.224	31,318,501.709									
18.00	1,343.174	152.838	205,287.615	23,359.363	3,570,191.384	545,659,846.897	31,375,687.374									
19.00	1,358.445	155.081	210,669.585	24,050.235	3,729,743.688	578,413,805.625	32,670,930.442									
20.00	1,343.078	152.556	204,894.683	23,273.344	3,550,489.193	541,648,560.731	31,257,920.840									
21.00	1,340.255	152.810	204,804.157	23,350.856	3,568,241.326	545,262,493.185	31,296,096.633								γ	0.045207
22.00	1,336.394	152.523	203,831.409	23,263.394	3,548,212.360	541,185,484.045	31,089,063.646									
23.00	1,323.180	152.626	201,951.636	23,294.677	3,555,371.850	542,641,960.001	30,823,057.698									
24.00	1,228.282	135.801	166,801.671	18,441.870	2,504,421.572	340,102,570.791	22,651,808.172									
Total	27,572.429	2,750.056	3,294,570.325	344,998.484	46,318,297.647	6,509,183,270.295	427,437,471.865									

Lampiran 4. Data Beban Listrik Sistem Sulselbar Bulan Agustus 2016

Tanggal	Beban (MW)																							
	00.00	01.00	02.00	03.00	04.00	05.00	06.00	07.00	08.00	09.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00	17.00	18.00	19.00	20.00	21.00	22.00	23.00
1	676	659	629	595	601	615	648	613	665	708	734	746	756	768	779	755	760	777	980	961	943	892	792	735
2	688	671	640	624	621	694	642	644	659	705	726	738	720	727	730	722	720	729	953	950	949	897	806	729
3	693	671	659	641	620	631	650	627	670	726	746	769	758	778	791	798	783	771	969	943	945	886	797	737
4	672	658	649	626	619	628	662	640	680	752	741	775	767	806	818	813	776	768	988	959	970	889	825	751
5	703	689	642	628	631	647	666	649	703	744	764	783	770	805	817	809	768	756	970	960	947	884	810	724
6	694	650	622	623	612	634	662	639	694	730	756	775	760	797	808	810	777	768	986	957	944	889	805	734
7	687	661	634	614	613	641	665	650	702	737	764	790	776	806	797	793	771	774	964	953	947	870	798	734
8	679	653	627	609	614	646	651	623	647	695	716	744	739	772	768	760	739	739	947	948	922	868	791	737
9	694	655	639	614	607	629	645	636	634	684	703	733	720	731	737	734	721	736	966	947	939	888	804	752
10	704	674	651	635	634	656	697	667	716	770	787	800	790	837	844	848	812	802	998	1005	975	918	833	771
11	720	704	669	658	647	681	694	696	746	760	805	806	808	843	870	860	842	823	1031	1027	1018	989	857	744
12	738	712	695	678	657	693	712	693	733	806	806	832	827	874	875	862	851	849	1038	1037	1031	965	884	815
13	766	739	705	703	684	691	723	708	760	801	871	830	815	861	858	855	823	808	1020	993	971	951	859	787
14	756	689	663	672	667	687	702	689	728	745	807	826	810	845	861	850	822	804	1023	1003	1001	933	852	779
15	733	707	664	653	655	669	680	656	707	723	738	751	751	777	773	775	757	742	934	916	891	855	781	734
16	680	650	631	605	595	611	611	611	652	669	675	704	699	708	712	721	704	717	920	921	914	886	773	702
17	649	613	587	586	588	632	619	608	620	653	686	700	704	705	692	704	694	719	938	926	933	853	762	711
18	650	645	604	601	586	628	636	627	678	727	765	774	779	786	796	802	795	783	1011	991	982	925	828	764
19	707	682	659	651	654	681	683	700	725	764	795	811	802	818	844	841	814	867	1002	971	948	898	818	741
20	697	659	646	641	637	670	683	657	731	752	797	807	790	825	839	822	790	795	982	966	952	885	798	728
21	689	655	645	629	625	667	659	660	697	726	775	805	783	816	821	817	801	779	973	978	975	897	825	762
22	704	679	680	644	637	673	669	643	675	724	749	751	760	785	796	785	770	793	968	958	943	899	828	759
23	718	667	659	661	643	655	653	647	648	687	736	748	738	748	733	734	730	742	964	958	958	906	824	744
24	701	673	657	642	635	672	697	668	717	771	805	813	798	848	849	840	819	803	1015	978	982	926	846	763
25	737	707	682	674	665	691	676	676	749	788	815	827	822	858	867	861	817	808	1027	1017	1012	948	873	794
26	736	708	698	678	668	667	689	683	737	772	789	801	792	802	841	836	819	792	1026	985	996	931	847	799
27	736	684	677	663	652	691	708	688	734	759	812	822	809	828	846	843	818	794	988	985	980	922	834	780
28	732	698	684	664	677	692	698	660	697	775	792	813	796	828	841	834	816	797	1026	983	976	921	852	751
29	699	676	659	638	625	657	651	649	691	706	733	748	752	780	752	775	760	764	945	952	922	887	806	748
30	695	667	662	636	630	635	631	635	663	680	727	746	739	739	739	750	743	754	930	959	957	916	809	742
31	690	665	644	630	621	651	667	644	709	757	810	819	800	841	848	848	820	805	1015	982	982	923	840	762

KEMENTERIAN RISET, TEKNOLOGI, DAN PENDIDIKAN TINGGI
POLITEKNIK NEGERI UJUNG PANDANG
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E Mail : pnupdr@poliupg.ac.id

Nomor : 84 /PL10/AK/2016
H a l : Permohonan izin Pengambilan Data

26 Februari 2016

Yth. Pimpinan PT PLN (Persero) UPB Wil. Sulselrabar
Jl. Hertasning Raya Makassar

Sehubungan dengan pelaksanaan tugas matakuliah Manajemen dan Desain Jaringan mahasiswa pada **Jurusan Teknik Mesin Program Studi D4 Teknik Pembangkit Energi** maka kami mengharapkan bantuan Bapak/Ibu kiranya dapat memberikan Izin untuk Pengambilan Data tersebut pada Perusahaan Bapak/Ibu pimpin, kepada mahasiswa Kami sebagai berikut :

No	Nama / Stambuk Mahasiswa	Judul Skripsi/TA	Tanggal Pelaksanaan
1 2	Muhammad Fausan Azdima 442 12 023 Yuliana 442 12 009	Optimasi Penjadwalan pembangkit Tenaga Listrik Untuk Sistem Sulselrabar dengan Metode Dinamic programming	1 Maret s.d 3 Maret 2016

Demikian Permohonan kami ,atas perhatian dan kerja sama yang baik, diucapkan terima kasih

a.n Direktur
Wakil Direktur I

Ibrahim Abduh,S. ST, MT
NIP. 19680514 199303 1 00 1

Tembusan :
Ketua Jurusan Teknik Mesin
Politeknik Negeri Ujung Pandang

IA/MT/IH/HM

PT PLN (Persero) WILAYAH
SULAWESI SELATAN DAN TENGGARA
UNIT PENGATUR BEBAN SULSELABAR

Jl.Letjen Hertasning Panakukang Blok B- Makassar
Telepon : (0411) 440066 Kotak Pos : 90222
Facsimile : (0411) 440066

Nomor :0007/MUM-0001/MUPB /2016 Makassar, 01 Maret 2016
Perihal : Permohonan Izin Pengambilan Data

Kepada Yth,
Ketua Jurusan Teknik Mesin
Politeknik Negeri Ujung Pandang
Di,-
Makassar

Menunjuk Surat Saudara tanggal 26 Februari 2016 No:864/PL10/AK/2016 perihal tersebut diatas, maka dengan ini kami sampaikan bahwa pada prinsipnya dapat kami setujui untuk Pengambilan Data mulai 02 Maret s/d 02 April 2016 Pada PT PLN (Persero) Unit Pengatur Beban Sistem Sulselrabar

No	Nama/Nis	Jurusan	Keterangan
1.	Muh.Fauzan Azdima/442-12-023	TEKNIK MESIN	Program Studi D4 Teknik Pembangkit Energi
2.	Yuliana /442-12-009		

Perlu kami sampaikan bahwa selama pelaksanaan kegiatan tersebut siswa harus mematuhi segala peraturan yang berlaku di PT PLN (Persero) Unit Pengatur Beban serta pihak PT PLN tidak menyediakan sarana transportasi maupun sarana lainnya.

Untuk itu yang bersangkutan harap melapor ke PT PLN (Persero) Unit Pengatur Beban Cq. Supervisor SDM & Sekretariat yaitu 1 (satu) hari sebelum pelaksanaan dan membawa pas photo ukuran 2x3 sebanyak 2 (dua) lembar.

Demikian kami sampaikan, dan atas perhatiannya diucapkan terima kasih.

PH. MANAJER

MUDAKIR

Tembusan :
Asman Operasi Sistem

CATATAN KONSULTASI PROPOSAL TUGAS AKHIR

Nama / No. Induk Mahasiswa : Yuliana / 442 12 009

: Muhammad Fauzan Azdima / 442 12 023

Judul Tugas Akhir : Optimisasi Penjadwalan Pembangkit Listrik Untuk Sistem Sulselbar Dengan Metode *Dynamic Programming*

Pembimbing : Sukma Abadi, S.T., M.T.

No.	Tanggal	Uraian / Anjuran	Tanda Tangan Pembimbing
1.	20 Feb 2016	- Perbaiki latar belakang	
		- " rumusan masalah dan tujuan penelitian	
		- Perbaiki penomoran kutipan	
2.	22 Feb 2016	- Perbaiki tempat dan waktu pelaksanaan penelitian	
		- Cari data awal ke UPD	
		- Perbaiki flowchart	
3.	8 Mar 2016	- Perbaiki tinjauan pustaka	
		- Lanjutkan/cari Single Line Diagram th. 2015	
4.	10 Mar 2016	ACC lgkp. Seminar proposal	

Makassar, 11 ~~Februari~~ Maret 2016

Sukma Abadi, S.T., M.T.

NIP.19751024 200312 1 001

CATATAN KONSULTASI TUGAS AKHIR

Nama / No. Induk Mahasiswa : 1. Yuliana 442 12 009

2. Muhammad Fauzan Azdima 442 12 023

Judul Tugas Akhir : Optimisasi Penjadwalan Pembangkit Listrik Untuk Sistem Sulselbar dengan Metode *Dynamic Programming.*

Pembimbing 2 : Sukma Abadi, S.T., M.T.

No.	Tanggal	Uraian/Anjuran	Tanda Tangan
5.	6/10/16	– Perbaiki latar belakang – " rumusan masalah – Perjelas flowchart gbr. 6 – Perbaiki waktu dan tempat penelitian	
6.	15/10/16	– Tambahkan batasan masalah tentang: 1. PLTA yang diabaikan/dimaksimalkan 2. Pembangkit yg tidak diperhitungkan karena prob. pengganan yg kurang – Lamp. 1 s/d Lamp. 6 print out – Beri kertas pembatas utk lampiran (berwarna) – Perjelas lit. dap hal. 30 – Ubah penulisan lit. α, β, γ	
7.	17/10/16	– Perbaiki hitung. determinan masing – Perbaiki kesimpulan & saran	
8.	18.10/16	Disetujui untuk ujian sidang ACC: 18/10 16	

CATATAN KONSULTASI TUGAS AKHIR

Nama / No. Induk Mahasiswa	: 1. Yuliana	442 12 009
	2. Muhammad Fauzan Azdima	442 12 023
Judul Tugas Akhir	: Optimisasi Penjadwalan Pembangkit Listrik Untuk Sistem Sulselbar dengan Metode *Dynamic Programming.*	
Pembimbing 1	: Ir. Muhammad Anshar, M.Si., Ph.D.	

No.	Tanggal	Uraian/Anjuran	Tanda Tangan
1	25/7/2016	Lengkapi datanya	
2	22/10-16	Abstrak dilengkapi cara penulisan, kesimpulan lampiran	
	23/10-16	Gambar perlu diperjelas	
	24/10-16	Perbaiki kesimpulan.	
		[signature] 24/10 2016	

LEMBAR REVISI JUDUL SKRIPSI / TUGAS AKHIR

463

Nama Mahasiswa : Yuliana / Muh. Fauzan Azdinq

Stambuk : 442 12 009 / 442 12 023

Catatan Penguji :

No	Nama	Uraian	Tanda Tangan
1.	Herman Nawir	*) Daftar lampiran di Body tidak ada *) Program apa yang dipakai apa? *) Bagaimana cara penghitungan untuk Sistem Sulselbar. *) Perbaiki redaksi kesimpulan. → Hilangkan kata "akan".	26-1-017
2.	Remigius Tandiogo	*) Data tolong divalidasi dari instansi	24/01 2017
3.	Andareas Panglay	*) Tidak terlihat mengenai pembiayaan yang murah *) Harus bicara biaya di kesimpulan dan body.	02/02 2017

~~Ketua~~ / Sekretaris
Penguji Ujian ~~Sidang~~,

Ir. Remigius Tandiogo, M.Eng.Sc
NIP. 19622210 199003 1005

Catatan: Jika ada perubahan judul Tugas Akhir konfirmasikan secepatnya ke bagian Akademik

FM-Q 42.ed.A rev.0

Ujian Sidang : 27 Oktober 2016
1. Fauzan Adziima
2. Yuliana

4. Jamal :

*) Halaman 29
→ apa makna kata "harian"? Padahal ada input per tanggal
→ Data mingguan dijelas. (Hal. 26 & 27.)

*) Terjadi banyak pengulangan → tabel dan penghitungan
→ kurang pembahasan
→ perbanyak pembahasan.

*) Apa akhir dari tugas akhir Audaini?
→ Mana yang bagus?

* Apakah biaya dihitung dari bahan bakar, bukan dari pembayaran orang?

10 - 2 - 2017