

### Simulasi Energi Tahun 1994

Karakteristik Debit	bulan	jumlah hari	inflow		A	E		outflow PLTA			S <sub>(n-1)</sub>	S akhir periode (Tampungan Efektif)	S total periode
			m <sup>3</sup> /dt	juta m <sup>3</sup>	km <sup>2</sup>	mm/hari	juta m <sup>3</sup>	draft	m <sup>3</sup> /dt	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
1994	Jan	31	312.89	838.04	5,724.42	7.87	0.24	1.00	200.00	535.68	839.05	536.93	1,999.03
	Feb	28	341.21	825.46	5,661.38	8.01	0.22	1.00	200.00	483.84	878.32	536.93	1,999.03
	Mar	31	274.43	735.03	5,207.89	8.06	0.25	1.00	200.00	535.68	736.03	536.93	1,999.03
	Apr	30	238.82	619.02	4,552.03	6.51	0.20	1.00	200.00	518.40	637.35	536.93	1,999.03
	May	31	268.03	717.89	5,133.37	6.30	0.20	1.00	200.00	535.68	718.94	536.93	1,999.03
	Jun	30	209.68	543.49	4,183.52	6.19	0.19	1.00	200.00	518.40	561.83	536.93	1,999.03
	Jul	31	132.11	353.84	3,272.50	6.23	0.19	1.00	200.00	535.68	354.90	354.90	1,817.00
	Aug	31	74.44	199.38	2,037.57	7.10	0.22	1.00	200.00	535.68	18.38	18.38	1,480.48
	Sep	30	58.29	151.09	1,490.50	7.23	0.22	0.30	60.00	155.52	13.73	13.73	1,475.83
	Oct	31	60.45	161.91	1,587.73	7.26	0.22	0.30	60.00	160.70	14.71	14.71	1,476.81
	Nov	30	309.22	801.50	5,535.75	7.18	0.22	1.00	200.00	518.40	297.59	297.59	1,759.70
	Dec	31	321.17	860.22	5,835.48	7.10	0.22	1.00	200.00	535.68	621.91	536.93	1,999.03

Spillout		Outflow + spillout	EMAW	keterangan tampungan	keterangan Q hilir	Gross Head	Head Loss	Net Head	Power	Energy	Keterangan Energi
juta m <sup>3</sup>	m <sup>3</sup> /dt	m <sup>3</sup> /dt	m			m	m	m	MW	MWh	MWh
[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]
302.12	112.80	312.80	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
341.39	141.12	341.12	125.00	sukses	sukses	69.46	2.82	66.64	110.33	74,144.10	
199.10	74.34	274.34	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
100.43	38.74	238.74	125.00	sukses	sukses	69.46	2.82	66.64	110.33	79,440.10	
182.02	67.96	267.96	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
24.90	9.61	209.61	125.00	sukses	sukses	69.46	2.82	66.64	110.33	79,440.10	
0.00	0.00	200.00	123.64	sukses	sukses	68.10	2.82	65.28	108.08	80,412.61	
0.00	0.00	200.00	120.16	sukses	sukses	64.62	2.82	61.79	102.31	76,121.71	
0.00	0.00	60.00	120.10	sukses	sukses	64.57	2.82	61.74	30.67	-	Rerata Energi =
0.00	0.00	60.00	120.12	sukses	sukses	64.58	2.82	61.75	30.67	-	66,255.97
0.00	0.00	200.00	123.09	sukses	sukses	67.55	2.82	64.73	107.17	77,160.53	Total Energy =
84.99	31.73	231.73	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	795,071.58

Sumber: Hasil Perhitungan

## Simulasi Energi Tahun 1995

Karakteristik Debit	bulan	jumlah hari	inflow		A	E		outflow PLTA			S <sub>(n-1)</sub>	S akhir periode (Tampungan Efektif)	S total periode
			m <sup>3</sup> /dt	juta m <sup>3</sup>	km <sup>2</sup>	mm/hari	juta m <sup>3</sup>	draft	m <sup>3</sup> /dt	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
1995	Jan	31	550.19	1,473.63	8,818.26	7.87	0.24	1.00	200.00	535.68	1474.63	536.93	1,999.03
	Feb	28	677.59	1,639.23	9,675.12	8.01	0.22	1.00	200.00	483.84	1692.09	536.93	1,999.03
	Mar	31	355.82	953.03	6,492.52	8.06	0.25	1.00	200.00	535.68	954.03	536.93	1,999.03
	Apr	30	416.17	1,078.71	7,101.89	6.51	0.20	1.00	200.00	518.40	1097.05	536.93	1,999.03
	May	31	450.67	1,207.07	7,654.20	6.30	0.20	1.00	200.00	535.68	1208.13	536.93	1,999.03
	Jun	30	206.29	534.70	4,141.35	6.19	0.19	1.00	200.00	518.40	553.05	536.93	1,999.03
	Jul	31	118.64	317.77	2,914.28	6.23	0.19	1.00	200.00	535.68	318.82	318.82	1,780.93
	Aug	31	142.98	382.96	3,394.17	7.10	0.22	1.00	200.00	535.68	165.88	165.88	1,627.98
	Sep	30	164.37	426.05	3,585.20	7.23	0.22	0.70	140.00	362.88	228.83	228.83	1,690.93
	Oct	31	229.34	614.26	4,517.25	7.26	0.22	1.00	200.00	535.68	307.19	307.19	1,769.29
	Nov	30	283.05	733.67	5,201.94	7.18	0.22	1.00	200.00	518.40	522.24	522.24	1,984.34
	Dec	31	211.83	567.37	4,298.09	7.10	0.22	1.00	200.00	535.68	553.70	536.93	1,999.03

Spillout		Outflow + spillout	EMAW	keterangan tampungan	keterangan Q hilir	Gross Head	Head Loss	Net Head	Power	Energy	Keterangan Energi
juta m <sup>3</sup>	m <sup>3</sup> /dt	m <sup>3</sup> /dt	m			m	m	m	MW	MWh	MWh
[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]
937.70	350.10	550.10	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
1155.16	477.50	677.50	125.00	sukses	sukses	69.46	2.82	66.64	110.33	74,144.10	
417.10	155.73	355.73	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
560.12	216.09	416.09	125.00	sukses	sukses	69.46	2.82	66.64	110.33	79,440.10	
671.20	250.60	450.60	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
16.12	6.22	206.22	125.00	sukses	sukses	69.46	2.82	66.64	110.33	79,440.10	
0.00	0.00	200.00	123.29	sukses	sukses	67.75	2.82	64.93	107.51	79,984.46	
0.00	0.00	200.00	121.76	sukses	sukses	66.22	2.82	63.39	104.96	78,093.24	
0.00	0.00	140.00	122.40	sukses	sukses	66.86	2.82	64.04	74.22	53,439.32	Rerata Energi =
0.00	0.00	200.00	123.18	sukses	sukses	67.64	2.82	64.82	107.32	79,846.41	77,671.60
0.00	0.00	200.00	124.90	sukses	sukses	69.36	2.82	66.54	110.17	79,319.03	Total Energy =
16.77	6.26	206.26	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	932,059.20

Sumber: Hasil Perhitungan

### Simulasi Energi Tahun 1996

Karakteristik Debit	bulan	jumlah hari	inflow		A	E		outflow PLTA			S <sub>(n-1)</sub>	S akhir periode (Tampungan Efektif)	S total periode
			m <sup>3</sup> /dt	juta m <sup>3</sup>	km <sup>2</sup>	mm/hari	juta m <sup>3</sup>	draft	m <sup>3</sup> /dt	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
1996	Jan	31	186.67	499.98	3,953.02	7.87	0.24	1.00	200.00	535.68	500.98	536.93	1,999.03
	Feb	28	409.83	991.46	6,675.65	8.01	0.22	1.00	200.00	483.84	1008.38	536.93	1,963.09
	Mar	31	312.73	837.62	5,722.28	8.06	0.25	1.00	200.00	535.68	838.61	536.93	1,999.03
	Apr	30	498.70	1,292.63	8,030.06	6.51	0.20	1.00	200.00	518.40	1310.96	536.93	1,999.03
	May	31	251.48	673.56	4,920.40	6.30	0.20	1.00	200.00	535.68	674.62	536.93	1,999.03
	Jun	30	218.69	566.84	4,295.59	6.19	0.19	1.00	200.00	518.40	585.19	536.93	1,999.03
	Jul	31	133.57	357.75	3,288.77	6.23	0.19	0.80	160.00	428.54	465.95	465.95	1,928.05
	Aug	31	189.38	507.24	3,993.49	7.10	0.22	1.00	200.00	535.68	437.28	437.28	1,899.38
	Sep	30	293.76	761.43	5,322.62	7.23	0.22	1.00	200.00	518.40	680.09	536.93	1,999.03
	Oct	31	234.38	627.76	4,615.95	7.26	0.22	1.00	200.00	535.68	628.79	536.93	1,999.03
	Nov	30	152.64	395.64	3,448.86	7.18	0.22	1.00	200.00	518.40	413.96	413.96	1,876.06
	Dec	31	150.68	403.58	3,483.08	7.10	0.22	0.50	100.00	267.84	549.48	536.93	1,999.03

Spillout		Outflow + spillout	EMAW	keterangan tampungan	keterangan Q hilir	Gross Head	Head Loss	Net Head	Power	Energy	Keterangan Energi
juta m <sup>3</sup>	m <sup>3</sup> /dt	m <sup>3</sup> /dt	m			m	m	m	MW	MWh	MWh
[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]
0.00	0.00	200.00	124.75	sukses	sukses	69.21	2.82	66.39	109.92	81,781.97	
471.45	194.88	394.88	125.00	sukses	sukses	69.46	2.82	66.64	110.33	74,144.10	
301.69	112.64	312.64	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
774.04	298.62	498.62	125.00	sukses	sukses	69.46	2.82	66.64	110.33	79,440.10	
137.69	51.41	251.41	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
48.26	18.62	218.62	125.00	sukses	sukses	69.46	2.82	66.64	110.33	79,440.10	
0.00	0.00	160.00	124.51	sukses	sukses	68.97	2.82	66.15	87.62	65,186.87	
0.00	0.00	200.00	124.31	sukses	sukses	68.77	2.82	65.95	109.19	81,239.46	
143.16	55.23	255.23	125.00	sukses	sukses	69.46	2.82	66.64	110.33	79,440.10	Rerata Energi =
91.86	34.30	234.30	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	75,533.97
0.00	0.00	200.00	124.15	sukses	sukses	68.61	2.82	65.79	108.93	78,426.60	Total Energy =
12.55	4.69	104.69	125.00	sukses	sukses	69.46	2.82	66.64	55.17	41,044.05	906,407.69

Sumber: Hasil Perhitungan

### Simulasi Energi Tahun 1997

Karakteristik Debit	bulan	jumlah hari	inflow		A	E		outflow PLTA			S <sub>(n-1)</sub>	S akhir periode (Tampungan Efektif)	S total periode
			m <sup>3</sup> /dt	juta m <sup>3</sup>	km <sup>2</sup>	mm/hari	juta m <sup>3</sup>	draft	m <sup>3</sup> /dt	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
<b>1997</b>	Jan	31	131.86	353.17	3,269.72	7.87	0.24	1.00	200.00	535.68	354.18	536.93	1,999.03
	Feb	28	89.64	216.86	2,171.53	8.01	0.22	1.00	200.00	483.84	86.97	354.18	1,816.28
	Mar	31	173.74	465.35	3,774.50	8.06	0.25	1.00	200.00	535.68	16.39	86.97	1,549.08
	Apr	30	265.99	689.45	4,998.09	6.51	0.20	1.00	200.00	518.40	187.24	16.39	1,478.49
	May	31	227.40	609.07	4,492.67	6.30	0.20	1.00	200.00	535.68	260.43	187.24	1,649.34
	Jun	30	82.83	214.70	2,157.08	6.19	0.19	0.20	40.00	103.68	371.26	260.43	1,722.53
	Jul	31	76.17	204.01	2,073.73	6.23	0.19	1.00	200.00	535.68	39.40	371.26	1,833.36
	Aug	31	44.84	120.10	1,247.94	7.10	0.22	0.10	20.00	53.57	105.71	39.40	1,501.50
	Sep	30	36.28	94.04	1,088.74	7.23	0.22	0.10	20.00	51.84	147.69	105.71	1,567.82
	Oct	31	37.19	99.61	1,124.57	7.26	0.22	0.10	20.00	53.57	193.51	147.69	1,609.80
	Nov	30	82.50	213.84	2,150.41	7.18	0.22	0.10	20.00	51.84	355.29	193.51	1,655.61
	Dec	31	177.58	475.63	3,825.21	7.10	0.22	0.50	100.00	267.84	562.86	355.29	1,817.40
											536.93	1,999.03	

Spillout		Outflow + spillout	EMAW	keterangan tampungan	keterangan Q hilir	Gross Head	Head Loss	Net Head	Power	Energy	Keterangan Energi
juta m <sup>3</sup>	m <sup>3</sup> /dt	m <sup>3</sup> /dt	m			m	m	m	MW	MWh	MWh
[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]
0.00	0.00	200.00	123.63	sukses	sukses	68.09	2.82	65.27	108.07	80,404.06	
0.00	0.00	200.00	120.92	sukses	sukses	65.38	2.82	62.56	103.58	69,604.04	
0.00	0.00	200.00	120.13	sukses	sukses	64.60	2.82	61.77	102.28	76,094.41	
0.00	0.00	200.00	121.98	sukses	sukses	66.44	2.82	63.62	105.34	75,843.03	
0.00	0.00	200.00	122.72	sukses	sukses	67.18	2.82	64.36	106.56	79,277.48	
0.00	0.00	40.00	123.80	sukses	sukses	68.26	2.82	65.43	21.67	-	
0.00	0.00	200.00	120.39	sukses	sukses	64.85	2.82	62.03	102.70	76,409.76	
0.00	0.00	20.00	121.12	sukses	sukses	65.58	2.82	62.76	10.39	-	
0.00	0.00	20.00	121.56	sukses	sukses	66.03	2.82	63.20	10.46	-	Rerata Energi =
0.00	0.00	20.00	122.05	sukses	sukses	66.51	2.82	63.68	10.54	-	41,556.40
0.00	0.00	20.00	123.64	sukses	sukses	68.10	2.82	65.28	10.81	-	Total Energy =
25.94	9.68	109.68	125.00	sukses	sukses	69.46	2.82	66.64	55.17	41,044.05	498,676.84

Sumber: Hasil Perhitungan

### Simulasi Energi Tahun 1998

Karakteristik Debit	bulan	jumlah hari	inflow		A	E		outflow PLTA			S <sub>(n-1)</sub>	S akhir periode (Tampungan Efektif)	S total periode
			m <sup>3</sup> /dt	juta m <sup>3</sup>	km <sup>2</sup>	mm/hari	juta m <sup>3</sup>	draft	m <sup>3</sup> /dt	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
1998	Jan	31	463.42	1,241.22	7,805.66	7.87	0.24	1.00	200.00	535.68	1242.23	536.93	1,999.03
	Feb	28	359.28	869.17	5,880.30	8.01	0.22	1.00	200.00	483.84	922.03	536.93	1,999.03
	Mar	31	252.30	675.76	4,931.15	8.06	0.25	1.00	200.00	535.68	676.76	536.93	1,999.03
	Apr	30	263.22	682.27	4,962.97	6.51	0.20	1.00	200.00	518.40	700.60	536.93	1,999.03
	May	31	214.69	575.03	4,334.14	6.30	0.20	1.00	200.00	535.68	576.08	536.93	1,999.03
	Jun	30	99.28	257.33	2,508.62	6.19	0.19	1.00	200.00	518.40	275.68	275.68	1,737.78
	Jul	31	131.92	353.33	3,270.38	6.23	0.19	1.00	200.00	535.68	93.14	93.14	1,555.24
	Aug	31	381.35	1,021.41	6,822.55	7.10	0.22	1.00	200.00	535.68	578.65	536.93	1,999.03
	Sep	30	314.63	815.52	5,610.87	7.23	0.22	1.00	200.00	518.40	833.83	536.93	1,999.03
	Oct	31	119.79	320.85	2,949.59	7.26	0.22	0.50	100.00	267.84	589.71	536.93	1,999.03
	Nov	30	92.77	240.46	2,340.39	7.18	0.22	0.50	100.00	259.20	517.97	517.97	1,980.08
	Dec	31	119.65	320.47	2,945.29	7.10	0.22	0.50	100.00	267.84	570.38	536.93	1,999.03

Spillout		Outflow + spillout	EMAW	keterangan tampungan	keterangan Q hilir	Gross Head	Head Loss	Net Head	Power	Energy	Keterangan Energi
juta m <sup>3</sup>	m <sup>3</sup> /dt	m <sup>3</sup> /dt	m			m	m	m	MW	MWh	MWh
[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]
705.30	263.33	463.33	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	Rerata Energi = 69,762.96 Total Energy = 837,155.53
385.11	159.19	359.19	125.00	sukses	sukses	69.46	2.82	66.64	110.33	74,144.10	
139.83	52.21	252.21	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
163.67	63.14	263.14	125.00	sukses	sukses	69.46	2.82	66.64	110.33	79,440.10	
39.15	14.62	214.62	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
0.00	0.00	200.00	122.87	sukses	sukses	67.33	2.82	64.51	106.81	76,902.63	
0.00	0.00	200.00	120.99	sukses	sukses	65.45	2.82	62.63	103.69	77,146.12	
41.72	15.58	215.58	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
296.90	114.55	314.55	125.00	sukses	sukses	69.46	2.82	66.64	110.33	79,440.10	
52.78	19.71	119.71	125.00	sukses	sukses	69.46	2.82	66.64	55.17	41,044.05	
0.00	0.00	100.00	124.87	sukses	sukses	69.33	2.82	66.51	55.06	39,641.94	
33.45	12.49	112.49	125.00	sukses	sukses	69.46	2.82	66.64	55.17	41,044.05	

Sumber: Hasil Perhitungan

### Simulasi Energi Tahun 1999

Karakteristik Debit	bulan	jumlah hari	inflow		A	E		outflow PLTA			S <sub>(n-1)</sub>	S akhir periode (Tampungan Efektif)	S total periode
			m <sup>3</sup> /dt	juta m <sup>3</sup>	km <sup>2</sup>	mm/hari	juta m <sup>3</sup>	draft	m <sup>3</sup> /dt	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
1999	Jan	31	178.86	479.06	3,842.11	7.87	0.24	1.00	200.00	535.68	480.06	536.93	1,999.03
	Feb	28	140.86	340.77	3,178.00	8.01	0.22	1.00	200.00	483.84	336.77	480.06	1,942.17
	Mar	31	148.55	397.88	3,458.48	8.06	0.25	1.00	200.00	535.68	198.71	336.77	1,798.87
	Apr	30	47.72	123.69	1,269.22	6.51	0.20	0.30	60.00	155.52	166.69	198.71	1,660.82
	May	31	233.93	626.56	4,607.14	6.30	0.20	1.00	200.00	535.68	257.37	166.69	1,628.79
	Jun	30	85.97	222.83	2,211.43	6.19	0.19	0.50	100.00	259.20	220.82	257.37	1,719.48
	Jul	31	91.54	245.18	2,387.46	6.23	0.19	0.50	100.00	267.84	197.97	220.82	1,682.92
	Aug	31	98.10	262.75	2,557.36	7.10	0.22	0.50	100.00	267.84	192.66	197.97	1,660.07
	Sep	30	153.23	397.17	3,455.45	7.23	0.22	0.50	100.00	259.20	330.41	192.66	1,654.76
	Oct	31	321.35	860.70	5,837.90	7.26	0.22	1.00	200.00	535.68	655.21	330.41	1,792.52
	Nov	30	215.77	559.28	4,259.27	7.18	0.22	1.00	200.00	518.40	577.59	536.93	1,999.03
	Dec	31	296.27	793.53	5,493.06	7.10	0.22	1.00	200.00	535.68	794.56	536.93	1,999.03

Spillout		Outflow + spillout	EMAW	keterangan tampungan	keterangan Q hilir	Gross Head	Head Loss	Net Head	Power	Energy	Keterangan Energi
juta m <sup>3</sup>	m <sup>3</sup> /dt	m <sup>3</sup> /dt	m			m	m	m	MW	MWh	MWh
[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]
0.00	0.00	200.00	124.61	sukses	sukses	69.07	2.82	66.24	109.68	81,603.82	
0.00	0.00	200.00	123.47	sukses	sukses	67.93	2.82	65.10	107.79	72,436.40	
0.00	0.00	200.00	122.10	sukses	sukses	66.56	2.82	63.74	105.53	78,514.14	
0.00	0.00	60.00	121.77	sukses	sukses	66.23	2.82	63.40	31.49	-	
0.00	0.00	200.00	122.69	sukses	sukses	67.15	2.82	64.32	106.50	79,239.65	
0.00	0.00	100.00	122.32	sukses	sukses	66.78	2.82	63.96	52.95	38,123.01	
0.00	0.00	100.00	122.09	sukses	sukses	66.55	2.82	63.73	52.76	39,252.45	
0.00	0.00	100.00	122.04	sukses	sukses	66.50	2.82	63.68	52.71	39,219.62	
0.00	0.00	100.00	123.40	sukses	sukses	67.86	2.82	65.04	53.85	38,768.73	Rerata Energi =
118.28	44.16	244.16	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	59,231.18
40.66	15.69	215.69	125.00	sukses	sukses	69.46	2.82	66.64	110.33	79,440.10	Total Energy =
257.63	96.19	296.19	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	710,774.14

Sumber: Hasil Perhitungan

### Simulasi Energi Tahun 2000

Karakteristik Debit	bulan	jumlah hari	inflow		A	E		outflow PLTA			S <sub>(n-1)</sub>	S akhir periode (Tampungan Efektif)	S total periode
			m <sup>3</sup> /dt	juta m <sup>3</sup>	km <sup>2</sup>	mm/hari	juta m <sup>3</sup>	draft	m <sup>3</sup> /dt	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
<b>2000</b>	Jan	31	512.13	1,371.69	8,375.89	7.87	0.24	1.00	200.00	535.68	1372.69	536.93	1,999.03
	Feb	28	195.92	473.97	3,817.02	8.01	0.22	1.00	200.00	483.84	526.83	526.83	1,988.94
	Mar	31	195.09	522.53	4,078.76	8.06	0.25	1.00	200.00	535.68	513.43	513.43	1,975.54
	Apr	30	183.19	474.83	3,821.26	6.51	0.20	1.00	200.00	518.40	469.67	469.67	1,931.77
	May	31	76.96	206.13	2,090.24	6.30	0.20	1.00	200.00	535.68	139.92	139.92	1,602.03
	Jun	30	149.20	386.73	3,410.42	6.19	0.19	0.50	100.00	259.20	267.26	267.26	1,729.37
	Jul	31	108.90	291.68	2,740.87	6.23	0.19	0.80	160.00	428.54	130.20	130.20	1,592.31
	Aug	31	171.17	458.46	3,740.56	7.10	0.22	0.60	120.00	321.41	267.04	267.04	1,729.14
	Sep	30	56.98	147.69	1,460.17	7.23	0.22	0.50	100.00	259.20	155.31	155.31	1,617.42
	Oct	31	41.92	112.28	1,201.58	7.26	0.22	0.50	100.00	267.84	-0.48	0.00	1,462.10
	Nov	30	310.39	804.53	5,552.00	7.18	0.22	1.00	200.00	518.40	285.92	285.92	1,748.02
	Dec	31	511.08	1,368.88	8,363.59	7.10	0.22	1.00	200.00	535.68	1118.89	536.93	1,999.03

Spillout		Outflow + spillout	EMAW	keterangan tampungan	keterangan Q hilir	Gross Head	Head Loss	Net Head	Power	Energy	Keterangan Energi
juta m <sup>3</sup>	m <sup>3</sup> /dt	m <sup>3</sup> /dt	m			m	m	m	MW	MWh	MWh
[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]
835.77	312.04	512.04	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	Rerata Energi = 64,797.58 Total Energy = 777,570.96
0.00	0.00	200.00	124.93	sukses	sukses	69.39	2.82	66.57	110.22	74,066.45	
0.00	0.00	200.00	124.84	sukses	sukses	69.30	2.82	66.47	110.06	81,888.01	
0.00	0.00	200.00	124.53	sukses	sukses	69.00	2.82	66.17	109.56	78,885.75	
0.00	0.00	200.00	121.48	sukses	sukses	65.94	2.82	63.12	104.51	77,755.52	
0.00	0.00	100.00	122.79	sukses	sukses	67.25	2.82	64.42	53.33	38,400.95	
0.00	0.00	160.00	121.38	sukses	sukses	65.84	2.82	63.02	83.47	62,103.26	
0.00	0.00	120.00	122.78	sukses	sukses	67.25	2.82	64.42	64.00	47,615.50	
0.00	0.00	100.00	121.65	sukses	sukses	66.11	2.82	63.28	52.39	37,720.53	
0.00	0.00	100.00	119.95	gagal	sukses	64.41	2.82	61.59	50.99	37,933.60	
0.00	0.00	200.00	122.97	sukses	sukses	67.43	2.82	64.61	106.98	77,025.18	
581.96	217.28	417.28	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	

Sumber: Hasil Perhitungan

## Simulasi Energi Tahun 2001

Karakteristik Debit	bulan	jumlah hari	inflow		A	E		outflow PLTA			S <sub>(n-1)</sub>	S akhir periode (Tampungan Efektif)	S total periode
			m <sup>3</sup> /dt	juta m <sup>3</sup>	km <sup>2</sup>	mm/hari	juta m <sup>3</sup>	draft	m <sup>3</sup> /dt	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
2001	Jan	31	486.86	1,304.01	8,079.78	7.87	0.24	1.00	200.00	535.68	1305.01	536.93	1,999.03
	Feb	28	309.67	749.15	5,269.27	8.01	0.22	1.00	200.00	483.84	802.02	536.93	1,999.03
	Mar	31	237.47	636.04	4,676.47	8.06	0.25	1.00	200.00	535.68	637.04	536.93	1,999.03
	Apr	30	405.30	1,050.54	6,967.88	6.51	0.20	1.00	200.00	518.40	1068.87	536.93	1,999.03
	May	31	442.33	1,184.74	7,552.31	6.30	0.20	1.00	200.00	535.68	1185.79	536.93	1,999.03
	Jun	30	111.78	289.73	2,728.79	6.19	0.19	1.00	200.00	518.40	308.08	308.08	1,770.18
	Jul	31	42.34	113.40	1,208.25	6.23	0.19	0.50	100.00	267.84	153.45	153.45	1,615.55
	Aug	31	44.54	119.30	1,243.17	7.10	0.22	0.20	40.00	107.14	165.39	165.39	1,627.49
	Sep	30	93.50	242.35	2,359.26	7.23	0.22	0.20	40.00	103.68	303.84	303.84	1,765.95
	Oct	31	73.77	197.59	2,023.57	7.26	0.22	0.20	40.00	107.14	394.07	394.07	1,856.17
	Nov	30	90.02	233.33	2,281.50	7.18	0.22	0.50	100.00	259.20	367.98	367.98	1,830.09
	Dec	31	100.02	267.89	2,590.09	7.10	0.22	0.10	20.00	53.57	582.09	536.93	1,999.03

Spillout		Outflow + spillout	EMAW	keterangan tampungan	keterangan Q hilir	Gross Head	Head Loss	Net Head	Power	Energy	Keterangan Energi
juta m <sup>3</sup>	m <sup>3</sup> /dt	m <sup>3</sup> /dt	m			m	m	m	MW	MWh	MWh
[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]
768.08	286.77	486.77	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
265.09	109.58	309.58	125.00	sukses	sukses	69.46	2.82	66.64	110.33	74,144.10	
100.11	37.38	237.38	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
531.94	205.22	405.22	125.00	sukses	sukses	69.46	2.82	66.64	110.33	79,440.10	
648.86	242.26	442.26	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
0.00	0.00	200.00	123.19	sukses	sukses	67.65	2.82	64.83	107.33	77,280.93	
0.00	0.00	100.00	121.63	sukses	sukses	66.09	2.82	63.26	52.37	38,965.75	
0.00	0.00	40.00	121.75	sukses	sukses	66.21	2.82	63.39	20.99	-	
0.00	0.00	40.00	123.15	sukses	sukses	67.61	2.82	64.79	21.45	-	Rerata Energi =
0.00	0.00	40.00	124.01	sukses	sukses	68.47	2.82	65.65	21.74	-	46,256.64
0.00	0.00	100.00	123.77	sukses	sukses	68.23	2.82	65.40	54.15	38,984.46	Total Energy =
45.16	16.86	36.86	125.00	sukses	sukses	69.46	2.82	66.64	11.03	-	555,079.67

Sumber: Hasil Perhitungan

### Simulasi Energi Tahun 2002

Karakteristik Debit	bulan	jumlah hari	inflow		A	E		outflow PLTA			S <sub>(n-1)</sub>	S akhir periode (Tampungan Efektif)	S total periode
			m <sup>3</sup> /dt	juta m <sup>3</sup>	km <sup>2</sup>	mm/hari	juta m <sup>3</sup>	draft	m <sup>3</sup> /dt	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
2002	Jan	31	336.46	901.17	6,122.76	7.87	0.24	1.00	200.00	535.68	902.18	536.93	1,999.03
	Feb	28	163.43	395.37	3,447.68	8.01	0.22	1.00	200.00	483.84	448.23	448.23	1,910.34
	Mar	31	297.58	797.04	5,511.86	8.06	0.25	1.00	200.00	535.68	709.34	536.93	1,999.03
	Apr	30	440.55	1,141.91	7,357.95	6.51	0.20	1.00	200.00	518.40	1160.24	536.93	1,999.03
	May	31	304.45	815.44	5,610.43	6.30	0.20	1.00	200.00	535.68	816.49	536.93	1,999.03
	Jun	30	126.70	328.41	3,036.27	6.19	0.19	1.00	200.00	518.40	346.75	346.75	1,808.85
	Jul	31	120.53	322.83	2,972.31	6.23	0.19	1.00	200.00	535.68	133.70	133.70	1,595.81
	Aug	31	186.05	498.32	3,943.76	7.10	0.22	1.00	200.00	535.68	96.12	96.12	1,558.22
	Sep	30	156.83	406.50	3,495.67	7.23	0.22	0.90	180.00	466.56	35.85	35.85	1,497.95
	Oct	31	127.19	340.67	3,176.82	7.26	0.22	0.70	140.00	374.98	1.31	1.31	1,463.42
	Nov	30	381.57	989.03	6,664.07	7.18	0.22	1.00	200.00	518.40	471.73	471.73	1,933.83
	Dec	31	545.49	1,461.04	8,762.09	7.10	0.22	1.00	200.00	535.68	1396.87	536.93	1,999.03

Spillout		Outflow + spillout	EMAW	keterangan tampungan	keterangan Q hilir	Gross Head	Head Loss	Net Head	Power	Energy	Keterangan Energi
juta m <sup>3</sup>	m <sup>3</sup> /dt	m <sup>3</sup> /dt	m			m	m	m	MW	MWh	MWh
[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]
365.25	136.37	336.37	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	Rerata Energi = 76,030.89 Total Energy = 912,370.64
0.00	0.00	200.00	124.39	sukses	sukses	68.85	2.82	66.02	109.32	73,461.84	
172.41	64.37	264.37	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
623.31	240.47	440.47	125.00	sukses	sukses	69.46	2.82	66.64	110.33	79,440.10	
279.56	104.38	304.38	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
0.00	0.00	200.00	123.56	sukses	sukses	68.02	2.82	65.20	107.95	77,725.06	
0.00	0.00	200.00	121.42	sukses	sukses	65.88	2.82	63.05	104.40	77,674.63	
0.00	0.00	200.00	121.02	sukses	sukses	65.48	2.82	62.66	103.74	77,185.65	
0.00	0.00	180.00	120.35	sukses	sukses	64.81	2.82	61.99	92.37	66,508.02	
0.00	0.00	140.00	119.97	sukses	sukses	64.43	2.82	61.60	71.40	53,120.18	
0.00	0.00	200.00	124.55	sukses	sukses	69.01	2.82	66.19	109.59	78,902.72	
859.94	321.06	521.06	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	

Sumber: Hasil Perhitungan

### Simulasi Energi Tahun 2003

Karakteristik Debit	bulan	jumlah hari	inflow		A	E		outflow PLTA			S <sub>(n-1)</sub>	S akhir periode (Tampungan Efektif)	S total periode
			m <sup>3</sup> /dt	juta m <sup>3</sup>	km <sup>2</sup>	mm/hari	juta m <sup>3</sup>	draft	m <sup>3</sup> /dt	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
2003	Jan	31	347.38	930.42	6,362.35	7.87	0.24	1.00	200.00	535.68	931.43	536.93	1,999.03
	Feb	28	412.50	997.92	6,706.43	8.01	0.22	1.00	200.00	483.84	1050.78	536.93	1,999.03
	Mar	31	458.82	1,228.90	7,751.88	8.06	0.25	1.00	200.00	535.68	1229.90	536.93	1,999.03
	Apr	30	573.73	1,487.11	8,879.85	6.51	0.20	1.00	200.00	518.40	1505.44	536.93	1,999.03
	May	31	237.30	635.58	4,673.14	6.30	0.20	1.00	200.00	535.68	636.64	536.93	1,999.03
	Jun	30	112.30	291.08	2,737.16	6.19	0.19	1.00	200.00	518.40	309.42	309.42	1,771.53
	Jul	31	100.58	269.39	2,599.64	6.23	0.19	1.00	200.00	535.68	42.94	42.94	1,505.05
	Aug	31	152.43	408.27	3,503.28	7.10	0.22	0.80	160.00	428.54	22.45	22.45	1,484.55
	Sep	30	237.13	614.64	4,520.00	7.23	0.22	1.00	200.00	518.40	118.47	118.47	1,580.58
	Oct	31	252.85	677.23	4,938.35	7.26	0.22	1.00	200.00	535.68	259.80	259.80	1,721.91
	Nov	30	260.28	674.65	4,925.70	7.18	0.22	1.00	200.00	518.40	415.83	415.83	1,877.94
	Dec	31	368.94	988.17	6,659.97	7.10	0.22	1.00	200.00	535.68	868.10	536.93	1,999.03

Spillout		Outflow + spillout	EMAW	keterangan tampungan	keterangan Q hilir	Gross Head	Head Loss	Net Head	Power	Energy	Keterangan Energi
juta m <sup>3</sup>	m <sup>3</sup> /dt	m <sup>3</sup> /dt	m			m	m	m	MW	MWh	MWh
[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]
394.50	147.29	347.29	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
513.86	212.41	412.41	125.00	sukses	sukses	69.46	2.82	66.64	110.33	74,144.10	
692.97	258.73	458.73	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
968.51	373.65	573.65	125.00	sukses	sukses	69.46	2.82	66.64	110.33	79,440.10	
99.71	37.23	237.23	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
0.00	0.00	200.00	123.20	sukses	sukses	67.66	2.82	64.84	107.36	77,296.41	
0.00	0.00	200.00	120.43	sukses	sukses	64.89	2.82	62.07	102.77	76,458.33	
0.00	0.00	160.00	120.20	sukses	sukses	64.66	2.82	61.84	81.91	60,941.99	
0.00	0.00	200.00	121.26	sukses	sukses	65.72	2.82	62.89	104.14	74,977.24	Rerata Energi =
0.00	0.00	200.00	122.71	sukses	sukses	67.17	2.82	64.35	106.55	79,269.70	77,443.53
0.00	0.00	200.00	124.16	sukses	sukses	68.62	2.82	65.80	108.95	78,442.07	Total Energy =
331.17	123.65	323.65	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	929,322.37

Sumber: Hasil Perhitungan

### Simulasi Energi Tahun 2004

Karakteristik Debit	bulan	jumlah hari	inflow		A	E		outflow PLTA			S <sub>(n-1)</sub>	S akhir periode (Tampungan Efektif)	S total periode
			m <sup>3</sup> /dt	juta m <sup>3</sup>	km <sup>2</sup>	mm/hari	juta m <sup>3</sup>	draft	m <sup>3</sup> /dt	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
2004	Jan	31	277.96	744.49	5,248.99	7.87	0.24	1.00	200.00	535.68	745.49	536.93	1,999.03
	Feb	28	240.81	582.57	4,369.26	8.01	0.22	1.00	200.00	483.84	635.43	536.93	1,999.03
	Mar	31	132.37	354.54	3,275.40	8.06	0.25	1.00	200.00	535.68	355.54	355.54	1,817.64
	Apr	30	323.47	838.43	5,726.37	6.51	0.20	1.00	200.00	518.40	675.38	536.93	1,999.03
	May	31	140.11	375.27	3,361.65	6.30	0.20	1.00	200.00	535.68	376.32	376.32	1,838.43
	Jun	30	84.00	217.73	2,177.35	6.19	0.19	1.00	200.00	518.40	75.47	75.47	1,537.57
	Jul	31	137.27	367.66	3,330.00	6.23	0.19	0.50	100.00	267.84	175.10	175.10	1,637.20
	Aug	31	73.58	197.08	2,019.60	7.10	0.22	0.50	100.00	267.84	104.11	104.11	1,566.22
	Sep	30	59.10	153.19	1,509.25	7.23	0.22	0.40	80.00	207.36	49.72	49.72	1,511.83
	Oct	31	184.70	494.70	3,923.60	7.26	0.22	1.00	200.00	535.68	8.52	8.52	1,470.62
	Nov	30	332.81	862.64	5,847.61	7.18	0.22	1.00	200.00	518.40	352.55	352.55	1,814.65
	Dec	31	470.05	1,258.98	7,883.18	7.10	0.22	1.00	200.00	535.68	1075.63	536.93	1,999.03

Spillout		Outflow + spillout	EMAW	keterangan tampungan	keterangan Q hilir	Gross Head	Head Loss	Net Head	Power	Energy	Keterangan Energi
juta m <sup>3</sup>	m <sup>3</sup> /dt	m <sup>3</sup> /dt	m			m	m	m	MW	MWh	MWh
[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]
208.56	77.87	277.87	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
98.50	40.72	240.72	125.00	sukses	sukses	69.46	2.82	66.64	110.33	74,144.10	
0.00	0.00	200.00	123.65	sukses	sukses	68.11	2.82	65.28	108.09	80,420.20	
138.45	53.41	253.41	125.00	sukses	sukses	69.46	2.82	66.64	110.33	79,440.10	
0.00	0.00	200.00	123.85	sukses	sukses	68.31	2.82	65.48	108.42	80,666.86	
0.00	0.00	200.00	120.79	sukses	sukses	65.25	2.82	62.43	103.37	74,423.19	
0.00	0.00	100.00	121.85	sukses	sukses	66.32	2.82	63.49	52.56	39,106.59	
0.00	0.00	100.00	121.10	sukses	sukses	65.57	2.82	62.74	51.94	38,644.82	
0.00	0.00	80.00	120.51	sukses	sukses	64.97	2.82	62.14	41.16	-	Rerata Energi =
0.00	0.00	200.00	120.05	sukses	sukses	64.51	2.82	61.68	102.13	75,986.61	71,345.49
0.00	0.00	200.00	123.62	sukses	sukses	68.08	2.82	65.25	108.04	77,791.65	Total Energi =
538.70	201.13	401.13	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	784,800.34

Sumber: Hasil Perhitungan

## Simulasi Energi Tahun 2005

Karakteristik Debit	bulan	jumlah hari	inflow		A	E		outflow PLTA			S <sub>(n-1)</sub>	S akhir periode (Tampungan Efektif)	S total periode
			m <sup>3</sup> /dt	juta m <sup>3</sup>	km <sup>2</sup>	mm/hari	juta m <sup>3</sup>	draft	m <sup>3</sup> /dt	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
2005	Jan	31	401.82	1,076.23	7,091.85	7.87	0.24	1.00	200.00	535.68	1077.24	536.93	1,999.03
	Feb	28	148.77	359.90	3,297.72	8.01	0.22	1.00	200.00	483.84	412.77	412.77	1,874.87
	Mar	31	232.39	622.43	4,576.98	8.06	0.25	1.00	200.00	535.68	499.27	499.27	1,961.38
	Apr	30	169.15	438.44	3,643.98	6.51	0.20	1.00	200.00	518.40	419.11	419.11	1,881.22
	May	31	200.15	536.08	4,147.96	6.30	0.20	1.00	200.00	535.68	419.32	419.32	1,881.42
	Jun	30	134.90	349.66	3,255.10	6.19	0.19	0.50	100.00	259.20	509.60	509.60	1,971.70
	Jul	31	81.62	218.61	2,183.24	6.23	0.19	0.50	100.00	267.84	460.17	460.17	1,922.28
	Aug	31	63.43	169.89	1,660.65	7.10	0.22	0.50	100.00	267.84	362.00	362.00	1,824.11
	Sep	30	68.46	177.45	1,742.12	7.23	0.22	0.50	100.00	259.20	280.04	280.04	1,742.14
	Oct	31	209.84	562.04	4,272.51	7.26	0.22	1.00	200.00	535.68	306.17	306.17	1,768.27
	Nov	30	191.54	496.47	3,933.47	7.18	0.22	1.00	200.00	518.40	284.02	284.02	1,746.13
	Dec	31	105.86	283.54	2,689.65	7.10	0.22	0.05	10.00	26.78	540.55	536.93	1,999.03

Spillout		Outflow + spillout	EMAW	keterangan tampungan	keterangan Q hilir	Gross Head	Head Loss	Net Head	Power	Energy	Keterangan Energi
juta m <sup>3</sup>	m <sup>3</sup> /dt	m <sup>3</sup> /dt	m			m	m	m	MW	MWh	MWh
[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]
540.31	201.73	401.73	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	Rerata Energi = 59,715.99 Total Energy = 716,591.87
0.00	0.00	200.00	124.14	sukses	sukses	68.60	2.82	65.78	108.91	73,189.03	
0.00	0.00	200.00	124.74	sukses	sukses	69.20	2.82	66.38	109.90	81,767.41	
0.00	0.00	200.00	124.19	sukses	sukses	68.65	2.82	65.82	108.98	78,469.11	
0.00	0.00	200.00	124.19	sukses	sukses	68.65	2.82	65.82	108.99	81,086.51	
0.00	0.00	100.00	124.81	sukses	sukses	69.27	2.82	66.45	55.01	39,607.42	
0.00	0.00	100.00	124.47	sukses	sukses	68.93	2.82	66.11	54.73	40,717.21	
0.00	0.00	100.00	123.71	sukses	sukses	68.17	2.82	65.35	54.10	40,248.46	
0.00	0.00	100.00	122.92	sukses	sukses	67.38	2.82	64.55	53.44	38,477.40	
0.00	0.00	200.00	123.17	sukses	sukses	67.63	2.82	64.81	107.30	79,834.29	
0.00	0.00	200.00	122.96	sukses	sukses	67.42	2.82	64.59	106.95	77,002.52	
3.62	1.35	11.35	125.00	sukses	sukses	69.46	2.82	66.64	5.52	4,104.41	

Sumber: Hasil Perhitungan

### Simulasi Energi Tahun 2006

Karakteristik Debit	bulan	jumlah hari	inflow		A	E		outflow PLTA			S <sub>(n-1)</sub>	S akhir periode (Tampungan Efektif)	S total periode
			m <sup>3</sup> /dt	juta m <sup>3</sup>	km <sup>2</sup>	mm/hari	juta m <sup>3</sup>	draft	m <sup>3</sup> /dt	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
2006	Jan	31	291.85	781.69	5,429.65	7.87	0.24	1.00	200.00	535.68	782.70	536.93	1,999.03
	Feb	28	352.64	853.11	5,799.85	8.01	0.22	1.00	200.00	483.84	905.97	536.93	1,999.03
	Mar	31	171.98	460.63	3,751.26	8.06	0.25	1.00	200.00	535.68	461.63	461.63	1,923.73
	Apr	30	167.52	434.21	3,623.94	6.51	0.20	1.00	200.00	518.40	377.25	377.25	1,839.35
	May	31	134.39	359.95	3,297.91	6.30	0.20	1.00	200.00	535.68	201.32	201.32	1,663.43
	Jun	30	184.30	477.71	3,835.44	6.19	0.19	1.00	200.00	518.40	160.44	160.44	1,622.55
	Jul	31	145.15	388.77	3,419.23	6.23	0.19	0.50	100.00	267.84	281.18	281.18	1,743.28
	Aug	31	52.20	139.81	1,390.78	7.10	0.22	0.50	100.00	267.84	152.93	152.93	1,615.03
	Sep	30	177.26	459.46	3,745.48	7.23	0.22	1.00	200.00	518.40	93.77	93.77	1,555.88
	Oct	31	128.22	343.42	3,208.45	7.26	0.22	0.80	160.00	428.54	8.43	8.43	1,470.53
	Nov	30	331.12	858.26	5,825.67	7.18	0.22	1.00	200.00	518.40	348.07	348.07	1,810.18
	Dec	31	631.30	1,690.87	9,917.27	7.10	0.22	1.00	200.00	535.68	1503.05	536.93	1,999.03

Spillout		Outflow + spillout	EMAW	keterangan tampungan	keterangan Q hilir	Gross Head	Head Loss	Net Head	Power	Energy	Keterangan Energi
juta m <sup>3</sup>	m <sup>3</sup> /dt	m <sup>3</sup> /dt	m			m	m	m	MW	MWh	MWh
[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]
245.77	91.76	291.76	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	Rerata Energi = 70,318.20 Total Energy = 843,818.39
369.04	152.55	352.55	125.00	sukses	sukses	69.46	2.82	66.64	110.33	74,144.10	
0.00	0.00	200.00	124.48	sukses	sukses	68.94	2.82	66.12	109.47	81,446.83	
0.00	0.00	200.00	123.86	sukses	sukses	68.32	2.82	65.49	108.44	78,075.30	
0.00	0.00	200.00	122.12	sukses	sukses	66.59	2.82	63.76	105.57	78,546.39	
0.00	0.00	200.00	121.70	sukses	sukses	66.16	2.82	63.34	104.87	75,505.65	
0.00	0.00	100.00	122.93	sukses	sukses	67.39	2.82	64.56	53.45	39,767.05	
0.00	0.00	100.00	121.62	sukses	sukses	66.08	2.82	63.26	52.37	38,962.39	
0.00	0.00	200.00	121.00	sukses	sukses	65.46	2.82	62.63	103.70	74,665.93	
0.00	0.00	160.00	120.05	sukses	sukses	64.51	2.82	61.68	81.70	60,788.27	
0.00	0.00	200.00	123.57	sukses	sukses	68.03	2.82	65.21	107.97	77,740.28	
966.12	360.71	560.71	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	

Sumber: Hasil Perhitungan

### Simulasi Energi Tahun 2007

Karakteristik Debit	bulan	jumlah hari	inflow		A	E		outflow PLTA			S <sub>(n-1)</sub>	S akhir periode (Tampungan Efektif)	S total periode
			m <sup>3</sup> /dt	juta m <sup>3</sup>	km <sup>2</sup>	mm/hari	juta m <sup>3</sup>	draft	m <sup>3</sup> /dt	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
2007	Jan	31	456.66	1,223.12	7,726.63	7.87	0.24	1.00	200.00	535.68	1224.12	536.93	1,999.03
	Feb	28	236.79	572.84	4,323.97	8.01	0.22	1.00	200.00	483.84	625.71	536.93	1,999.03
	Mar	31	159.72	427.79	3,593.49	8.06	0.25	1.00	200.00	535.68	428.79	428.79	1,890.90
	Apr	30	243.11	630.14	4,633.34	6.51	0.20	1.00	200.00	518.40	540.34	536.93	1,999.03
	May	31	182.34	488.38	3,888.35	6.30	0.20	1.00	200.00	535.68	489.43	489.43	1,951.54
	Jun	30	197.26	511.30	4,016.14	6.19	0.19	1.00	200.00	518.40	482.14	482.14	1,944.25
	Jul	31	140.03	375.06	3,360.76	6.23	0.19	1.00	200.00	535.68	321.33	321.33	1,783.43
	Aug	31	136.37	365.25	3,319.97	7.10	0.22	1.00	200.00	535.68	150.68	150.68	1,612.79
	Sep	30	231.02	598.80	4,444.87	7.23	0.22	1.00	200.00	518.40	230.87	230.87	1,692.97
	Oct	31	212.11	568.12	4,301.69	7.26	0.22	1.00	200.00	535.68	263.08	263.08	1,725.18
	Nov	30	128.19	332.27	3,080.55	7.18	0.22	1.00	200.00	518.40	76.73	76.73	1,538.84
	Dec	31	318.53	853.15	5,800.07	7.10	0.22	0.70	140.00	374.98	554.69	536.93	1,999.03

Spillout		Outflow + spillout	EMAW	keterangan tampungan	keterangan Q hilir	Gross Head	Head Loss	Net Head	Power	Energy	Keterangan Energi
juta m <sup>3</sup>	m <sup>3</sup> /dt	m <sup>3</sup> /dt	m			m	m	m	MW	MWh	MWh
[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]
687.19	256.57	456.57	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
88.78	36.70	236.70	125.00	sukses	sukses	69.46	2.82	66.64	110.33	74,144.10	
0.00	0.00	200.00	124.25	sukses	sukses	68.71	2.82	65.89	109.10	81,167.18	
3.41	1.32	201.32	125.00	sukses	sukses	69.46	2.82	66.64	110.33	79,440.10	
0.00	0.00	200.00	124.67	sukses	sukses	69.13	2.82	66.31	109.79	81,683.61	
0.00	0.00	200.00	124.62	sukses	sukses	69.08	2.82	66.26	109.71	78,988.60	
0.00	0.00	200.00	123.32	sukses	sukses	67.78	2.82	64.95	107.55	80,014.22	
0.00	0.00	200.00	121.60	sukses	sukses	66.06	2.82	63.23	104.70	77,895.52	
0.00	0.00	200.00	122.42	sukses	sukses	66.88	2.82	64.06	106.06	76,366.30	Rerata Energi =
0.00	0.00	200.00	122.74	sukses	sukses	67.21	2.82	64.38	106.60	79,310.23	76,916.64
0.00	0.00	200.00	120.81	sukses	sukses	65.27	2.82	62.44	103.39	74,439.98	Total Energy =
17.76	6.63	146.63	125.00	sukses	sukses	69.46	2.82	66.64	77.23	57,461.68	922,999.62

Sumber: Hasil Perhitungan

### Simulasi Energi Tahun 2008

Karakteristik Debit	bulan	jumlah hari	inflow		A	E		outflow PLTA			S <sub>(n-1)</sub>	S akhir periode (Tampungan Efektif)	S total periode
			m <sup>3</sup> /dt	juta m <sup>3</sup>	km <sup>2</sup>	mm/hari	juta m <sup>3</sup>	draft	m <sup>3</sup> /dt	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
2008	Jan	31	453.60	1,214.92	7,690.00	7.87	0.24	1.00	200.00	535.68	1215.93	536.93	1,999.03
	Feb	28	175.20	423.84	3,574.74	8.01	0.22	1.00	200.00	483.84	476.71	476.71	1,938.81
	Mar	31	450.54	1,206.73	7,652.61	8.06	0.25	1.00	200.00	535.68	1147.50	536.93	1,999.03
	Apr	30	387.77	1,005.10	6,741.18	6.51	0.20	1.00	200.00	518.40	1023.43	536.93	1,999.03
	May	31	142.22	380.92	3,385.40	6.30	0.20	1.00	200.00	535.68	381.98	381.98	1,844.08
	Jun	30	160.38	415.70	3,536.13	6.19	0.19	1.00	200.00	518.40	279.09	279.09	1,741.20
	Jul	31	140.99	377.63	3,371.46	6.23	0.19	1.00	200.00	535.68	120.85	120.85	1,582.95
	Aug	31	231.28	619.46	4,555.24	7.10	0.22	1.00	200.00	535.68	204.41	204.41	1,666.51
	Sep	30	239.67	621.22	4,568.14	7.23	0.22	1.00	200.00	518.40	307.02	307.02	1,769.12
	Oct	31	278.39	745.64	5,254.00	7.26	0.22	1.00	200.00	535.68	516.75	516.75	1,978.86
	Nov	30	175.39	454.61	3,721.58	7.18	0.22	1.00	200.00	518.40	452.75	452.75	1,914.85
	Dec	31	298.46	799.40	5,524.48	7.10	0.22	1.00	200.00	535.68	716.24	536.93	1,999.03

Spillout		Outflow + spillout	EMAW	keterangan tampungan	keterangan Q hilir	Gross Head	Head Loss	Net Head	Power	Energy	Keterangan Energi
juta m <sup>3</sup>	m <sup>3</sup> /dt	m <sup>3</sup> /dt	m			m	m	m	MW	MWh	MWh
[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]
679.00	253.51	453.51	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	Rerata Energi = 79,257.17 Total Energy = 951,086.08
0.00	0.00	200.00	124.58	sukses	sukses	69.04	2.82	66.22	109.64	73,680.87	
610.58	227.96	427.96	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
486.50	187.69	387.69	125.00	sukses	sukses	69.46	2.82	66.64	110.33	79,440.10	
0.00	0.00	200.00	123.90	sukses	sukses	68.36	2.82	65.54	108.51	80,733.93	
0.00	0.00	200.00	122.91	sukses	sukses	67.37	2.82	64.54	106.87	76,943.54	
0.00	0.00	200.00	121.28	sukses	sukses	65.74	2.82	62.92	104.18	77,507.39	
0.00	0.00	200.00	122.16	sukses	sukses	66.62	2.82	63.79	105.62	78,584.58	
0.00	0.00	200.00	123.18	sukses	sukses	67.64	2.82	64.82	107.32	77,268.76	
0.00	0.00	200.00	124.86	sukses	sukses	69.32	2.82	66.50	110.10	81,916.27	
0.00	0.00	200.00	124.42	sukses	sukses	68.88	2.82	66.06	109.37	78,746.31	
179.31	66.95	266.95	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	

Sumber: Hasil Perhitungan

### Simulasi Energi Tahun 2009

Karakteristik Debit	bulan	jumlah hari	inflow		A	E		outflow PLTA			S <sub>(n-1)</sub>	S akhir periode (Tampungan Efektif)	S total periode
			m <sup>3</sup> /dt	juta m <sup>3</sup>	km <sup>2</sup>	mm/hari	juta m <sup>3</sup>	draft	m <sup>3</sup> /dt	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
2009	Jan	31	159.17	426.32	3,586.50	7.87	0.24	1.00	200.00	535.68	427.33	536.93	1,999.03
	Feb	28	163.24	394.91	3,445.70	8.01	0.22	1.00	200.00	483.84	338.17	427.33	1,889.43
	Mar	31	159.42	426.99	3,589.67	8.06	0.25	1.00	200.00	535.68	229.23	338.17	1,800.28
	Apr	30	375.58	973.50	6,590.09	6.51	0.20	1.00	200.00	518.40	684.14	229.23	1,691.34
	May	31	112.45	301.19	2,799.97	6.30	0.20	1.00	200.00	535.68	302.24	536.93	1,999.03
	Jun	30	67.28	174.39	1,701.74	6.19	0.19	0.50	100.00	259.20	217.24	302.24	1,764.34
	Jul	31	44.78	119.94	1,246.98	6.23	0.19	0.50	100.00	267.84	69.15	217.24	1,679.35
	Aug	31	53.51	143.32	1,421.32	7.10	0.22	0.30	60.00	160.70	51.55	69.15	1,531.25
	Sep	30	149.57	387.69	3,414.55	7.23	0.22	0.75	150.00	388.80	50.21	51.55	1,513.65
	Oct	31	195.27	523.01	4,081.44	7.26	0.22	1.00	200.00	535.68	37.32	50.21	1,512.32
	Nov	30	312.11	808.99	5,575.88	7.18	0.22	1.00	200.00	518.40	327.69	37.32	1,499.43
	Dec	31	533.98	1,430.21	8,629.02	7.10	0.22	1.00	200.00	535.68	1222.01	327.69	1,789.80
											536.93	1,999.03	

Spillout		Outflow + spillout	EMAW	keterangan tampungan	keterangan Q hilir	Gross Head	Head Loss	Net Head	Power	Energy	Keterangan Energi
juta m <sup>3</sup>	m <sup>3</sup> /dt	m <sup>3</sup> /dt	m			m	m	m	MW	MWh	MWh
[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]
0.00	0.00	200.00	124.24	sukses	sukses	68.70	2.82	65.88	109.08	81,154.68	
0.00	0.00	200.00	123.48	sukses	sukses	67.94	2.82	65.12	107.81	72,451.45	
0.00	0.00	200.00	122.41	sukses	sukses	66.87	2.82	64.04	106.04	78,891.60	
147.21	56.79	256.79	125.00	sukses	sukses	69.46	2.82	66.64	110.33	79,440.10	
0.00	0.00	200.00	123.13	sukses	sukses	67.59	2.82	64.77	107.24	79,787.69	
0.00	0.00	100.00	122.28	sukses	sukses	66.75	2.82	63.92	52.92	38,101.61	
0.00	0.00	100.00	120.72	sukses	sukses	65.18	2.82	62.36	51.62	38,408.70	
0.00	0.00	60.00	120.53	sukses	sukses	64.99	2.82	62.16	30.88	-	
0.00	0.00	150.00	120.51	sukses	sukses	64.97	2.82	62.15	77.18	55,566.25	Rerata Energi =
0.00	0.00	200.00	120.37	sukses	sukses	64.83	2.82	62.00	102.66	76,381.27	63,314.81
0.00	0.00	200.00	123.38	sukses	sukses	67.84	2.82	65.02	107.65	77,506.23	Total Energy =
685.08	255.78	455.78	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	759,777.69

Sumber: Hasil Perhitungan

### Simulasi Energi Tahun 2010

Karakteristik Debit	bulan	jumlah hari	inflow		A	E		outflow PLTA			S <sub>(n-1)</sub>	S akhir periode (Tampungan Efektif)	S total periode
			m <sup>3</sup> /dt	juta m <sup>3</sup>	km <sup>2</sup>	mm/hari	juta m <sup>3</sup>	draft	m <sup>3</sup> /dt	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
<b>2010</b>	Jan	31	312.88	838.02	5,724.29	7.87	0.24	1.00	200.00	535.68	839.02	536.93	1,999.03
	Feb	28	436.14	1,055.11	6,990.70	8.01	0.22	1.00	200.00	483.84	1107.97	536.93	1,999.03
	Mar	31	422.91	1,132.72	7,320.74	8.06	0.25	1.00	200.00	535.68	1133.72	536.93	1,999.03
	Apr	30	575.15	1,490.79	8,896.67	6.51	0.20	1.00	200.00	518.40	1509.12	536.93	1,999.03
	May	31	283.58	759.54	5,314.42	6.30	0.20	1.00	200.00	535.68	760.59	536.93	1,999.03
	Jun	30	254.67	660.10	4,852.43	6.19	0.19	1.00	200.00	518.40	678.45	536.93	1,999.03
	Jul	31	248.45	665.45	4,880.71	6.23	0.19	1.00	200.00	535.68	666.50	536.93	1,999.03
	Aug	31	175.89	471.10	3,802.89	7.10	0.22	1.00	200.00	535.68	472.13	472.13	1,934.24
	Sep	30	247.57	641.70	4,717.87	7.23	0.22	1.00	200.00	518.40	595.22	536.93	1,999.03
	Oct	31	163.06	436.74	3,635.93	7.26	0.22	1.00	200.00	535.68	437.76	437.76	1,899.87
	Nov	30	152.97	396.50	3,452.54	7.18	0.22	0.70	140.00	362.88	471.17	471.17	1,933.27
	Dec	31	136.71	366.16	3,323.76	7.10	0.22	0.50	100.00	267.84	569.27	536.93	1,999.03

Spillout		Outflow + spillout	EMAW	keterangan tampungan	keterangan Q hilir	Gross Head	Head Loss	Net Head	Power	Energy	Keterangan Energi
juta m <sup>3</sup>	m <sup>3</sup> /dt	m <sup>3</sup> /dt	m			m	m	m	MW	MWh	MWh
[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]
302.09	112.79	312.79	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	Rerata Energi = 74,989.12  Total Energy = 899,869.43
571.05	236.05	436.05	125.00	sukses	sukses	69.46	2.82	66.64	110.33	74,144.10	
596.79	222.82	422.82	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
972.19	375.07	575.07	125.00	sukses	sukses	69.46	2.82	66.64	110.33	79,440.10	
223.67	83.51	283.51	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
141.52	54.60	254.60	125.00	sukses	sukses	69.46	2.82	66.64	110.33	79,440.10	
129.58	48.38	248.38	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
0.00	0.00	200.00	124.55	sukses	sukses	69.01	2.82	66.19	109.59	81,536.28	
58.29	22.49	222.49	125.00	sukses	sukses	69.46	2.82	66.64	110.33	79,440.10	
0.00	0.00	200.00	124.31	sukses	sukses	68.78	2.82	65.95	109.20	81,243.58	
0.00	0.00	140.00	124.55	sukses	sukses	69.01	2.82	66.18	76.71	55,228.68	
32.34	12.08	112.08	125.00	sukses	sukses	69.46	2.82	66.64	55.17	41,044.05	

Sumber: Hasil Perhitungan

## Simulasi Energi Tahun 2011

Karakteristik Debit	bulan	jumlah hari	inflow		A	E		outflow PLTA			S <sub>(n-1)</sub>	S akhir periode (Tampungan Efektif)	S total periode
			m <sup>3</sup> /dt	juta m <sup>3</sup>	km <sup>2</sup>	mm/hari	juta m <sup>3</sup>	draft	m <sup>3</sup> /dt	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
2011	Jan	31	144.81	387.86	3,415.30	7.87	0.24	1.00	200.00	535.68	388.86	536.93	1,999.03
	Feb	28	147.36	356.49	3,283.53	8.01	0.22	1.00	200.00	483.84	261.29	388.86	1,850.97
	Mar	31	157.35	421.45	3,563.37	8.06	0.25	1.00	200.00	535.68	146.81	261.29	1,723.40
	Apr	30	226.94	588.23	4,395.62	6.51	0.20	1.00	200.00	518.40	216.44	146.81	1,608.91
	May	31	281.13	752.98	5,285.90	6.30	0.20	1.00	200.00	535.68	433.55	216.44	1,678.55
	Jun	30	134.20	347.85	3,247.55	6.19	0.19	1.00	200.00	518.40	262.81	433.55	1,895.65
	Jul	31	84.71	226.89	2,238.48	6.23	0.19	0.50	100.00	267.84	221.66	262.81	1,724.91
	Aug	31	85.30	228.47	2,249.03	7.10	0.22	0.60	120.00	321.41	128.50	221.66	1,683.76
	Sep	30	129.14	334.73	3,108.78	7.23	0.22	0.80	160.00	414.72	48.29	128.50	1,590.60
	Oct	31	184.37	493.82	3,918.67	7.26	0.22	1.00	200.00	535.68	6.21	48.29	1,510.40
	Nov	30	291.58	755.78	5,298.06	7.18	0.22	1.00	200.00	518.40	243.37	6.21	1,468.31
	Dec	31	415.76	1,113.57	7,243.14	7.10	0.22	1.00	200.00	535.68	821.04	243.37	1,705.47
											536.93	1,999.03	

Spillout		Outflow + spillout	EMAW	keterangan tampungan	keterangan Q hilir	Gross Head	Head Loss	Net Head	Power	Energy	Keterangan Energi
juta m <sup>3</sup>	m <sup>3</sup> /dt	m <sup>3</sup> /dt	m			m	m	m	MW	MWh	MWh
[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]
0.00	0.00	200.00	123.97	sukses	sukses	68.43	2.82	65.60	108.62	80,815.67	
0.00	0.00	200.00	122.73	sukses	sukses	67.19	2.82	64.36	106.57	71,615.10	
0.00	0.00	200.00	121.56	sukses	sukses	66.02	2.82	63.19	104.63	77,845.14	
0.00	0.00	200.00	122.28	sukses	sukses	66.74	2.82	63.91	105.82	76,193.62	
0.00	0.00	200.00	124.29	sukses	sukses	68.75	2.82	65.92	109.15	81,207.66	
0.00	0.00	200.00	122.74	sukses	sukses	67.20	2.82	64.38	106.60	76,748.58	
0.00	0.00	100.00	122.33	sukses	sukses	66.79	2.82	63.97	52.96	39,398.98	
0.00	0.00	120.00	121.36	sukses	sukses	65.82	2.82	63.00	62.59	46,564.16	
0.00	0.00	160.00	120.49	sukses	sukses	64.95	2.82	62.13	82.29	59,250.29	Rerata Energi =
0.00	0.00	200.00	120.02	sukses	sukses	64.48	2.82	61.66	102.09	75,954.90	70,349.84
0.00	0.00	200.00	122.55	sukses	sukses	67.01	2.82	64.18	106.27	76,515.88	Total Energy =
284.11	106.07	306.07	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	844,198.08

Sumber: Hasil Perhitungan

### Simulasi Energi Tahun 2012

Karakteristik Debit	bulan	jumlah hari	inflow		A	E		outflow PLTA			S <sub>(n-1)</sub>	S akhir periode (Tampungan Efektif)	S total periode
			m <sup>3</sup> /dt	juta m <sup>3</sup>	km <sup>2</sup>	mm/hari	juta m <sup>3</sup>	draft	m <sup>3</sup> /dt	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
2012	Jan	31	150.10	402.03	3,476.38	7.87	0.24	1.00	200.00	535.68	403.03	536.93	1,999.03
	Feb	28	280.40	678.34	4,943.79	8.01	0.22	1.00	200.00	483.84	597.31	536.93	1,999.03
	Mar	31	132.34	354.46	3,275.07	8.06	0.25	1.00	200.00	535.68	355.46	355.46	1,817.56
	Apr	30	249.97	647.92	4,763.35	6.51	0.20	1.00	200.00	518.40	484.78	484.78	1,946.89
	May	31	148.27	397.13	3,455.25	6.30	0.20	1.00	200.00	535.68	346.04	346.04	1,808.14
	Jun	30	116.56	302.12	2,805.80	6.19	0.19	1.00	200.00	518.40	129.57	129.57	1,591.68
	Jul	31	144.08	385.90	3,406.87	6.23	0.19	0.90	180.00	482.11	33.17	33.17	1,495.28
	Aug	31	122.41	327.86	3,030.04	7.10	0.22	0.60	120.00	321.41	39.41	39.41	1,501.51
	Sep	30	127.86	331.41	3,070.74	7.23	0.22	0.70	140.00	362.88	7.72	7.72	1,469.83
	Oct	31	257.85	690.63	5,003.86	7.26	0.22	1.00	200.00	535.68	162.44	162.44	1,624.55
	Nov	30	548.72	1,422.28	8,594.79	7.18	0.22	1.00	200.00	518.40	1066.11	536.93	1,999.03
	Dec	31	548.29	1,468.54	8,795.01	7.10	0.22	1.00	200.00	535.68	1469.57	536.93	1,999.03

Spillout		Outflow + spillout	EMAW	keterangan tampungan	keterangan Q hilir	Gross Head	Head Loss	Net Head	Power	Energy	Keterangan Energi
juta m <sup>3</sup>	m <sup>3</sup> /dt	m <sup>3</sup> /dt	m			m	m	m	MW	MWh	MWh
[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]
0.00	0.00	200.00	124.07	sukses	sukses	68.53	2.82	65.71	108.80	80,947.79	
60.38	24.96	224.96	125.00	sukses	sukses	69.46	2.82	66.64	110.33	74,144.10	
0.00	0.00	200.00	123.65	sukses	sukses	68.11	2.82	65.28	108.09	80,419.24	
0.00	0.00	200.00	124.64	sukses	sukses	69.10	2.82	66.28	109.74	79,010.35	
0.00	0.00	200.00	123.55	sukses	sukses	68.02	2.82	65.19	107.94	80,307.43	
0.00	0.00	200.00	121.37	sukses	sukses	65.83	2.82	63.01	104.33	75,117.00	
0.00	0.00	180.00	120.32	sukses	sukses	64.78	2.82	61.96	92.33	68,691.98	
0.00	0.00	120.00	120.39	sukses	sukses	64.85	2.82	62.03	61.62	45,845.92	
0.00	0.00	140.00	120.04	sukses	sukses	64.50	2.82	61.68	71.48	51,467.41	Rerata Energi =
0.00	0.00	200.00	121.72	sukses	sukses	66.18	2.82	63.36	104.90	78,048.56	72,960.67
529.18	204.16	404.16	125.00	sukses	sukses	69.46	2.82	66.64	110.33	79,440.10	Total Energy =
932.64	348.21	548.21	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	875,528.01

Sumber: Hasil Perhitungan

### Simulasi Energi Tahun 2013

Karakteristik Debit	bulan	jumlah hari	inflow		A	E		outflow PLTA			S <sub>(n-1)</sub>	S akhir periode (Tampungan Efektif)	S total periode
			m <sup>3</sup> /dt	juta m <sup>3</sup>	km <sup>2</sup>	mm/hari	juta m <sup>3</sup>	draft	m <sup>3</sup> /dt	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
2013	Jan	31	194.47	520.87	4,069.50	7.87	0.24	1.00	200.00	535.68	521.87	536.93	1,999.03
	Feb	28	205.64	497.48	3,939.12	8.01	0.22	1.00	200.00	483.84	535.29	535.29	1,997.40
	Mar	31	397.51	1,064.69	7,038.50	8.06	0.25	1.00	200.00	535.68	1064.05	536.93	1,999.03
	Apr	30	279.40	724.20	5,160.82	6.51	0.20	1.00	200.00	518.40	742.54	536.93	1,999.03
	May	31	306.27	820.31	5,635.63	6.30	0.20	1.00	200.00	535.68	821.37	536.93	1,999.03
	Jun	30	105.35	273.07	2,623.02	6.19	0.19	1.00	200.00	518.40	291.41	291.41	1,753.51
	Jul	31	111.79	299.42	2,788.98	6.23	0.19	0.50	100.00	267.84	322.80	322.80	1,784.90
	Aug	31	126.92	339.94	3,168.53	7.10	0.22	1.00	200.00	535.68	126.84	126.84	1,588.94
	Sep	30	170.08	440.85	3,655.42	7.23	0.22	1.00	200.00	518.40	49.07	49.07	1,511.17
	Oct	31	217.42	582.34	4,368.19	7.26	0.22	1.00	200.00	535.68	95.50	95.50	1,557.61
	Nov	30	302.86	785.01	5,447.44	7.18	0.22	1.00	200.00	518.40	361.90	361.90	1,824.00
	Dec	31	341.08	913.55	6,224.12	7.10	0.22	1.00	200.00	535.68	739.55	536.93	1,999.03

Spillout		Outflow + spillout	EMAW	keterangan tampungan	keterangan Q hilir	Gross Head	Head Loss	Net Head	Power	Energy	Keterangan Energi
juta m <sup>3</sup>	m <sup>3</sup> /dt	m <sup>3</sup> /dt	m			m	m	m	MW	MWh	MWh
[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]
0.00	0.00	200.00	124.90	sukses	sukses	69.36	2.82	66.53	110.16	81,959.89	
0.00	0.00	200.00	124.99	sukses	sukses	69.45	2.82	66.63	110.31	74,131.52	
527.13	196.81	396.81	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
205.61	79.32	279.32	125.00	sukses	sukses	69.46	2.82	66.64	110.33	79,440.10	
284.44	106.20	306.20	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
0.00	0.00	200.00	123.03	sukses	sukses	67.49	2.82	64.67	107.07	77,089.53	
0.00	0.00	100.00	123.33	sukses	sukses	67.79	2.82	64.97	53.78	40,015.82	
0.00	0.00	200.00	121.34	sukses	sukses	65.81	2.82	62.98	104.28	77,585.30	
0.00	0.00	200.00	120.50	sukses	sukses	64.96	2.82	62.14	102.88	74,073.13	Rerata Energi =
0.00	0.00	200.00	121.01	sukses	sukses	65.47	2.82	62.65	103.73	77,177.59	75,469.69
0.00	0.00	200.00	123.71	sukses	sukses	68.17	2.82	65.34	108.19	77,899.04	Total Energy =
202.62	75.65	275.65	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	905,636.25

Sumber: Hasil Perhitungan

### Simulasi Energi Tahun 2014

Karakteristik Debit	bulan	jumlah hari	inflow		A	E		outflow PLTA			S <sub>(n-1)</sub>	S akhir periode (Tampungan Efektif)	S total periode
			m <sup>3</sup> /dt	juta m <sup>3</sup>	km <sup>2</sup>	mm/hari	juta m <sup>3</sup>	draft	m <sup>3</sup> /dt	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>	juta m <sup>3</sup>
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
2014	Jan	31	229.90	615.76	4,528.22	7.87	0.24	1.00	200.00	535.68	616.77	536.93	1,999.03
	Feb	28	159.27	385.31	3,404.30	8.01	0.22	1.00	200.00	483.84	438.17	438.17	1,900.27
	Mar	31	257.80	690.49	5,003.21	8.06	0.25	1.00	200.00	535.68	592.73	536.93	1,999.03
	Apr	30	234.36	607.46	4,485.19	6.51	0.20	1.00	200.00	518.40	625.79	536.93	1,999.03
	May	31	202.72	542.97	4,181.00	6.30	0.20	1.00	200.00	535.68	544.02	536.93	1,999.03
	Jun	30	160.44	415.86	3,536.87	6.19	0.19	1.00	200.00	518.40	434.20	434.20	1,896.31
	Jul	31	105.66	283.00	2,686.24	6.23	0.19	1.00	200.00	535.68	181.33	181.33	1,643.43
	Aug	31	123.04	329.55	3,049.39	7.10	0.22	0.80	160.00	428.54	82.12	82.12	1,544.22
	Sep	30	128.65	333.46	3,094.22	7.23	0.22	0.50	100.00	259.20	156.16	156.16	1,618.26
	Oct	31	79.16	212.02	2,136.22	7.26	0.22	0.50	100.00	267.84	100.12	100.12	1,562.22
	Nov	30	169.75	439.99	3,651.36	7.18	0.22	1.00	200.00	518.40	21.49	21.49	1,483.60
	Dec	31	429.09	1,149.27	7,390.55	7.10	0.22	1.00	200.00	535.68	634.87	536.93	1,999.03

Spillout		Outflow + spillout	EMAW	keterangan tampungan	keterangan Q hilir	Gross Head	Head Loss	Net Head	Power	Energy	Keterangan Energi
juta m <sup>3</sup>	m <sup>3</sup> /dt	m <sup>3</sup> /dt	m			m	m	m	MW	MWh	MWh
[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]
79.84	29.81	229.81	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	Rerata Energi = 70,809.41 Total Energy = 849,712.96
0.00	0.00	200.00	124.32	sukses	sukses	68.78	2.82	65.95	109.20	73,384.43	
55.80	20.83	220.83	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
88.87	34.28	234.28	125.00	sukses	sukses	69.46	2.82	66.64	110.33	79,440.10	
7.09	2.65	202.65	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	
0.00	0.00	200.00	124.29	sukses	sukses	68.75	2.82	65.93	109.16	78,593.48	
0.00	0.00	200.00	121.92	sukses	sukses	66.38	2.82	63.56	105.23	78,294.28	
0.00	0.00	160.00	120.87	sukses	sukses	65.33	2.82	62.50	82.79	61,596.07	
0.00	0.00	100.00	121.65	sukses	sukses	66.12	2.82	63.29	52.40	37,725.87	
0.00	0.00	100.00	121.06	sukses	sukses	65.52	2.82	62.70	51.91	38,618.83	
0.00	0.00	200.00	120.19	sukses	sukses	64.65	2.82	61.83	102.37	73,707.48	
97.94	36.57	236.57	125.00	sukses	sukses	69.46	2.82	66.64	110.33	82,088.11	

Sumber: Hasil Perhitungan

