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LAMPIRAN

**Lampiran 1 Data *Input-Output* Unit Pembangkit Gas pada Tanggal 1 Juni –
29 Juni 2021**

01 Juni 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
1:00 AM	7.43	4541.635	7.41	4588.180	14.84	9129.815
2:00 AM	7.41	4537.536	7.41	4590.334	14.83	9127.870
3:00 AM	7.36	4530.915	7.41	4588.568	14.78	9119.484
4:00 AM	7.39	4537.770	7.41	4588.296	14.81	9126.066
5:00 AM	7.39	4536.426	7.41	4590.128	14.80	9126.554
6:00 AM	7.38	4537.134	7.41	4590.941	14.79	9128.075
7:00 AM	7.38	4535.697	7.41	4588.022	14.80	9123.719
8:00 AM	7.41	4538.315	7.41	4587.757	14.82	9126.072
9:00 AM	7.40	4536.828	7.41	4583.527	14.82	9120.355
10:00 AM	7.41	4537.125	7.41	4582.332	14.83	9119.456
11:00 AM	9.36	4840.809	7.64	4619.992	17.00	9460.801
12:00 PM	15.38	5781.971	15.49	5785.182	30.87	11567.153
1:00 PM	15.35	5774.663	15.49	5777.561	30.83	11552.224
2:00 PM	15.35	5773.668	14.92	5689.741	30.27	11463.409
3:00 PM	15.06	5717.789	7.28	4572.161	22.34	10289.950
4:00 PM	8.23	4659.106	7.28	4559.586	15.51	9218.692
5:00 PM	8.24	4660.553	7.28	4560.636	15.52	9221.190
6:00 PM	8.22	4660.878	7.28	4566.211	15.50	9227.088
7:00 PM	8.21	4662.388	7.28	4570.169	15.49	9232.558
8:00 PM	8.22	4664.121	7.28	4571.838	15.49	9235.959
9:00 PM	8.21	4667.571	7.28	4573.167	15.48	9240.737
10:00 PM	8.22	4668.636	7.44	4598.531	15.66	9267.167
11:00 PM	8.14	4646.021	7.53	4635.873	15.67	9281.893

02 Juni 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
1:00 AM	8.23	4663.733	7.50	4602.452	15.73	9266.185
2:00 AM	8.24	4664.682	7.50	4600.693	15.74	9265.375
3:00 AM	8.23	4660.447	7.50	4599.787	15.73	9260.234
4:00 AM	8.24	4662.844	7.50	4600.307	15.74	9263.151
5:00 AM	8.23	4661.830	7.50	4601.053	15.73	9262.883
6:00 AM	8.24	4667.503	7.50	4605.875	15.74	9273.378
7:00 AM	8.21	4665.130	7.50	4606.863	15.70	9271.993
8:00 AM	8.20	4667.187	7.50	4605.172	15.70	9272.359
9:00 AM	8.21	4669.374	7.50	4599.788	15.70	9269.162
10:00 AM	8.19	4666.410	7.50	4600.798	15.68	9267.208
11:00 AM	8.19	4670.992	7.50	4600.978	15.68	9271.970
12:00 PM	8.21	4668.629	7.50	4596.942	15.71	9265.572
1:00 PM	8.23	4669.251	7.50	4592.615	15.73	9261.866
2:00 PM	8.21	4667.888	7.50	4592.999	15.71	9260.886
3:00 PM	8.24	4669.501	7.50	4592.662	15.74	9262.162
4:00 PM	7.42	4537.714	7.15	4533.027	14.57	9070.741
5:00 PM	7.26	4509.229	7.06	4519.940	14.31	9029.169
6:00 PM	13.28	5458.994	12.97	5420.762	26.25	10879.756
7:00 PM	24.74	7260.757	24.75	7213.261	49.49	14474.018
8:00 PM	16.00	5885.565	16.00	5862.285	32.00	11747.850
9:00 PM	10.85	5081.583	10.11	4991.291	20.96	10072.874
10:00 PM	7.84	4620.862	8.37	4738.483	16.21	9359.344
11:00 PM	7.82	4627.079	8.10	4701.854	15.92	9328.932
12:00 AM	7.45	4553.550	14.43	5594.455	21.88	10148.005

03 JUNI 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
12:00 AM	7.85	4619.277	7.66	4632.247	15.51	9251.524
1:00 AM	7.86	4620.110	7.66	4631.878	15.52	9251.988
2:00 AM	7.88	4619.212	7.66	4629.090	15.54	9248.302
3:00 AM	7.91	4617.046	7.66	4629.351	15.57	9246.397
4:00 AM	7.90	4619.239	7.66	4632.149	15.56	9251.388
5:00 AM	7.89	4618.000	7.66	4630.610	15.55	9248.610
6:00 AM	7.89	4620.978	7.66	4632.027	15.55	9253.005
7:00 AM	7.88	4618.935	7.66	4630.385	15.54	9249.321
8:00 AM	7.86	4615.355	7.66	4630.857	15.52	9246.212
9:00 AM	7.86	4624.207	7.66	4635.885	15.52	9260.092
10:00 AM	7.86	4620.911	7.66	4627.557	15.52	9248.468
11:00 AM	7.87	4619.982	7.66	4626.950	15.53	9246.932
12:00 PM	7.85	4612.355	7.66	4623.097	15.51	9235.452
1:00 PM	7.86	4614.106	7.66	4619.811	15.52	9233.916
2:00 PM	7.86	4612.333	7.66	4619.155	15.52	9231.487
3:00 PM	7.87	4614.376	7.66	4618.381	15.53	9232.757
4:00 PM	7.91	4618.893	7.66	4614.574	15.57	9233.467
5:00 PM	7.91	4614.772	7.66	4611.770	15.57	9226.542
6:00 PM	11.28	5143.306	7.66	4629.768	18.94	9773.073
7:00 PM	14.70	5676.237	7.66	4639.558	22.36	10315.795
8:00 PM	7.84	4611.887	7.66	4631.196	15.50	9243.084
9:00 PM	7.57	4575.715	7.66	4636.755	15.23	9212.470
10:00 PM	7.56	4579.153	7.66	4638.345	15.23	9217.498
11:00 PM	7.57	4581.698	7.66	4636.167	15.23	9217.865

04 JUNI 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
12:00 AM	7.57	4581.860	7.66	4636.338	15.23	9218.198
1:00 AM	7.56	4578.009	7.66	4636.497	15.22	9214.507
2:00 AM	7.57	4575.143	7.66	4630.879	15.23	9206.022
3:00 AM	7.59	4573.047	7.66	4632.820	15.25	9205.867
4:00 AM	7.58	4572.245	7.66	4633.604	15.24	9205.848
5:00 AM	7.56	4575.096	7.66	4633.864	15.22	9208.960
6:00 AM	7.56	4577.584	7.66	4635.601	15.22	9213.186
7:00 AM	7.57	4578.641	7.66	4639.380	15.23	9218.021
8:00 AM	7.57	4579.603	7.66	4633.778	15.23	9213.381
9:00 AM	7.56	4575.800	7.66	4625.679	15.22	9201.480
10:00 AM	7.55	4571.513	7.66	4624.550	15.21	9196.063
11:00 AM	7.56	4572.001	7.66	4626.283	15.22	9198.284
12:00 PM	7.57	4569.152	7.66	4624.827	15.23	9193.980
1:00 PM	7.58	4576.892	11.25	5153.862	18.83	9730.753
2:00 PM	7.56	4580.418	14.54	5630.761	22.09	10211.179
3:00 PM	7.58	4572.736	9.10	4824.336	16.68	9397.072
4:00 PM	7.64	4575.521	8.42	4721.660	16.06	9297.181
5:00 PM	7.64	4572.959	7.58	4600.346	15.22	9173.306
6:00 PM	23.09	7019.639	25.46	7339.355	48.55	14358.994
7:00 PM	21.03	6670.400	20.32	6527.034	41.34	13197.435
8:00 PM	9.82	4917.279	7.35	4585.572	17.17	9502.852
9:00 PM	7.54	4562.691	7.33	4583.264	14.87	9145.954
10:00 PM	7.52	4566.430	7.33	4587.924	14.85	9154.354
11:00 PM	6.84	4454.679	8.83	4814.170	15.66	9268.849

05 JUNI 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
1:00 AM	-0.02	0.00012524	21.03	6689.885	21.01	6689.885
2:00 AM	-0.02	0.00025049	21.03	6688.792	21.01	6688.793
3:00 AM	-0.02	0	20.73	6641.891	20.70	6641.891
4:00 AM	0.00	0.00025049	20.07	6536.725	20.06	6536.725
5:00 AM	-0.03	0	20.07	6539.597	20.03	6539.597
6:00 AM	-0.01	0	20.07	6545.931	20.06	6545.931
7:00 AM	0.02	0	20.07	6542.125	20.08	6542.125
8:00 AM	0.01	0	20.07	6543.985	20.08	6543.985
9:00 AM	0.00	0.00012524	20.07	6547.179	20.07	6547.179
10:00 AM	0.00	0	20.07	6539.552	20.07	6539.552
11:00 AM	0.00	0	20.80	6651.309	20.80	6651.309
12:00 PM	0.00	0	21.24	6712.984	21.24	6712.984
1:00 PM	0.00	0	21.24	6713.714	21.24	6713.714
2:00 PM	0.00	0	21.22	6707.491	21.22	6707.491
3:00 PM	0.00	0	21.22	6700.083	21.22	6700.083
4:00 PM	0.00	0	21.22	6698.402	21.22	6698.402
5:00 PM	0.00	0	21.23	6701.210	21.23	6701.210
6:00 PM	0.00	0	21.26	6712.129	21.26	6712.129
7:00 PM	0.00	0	21.27	6717.156	21.27	6717.156
8:00 PM	0.00	0	21.28	6718.111	21.28	6718.111
9:00 PM	0.00	0	20.31	6572.033	20.31	6572.033
10:00 PM	0.00	0	19.96	6519.945	19.96	6519.945
11:00 PM	0.00	0	19.96	6516.077	19.96	6516.077
12:00 AM	0.00	0	19.98	6514.913	19.98	6514.913

06 JUNI 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
1:00 AM	0.00	0	19.98	6513.183	19.98	6513.183
2:00 AM	0.00	0	19.99	6515.726	19.99	6515.726
3:00 AM	0.00	0	19.99	6514.351	19.99	6514.351
4:00 AM	0.00	0	19.99	6510.370	19.99	6510.370
5:00 AM	0.00	0	20.00	6512.968	20.00	6512.968
6:00 AM	0.00	0	19.99	6514.085	19.99	6514.085
7:00 AM	0.00	0	19.96	6510.288	19.96	6510.288
8:00 AM	0.00	0	19.92	6504.108	19.92	6504.108
9:00 AM	0.00	0	19.93	6503.031	19.93	6503.031
10:00 AM	0.00	0	19.88	6494.820	19.88	6494.820
11:00 AM	0.00	0	19.88	6494.255	19.88	6494.255
12:00 PM	0.00	0	19.86	6490.890	19.86	6490.890
1:00 PM	0.00	0	19.84	6484.592	19.84	6484.592
2:00 PM	0.00	0	19.87	6487.724	19.87	6487.724
3:00 PM	0.00	0	19.84	6480.686	19.84	6480.686
4:00 PM	0.00	0	19.86	6481.539	19.86	6481.539
5:00 PM	0.00	0	19.92	6495.361	19.92	6495.361
6:00 PM	0.00	0	19.96	6514.069	19.96	6514.069
7:00 PM	0.00	0	19.95	6516.463	19.95	6516.463
8:00 PM	0.00	0	19.97	6520.261	19.97	6520.261
9:00 PM	0.00	0	19.99	6525.922	19.99	6525.922
10:00 PM	0.00	0	20.01	6530.348	20.01	6530.348
11:00 PM	0.00	0	20.00	6533.014	20.00	6533.014
12:00 AM	0.00	0	20.03	6530.658	20.03	6530.658

07 JUNI 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
12:00 AM	0.00	0	20.03	6530.658	20.03	6530.658
1:00 AM	0.00	0	20.06	6533.233	20.06	6533.233
2:00 AM	0.00	0	20.03	6526.297	20.03	6526.297
3:00 AM	0.00	0	20.01	6519.317	20.01	6519.317
4:00 AM	0.00	0	20.00	6516.770	20.00	6516.770
5:00 AM	0.00	0	19.99	6515.874	19.99	6515.874
6:00 AM	0.00	0	19.99	6517.836	19.99	6517.836
7:00 AM	0.00	0	19.98	6519.836	19.98	6519.836
8:00 AM	0.00	0	19.92	6513.341	19.92	6513.341
9:00 AM	0.00	0	19.90	6512.487	19.90	6512.487
10:00 AM	0.00	0	25.06	7310.102	25.06	7310.102
11:00 AM	0.00	0	26.25	7480.173	26.25	7480.173
12:00 PM	0.00	0	31.86	8371.235	31.86	8371.235
1:00 PM	0.00	0	40.48	9820.634	40.48	9820.634
2:00 PM	0.00	0	40.58	9806.980	40.58	9806.980
3:00 PM	0.00	0	37.93	9328.324	37.93	9328.324
4:00 PM	0.00	0	26.04	7420.789	26.04	7420.789
5:00 PM	0.00	0	20.34	6555.145	20.34	6555.145
6:00 PM	0.00	0	31.70	8340.479	31.70	8340.479
7:00 PM	0.00	0	33.42	8587.259	33.42	8587.259
8:00 PM	0.00	0	26.98	7589.715	26.98	7589.715
9:00 PM	0.00	0	26.99	7597.277	26.99	7597.277
10:00 PM	0.00	0	22.72	6938.532	22.72	6938.532
11:00 PM	0.00	0	19.74	6485.420	19.74	6485.420

08 JUNI 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
12:00 AM	0.00	0	19.73	6484.018	19.73	6484.018
1:00 AM	0.00	0	19.73	6480.195	19.73	6480.195
2:00 AM	0.00	0	19.75	6479.698	19.75	6479.698
3:00 AM	0.00	0	19.72	6472.603	19.72	6472.603
4:00 AM	0.00	0	19.74	6476.722	19.74	6476.722
5:00 AM	0.00	0	19.75	6481.570	19.75	6481.570
6:00 AM	0.00	0	19.73	6480.458	19.73	6480.458
7:00 AM	0.00	0	19.71	6481.507	19.71	6481.507
8:00 AM	0.00	0	22.54	6927.797	22.54	6927.797
9:00 AM	0.00	0	38.40	9441.600	38.40	9441.600
10:00 AM	0.00	0	31.42	8274.094	31.42	8274.094
11:00 AM	0.00	0	24.79	7246.241	24.79	7246.241
12:00 PM	0.00	0	27.00	7585.824	27.00	7585.824
1:00 PM	0.00	0	35.94	9050.013	35.94	9050.013
2:00 PM	0.00	0	40.67	9823.955	40.67	9823.955
3:00 PM	0.00	0	39.01	9481.446	39.01	9481.446
4:00 PM	0.00	0	35.04	8832.955	35.04	8832.955
5:00 PM	0.00	0	29.38	7942.798	29.38	7942.798
6:00 PM	0.00	0	41.60	9978.755	41.60	9978.755
7:00 PM	0.00	0	41.94	10026.066	41.94	10026.066
8:00 PM	0.00	0	42.16	10055.765	42.16	10055.765
9:00 PM	0.00	0	33.98	8710.164	33.98	8710.164
10:00 PM	0.00	0	19.48	6437.431	19.48	6437.431
11:00 PM	0.00	0	19.50	6448.801	19.50	6448.801

09 JUNI 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
1:00 AM	0.00	0.000	19.53	6455.234	19.53	6455.234
2:00 AM	0.00	0.000	19.50	6450.819	19.50	6450.819
3:00 AM	0.00	0.000	19.52	6445.945	19.52	6445.945
4:00 AM	0.00	0.000	19.50	6437.178	19.50	6437.178
5:00 AM	0.00	0.000	19.49	6439.599	19.49	6439.599
6:00 AM	0.00	0.000	19.51	6446.664	19.51	6446.664
7:00 AM	0.00	0.000	19.44	6438.014	19.44	6438.014
8:00 AM	0.00	0.000	35.78	9058.240	35.78	9058.240
9:00 AM	0.00	0.000	29.57	7999.183	29.57	7999.183
10:00 AM	0.00	0.000	25.30	7329.936	25.30	7329.936
11:00 AM	0.01	0.000	35.95	9054.099	35.96	9054.099
12:00 PM	0.03	0.000	40.77	9851.697	40.80	9851.697
1:00 PM	0.04	0.000	37.36	9241.881	37.40	9241.881
2:00 PM	0.06	0.000	36.17	9013.407	36.23	9013.407
3:00 PM	-0.04	0.000	35.59	8896.000	35.56	8896.000
4:00 PM	-0.11	3.993	40.27	9617.542	40.16	9621.535
5:00 PM	9.87	4658.465	28.93	7732.114	38.80	12390.579
6:00 PM	38.38	9382.983	41.50	9777.085	79.88	19160.068
7:00 PM	44.66	10304.806	42.87	9997.489	87.53	20302.295
8:00 PM	25.68	7330.820	25.67	7249.355	51.35	14580.175
9:00 PM	15.92	5812.210	15.96	5790.640	31.87	11602.851
10:00 PM	15.98	5811.789	15.96	5789.681	31.93	11601.470
11:00 PM	16.02	5807.453	15.95	5790.494	31.97	11597.947
12:00 AM	16.20	5775.341	15.96	5813.106	32.15	11588.446

10 JUNI 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
1:00 AM	15.97	5799.930	15.95	5787.877	31.93	11587.807
2:00 AM	15.99	5802.539	15.95	5789.179	31.95	11591.718
3:00 AM	16.00	5800.482	15.95	5787.129	31.95	11587.612
4:00 AM	16.01	5798.999	15.95	5788.955	31.96	11587.955
5:00 AM	15.94	5794.191	15.95	5792.757	31.89	11586.948
6:00 AM	15.93	5793.925	15.95	5792.082	31.88	11586.007
7:00 AM	15.94	5795.874	15.95	5792.832	31.90	11588.706
8:00 AM	15.93	5799.341	15.96	5797.031	31.89	11596.372
9:00 AM	15.95	5809.731	15.96	5796.274	31.91	11606.005
10:00 AM	15.97	5813.143	15.96	5794.887	31.93	11608.030
11:00 AM	15.94	5804.087	15.96	5791.449	31.91	11595.536
12:00 PM	20.29	6492.145	20.30	6463.433	40.59	12955.578
1:00 PM	35.29	8814.245	35.29	8754.514	70.59	17568.759
2:00 PM	36.41	8980.566	36.41	8910.908	72.82	17891.474
3:00 PM	36.39	8979.266	36.36	8898.771	72.75	17878.037
4:00 PM	18.88	6245.230	18.85	6198.215	37.73	12443.444
5:00 PM	16.77	5921.428	16.73	5893.633	33.50	11815.062
6:00 PM	41.91	9843.372	40.70	9680.065	82.61	19523.437
7:00 PM	44.87	10307.418	42.80	9993.977	87.67	20301.395
8:00 PM	45.05	10354.993	43.01	10027.502	88.06	20382.495
9:00 PM	24.76	7203.052	43.11	10020.151	67.87	17223.203
10:00 PM	9.05	4821.790	29.15	7782.762	38.20	12604.551
11:00 PM	13.74	5530.317	13.15	5370.074	26.88	10900.391
12:00 AM	19.96	6574.593	0.09	1240.217	20.05	7814.810

11 JUNI 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
1:00 AM	20.18	6605.042	0.07	880.559	20.26	7485.601
2:00 AM	20.16	6595.579	0.07	879.535	20.24	7475.114
3:00 AM	20.17	6589.433	0.07	878.568	20.25	7468.001
4:00 AM	21.87	6865.806	0.07	880.178	21.94	7745.983
5:00 AM	34.33	8828.640	0.07	880.030	34.40	9708.670
6:00 AM	42.46	10083.299	0.07	879.964	42.53	10963.264
7:00 AM	39.85	9674.449	0.07	879.546	39.92	10553.995
8:00 AM	44.98	10528.697	0.07	878.115	45.05	11406.811
9:00 AM	44.68	10484.320	0.07	878.076	44.75	11362.396
10:00 AM	44.18	10426.038	0.07	872.769	44.26	11298.807
11:00 AM	43.73	10356.124	0.07	883.090	43.80	11239.214
12:00 PM	43.22	10261.624	0.07	910.234	43.29	11171.858
1:00 PM	43.16	10260.964	0.07	910.246	43.23	11171.210
2:00 PM	43.22	10271.201	0.07	909.678	43.29	11180.878
3:00 PM	43.21	10265.294	0.07	911.851	43.28	11177.144
4:00 PM	43.04	10228.139	0.07	887.052	43.11	11115.191
5:00 PM	43.66	10329.234	0.07	879.597	43.73	11208.831
6:00 PM	44.05	10384.189	0.07	872.174	44.12	11256.363
7:00 PM	44.32	10421.180	0.07	878.052	44.39	11299.232
8:00 PM	44.53	10451.642	0.07	878.043	44.60	11329.685
9:00 PM	44.64	10475.321	0.07	878.037	44.71	11353.358
10:00 PM	30.75	8234.865	0.07	878.128	30.83	9112.993
11:00 PM	20.51	6642.376	0.07	878.337	20.58	7520.713
12:00 AM	20.49	6646.807	0.07	878.253	20.56	7525.060

12 JUNI 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
1:00 AM	20.54	6651.927	0.07	878.097	20.62	7530.024
2:00 AM	20.50	6643.202	0.07	878.575	20.58	7521.777
3:00 AM	20.52	6648.459	0.07	879.639	20.59	7528.098
4:00 AM	20.52	6650.096	0.07	879.679	20.59	7529.775
5:00 AM	20.50	6645.715	0.07	879.774	20.57	7525.489
6:00 AM	20.48	6645.530	0.07	879.512	20.55	7525.042
7:00 AM	20.46	6648.624	0.07	878.324	20.53	7526.948
8:00 AM	20.41	6645.488	0.07	876.547	20.49	7522.035
9:00 AM	20.48	6653.973	0.07	874.623	20.55	7528.596
10:00 AM	20.46	6653.394	0.07	878.059	20.53	7531.452
11:00 AM	20.49	6658.089	0.07	878.627	20.57	7536.716
12:00 PM	20.41	6646.906	0.07	906.259	20.48	7553.164
1:00 PM	20.41	6642.041	0.07	909.692	20.48	7551.733
2:00 PM	20.39	6637.990	0.07	915.563	20.47	7553.553
3:00 PM	20.43	6638.783	0.07	893.959	20.50	7532.742
4:00 PM	20.44	6638.192	0.07	877.525	20.52	7515.717
5:00 PM	25.89	7516.503	0.07	870.300	25.96	8386.803
6:00 PM	44.36	10443.939	0.07	872.953	44.43	11316.891
7:00 PM	44.49	10457.182	0.07	878.030	44.56	11335.212
8:00 PM	44.13	10393.564	0.07	880.320	44.20	11273.884
9:00 PM	26.02	7497.624	0.07	885.967	26.09	8383.591
10:00 PM	20.40	6640.571	0.07	890.183	20.47	7530.754
11:00 PM	20.44	6649.334	0.07	893.861	20.51	7543.195
12:00 AM	20.49	6694.049	0.00	893.852	20.49	7587.901

13 JUNI 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
1:00 AM	20.50	6647.612	0.07	893.854	20.57	7541.466
2:00 AM	20.52	6649.556	0.07	893.861	20.59	7543.417
3:00 AM	20.50	6642.174	0.07	895.780	20.58	7537.954
4:00 AM	20.50	6640.415	0.07	894.426	20.57	7534.841
5:00 AM	20.51	6644.735	0.07	894.835	20.58	7539.570
6:00 AM	20.47	6644.282	0.07	893.850	20.54	7538.132
7:00 AM	20.48	6643.908	0.07	893.857	20.55	7537.765
8:00 AM	20.28	6616.056	0.07	891.280	20.36	7507.336
9:00 AM	20.24	6612.594	0.07	885.613	20.31	7498.207
10:00 AM	20.21	6610.126	0.07	887.715	20.28	7497.841
11:00 AM	20.20	6610.211	0.07	904.407	20.27	7514.618
12:00 PM	20.20	6603.410	0.07	918.573	20.27	7521.983
1:00 PM	20.15	6596.348	0.07	924.772	20.22	7521.120
2:00 PM	20.17	6595.904	0.07	947.438	20.24	7543.342
3:00 PM	20.19	6596.791	0.07	949.167	20.27	7545.958
4:00 PM	20.22	6601.007	0.07	922.234	20.29	7523.241
5:00 PM	22.68	6997.036	0.07	913.351	22.75	7910.387
6:00 PM	44.27	10437.197	0.07	909.704	44.35	11346.901
7:00 PM	44.35	10434.790	0.07	911.326	44.42	11346.116
8:00 PM	44.55	10468.026	0.07	917.461	44.63	11385.487
9:00 PM	24.18	7202.446	0.07	917.453	24.25	8119.899
10:00 PM	19.64	6513.819	0.07	917.407	19.71	7431.226
11:00 PM	19.74	6531.850	0.07	917.405	19.81	7449.255
12:00 AM	19.73	6529.411	0.07	917.466	19.80	7446.877

14 JUNI 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
1:00 AM	19.76	6531.860	0.07	917.561	19.83	7449.421
2:00 AM	19.77	6533.745	0.07	919.467	19.84	7453.211
3:00 AM	19.81	6537.322	0.07	921.703	19.88	7459.025
4:00 AM	19.84	6542.434	0.07	921.207	19.91	7463.641
5:00 AM	19.83	6544.735	0.07	920.891	19.91	7465.626
6:00 AM	19.87	6551.006	0.07	920.804	19.95	7471.810
7:00 AM	19.86	6557.304	0.07	920.716	19.94	7478.021
8:00 AM	20.37	6642.934	0.07	919.265	20.45	7562.199
9:00 AM	20.33	6632.449	0.07	917.763	20.41	7550.213
10:00 AM	20.28	6629.108	0.07	909.902	20.36	7539.011
11:00 AM	20.41	6643.162	0.08	913.025	20.49	7556.186
12:00 PM	20.62	6674.990	0.08	928.375	20.71	7603.365
1:00 PM	20.36	6631.184	0.12	932.762	20.48	7563.946
2:00 PM	20.62	6669.421	0.07	933.441	20.69	7602.863
3:00 PM	20.46	6642.371	0.08	939.533	20.54	7581.903
4:00 PM	20.27	6616.237	0.07	927.895	20.34	7544.132
5:00 PM	27.95	7794.289	0.77	2197.656	28.72	9991.945
6:00 PM	28.10	7756.252	16.89	6135.610	44.99	13891.861
7:00 PM	28.09	7790.089	44.34	10276.394	72.43	18066.483
8:00 PM	38.10	9326.913	32.63	8405.561	70.73	17732.474
9:00 PM	33.67	8635.237	33.25	8495.012	66.92	17130.249
10:00 PM	25.80	7407.119	25.80	7335.400	51.61	14742.519
11:00 PM	11.78	5214.270	14.26	5582.114	26.04	10796.384
12:00 AM	7.27	4512.224	7.11	4535.917	14.39	9048.141

15 JUNI 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
12:00 AM	7.27	4512.224	7.11	4535.917	14.39	9048.141
1:00 AM	7.27	4513.274	7.11	4540.279	14.38	9053.553
2:00 AM	7.30	4517.805	7.11	4539.526	14.41	9057.331
3:00 AM	7.30	4516.722	7.11	4538.179	14.41	9054.901
4:00 AM	7.34	4518.791	7.20	4549.176	14.54	9067.967
5:00 AM	7.46	4539.059	7.40	4582.238	14.87	9121.297
6:00 AM	7.45	4536.275	7.40	4582.068	14.85	9118.343
7:00 AM	7.45	4536.882	7.40	4581.483	14.86	9118.365
8:00 AM	7.60	4567.278	7.99	4673.688	15.59	9240.966
9:00 AM	19.64	6454.827	15.89	5863.709	35.53	12318.536
10:00 AM	36.22	9015.827	22.33	6862.480	58.55	15878.307
11:00 AM	36.14	9012.154	31.34	8215.328	67.48	17227.482
12:00 PM	42.30	10036.941	42.32	9940.535	84.62	19977.476
1:00 PM	44.44	10393.817	44.59	10297.653	89.02	20691.469
2:00 PM	44.08	10354.338	44.21	10279.676	88.29	20634.014
3:00 PM	43.93	10341.721	44.13	10382.299	88.06	20724.020
4:00 PM	43.76	10313.736	44.38	10259.281	88.14	20573.016
5:00 PM	44.25	10375.942	44.57	10260.999	88.81	20636.941
6:00 PM	44.61	10422.593	44.72	10302.706	89.33	20725.299
7:00 PM	44.74	10454.395	44.86	10322.783	89.60	20777.178
8:00 PM	44.91	10472.207	45.02	10337.682	89.93	20809.889
9:00 PM	30.99	8220.811	31.00	8105.775	61.98	16326.586
10:00 PM	12.03	5246.741	12.48	5307.901	24.51	10554.642
11:00 PM	7.65	4562.363	7.52	4585.170	15.17	9147.533

16 JUNI 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
12:00 AM	7.64	4561.854	7.52	4590.481	15.16	9152.335
1:00 AM	7.63	4560.994	7.52	4588.710	15.16	9149.704
2:00 AM	7.63	4554.365	7.52	4584.386	15.15	9138.751
3:00 AM	7.65	4558.221	7.52	4588.053	15.17	9146.274
4:00 AM	7.64	4558.256	7.52	4587.477	15.16	9145.733
5:00 AM	7.64	4553.880	7.52	4589.005	15.17	9142.885
6:00 AM	7.65	4564.209	7.52	4595.582	15.17	9159.791
7:00 AM	7.64	4566.111	7.52	4595.451	15.17	9161.561
8:00 AM	7.64	4567.518	7.52	4600.095	15.16	9167.613
9:00 AM	7.65	4574.320	7.52	4604.313	15.17	9178.633
10:00 AM	7.62	4569.946	7.52	4605.181	15.15	9175.127
11:00 AM	7.64	4575.574	7.52	4600.567	15.16	9176.141
12:00 PM	7.63	4565.203	7.52	4591.597	15.15	9156.800
1:00 PM	8.76	4748.709	10.56	5039.842	19.33	9788.551
2:00 PM	17.88	6170.715	17.10	6012.334	34.97	12183.050
3:00 PM	18.02	6184.333	17.87	6125.647	35.89	12309.980
4:00 PM	8.39	4671.370	8.85	4769.088	17.24	9440.459
5:00 PM	7.36	4511.182	7.30	4546.162	14.66	9057.343
6:00 PM	7.35	4515.331	7.30	4557.628	14.65	9072.959
7:00 PM	7.34	4516.912	7.30	4561.329	14.64	9078.241
8:00 PM	7.34	4519.794	7.30	4562.937	14.64	9082.731
9:00 PM	7.38	4528.388	7.30	4567.265	14.68	9095.653
10:00 PM	7.38	4526.720	7.30	4565.643	14.68	9092.363
11:00 PM	7.37	4525.838	7.30	4563.041	14.67	9088.878

17 JUNI 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
1:00 AM	7.36	4517.093	7.30	4553.893	14.67	9070.986
2:00 AM	7.36	4519.367	7.30	4555.904	14.67	9075.271
3:00 AM	7.34	4511.802	7.30	4553.994	14.64	9065.796
4:00 AM	7.36	4512.247	7.30	4552.135	14.67	9064.381
5:00 AM	7.37	4514.577	7.30	4553.724	14.68	9068.302
6:00 AM	7.39	4520.566	7.30	4560.312	14.69	9080.877
7:00 AM	7.38	4521.583	7.30	4559.297	14.68	9080.881
8:00 AM	7.35	4526.938	11.83	5221.611	19.17	9748.550
9:00 AM	7.37	4541.410	14.22	5570.220	21.58	10111.630
10:00 AM	7.34	4532.976	14.22	5564.426	21.55	10097.401
11:00 AM	7.36	4533.263	14.22	5561.345	21.57	10094.608
12:00 PM	7.36	4531.994	14.22	5561.410	21.58	10093.403
1:00 PM	7.36	4529.259	14.22	5557.185	21.57	10086.444
2:00 PM	7.35	4523.838	14.22	5549.865	21.57	10073.703
3:00 PM	7.36	4524.058	14.22	5549.783	21.58	10073.841
4:00 PM	7.34	4523.137	14.22	5549.426	21.56	10072.563
5:00 PM	7.35	4525.032	14.22	5550.153	21.56	10075.185
6:00 PM	7.33	4525.640	14.22	5562.415	21.55	10088.056
7:00 PM	7.32	4526.979	14.22	5566.385	21.54	10093.364
8:00 PM	7.35	4535.213	14.22	5569.588	21.57	10104.800
9:00 PM	7.33	4534.362	14.22	5569.622	21.55	10103.984
10:00 PM	7.34	4532.682	14.22	5564.089	21.56	10096.771
11:00 PM	7.37	4533.841	14.22	5565.089	21.58	10098.930

18 JUNI 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
1:00 AM	7.35	4533.073	14.22	5566.678	21.57	10099.752
2:00 AM	7.35	4532.172	14.22	5565.504	21.57	10097.676
3:00 AM	7.37	4534.141	14.22	5560.661	21.59	10094.802
4:00 AM	7.36	4529.062	14.22	5561.371	21.57	10090.433
5:00 AM	7.37	4534.279	14.22	5564.373	21.58	10098.652
6:00 AM	7.37	4537.072	14.22	5570.068	21.58	10107.140
7:00 AM	7.35	4537.596	14.22	5572.665	21.56	10110.261
8:00 AM	14.36	5620.394	14.61	5655.069	28.97	11275.463
9:00 AM	16.06	5896.778	16.06	5882.345	32.12	11779.123
10:00 AM	26.35	7514.781	26.34	7442.705	52.70	14957.486
11:00 AM	26.66	7550.076	26.65	7464.316	53.30	15014.392
12:00 PM	11.71	5197.750	12.46	5307.025	24.17	10504.775
1:00 PM	7.95	4627.692	14.08	5535.013	22.03	10162.705
2:00 PM	18.12	6208.409	18.10	6153.482	36.21	12361.891
3:00 PM	8.34	4675.224	14.52	5594.584	22.86	10269.808
4:00 PM	7.76	4587.703	14.15	5537.828	21.91	10125.531
5:00 PM	7.75	4586.628	14.15	5539.919	21.90	10126.547
6:00 PM	13.80	5524.005	14.45	5610.865	28.25	11134.870
7:00 PM	8.04	4633.453	14.35	5589.092	22.40	10222.544
8:00 PM	7.63	4575.772	14.35	5590.571	21.98	10166.343
9:00 PM	7.60	4579.747	14.35	5593.771	21.96	10173.518
10:00 PM	7.60	4576.959	14.35	5590.568	21.95	10167.527
11:00 PM	7.65	4575.619	14.35	5583.352	22.00	10158.972

19 JUNI 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
1:00 AM	7.61	4572.008	14.35	5580.180	21.96	10152.188
2:00 AM	7.62	4569.114	14.35	5577.920	21.97	10147.035
3:00 AM	7.60	4563.567	14.35	5578.097	21.95	10141.664
4:00 AM	7.63	4569.324	14.35	5579.042	21.99	10148.366
5:00 AM	7.61	4568.789	14.35	5581.397	21.97	10150.186
6:00 AM	7.60	4568.719	14.35	5584.223	21.96	10152.942
7:00 AM	7.61	4574.195	14.35	5586.465	21.96	10160.660
8:00 AM	7.60	4571.775	14.35	5587.670	21.95	10159.446
9:00 AM	7.61	4576.344	14.35	5586.943	21.96	10163.287
10:00 AM	7.61	4571.911	14.35	5577.271	21.97	10149.182
11:00 AM	7.62	4566.938	14.35	5571.472	21.97	10138.410
12:00 PM	7.62	4565.813	14.35	5573.898	21.97	10139.711
1:00 PM	7.61	4559.977	14.35	5570.015	21.96	10129.992
2:00 PM	7.60	4558.820	14.35	5563.087	21.95	10121.907
3:00 PM	8.01	4624.331	14.42	5570.233	22.43	10194.565
4:00 PM	9.10	4789.883	14.27	5549.110	23.37	10338.993
5:00 PM	7.88	4603.487	14.14	5533.495	22.02	10136.982
6:00 PM	22.67	6916.849	21.55	6704.870	44.22	13621.720
7:00 PM	22.57	6895.340	22.56	6840.896	45.13	13736.236
8:00 PM	17.33	6074.387	17.52	6075.594	34.85	12149.980
9:00 PM	7.42	4546.733	14.28	5579.269	21.70	10126.003
10:00 PM	7.40	4542.876	14.28	5574.136	21.68	10117.013
11:00 PM	7.41	4544.743	14.28	5574.841	21.69	10119.584
12:00 AM	7.35	4547.535	14.27	5576.289	21.63	10123.824

20 JUNI 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
12:00 AM	7.38	4540.834	14.28	5574.890	21.66	10115.724
1:00 AM	7.42	4538.865	14.28	5568.391	21.70	10107.256
2:00 AM	7.39	4532.818	14.28	5563.241	21.67	10096.059
3:00 AM	7.39	4531.235	14.28	5563.725	21.67	10094.961
4:00 AM	7.38	4528.503	14.28	5564.003	21.66	10092.506
5:00 AM	7.40	4533.267	14.28	5565.087	21.68	10098.354
6:00 AM	7.41	4536.095	14.28	5566.235	21.68	10102.330
7:00 AM	7.41	4537.580	14.28	5567.564	21.69	10105.144
8:00 AM	7.41	4536.870	14.28	5567.114	21.69	10103.984
9:00 AM	7.40	4536.283	14.28	5569.138	21.68	10105.421
10:00 AM	7.38	4527.946	14.28	5559.177	21.66	10087.123
11:00 AM	7.41	4531.863	14.28	5561.765	21.69	10093.628
12:00 PM	7.41	4533.858	14.28	5559.188	21.69	10093.046
1:00 PM	7.39	4527.958	14.28	5552.086	21.67	10080.044
2:00 PM	9.65	4873.588	14.28	5556.580	23.93	10430.168
3:00 PM	14.63	5638.267	14.28	5569.338	28.91	11207.605
4:00 PM	7.36	4523.741	14.28	5555.477	21.64	10079.218
5:00 PM	9.55	4863.857	14.28	5568.791	23.83	10432.648
6:00 PM	23.44	7046.990	23.43	6991.955	46.87	14038.945
7:00 PM	15.27	5756.461	18.11	6159.786	33.37	11916.247
8:00 PM	7.78	4608.830	14.44	5607.471	22.22	10216.301
9:00 PM	7.76	4607.764	14.45	5607.413	22.20	10215.177
10:00 PM	7.77	4605.615	14.44	5601.136	22.22	10206.751
11:00 PM	7.77	4601.059	14.44	5599.307	22.21	10200.366

21 JUNI 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
1:00 AM	7.77	4596.869	14.44	5599.323	22.21	10196.192
2:00 AM	7.78	4594.825	14.44	5592.231	22.23	10187.056
3:00 AM	7.78	4590.293	14.44	5590.537	22.23	10180.830
4:00 AM	7.80	4592.525	14.44	5590.055	22.25	10182.580
5:00 AM	7.79	4590.476	14.45	5589.237	22.24	10179.713
6:00 AM	7.78	4594.507	14.44	5594.307	22.23	10188.814
7:00 AM	7.77	4595.626	14.45	5597.861	22.22	10193.487
8:00 AM	7.77	4597.721	14.44	5600.228	22.21	10197.949
9:00 AM	7.76	4593.622	14.44	5600.358	22.20	10193.980
10:00 AM	7.77	4600.792	14.44	5602.424	22.21	10203.216
11:00 AM	7.77	4602.235	14.44	5599.191	22.21	10201.426
12:00 PM	7.78	4598.282	14.44	5595.585	22.22	10193.867
1:00 PM	7.76	4591.629	14.44	5594.857	22.20	10186.485
2:00 PM	7.75	4591.833	14.44	5594.271	22.19	10186.105
3:00 PM	12.59	5343.693	14.44	5601.392	27.04	10945.085
4:00 PM	14.35	5604.692	14.44	5604.783	28.80	11209.475
5:00 PM	7.36	4529.166	14.45	5591.999	21.80	10121.164
6:00 PM	20.67	6619.769	21.27	6661.720	41.94	13281.488
7:00 PM	29.15	7938.239	29.18	7861.378	58.32	15799.616
8:00 PM	29.27	7956.274	29.27	7873.097	58.54	15829.371
9:00 PM	14.10	5578.077	17.16	6016.895	31.26	11594.972
10:00 PM	7.31	4535.161	14.30	5579.749	21.60	10114.910
11:00 PM	7.32	4534.272	14.30	5580.219	21.62	10114.491
12:00 AM	7.32	4531.491	14.30	5577.712	21.62	10109.203

22 JUNI 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
1:00 AM	7.31	4522.384	14.30	5573.768	21.60	10096.152
2:00 AM	7.29	4517.101	14.30	5569.815	21.58	10086.917
3:00 AM	7.28	4514.848	14.30	5568.637	21.58	10083.485
4:00 AM	7.28	4515.369	14.30	5565.991	21.57	10081.360
5:00 AM	7.28	4518.749	14.30	5572.874	21.58	10091.623
6:00 AM	7.30	4524.489	14.30	5576.551	21.60	10101.040
7:00 AM	7.32	4530.588	14.30	5580.030	21.62	10110.618
8:00 AM	7.55	4568.641	14.30	5583.759	21.85	10152.400
9:00 AM	7.54	4567.954	14.30	5578.492	21.84	10146.447
10:00 AM	7.51	4558.518	14.30	5574.022	21.81	10132.541
11:00 AM	7.39	4535.387	14.30	5571.961	21.69	10107.348
12:00 PM	7.39	4533.696	14.30	5569.588	21.69	10103.284
1:00 PM	7.40	4533.167	14.30	5563.903	21.70	10097.071
2:00 PM	7.39	4526.128	14.30	5553.420	21.69	10079.548
3:00 PM	7.37	4515.208	14.30	5547.196	21.67	10062.404
4:00 PM	7.37	4514.290	14.30	5548.567	21.67	10062.857
5:00 PM	7.37	4515.631	14.30	5550.395	21.67	10066.026
6:00 PM	7.39	4536.172	14.30	5573.450	21.68	10109.622
7:00 PM	7.38	4542.624	14.30	5580.805	21.68	10123.429
8:00 PM	7.39	4545.280	14.30	5584.999	21.69	10130.279
9:00 PM	7.40	4549.067	14.30	5584.592	21.70	10133.659
10:00 PM	8.79	4751.661	14.68	5640.585	23.47	10392.246
11:00 PM	10.63	4983.151	17.33	6038.052	27.96	11021.203
12:00 AM	12.11	5215.948	18.94	6268.866	31.05	11484.814

23 JUNI 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
12:00 AM	12.11	5215.948	18.94	6268.866	31.05	11484.814
1:00 AM	11.96	5188.440	19.07	6285.174	31.04	11473.614
2:00 AM	7.88	4601.160	18.18	6149.477	26.06	10750.636
3:00 AM	7.28	4511.056	14.39	5578.401	21.67	10089.457
4:00 AM	7.28	4512.021	14.39	5578.181	21.67	10090.202
5:00 AM	7.26	4512.251	14.39	5584.666	21.65	10096.917
6:00 AM	7.25	4510.947	14.39	5583.852	21.64	10094.799
7:00 AM	7.33	4527.628	14.39	5588.805	21.72	10116.432
8:00 AM	7.33	4533.131	14.39	5593.262	21.72	10126.393
9:00 AM	7.33	4535.755	14.39	5590.350	21.72	10126.104
10:00 AM	7.34	4535.257	14.39	5588.223	21.73	10123.480
11:00 AM	7.34	4530.059	14.39	5587.713	21.73	10117.772
12:00 PM	7.34	4525.908	14.39	5583.425	21.73	10109.333
1:00 PM	7.35	4525.750	14.39	5581.867	21.74	10107.617
2:00 PM	7.34	4525.684	14.39	5579.498	21.73	10105.182
3:00 PM	7.36	4524.531	14.39	5577.276	21.75	10101.807
4:00 PM	7.37	4527.436	14.39	5577.581	21.76	10105.017
5:00 PM	7.33	4520.669	14.39	5572.385	21.72	10093.054
6:00 PM	13.98	5553.205	16.30	5882.718	30.28	11435.923
7:00 PM	9.69	4887.634	14.64	5631.605	24.32	10519.239
8:00 PM	7.38	4541.918	14.64	5628.340	22.02	10170.257
9:00 PM	7.41	4548.667	14.64	5628.890	22.04	10177.557
10:00 PM	7.42	4550.936	14.64	5626.562	22.05	10177.498
11:00 PM	7.41	4545.921	14.64	5625.644	22.05	10171.565

24 JUNI 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
12:00 AM	7.37	4535.724	14.64	5619.650	22.01	10155.375
1:00 AM	7.37	4526.511	14.64	5613.912	22.00	10140.423
2:00 AM	7.35	4524.580	14.64	5612.938	21.99	10137.518
3:00 AM	7.40	4535.169	14.64	5612.450	22.04	10147.619
4:00 AM	7.36	4525.619	14.64	5609.311	21.99	10134.930
5:00 AM	7.38	4530.436	14.64	5613.080	22.01	10143.516
6:00 AM	7.38	4532.185	14.64	5615.503	22.01	10147.689
7:00 AM	7.38	4533.446	14.64	5615.340	22.02	10148.785
8:00 AM	7.36	4528.862	14.64	5611.919	22.00	10140.781
9:00 AM	8.85	4760.115	15.26	5712.345	24.11	10472.460
10:00 AM	7.26	4516.471	14.53	5600.896	21.78	10117.367
11:00 AM	7.27	4519.353	14.53	5604.467	21.79	10123.820
12:00 PM	7.25	4507.188	14.53	5593.515	21.78	10100.703
1:00 PM	7.24	4502.261	14.53	5590.593	21.77	10092.855
2:00 PM	7.24	4499.870	14.53	5582.819	21.77	10082.688
3:00 PM	7.24	4497.273	14.53	5581.212	21.77	10078.485
4:00 PM	7.27	4502.966	14.53	5578.781	21.80	10081.747
5:00 PM	7.28	4504.378	14.53	5582.563	21.80	10086.941
6:00 PM	7.25	4506.724	14.53	5598.608	21.78	10105.332
7:00 PM	7.24	4515.168	14.53	5603.663	21.77	10118.830
8:00 PM	7.22	4516.760	14.53	5602.773	21.75	10119.534
9:00 PM	7.23	4520.518	14.53	5605.864	21.76	10126.382
10:00 PM	7.23	4519.740	14.53	5606.719	21.76	10126.459
11:00 PM	7.22	4514.621	14.53	5601.044	21.74	10115.665

25 JUNI 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
1:00 AM	7.22	4516.503	14.53	5604.386	21.74	10120.889
2:00 AM	7.24	4511.969	14.53	5600.759	21.77	10112.728
3:00 AM	7.29	4520.322	14.53	5599.744	21.82	10120.066
4:00 AM	7.26	4518.852	14.53	5603.413	21.79	10122.265
5:00 AM	7.24	4516.038	14.53	5606.805	21.77	10122.843
6:00 AM	7.25	4513.215	14.53	5604.347	21.77	10117.563
7:00 AM	7.24	4514.752	14.53	5609.044	21.77	10123.797
8:00 AM	7.26	4520.300	14.53	5611.887	21.78	10132.187
9:00 AM	7.22	4518.250	14.53	5612.645	21.75	10130.896
10:00 AM	7.21	4513.661	14.53	5606.892	21.73	10120.553
11:00 AM	7.21	4510.713	14.53	5603.877	21.73	10114.591
12:00 PM	7.23	4510.269	14.53	5602.699	21.76	10112.968
1:00 PM	7.26	4532.701	14.53	5597.018	21.78	10129.719
2:00 PM	7.26	4523.141	14.53	5597.815	21.79	10120.957
3:00 PM	7.26	4508.278	14.53	5594.330	21.79	10102.608
4:00 PM	7.25	4503.656	14.53	5585.421	21.78	10089.077
5:00 PM	7.27	4504.697	14.53	5585.236	21.80	10089.933
6:00 PM	7.24	4505.824	14.53	5598.930	21.77	10104.755
7:00 PM	7.25	4514.936	14.53	5603.365	21.77	10118.301
8:00 PM	7.23	4517.156	14.53	5603.376	21.76	10120.532
9:00 PM	7.24	4517.013	14.53	5605.190	21.77	10122.203
10:00 PM	7.56	4566.758	14.53	5607.185	22.08	10173.943
11:00 PM	7.67	4558.226	14.53	5591.395	22.21	10149.622

26 JUNI 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
1:00 AM	7.72	4586.558	14.53	5600.818	22.25	10187.376
2:00 AM	7.72	4585.328	14.53	5602.373	22.25	10187.701
3:00 AM	7.72	4585.908	14.53	5602.754	22.25	10188.662
4:00 AM	7.71	4586.147	14.53	5605.192	22.24	10191.339
5:00 AM	7.68	4584.506	14.53	5608.257	22.21	10192.763
6:00 AM	7.67	4583.688	14.53	5607.145	22.20	10190.832
7:00 AM	7.69	4586.505	14.53	5608.479	22.22	10194.984
8:00 AM	7.70	4589.536	14.53	5605.831	22.23	10195.367
9:00 AM	7.71	4591.151	14.53	5599.929	22.24	10191.080
10:00 AM	7.73	4587.991	14.53	5594.361	22.26	10182.352
11:00 AM	7.73	4584.888	14.53	5593.017	22.26	10177.905
12:00 PM	7.69	4577.359	14.53	5591.834	22.22	10169.192
1:00 PM	7.67	4572.331	14.53	5590.201	22.20	10162.531
2:00 PM	7.69	4574.717	14.53	5594.255	22.21	10168.972
3:00 PM	7.69	4573.820	14.53	5590.122	22.22	10163.942
4:00 PM	7.70	4575.524	14.53	5587.630	22.23	10163.154
5:00 PM	7.69	4578.869	14.53	5592.259	22.22	10171.128
6:00 PM	7.70	4585.703	14.53	5602.933	22.23	10188.636
7:00 PM	7.71	4585.389	14.53	5597.522	22.23	10182.910
8:00 PM	7.72	4582.794	14.53	5598.266	22.24	10181.060
9:00 PM	7.71	4586.924	14.53	5602.930	22.23	10189.854
10:00 PM	7.72	4591.185	14.53	5604.803	22.24	10195.988
11:00 PM	7.71	4553.812	14.55	5573.594	22.25	10127.406

27 JUNI 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
1:00 AM	7.71	4588.880	14.53	5603.890	22.24	10192.770
2:00 AM	7.72	4586.336	14.53	5600.744	22.24	10187.079
3:00 AM	7.73	4590.853	14.53	5601.637	22.26	10192.490
4:00 AM	7.72	4587.253	14.53	5599.420	22.25	10186.673
5:00 AM	7.72	4588.214	14.53	5601.536	22.25	10189.751
6:00 AM	7.73	4590.381	14.53	5602.472	22.25	10192.853
7:00 AM	7.73	4596.443	14.53	5609.777	22.25	10206.219
8:00 AM	7.73	4591.985	14.53	5604.544	22.25	10196.529
9:00 AM	7.73	4591.109	14.53	5598.230	22.26	10189.340
10:00 AM	7.71	4583.453	14.53	5593.581	22.24	10177.034
11:00 AM	7.67	4573.967	14.53	5588.475	22.20	10162.443
12:00 PM	7.67	4571.577	14.53	5589.239	22.20	10160.816
1:00 PM	7.69	4572.679	14.53	5587.842	22.21	10160.522
2:00 PM	7.71	4574.931	14.53	5585.743	22.24	10160.674
3:00 PM	7.70	4571.126	14.53	5586.874	22.23	10158.001
4:00 PM	7.71	4572.338	14.53	5581.857	22.24	10154.195
5:00 PM	7.70	4570.384	14.53	5584.723	22.23	10155.107
6:00 PM	7.70	4570.530	14.53	5598.781	22.22	10169.311
7:00 PM	7.71	4583.017	14.53	5602.778	22.24	10185.795
8:00 PM	7.70	4585.677	14.53	5605.640	22.23	10191.317
9:00 PM	7.71	4591.280	14.53	5607.137	22.24	10198.417
10:00 PM	7.71	4589.359	14.53	5606.526	22.24	10195.885
11:00 PM	7.70	4588.566	14.53	5604.781	22.23	10193.347
12:00 AM	7.67	4557.483	14.45	5540.700	22.12	10098.183

28 JUNI 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
12:00 AM	7.68	4577.579	14.53	5601.175	22.20	10178.754
1:00 AM	7.69	4577.984	14.53	5601.248	22.22	10179.232
2:00 AM	7.67	4572.459	14.53	5597.591	22.20	10170.050
3:00 AM	7.69	4575.772	14.53	5600.500	22.22	10176.272
4:00 AM	7.68	4574.279	14.53	5600.947	22.21	10175.226
5:00 AM	7.69	4575.714	14.53	5601.292	22.22	10177.006
6:00 AM	7.69	4579.057	14.53	5602.723	22.21	10181.780
7:00 AM	7.70	4579.029	14.53	5601.241	22.23	10180.270
8:00 AM	7.70	4580.746	14.53	5600.630	22.23	10181.376
9:00 AM	7.69	4575.847	14.53	5598.537	22.22	10174.384
10:00 AM	7.69	4576.695	14.53	5597.218	22.22	10173.913
11:00 AM	7.69	4577.376	14.53	5598.823	22.22	10176.199
12:00 PM	7.68	4575.283	14.53	5596.774	22.21	10172.057
1:00 PM	7.68	4574.070	14.53	5595.916	22.21	10169.986
2:00 PM	7.69	4576.335	14.53	5598.605	22.22	10174.940
3:00 PM	7.70	4579.741	14.53	5600.213	22.22	10179.954
4:00 PM	7.69	4577.581	14.53	5596.408	22.22	10173.989
5:00 PM	9.95	4937.753	15.77	5797.363	25.71	10735.115
6:00 PM	33.95	8682.243	33.94	8599.227	67.89	17281.470
7:00 PM	36.95	9145.391	36.94	9049.614	73.89	18195.005
8:00 PM	19.98	6492.233	19.98	6432.621	39.96	12924.854
9:00 PM	9.50	4868.617	14.97	5677.149	24.47	10545.766
10:00 PM	7.42	4544.484	14.43	5588.131	21.85	10132.615
11:00 PM	7.42	4540.072	14.59	5610.094	22.01	10150.166

29 JUNI 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
1:00 AM	7.42	4536.980	14.59	5606.574	22.01	10143.554
2:00 AM	7.42	4533.197	14.59	5604.903	22.01	10138.100
3:00 AM	7.43	4534.452	14.59	5605.496	22.03	10139.948
4:00 AM	7.44	4536.756	14.59	5606.509	22.03	10143.265
5:00 AM	7.44	4534.543	14.59	5604.779	22.03	10139.321
6:00 AM	7.43	4537.018	14.59	5609.428	22.03	10146.447
7:00 AM	7.42	4537.749	14.59	5613.494	22.01	10151.244
8:00 AM	7.42	4545.988	14.59	5627.207	22.01	10173.195
9:00 AM	7.84	4618.269	14.49	5620.498	22.33	10238.768
10:00 AM	7.50	4565.637	15.29	5738.027	22.79	10303.665
11:00 AM	7.49	4567.537	15.34	5749.329	22.83	10316.867
12:00 PM	7.51	4562.576	15.34	5737.819	22.85	10300.395
1:00 PM	7.50	4559.215	15.34	5735.892	22.84	10295.107
2:00 PM	8.17	4663.515	14.59	5624.763	22.76	10288.277
3:00 PM	7.56	4557.649	14.33	5572.097	21.88	10129.746
4:00 PM	7.48	4544.667	14.33	5568.203	21.80	10112.869
5:00 PM	7.48	4541.292	14.33	5566.928	21.81	10108.220
6:00 PM	23.93	7118.330	24.19	7112.008	48.12	14230.338
7:00 PM	23.57	7055.055	23.56	7000.987	47.13	14056.042
8:00 PM	7.98	4628.574	13.81	5505.619	21.79	10134.193
9:00 PM	7.35	4534.852	13.95	5524.292	21.30	10059.144
10:00 PM	7.36	4536.138	13.95	5524.676	21.31	10060.814
11:00 PM	7.35	4531.028	13.95	5520.156	21.30	10051.185
12:00 AM	7.33	4525.235	13.95	5516.906	21.28	10042.142

30 JUNI 2021						
Jam	GT 11		GT 12		Daya Total	Total Bahan Bakar
	Daya	Bahan Bakar	Daya	Bahan Bakar		
WITA	MW	Kg/Jam	MW	Kg/Jam	MW	Kg/Jam
1:00 AM	7.33	4521.750	13.95	5514.757	21.28	10036.507
2:00 AM	7.33	4526.494	13.95	5517.176	21.28	10043.670
3:00 AM	7.33	4525.945	13.95	5516.066	21.28	10042.011
4:00 AM	7.35	4538.930	13.95	5523.337	21.30	10062.267
5:00 AM	7.34	4527.202	13.95	5515.406	21.29	10042.608
6:00 AM	7.33	4527.742	13.95	5515.993	21.28	10043.735
7:00 AM	7.33	4528.627	13.95	5518.534	21.28	10047.161
8:00 AM	7.34	4532.326	14.40	5583.888	21.75	10116.214
9:00 AM	7.35	4534.694	14.43	5588.826	21.77	10123.520
10:00 AM	7.35	4532.755	14.43	5583.455	21.78	10116.211
11:00 AM	7.35	4536.365	14.43	5585.281	21.78	10121.647
12:00 PM	7.35	4532.933	14.43	5582.996	21.78	10115.929
1:00 PM	7.35	4529.400	14.43	5585.458	21.77	10114.858
2:00 PM	7.35	4528.183	14.43	5578.769	21.78	10106.952
3:00 PM	7.37	4527.470	14.43	5576.375	21.79	10103.845
4:00 PM	7.35	4521.897	14.43	5574.099	21.78	10095.996
5:00 PM	7.34	4519.478	14.43	5577.653	21.77	10097.131
6:00 PM	7.37	4530.989	14.43	5591.198	21.79	10122.187
7:00 PM	7.35	4534.553	14.43	5595.833	21.77	10130.386
8:00 PM	7.34	4535.144	14.43	5600.395	21.76	10135.539
9:00 PM	7.32	4538.848	14.43	5604.542	21.75	10143.390
10:00 PM	7.34	4543.705	14.43	5596.713	21.76	10140.417
11:00 PM	7.40	4546.592	14.43	5596.719	21.82	10143.312
12:00 AM	7.45	4553.550	14.43	5594.455	21.88	10148.005

Lampiran 2 Data Unit GT 11 dan GT 12 PLTGU Sengkang Blok 1 pada Aplikasi SPSS

1: BB1 4541,635

	P1	BB1	a	P2	BB2	var	var	var	var	var	var	var	var	var	var	var
1	7.43	4541.635		7.41	4588.180											
2	7.41	4537.536		7.41	4590.334											
3	7.36	4530.915		7.41	4588.568											
4	7.39	4537.770		7.41	4588.296											
5	7.39	4536.426		7.41	4590.128											
6	7.38	4537.134		7.41	4590.841											
7	7.38	4535.697		7.41	4588.022											
8	7.41	4538.315		7.41	4587.757											
9	7.40	4536.828		7.41	4583.527											
10	7.41	4537.125		7.41	4582.332											
11	9.36	4840.809		7.64	4619.992											
12	15.36	5781.971		15.49	5785.182											
13	15.36	5774.663		15.49	5777.561											
14	15.36	5773.668		14.92	5689.741											
15	15.06	5717.789		7.28	4572.161											
16	8.23	4659.106		7.28	4559.586											
17	8.24	4660.553		7.28	4560.636											
18	8.22	4660.878		7.28	4566.211											
19	8.21	4662.388		7.28	4570.169											
20	8.22	4664.121		7.28	4571.838											
21	8.21	4667.571		7.28	4573.167											
22	8.22	4668.636		7.44	4598.531											
23	8.14	4646.021		7.53	4635.873											

1: BB1 4541,635

	P1	BB1	a	P2	BB2	var	var	var	var	var	var	var	var	var	var	var
24	8.23	4663.733		7.50	4602.452											
25	8.24	4664.682		7.50	4600.693											
26	8.23	4660.447		7.50	4599.787											
27	8.24	4662.844		7.50	4600.307											
28	8.23	4661.830		7.50	4601.053											
29	8.24	4667.503		7.50	4605.875											
30	8.21	4665.130		7.50	4606.863											
31	8.20	4667.187		7.50	4605.172											
32	8.21	4669.374		7.50	4599.788											
33	8.19	4666.410		7.50	4600.798											
34	8.19	4670.992		7.50	4600.978											
35	8.21	4668.629		7.50	4596.942											
36	8.23	4669.251		7.50	4592.615											
37	8.21	4667.888		7.50	4592.999											
38	8.24	4669.501		7.50	4592.662											
39	7.42	4537.714		7.15	4533.027											
40	7.26	4509.229		7.06	4519.940											
41	13.28	5458.994		12.97	5420.762											
42	24.74	7260.757		24.75	7213.261											
43	16.00	5885.565		16.00	5862.285											
44	10.85	5081.583		10.11	4991.291											
45	7.84	4620.862		8.37	4738.483											
46	7.82	4627.079		8.10	4701.854											

Lampiran 3 Fungsi Karakteristik *Input-Output* Menggunakan SPSS

Fungsi Karakteristik *Input-Output* GT 11

Quadratic

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
1.000	1.000	1.000	34.512

The independent variable is Daya GT 11.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	1470449044.369	2	735224522.184	617269.610	.000
Residual	684877.553	575	1191.091		
Total	1471133921.921	577			

The independent variable is Daya GT 11.

Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Daya GT 11	157.439	.630	.994	249.999	.000
Daya GT 11 ** 2	.019	.013	.006	1.415	.158
(Constant)	3368.835	5.006		672.973	.000

Fungsi Karakteristik *Input-Output* GT 12

Quadratic

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.999	.999	.999	40.727

The independent variable is Daya GT 12.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	950857165.849	2	475428582.924	286630.327	.000
Residual	990233.194	597	1658.682		
Total	951847399.043	599			

The independent variable is Daya GT 12.

Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Daya GT 12	144.633	.813	.934	177.858	.000
Daya GT 12 ** 2	.219	.017	.068	12.959	.000
(Constant)	3479.814	8.149		427.024	.000

Lampiran 4 Fungsi Karakteristik *Input-Output* dengan Menggunakan Perhitungan Manual

Fungsi Karakteristik *Input-Output* GT 11

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
607		N	602,00											
608		P1	7764,83											
609		P1*2	159596,35											
610		P1*3	4797487,93											
611		P1*4	175315107,66											
612		H1	3253660,606											
613		P1*H1	51376453,444											
614		P1*2*H1	1296274304,125											
615														
616		a	602,00	7764,83	159596,35	602,00	7764,83							
617		b	7764,83	159596,35	4797487,93	7764,83	159596,35							
618		c	159596,35	4797487,93	175315107,66	159596,35	4797487,93							
619														
620		m11	27979652062732,400	23015890422794,600										
621		m12	1361292508795,130	765661583892,302										
622		m13	37251691911,247	25470996354,235										
623		m21	1361292508795,130	765661583892,302										
624		m22	105339694810,980	25470996354,235										
625		m23	2888087732,875	1239239017,370										
626		m31	37251691911,247	25470996354,235										
627		m32	2888087732,875	1239239017,370										
628		m33	96077005,380	60292629,343										
629														
630		D	16843750541164900,00	5945234226188530,00	5945234226188530,00	4065078162385400,00	13855566034522300,00	10570208804261000,00						
631		D	28734218994142000,00	28490853001168700,00										
632		D	243365992973244,00											
633														
634		a	4963761639937,88	-595630924902,827	11780695557,013	3253660,606								
635		b	-595630924902,827	80068698456,745	-1648848715,505	51376453,444								
636		c	11780695557,013	-1648848715,505	35784376,037	1296274304,125								
637														
638		a	66362,582	-125742,320	62749,165									
639		b	-7965,236	16903,125	-8782,493									
640		c	157,503	-348,085	190,603									
641														
642		a	3369,428											
643		b	157,395											
644		c	0,020											
645														
646														
647														
648														
649														
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658														
659														
660														

	J	K	L	M	N	O	P	Q	R	S	T
631											
632		D	28734218994142000,00	28490853001168700,00							
633		D	243365992973244,00								
634		a	4963761639937,88	-595630924902,827	11780695557,013	3253660,606					
635		b	-595630924902,827	80068698456,745	-1648848715,505	51376453,444					
636		c	11780695557,013	-1648848715,505	35784376,037	1296274304,125					
637											
638		a	66362,582	-125742,320	62749,165						
639		b	-7965,236	16903,125	-8782,493						
640		c	157,503	-348,085	190,603						
641											
642		a	3369,428								
643		b	157,395								
644		c	0,020								
645											
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Fungsi Karakteristik *Input-Output* GT 12

	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
631		N	624,00											
632		P1	10171,58											
633		P1*2	205557,30											
634		P1*3	5203341,23											
635		P1*4	159879656,34											
636		H1	3687058,072											
637		P1H1	66258031,596											
638		P1*2H1	1502792378,055											
639														
640		a	624,00	10171,58	205557,30	624,00	10171,58							
641		b	10171,58	205557,30	5203341,23	10171,58	205557,30							
642		c	205557,30	5203341,23	159879656,34	205557,30	5203341,23							
643														
644		m11	32386431104892,600	27074759945379,200	5789671159513,430									
645		m12	16262282437,330	1069584794306,610	556643489930,725									
646		m13	52926187565,518	42253805186,818	10672382378,700									
647		m21	16262282437,330	1069584794306,610	556643489930,725									
648		m22	9976495553,468	42253805186,818	57511100366,651									
649		m23	3246884926,894	2090842007,645	1156042919,249									
650		m31	52926187565,518	42253805186,818	10672382378,700									
651		m32	3246884926,894	2090842007,645	1156042919,249									
652		m33	128267737,634	103460696,913	24896772,721									
653														
654		D	2050740509453000,00	10879364421696800,00	10879364421696800,00	8685578273736690,00	16894650205916600,00	16541306711973500,00						
655		D	42266133852846000,00	42121535191626800,00										
656		D	144598661219800,00											
657														
658		a	5789671159513,420	-556643489930,725	10672382378,700	3687058,072								
659		b	-556643489930,725	57511100366,651	-1156042919,249	1502792378,055								

	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
655		D	42266133852846000,00	42121535191626800,00										
656		D	144598661219800,00											
657														
658		a	5789671159513,420	-556643489930,725	10672382378,700	3687058,072								
659		b	-556643489930,725	57511100366,651	-1156042919,249	1502792378,055								
660		c	10672382378,700	-1156042919,249	24896772,721									
661														
662		a	147628,295	-255065,307	110916,483									
663		b	-14193,609	26352,750	-12014,582									
664		c	272,130	-929,122	257,823									
665														
666		a	3479,470											
667		b	144,538											
668		c	0,221											
669														
670														
671														
672														
673														
674														
675														
676														
677														
678														
679														
680														
681														
682														
683														

Lampiran 5 Program Optimasi Metode Lagrange pada Aplikasi MATLAB

```
function BT = Beban_Total
% BT adalah fungsi untuk Beban_Total
BT= input('Masukkan nilai Beban_Total =');%memasukkan nilai Beban_Total
end

function [d] = data1
% d adalah data input-output pembangkit
% n a b(P) c(P2) min max
d= [1 10352429.955 483810.047 58.387 5 45;
    2 10693468.42 444457.209 672.987 5 45];
end

%% Economic Dispatch
% Rugi rugi daya diabaikan
clc;
BT=Beban_Total;
d=data1;
a=d(:,2);
b=d(:,3);
c=d(:,4);
P1=d(:,5);
P2=d(:,6);
dP=BT;
x=max(b); % asumsikan lambda
while abs(dP)>0.00001
    P=(x-b)./c/2;
    P=min(P,P2);
    P=max(P,P1);
    dP=BT-sum(P); % Delta Daya
```

```

    x=x+dP*2/(sum(1./c)); % LAMBDA BARU
end

C = a+b.*P+c.*P.*P; %Biaya
total_Biaya_Bahan_Bakar=sum(C);
('Hasil Optimasi Pembangkit di PLTGU Sengkang');
display(total_Biaya_Bahan_Bakar);
table(d(:,1),P,C,'V',{'Unit_Pembangkit' 'Daya_Optimasi' 'Biaya_Bahan_Bakar'})

```


Lampiran 6 Optimasi Unit Pembangkit Gas PLTGU Sengkang Blok 1 Tanggal 30 Juni 2021 pada Aplikasi MATLAB

Beban Total = 21,28 MW

```

1 %% Economic Dispatch
2 % Rugi rugi daya diabaikan
3 clc;
4 B=Beban_Total;
5 d=datal;
6 a=d(:,2);
7 b=d(:,3);
8 c=d(:,4);
9 P1=d(:,5);
10 P2=d(:,6);
11 dP=B;
12 x=max(b); % asumsikan lambda
13 while abs(dP)>0.00001
14     P=(x-b)./c/2;
15     P=min(P,P2);
16     P=max(P,P1);
17     dP=B-sum(P); % Delta Daya
18     x=x+dP*2/(sum(1./c)); % LAMDA BARU
19 end
20
21 C = a+b.*P+c.*P.^2; %Biaya
22 total_Biaya_Bahan_Bakar=sum(C);
23 ('Hasil Optimasi Pembangkit di PLTGU Sengkang');
24 display(total_Biaya_Bahan_Bakar);
25 table(d(:,1),P,C,'V',['Unit_Pembangkit' 'Daya_Optimasi' 'Biaya_Bahan_Bakar'])

```

Command Window Output:

```

Masukkan nilai Beban_Total = 21.28
total_Biaya_Bahan_Bakar =
    3.0881e+07

ans =
    Unit_Pembangkit    Daya_Optimasi    Biaya_Bahan_Bakar
    1                    5                1.2773e+07
    2                   16.28           1.8108e+07

```

Beban Total = 21,29

```

1 %% Economic Dispatch
2 % Rugi rugi daya diabaikan
3 clc;
4 B=Beban_Total;
5 d=datal;
6 a=d(:,2);
7 b=d(:,3);
8 c=d(:,4);
9 P1=d(:,5);
10 P2=d(:,6);
11 dP=B;
12 x=max(b); % asumsikan lambda
13 while abs(dP)>0.00001
14     P=(x-b)./c/2;
15     P=min(P,P2);
16     P=max(P,P1);
17     dP=B-sum(P); % Delta Daya
18     x=x+dP*2/(sum(1./c)); % LAMDA BARU
19 end
20
21 C = a+b.*P+c.*P.^2; %Biaya
22 total_Biaya_Bahan_Bakar=sum(C);
23 ('Hasil Optimasi Pembangkit di PLTGU Sengkang');
24 display(total_Biaya_Bahan_Bakar);
25 table(d(:,1),P,C,'V',['Unit_Pembangkit' 'Daya_Optimasi' 'Biaya_Bahan_Bakar'])

```

Command Window Output:

```

Masukkan nilai Beban_Total =21.29
total_Biaya_Bahan_Bakar =
    3.0885e+07

ans =
    Unit_Pembangkit    Daya_Optimasi    Biaya_Bahan_Bakar
    1                    5                1.2773e+07
    2                   16.29           1.8112e+07

```

Beban Total = 21,30

MATLAB R2015a

```

1 %% Economic Dispatch
2 % Rugi rugi daya diabaikan
3 clc;
4 BT=Beban_Total;
5 d=datas1;
6 a=d(:,2);
7 b=d(:,3);
8 c=d(:,4);
9 P1=d(:,5);
10 P2=d(:,6);
11 dP=BT;
12 x=max(b); % asumsikan lambda
13 while abs(dP)>0.00001
14     P=(x-b)./c/2;
15     P=min(P,P2);
16     P=max(P,P1);
17     dP=BT-sum(P); % Delta Daya
18     x=x+dP*2/(sum(1./c)); % LAMDA BARU
19 end
20
21 C = a*b.*P.*P; %Biaya
22 total_Biaya_Bahan_Bakar=sum(C);
23 ('Masih Optimasi Pembangkit di PLTGU Sengkang');
24 display(total_Biaya_Bahan_Bakar);
25 table(d(:,1),P,C,'V',('Unit_Pembangkit','Daya_Optimasi','Bia
  
```

Command Window

Masukkan nilai Beban_Total =21.30

total_Biaya_Bahan_Bakar =
3.0890e+07

ans =

Unit_Pembangkit	Daya_Optimasi	Biaya_Bahan_Bakar
1	5	1.2773e+07
2	16.3	1.8117e+07

Beban Total = 21,75

MATLAB R2015a

```

1 %% Economic Dispatch
2 % Rugi rugi daya diabaikan
3 clc;
4 BT=Beban_Total;
5 d=datas1;
6 a=d(:,2);
7 b=d(:,3);
8 c=d(:,4);
9 P1=d(:,5);
10 P2=d(:,6);
11 dP=BT;
12 x=max(b); % asumsikan lambda
13 while abs(dP)>0.00001
14     P=(x-b)./c/2;
15     P=min(P,P2);
16     P=max(P,P1);
17     dP=BT-sum(P); % Delta Daya
18     x=x+dP*2/(sum(1./c)); % LAMDA BARU
19 end
20
21 C = a*b.*P.*P; %Biaya
22 total_Biaya_Bahan_Bakar=sum(C);
23 ('Masih Optimasi Pembangkit di PLTGU Sengkang');
24 display(total_Biaya_Bahan_Bakar);
25 table(d(:,1),P,C,'V',('Unit_Pembangkit','Daya_Optimasi','Bia
  
```

Command Window

Masukkan nilai Beban_Total = 21.75

total_Biaya_Bahan_Bakar =
3.1100e+07

ans =

Unit_Pembangkit	Daya_Optimasi	Biaya_Bahan_Bakar
1	5	1.2773e+07
2	16.75	1.8327e+07

Beban Total = 21,76

MATLAB R2015a

```

1 %% Economic Dispatch
2 % Rugi rugi daya diabaikan
3 clc;
4 BT=Beban_Total;
5 d=data1;
6 a=d(:,2);
7 b=d(:,3);
8 c=d(:,4);
9 F1=d(:,5);
10 F2=d(:,6);
11 dP=BT;
12 x=max(b); % asumsikan lambda
13 while abs(dP)>0.00001
14     P=(x-b)./c/2;
15     P=min(P,F2);
16     P=max(P,F1);
17     dP=BT-sum(P); % Delta Daya
18     x=x+dP*2/(sum(1./c)); % LAMDA BARU
19 end
20
21 C = a*b.*P+c.*P.*P; %Biaya
22 total_Biaya_Bahan_Bakar=sum(C);
23 ('Hasil Optimasi Pembangkit di PLTGU Sengkang');
24 display(total_Biaya_Bahan_Bakar);
25 table(d(:,1),F,C,'V',{'Unit_Pembangkit','Daya_Optimasi','Bia
  
```

Masukkan nilai Beban_Total = 21.76

total_Biaya_Bahan_Bakar = 3.1105e+07

ans =

Unit_Pembangkit	Daya_Optimasi	Biaya_Bahan_Bakar
1	5	1.2773e+07
2	16.76	1.8332e+07

Beban Total = 21,77

MATLAB R2015a

```

1 %% Economic Dispatch
2 % Rugi rugi daya diabaikan
3 clc;
4 BT=Beban_Total;
5 d=data1;
6 a=d(:,2);
7 b=d(:,3);
8 c=d(:,4);
9 F1=d(:,5);
10 F2=d(:,6);
11 dP=BT;
12 x=max(b); % asumsikan lambda
13 while abs(dP)>0.00001
14     P=(x-b)./c/2;
15     P=min(P,F2);
16     P=max(P,F1);
17     dP=BT-sum(P); % Delta Daya
18     x=x+dP*2/(sum(1./c)); % LAMDA BARU
19 end
20
21 C = a*b.*P+c.*P.*P; %Biaya
22 total_Biaya_Bahan_Bakar=sum(C);
23 ('Hasil Optimasi Pembangkit di PLTGU Sengkang');
24 display(total_Biaya_Bahan_Bakar);
25 table(d(:,1),F,C,'V',{'Unit_Pembangkit','Daya_Optimasi','Bia
  
```

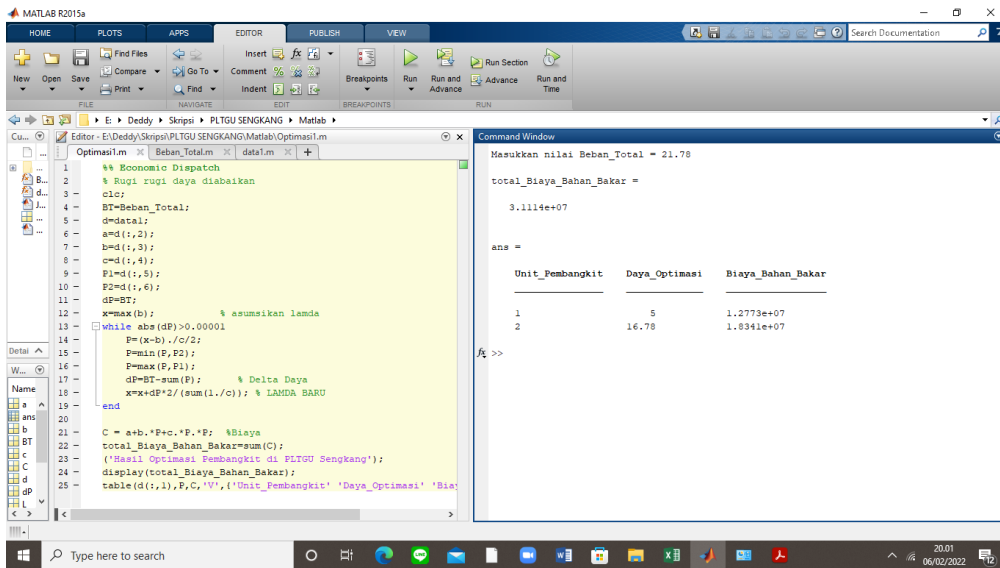
Masukkan nilai Beban_Total = 21.77

total_Biaya_Bahan_Bakar = 3.1109e+07

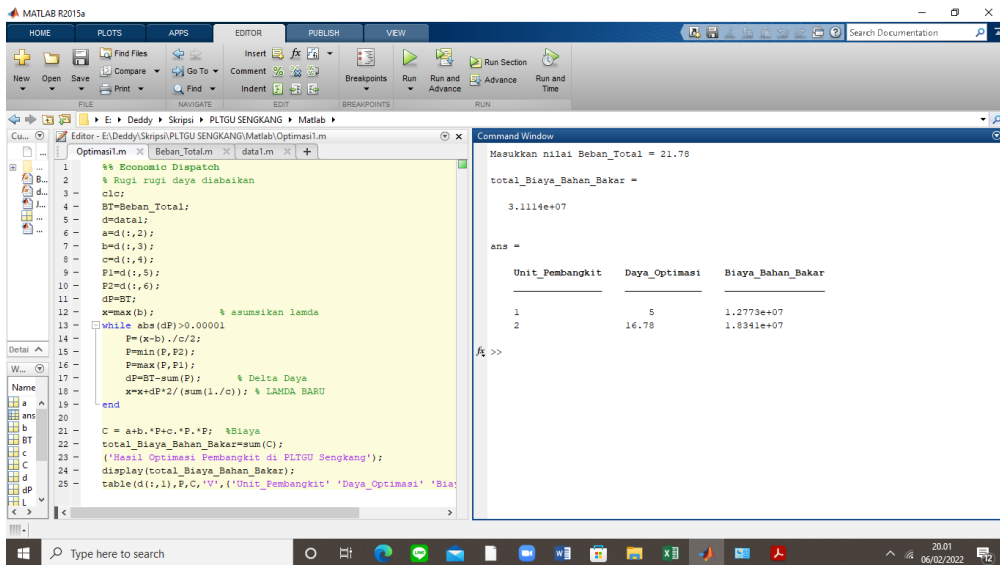
ans =

Unit_Pembangkit	Daya_Optimasi	Biaya_Bahan_Bakar
1	5	1.2773e+07
2	16.77	1.8336e+07

Beban Total = 21,78



Beban Total = 21,79



Beban Total = 21,82

MATLAB R2015a

```

1 %% Economic Dispatch
2 % Rugi rugi daya diabaikan
3 c1c;
4 BT=Beban_Total;
5 d=datal;
6 a=d(:,2);
7 b=d(:,3);
8 c=d(:,4);
9 P1=d(:,5);
10 P2=d(:,6);
11 dP=BT;
12 x=max(b); % asumsikan lambda
13 while abs(dP)>0.00001
14     P=(x-b)./c/2;
15     P=min(P,P2);
16     P=max(P,P1);
17     dP=BT-sum(P); % Delta Daya
18     x=x+dP/2/(sum(1./c)); % LAMDA BARU
19 end
20 C = a+b.*P+c.*P.^2; %Biaya
21 total_Biaya_Bahan_Bakar=sum(C);
22 ('Hasil Optimalisasi Pembangkit di PLTGU Sengkang');
23 display(total_Biaya_Bahan_Bakar);
24 table(d(:,1),P,C,'V',{'Unit_Pembangkit' 'Daya_Optimasi' 'Bia
  
```

Command Window

Masukkan nilai Beban_Total = 21.82

total_Biaya_Bahan_Bakar =

3.1133e+07

ans =

Unit_Pembangkit	Daya_Optimasi	Biaya_Bahan_Bakar
1	5	1.2773e+07
2	16.82	1.836e+07

f >> |

Beban Total = 21,88

MATLAB R2015a

```

1 %% Economic Dispatch
2 % Rugi rugi daya diabaikan
3 c1c;
4 BT=Beban_Total;
5 d=datal;
6 a=d(:,2);
7 b=d(:,3);
8 c=d(:,4);
9 P1=d(:,5);
10 P2=d(:,6);
11 dP=BT;
12 x=max(b); % asumsikan lambda
13 while abs(dP)>0.00001
14     P=(x-b)./c/2;
15     P=min(P,P2);
16     P=max(P,P1);
17     dP=BT-sum(P); % Delta Daya
18     x=x+dP/2/(sum(1./c)); % LAMDA BARU
19 end
20 C = a+b.*P+c.*P.^2; %Biaya
21 total_Biaya_Bahan_Bakar=sum(C);
22 ('Hasil Optimalisasi Pembangkit di PLTGU Sengkang');
23 display(total_Biaya_Bahan_Bakar);
24 table(d(:,1),P,C,'V',{'Unit_Pembangkit' 'Daya_Optimasi' 'Bia
  
```

Command Window

Masukkan nilai Beban_Total =21.88

total_Biaya_Bahan_Bakar =

3.1161e+07

ans =

Unit_Pembangkit	Daya_Optimasi	Biaya_Bahan_Bakar
1	5	1.2773e+07
2	16.88	1.8388e+07

f >> |



SURAT PENUGASAN

No. 3183/UN4.7.1/DA.04.09/2019

Dari : Dekan Fakultas Teknik Universitas Hasanuddin

Kepada : 1. Dr. Ir. Yusran, S.T., M.T.
2. Yusri Syam Akil, S.T., M.T, Ph.D

Isi : 1. Berdasarkan Surat Ketua Departemen Teknik Elektro Fakultas Teknik Nomor. 3181/UN4.7..1/DA.04.09/2019 tanggal 20 Februari 2019 tentang usul DOSEN PEMBIMBING MAHASISWA, maka dengan ini kami menugaskan Saudara untuk membimbing penulisan Laporan Tugas Akhir mahasiswa Teknik Elektro Fakultas Teknik Universitas Hasanuddin di bawah ini :

N a m a :
Deddy Hernawan

No. Stambuk :
D41115516

2. Surat penugasan pembimbing ini mulai berlaku sejak tanggal ditetapkannya dan berakhir sampai selesainya penulisan Laporan Tugas Akhir mahasiswa tersebut.
3. Agar penugasan ini dilaksanakan sebaik-baiknya dengan penuh rasa tanggung jawab.

Ditetapkan di Gowa Pada
Tanggal 20 Februari 2019
a.n. Dekan,
Wakil Dekan Bidang Akademik, Riset dan Inovasi

Prof. Baharuddin Hamzah, S.T., M.Arch., Ph.D
NIP. 19690308 199512 1 001

Tembusan :

1. Dekan FT-UH,
2. Ketua Departemen Teknik Elektro FT-UH
3. Mahasiswa yang bersangkutan





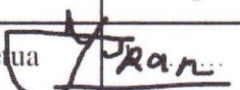
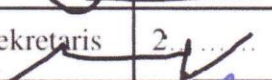

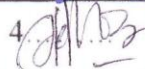
KEMENTERIAN PENDIDIKAN, KEBUDAYAN, RISET DAN TEKNOLOGI
UNIVERSITAS HASANUDDIN
DEPARTEMEN ELEKTRO
Jl. Poros Malino Km. 6 Gowa, 92171, Sulawesi Selatan
☎ (0411) 586015, 586262 Fax (0411) 586015
http://eng.unhas.ac.id/elektro, Email : elektro@unhas.ac.id

BERITA ACARA UJIAN SARJANA

Pada hari ini **Rabu** tanggal **2 Maret 2022** Pukul **08.30 WITA** - Selesai bertempat di Rumah (**Daring On-line Zoom**), telah dilaksanakan Ujian Sarjana bagi Saudara :

Nama : Deddy Hernawan
No. Stambuk : D41115516
Program Studi : Teknik Elektro
Judul Skripsi/TA : **"Penjadwalan Ekonomis Unit Pembangkit Gas Pada Pembangkit Listrik Tenaga Gas Uap Sengkang Blok 1"**

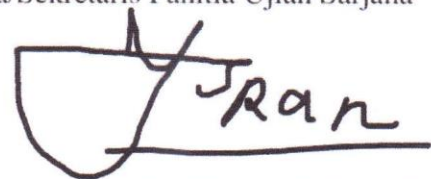
Yang dihadiri oleh Tim Penguji Ujian Sarjana sebagai berikut :

No.	Nama	Jabatan	Tanda tangan
1.	Dr. Yusran, S.T, M.T.	Pemb. I / Ketua	
2.	Yusri Syam Akil, S.T., M.T, Ph.D	Pemb. II / Sekretaris	
3.	Dr. Ir. Hj. Sri Mawar Said, M.T	Anggota	
4.	Dr. Ikhlas Kitta, S.T, M.T	Anggota	

Hasil keputusan panitia penilai Ujian Sarjana : **Lulus / Tidak lulus** dengan nilai angka ...dan huruf **A**
.....
87,25

Gowa, 24 Februari 2022

Ketua/Sekretaris Panitia Ujian Sarjana



Dr. Yusran, S.T, M.T



KEMENTERIAN PENDIDIKAN, KEBUDAYAN, RISET DAN TEKNOLOGI
UNIVERSITAS HASANUDDIN

FAKULTAS TEKNIK

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☎ (0411) 586015, 586262 Fax (0411) 586015

http://eng.unhas.ac.id., Email : teknik@unhas.ac.id

SURAT PENUGASAN

No. 3519/UN4.7.1/PT.01.06/2022

Dari : Dekan Fakultas Teknik Universitas Hasanuddin.

Kepada : Mereka yang tercantum namanya di bawah ini.

Isi : 1. Bahwa berdasarkan Peraturan Rektor Universitas Hasanuddin Nomor: 2781/UN4.1/KEP/2018, dengan ini menugaskan Saudara sebagai PANITIA UJIAN SARJANA Strata Satu (S1) Departemen Teknik Elektro Fakultas Teknik Universitas Hasanuddin dengan susunan sebagai Berikut :

Pembimbing I / Ketua : 1. Dr. Yusran, S.T, M.T.
Pembimbing II / Sekretaris : 2. Yusri Syam Akil, S.T., M.T, Ph.D
Anggota : 1. Dr. Ir. Hj. Sri Mawar Said, M.T
2. Dr. Ikhlas Kitta, S.T, M.T

untuk menguji bagi mahasiswa tersebut di bawah ini :

Nama/NIM : Deddy Hernawan / D41115516

Departemen : Teknik Elektro

Judul Thesis/Skripsi : **“Penjadwalan Ekonomis Unit Pembangkit Gas Pada Pembangkit Listrik Tenaga Gas Uap Sengkang Blok 1”**

2. Waktu seminar ditetapkan oleh Panitia Ujian Sarjana Strata Satu (S1).
3. Agar Surat penugasan ini dilaksanakan sebaik-baiknya dengan penuh rasa tanggung jawab.
4. Surat penugasan ini berlaku sejak tanggal ditetapkan sampai dengan berakhirnya Ujian Sarjana tersebut dengan ketentuan bahwa segala sesuatunya akan ditinjau dan diperbaiki sebagaimana mestinya apabila dikemudian hari ternyata terdapat kekeliruan dalam keputusan ini.

Ditetapkan di Gowa,
Pada tanggal 24 Februari 2022
a.n. Dekan.

Wakil Dekan Bidang Akademik, Riset dan Inovasi

Prof. Baharuddin Hamzah, ST., M.Arch., Ph.D
NIP. 19690308 199512 1 001

Tembusan :

1. Dekan Fak. Teknik Unhas
2. Ketua Departemen Teknik Elektro FT-UH
3. Mahasiswa yang bersangkutan

