Data Jaringan Sebelum Penyambungan

Study ID	**Untitled**
Study Case ID	**LF**
Data Revision	**Base**
Configuration	**Normal**
Loading Cat	**Malam**
Generation Cat	**Design**
Diversity Factor	**Normal Loading**
Buses	**23**
Branches	**26**
Generators	**5**
Power Grids	**0**
Loads	**22**
Load-MW	**62.534**
Load-Mvar	**41.949**
Generation-MW	**62.534**
Generation-Mvar	**41.949**
Loss-MW	**0.901**
Loss-Mvar	**3.752**
Mismatch-MW	**0**
Mismatch-Mvar	**0**

Bus ID	Nominal kV	Voltage	MW Loading
Bus MV20kV GI.empg	20	95.01	4.167
Bus77	20	94.39	0.748
BusPLTD Alas	20	94.41	5.844
GH Moyo	20	96.22	1.819
GH Utan	20	94.51	1.331
GI Alas	70	95.49	6.822
GI Alas- MV20kV	20	93.13	7.608
GI Empg	70	96.04	2.43
GI Sumbawa	70	96.91	6.325
GITlwg-MV 20kV	70	95.14	1.555
MV -GI.smbw	20	95.79	4.18
MV 20kV - Tlwg	20	94.31	2.909
PLTD Empang	20	98.86	5.969
PLTD Labuhan	20	95.78	25.543
PLTD Taliwang	20	94.78	12.804
PLTU Sumb-barat	70	99.52	13.446

ID	Type	MW Flow	Mvar Flow	Amp Flow	% PF	% Voltage Drop	kW Losses	kvar Losses
D.alas - utan	Line	0.442	-0.512	20.68	-65.3	0.11	1.332	-8.324
D.alas -Utan	Line	0.442	-0.512	20.68	-65.3	0.11	1.332	-8.324
empang - sumbawa	Line	2.43	1.861	26.29	79.4	0.88	14.345	-1379
GI Alas -- PLTD Alas	Line	2.382	0.656	75.56	96.41	1.28	24.016	25.324
GI Alas -- PLTD Alas4	Line	1.362	-0.055	41.51	-99.92	0.47	7.233	-2.236
GI Alas -- PLTD Alas6	Line	1.555	1.883	21.17	63.68	0.35	4.033	-541
GI Alas -- PLTD Alas18	Line	6.325	3.048	59.75	90.09	2.6	115	-1728
GI Alas -- PLTD Alas20	Line	6.822	5.673	76.63	76.89	4.02	184	-1570
labuhan - moyo	Line	0.679	0.066	20.46	99.53	0.44	2.647	-17.366
labuhan - moyo2	Line	0.302	0.121	9.801	92.81	0.43	0.97	-34.55
Line8	Line	0.748	0.463	26.9	85.06	0.02	0.109	-0.073
LinePLTS	Line	0	-0.008	0.253	0	0	0	-8.16
LinePLTS02	Line	0	-0.001	0.03	0	0	0	-0.995
Moyo -- PLTD Empang	Line	1.854	0.692	57.79	93.69	2.64	35.307	20.197
Moyo -- PLTD Empang2	Line	1.788	0.8	57.2	91.28	3.85	48.636	27.615

T-Alas	Transf. 2W	5.263	4.331	58.87	77.22	2.36	12.719	254
T-D.A	Transf. 2W	5.131	2.116	8011	92.45	5.59	106	633
T-empang	Transf. 2W	6.053	3.642	647.4	85.68	1.14	83.377	709
T-empg	Transf. 2W	2.43	1.861	26.29	79.4	1.02	2.537	50.74
T-Smbw	Transf. 2W	3.88	2.565	39.59	83.42	1.13	2.133	95.963
T-Tlwg	Transf. 2W	1.555	1.883	21.17	63.68	0.84	0.61	27.456
T-U	Transf. 2W	13.502	6.547	1375	89.98	0.48	56.223	1124
TD.Lab	Transf. 2W	24.969	21.894	3043	75.19	4.22	102	4594
TDtlwg	Transf. 2W	12.879	7.749	1377	85.69	5.22	75.216	1504
Tlwg -- PLTD Alas2	Line	0.826	-0.28	26.55	-94.72	0.37	7.595	-24.108
Utan - labuhan	Line	0.464	1.841	57.22	24.44	1.27	13.854	8.367

ID	Rating	Rated kV	kW	kvar	Amp	% PF	% Loading	Vtermal
Alasbarat1	5000 kVA	20	4137	2564	150.9	85	104.5	93.13
Badas	7500 kVA	20	6270	3886	222.3	85	102.7	95.78
Buer	4195 kVA	20	3471	2151	126.6	85	104.5	93.13
Jereweh	6250 kVA	20	5204	3225	186.5	85	103.4	94.78
k.empg	1000 kVA	20	846	524	29.07	85	100.7	98.86
Kota	3400 kVA	20	2831	1755	101.5	85	103.4	94.78
Ktc	400 kVA	20	333	206	11.94	85	103.4	94.78
Lenangguan	10000 kVA	20	8360	5181	296.4	85	102.7	95.78
Load empg	5000 kVA	20	4167	2583	149	85	103.2	95.01
Load Sumbwa	5000 kVA	20	4180	2590	148.2	85	102.7	95.79
Lump2	900 kVA	20	748	464	26.92	85	103.6	94.39
Lump4	2200 kVA	20	1829	1134	65.81	85	103.6	94.41
Nijang	5000 kVA	20	4180	2590	148.2	85	102.7	95.78
P.Kota	7500 kVA	20	6270	3886	222.3	85	102.7	95.78
P.Rhee	1600 kVA	20	1331	825	47.83	85	103.5	94.51
P1-Tlwg	2000 kVA	20	1662	1030	59.87	85	103.7	94.31
P2-Tlwg	1500 kVA	20	1247	773	44.9	85	103.7	94.31
Pidang	1250 kVA	20	1058	656	36.33	85	100.7	98.86
Plampang	500 kVA	20	423	262	14.53	85	100.7	98.86
Pondok	2700 kVA	20	2248	1393	80.56	85	103.4	94.78
Serading	500 kVA	20	419	259	14.78	85	102.4	96.22
Stober	500 kVA	20	419	259	14.78	85	102.4	96.22

Data Jaringan Setelah Penyambungan Opsi 1

Study ID	**Untitled**
Study Case ID	**LF**
Data Revision	**Base**
Configuration	**Normal**
Loading Cat	**Malam**
Generation Cat	**Design**
Diversity Factor	**Normal Loading**
Buses	**34**
Branches	**37**
Generators	**5**
Power Grids	**0**
Loads	**22**
Load-MW	**62.659**
Load-Mvar	**41.66**
Generation-MW	**62.659**
Generation-Mvar	**41.66**
Loss-MW	**1.005**
Loss-Mvar	**3.477**
Mismatch-MW	**0**
Mismatch-Mvar	**0**

Bus ID	Nominal kV	Voltage	MW Loading
Bus MV20kV GI.empg	20	95.07	4.168
Bus77	20	94.56	0.749
BUS78	0.4	97.33	1.193
BUS123	0.4	97.1	1.8
BUS456	0.4	97.18	1.8
BusPLTD Alas	20	94.58	4.811
BUSPLTS	20	94.49	4.621
GH Moyo	20	96.19	1.736
GH Utan	20	94.61	1.908
GI Alas	70	96.03	5.076
GI Alas- MV20kV	20	93.71	7.625
GI Empg	70	96.09	2.546
GI Sumbawa	70	96.98	6.552
GITlwg-MV 20kV	70	95.61	2.316
MV -GI.smbw	20	95.85	4.181
MV 20kV - Tlwg	20	94.72	2.914
PLTD Empang	20	98.83	5.765
PLTD Labuhan	20	95.7	25.071
PLTD Taliwang	20	94.85	11.688
PLTU Sumb-barat	70	99.62	11.881

ID	Type	MW Flow	Mvar Flow	Amp Flow	% PF	% Loading	% Voltage Drop	kW Losses	kvar Losses
D.alas - utan	Line	0.958	-0.67	35.69	-81.94		0.04	3.992	-4.021
D.alas -Utan	Line	0.958	-0.67	35.69	-81.94		0.04	3.992	-4.021
empang - sumbawa	Line	2.546	1.836	26.94	81.11		0.89	15.345	-1379
GI Alas -- PLTD Alas	Line	0.308	1.242	39.44	24.09		0.87	6.464	-3.37
GI Alas -- PLTD Alas4	Line	0.6	-0.157	18.89	-96.75		0.13	1.49	-11.66
GI Alas -- PLTD Alas6	Line	2.316	1.994	26.36	75.78		0.42	6.626	-542
GI Alas -- PLTD Alas18	Line	6.552	3.02	61.36	90.82		2.65	122	-1718
GI Alas -- PLTD Alas20	Line	5.076	5.79	66.14	65.92		3.59	130	-1684
labuhan - moyo	Line	0.707	0.107	21.44	98.88		0.49	2.911	-16.911
labuhan - moyo2	Line	0.192	0.128	6.946	83.23		0.34	0.466	-35.384
Line8	Line	0.749	0.463	26.87	85.06		0.02	0.109	-0.074
LinePLTS	Line	4.621	-0.638	142.5	-99.06		0.78	51.176	75.012
LinePLTS02	Line	0	-0.001	0.03	0		0	0	-0.999
Moyo -- PLTD Empang	Line	1.769	0.735	55.96	92.35		2.64	33.142	16.697
Moyo -- PLTD Empang2	Line	1.669	0.821	54.33	89.74		3.75	43.948	19.97
T-Alas	Transf. 2W	2.754	4.339	44.14	53.59	40.9	2.32	7.151	143
T-D.A	Transf. 2W	4.427	2.083	7062	90.49	259.5	5.42	81.98	492
T-empang	Transf. 2W	5.845	3.674	632.7	84.66	73.2	1.17	79.631	677
T-empg	Transf. 2W	2.546	1.836	26.94	81.11	25	1.01	2.664	53.289
T-Smbw	Transf. 2W	3.991	2.563	40.34	84.15	25.2	1.12	2.215	99.655

T-Tlwg	Transf. 2W	2.316	1.994	26.36	75.78	16.2	0.89	0.946	42.557
T-U	Transf. 2W	11.926	6.318	1237	88.37	107.4	0.38	45.483	910
TD.Lab	Transf. 2W	23.908	21.983	2976	73.61	172.3	4.3	97.646	4394
TDtlwg	Transf. 2W	11.754	7.601	1283	83.97	148.5	5.15	65.228	1305
Tlwg -- PLTD Alas2	Line	0.468	-0.128	14.76	-96.47		0.27	2.335	-32.768
TRAFO-1	Transf. 2W	1.8	-0.004	2675	-100	240	2.61	62.907	220
TRAFO-2	Transf. 2W	1.8	0.007	2673	100	240	2.69	62.809	220
TRAFO-3	Transf. 2W	1.193	-0.133	1780	-99.39	240	2.84	44.978	67.467
Utan - labuhan	Line	0.557	-2.175	67.73	-24.82		1.09	19.389	17.377
X-12	Reactor	0.6	0.001	891.7	100		0.02	0.122	2.382
X-22	Reactor	0.6	0.001	891.7	100		0.02	0.122	2.382
X-32	Reactor	0.6	0.001	891.7	100		0.02	0.122	2.382
X-42	Reactor	0.6	0.005	891	100		0.02	0.122	2.378
X-52	Reactor	0.6	0.005	891	100		0.02	0.122	2.378
X-62	Reactor	0.6	0.005	891	100		0.02	0.122	2.378
X-72	Reactor	0.596	-0.066	889.9	-99.39		0	3.65	71.173
X-82	Reactor	0.596	-0.066	889.9	-99.39		0	3.65	71.173

ID	Rating	Rated kV	kW	kvar	Amp	% PF	% Loading	Vtermal
Alasbarat1	5000 kVA	20	4146	2570	150.3	85	104.1	93.71
Badas	7500 kVA	20	6268	3884	222.4	85	102.7	95.7
Buer	4195 kVA	20	3479	2156	126.1	85	104.1	93.71
HF2	1 kvar	0.4	0	-0.943	1.402	0		0
HF3	1 kvar	0.4	0	-0.943	1.402	0		0
HF10	1 kvar	0.4	0	-0.943	1.402	0		0
HF11	5 kvar	0.4	0	-4.724	7.015	0		0
HF12	5 kvar	0.4	0	-4.724	7.015	0		0
HF13	5 kvar	0.4	0	-4.724	7.015	0		0
HF14	5 kvar	0.4	0	-4.736	7.024	0		0
HF15	5 kvar	0.4	0	-4.736	7.024	0		0
Jereweh	6250 kVA	20	5206	3226	186.4	85	103.3	94.85
k.empg	1000 kVA	20	846	524	29.07	85	100.7	98.83
Kota	3400 kVA	20	2832	1755	101.4	85	103.3	94.85
Ktc	400 kVA	20	333	206	11.93	85	103.3	94.85
Lenangguan	10000 kVA	20	8357	5179	296.6	85	102.7	95.7
Load empg	5000 kVA	20	4168	2583	148.9	85	103.2	95.07
Load Sumbwa	5000 kVA	20	4181	2591	148.1	85	102.6	95.85
Lump2	900 kVA	20	749	464	26.89	85	103.5	94.56
Lump4	2200 kVA	20	1831	1134	65.73	85	103.5	94.58
Nijang	5000 kVA	20	4179	2590	148.3	85	102.7	95.7
P.Kota	7500 kVA	20	6268	3884	222.4	85	102.7	95.7
P.Rhee	1600 kVA	20	1331	825	47.79	85	103.5	94.61

P1-Tlwg	2000 kVA	20	1665	1032	59.7	85	103.4	94.72
P2-Tlwg	1500 kVA	20	1249	774	44.78	85	103.4	94.72
Pidang	1250 kVA	20	1058	655	36.34	85	100.7	98.83
Plampang	500 kVA	20	423	262	14.54	85	100.7	98.83
Pondok	2700 kVA	20	2249	1394	80.52	85	103.3	94.85
Serading	500 kVA	20	419	259	14.78	85	102.4	96.19
Stober	500 kVA	20	419	259	14.78	85	102.4	96.19

Data Jaringan Setelah Penyambungan Opsi 2

Study ID	**Untitled**
Study Case ID	**LF**
Data Revision	**Base**
Configuration	**Normal**
Loading Cat	**Malam**
Generation Cat	**Design**
Diversity Factor	**Normal Loading**
Buses	**34**
Branches	**37**
Generators	**5**
Power Grids	**0**
Loads	**22**
Load-MW	**62.677**
Load-Mvar	**41.704**
Generation-MW	**62.677**
Generation-Mvar	**41.704**
Loss-MW	**1.035**
Loss-Mvar	**3.529**
Mismatch-MW	**0**
Mismatch-Mvar	**0**

Bus ID	Nominal kV	Voltage	MW Loading	% Loading
Bus MV20kV GI.empg	20	95	4.167	0
Bus77	20	94.95	4.609	0
BUS78	0.4	98.04	1.193	0
BUS123	0.4	97.81	1.8	0
BUS456	0.4	97.89	1.8	0
BusPLTD Alas	20	94.91	7.865	0
BUSPLTS	20	95.2	4.624	0
GH Moyo	20	96.18	1.7	0
GH Utan	20	94.87	2.524	0
GI Alas	70	95.68	5.929	0
GI Alas-MV20kV	20	93.29	7.613	0
GI Empg	70	96.02	2.482	0
GI Sumbawa	70	96.9	6.357	0
GITlwg-MV 20kV	70	95.3	1.746	0
MV -GI.smbw	20	95.77	4.18	0
MV 20kV - Tlwg	20	94.43	2.911	0
PLTD Empang	20	98.81	5.793	0
PLTD Labuhan	20	95.74	25.075	0
PLTD Taliwang	20	94.79	11.788	0
PLTU Sumb-barat	70	99.52	12.559	0

ID	Type	MW Flow	Mvar Flow	Amp Flow	% PF	% Voltage Drop	kW Losses	kvar Losses
D.alas - utan	Line	1.268	-0.676	43.7	-88.24	0.05	5.995	-0.825
D.alas -Utan	Line	1.268	-0.676	43.7	-88.24	0.05	5.995	-0.825
empang - sumbawa	Line	2.482	1.849	26.59	80.19	0.88	14.795	-1378
GI Alas -- PLTD Alas	Line	3.494	0.576	107.7	98.67	1.62	48.741	65.492
GI Alas -- PLTD Alas4	Line	1.171	-0.124	35.85	-99.44	0.36	5.391	-5.257
GI Alas -- PLTD Alas6	Line	1.746	1.954	22.68	66.63	0.37	4.709	-542
GI Alas -- PLTD Alas18	Line	6.357	3.059	60.05	90.11	2.62	116	-1725
GI Alas -- PLTD Alas20	Line	5.929	5.812	71.57	71.41	3.84	157	-1625
labuhan - moyo	Line	0.539	0.171	17.04	95.32	0.44	1.81	-18.712
labuhan - moyo2	Line	0.321	0.099	10.13	95.6	0.41	1.046	-34.405
Line8	Line	3.859	-1.109	122.1	-96.11	0.03	2.249	2.392
LinePLTS	Line	0	-0.008	0.253	0	0	0	-8.188
LinePLTS02	Line	4.624	-0.628	141.5	-99.09	0.26	15.11	16.407
Moyo -- PLTD Empang	Line	1.732	0.75	55.15	91.76	2.63	32.201	15.174
Moyo -- PLTD Empang2	Line	1.734	0.809	55.92	90.62	3.81	46.515	24.198
T-Alas	Transf. 2W	4.178	4.4	52.31	68.86	2.38	10.043	201
T-D.A	Transf. 2W	4.078	1.949	6524	90.23	5.09	69.973	420
T-empang	Transf. 2W	5.873	3.684	635.4	84.71	1.19	80.319	683

T-empg	Transf. 2W	2.482	1.849	26.59	80.19	1.02	2.594	51.885
T-Smbw	Transf. 2W	3.861	2.588	39.56	83.07	1.14	2.129	95.818
T-Tlwg	Transf. 2W	1.746	1.954	22.68	66.63	0.87	0.7	31.497
T-U	Transf. 2W	12.61	6.527	1301	88.81	0.48	50.338	1007
TD.Lab	Transf. 2W	23.464	21.853	2938	73.18	4.26	95.171	4283
TDtlwg	Transf. 2W	11.852	7.692	1295	83.88	5.21	66.462	1329
Tlwg -- PLTD Alas2	Line	0.003	0.094	2.857	2.7	0.12	0.058	-36.585
TRAFO-1	Transf. 2W	1.8	-0.004	2656	-100	2.61	62	217
TRAFO-2	Transf. 2W	1.8	0.007	2654	100	2.68	61.904	217
TRAFO-3	Transf. 2W	1.193	-0.131	1767	-99.41	2.83	44.321	66.482
Utan - labuhan	Line	1.167	-2.201	75.11	-46.86	0.88	23.816	24.544
X-12	Reactor	0.6	0.001	885.2	100	0.02	0.12	2.348
X-22	Reactor	0.6	0.001	885.2	100	0.02	0.12	2.348
X-32	Reactor	0.6	0.001	885.2	100	0.02	0.12	2.348
X-42	Reactor	0.6	0.005	884.5	100	0.02	0.12	2.344
X-52	Reactor	0.6	0.005	884.5	100	0.02	0.12	2.344
X-62	Reactor	0.6	0.005	884.5	100	0.02	0.12	2.344
X-72	Reactor	0.6	0.005	883.3	100	0.01	3.597	70.134
X-82	Reactor	0.6	0.005	883.3	100	0.01	3.597	70.134

ID	Rating	Rated kV	kW	kvar	Amp	% PF	% Loading	Vtermal
Alasbarat1	5000 kVA	20	4140	2566	150.7	85	104.4	93.29
Badas	7500 kVA	20	6269	3885	222.4	85	102.7	95.74
Buer	4195 kVA	20	3473	2153	126.4	85	104.4	93.29
HF2	1 kvar	0.4	0	-0.957	1.412	0		0
HF3	1 kvar	0.4	0	-0.957	1.412	0		0
HF10	1 kvar	0.4	0	-0.957	1.412	0		0
HF11	5 kvar	0.4	0	-4.793	7.066	0		0
HF12	5 kvar	0.4	0	-4.793	7.066	0		0
HF13	5 kvar	0.4	0	-4.793	7.066	0		0
HF14	5 kvar	0.4	0	-4.806	7.076	0		0
HF15	5 kvar	0.4	0	-4.806	7.076	0		0
Jereweh	6250 kVA	20	5205	3226	186.5	85	103.4	94.79
k.empg	1000 kVA	20	846	524	29.08	85	100.7	98.81
Kota	3400 kVA	20	2831	1755	101.4	85	103.4	94.79
Ktc	400 kVA	20	333	206	11.93	85	103.4	94.79

Lenangguan	10000 kVA	20	8358	5180	296.5	85	102.7	95.74
Load empg	5000 kVA	20	4167	2583	149	85	103.2	95
Load Sumbwa	5000 kVA	20	4180	2590	148.2	85	102.7	95.77
Lump2	900 kVA	20	750	465	26.82	85	103.2	94.95
Lump4	2200 kVA	20	1833	1136	65.59	85	103.3	94.91
Nijang	5000 kVA	20	4179	2590	148.2	85	102.7	95.74
P.Kota	7500 kVA	20	6269	3885	222.4	85	102.7	95.74
P.Rhee	1600 kVA	20	1333	826	47.71	85	103.3	94.87
P1-Tlwg	2000 kVA	20	1663	1031	59.81	85	103.6	94.43
P2-Tlwg	1500 kVA	20	1247	773	44.86	85	103.6	94.43
Pidang	1250 kVA	20	1057	655	36.35	85	100.7	98.81
Plampang	500 kVA	20	423	262	14.54	85	100.7	98.81
Pondok	2700 kVA	20	2248	1393	80.56	85	103.4	94.79
Serading	500 kVA	20	419	259	14.78	85	102.4	96.18
Stober	500 kVA	20	419	259	14.78	85	102.4	96.18