

DAFTAR PUSTAKA

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4. SPLN no 72 tahun 1987 tentang “Besarnya drop tegangan pada jaringan tegangan menengah (JTM) dibolehkan sebesar 2% untuk sistem jaringan SKTM dan 5% untuk sistem jaringan SUTM”.
5. Sumani, Sambodho Ir. (2015). *Diktat Transmisi Daya Listrik* . Jakarta:
STT PLN

DAFTAR RIWAYAT HIDUP



Data Personal

NIM : 2013-11-261
Nama : BIMASYAH RAMADHANA
Tempat / Tanggal Lahir : SURAKARTA, 11 FEBRUARI 1995
Jenis Kelamin : LAKI-LAKI
Status Perkawinan : BELUM KAWIN
Program Studi : S1 TEKNIK ELEKTRO
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Pendidikan

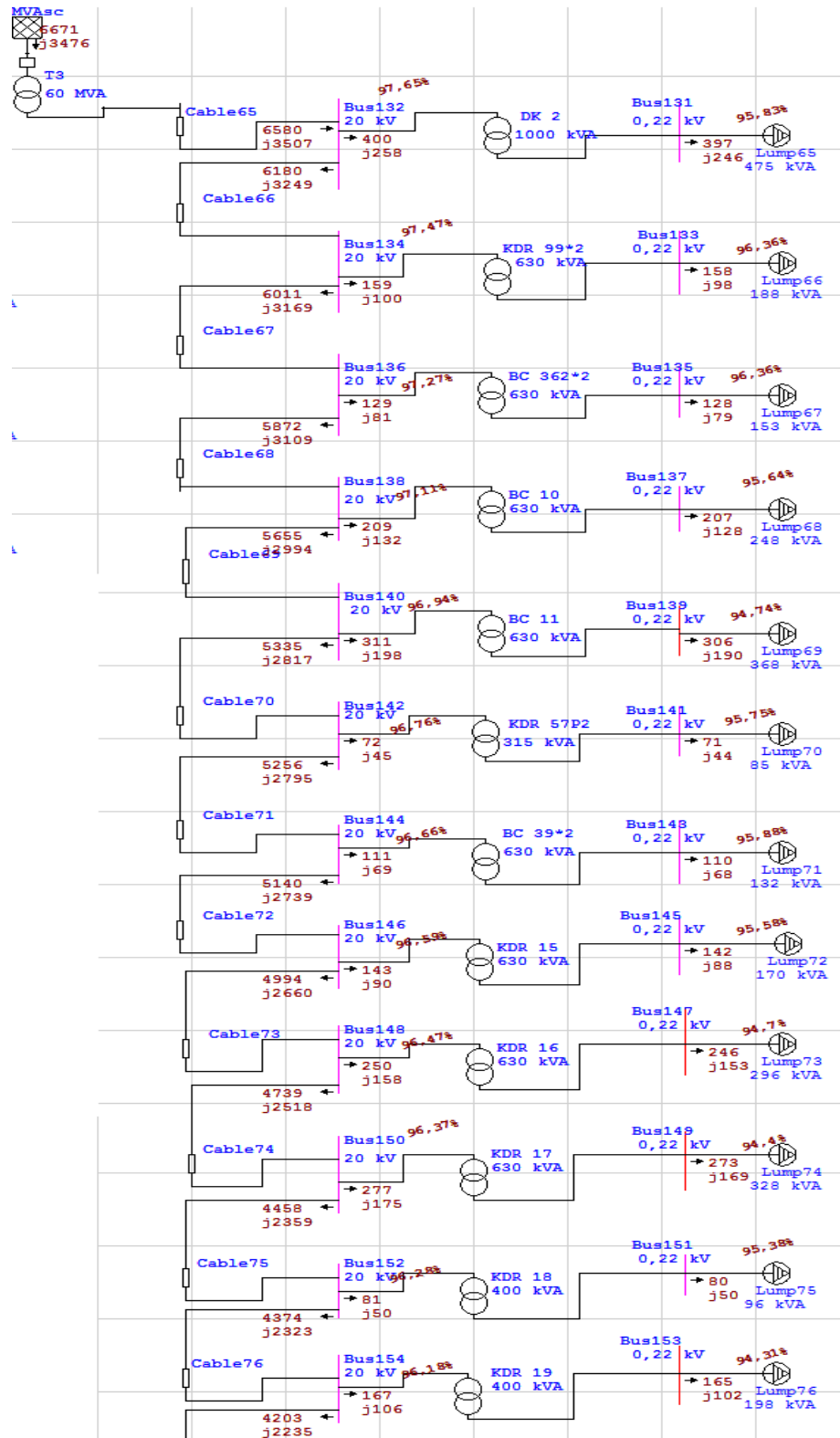
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SMP	SMP Negeri 3 Surakarta	-	2010
SMA	SMA Negeri 5 Surakarta	IPA	2013

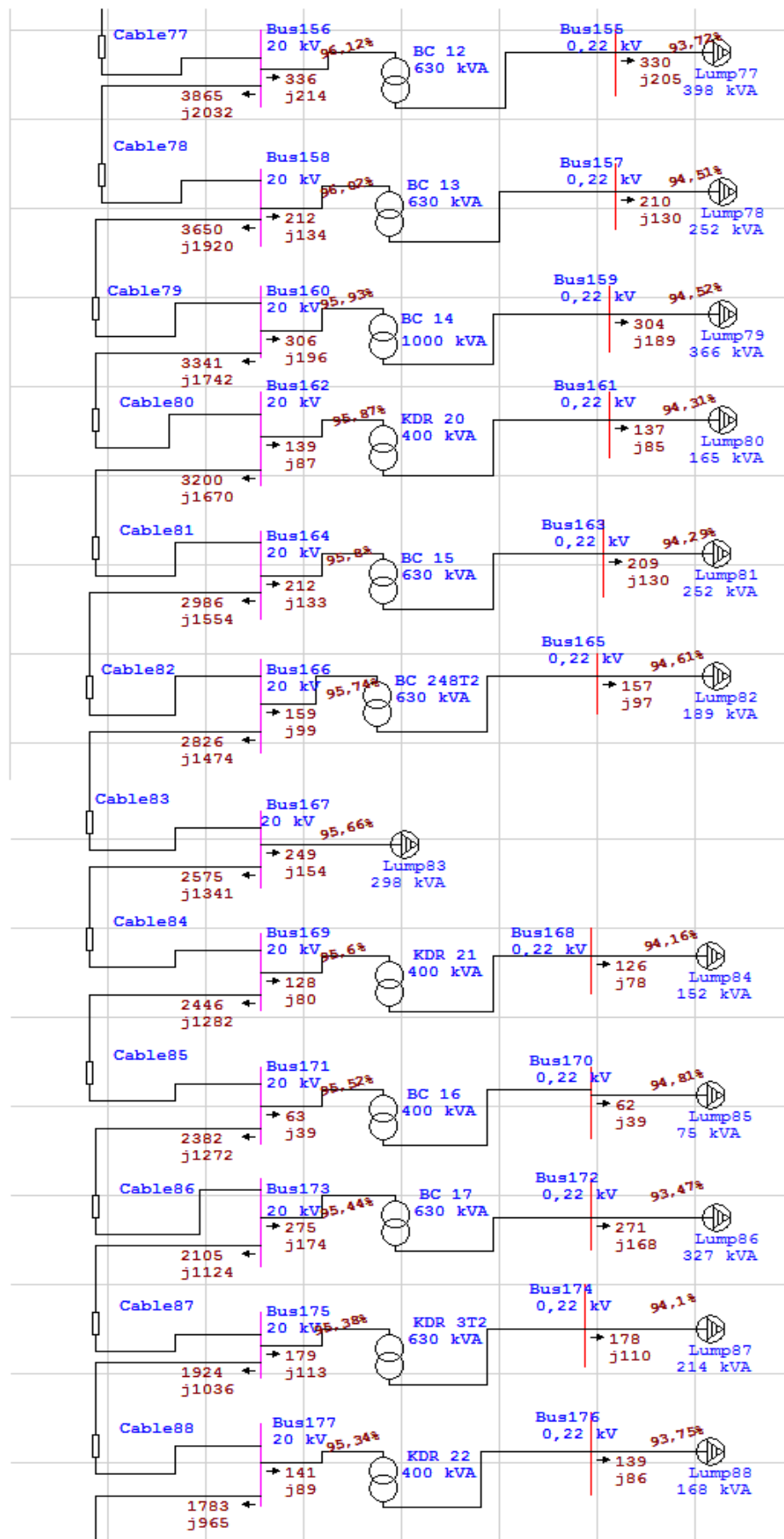
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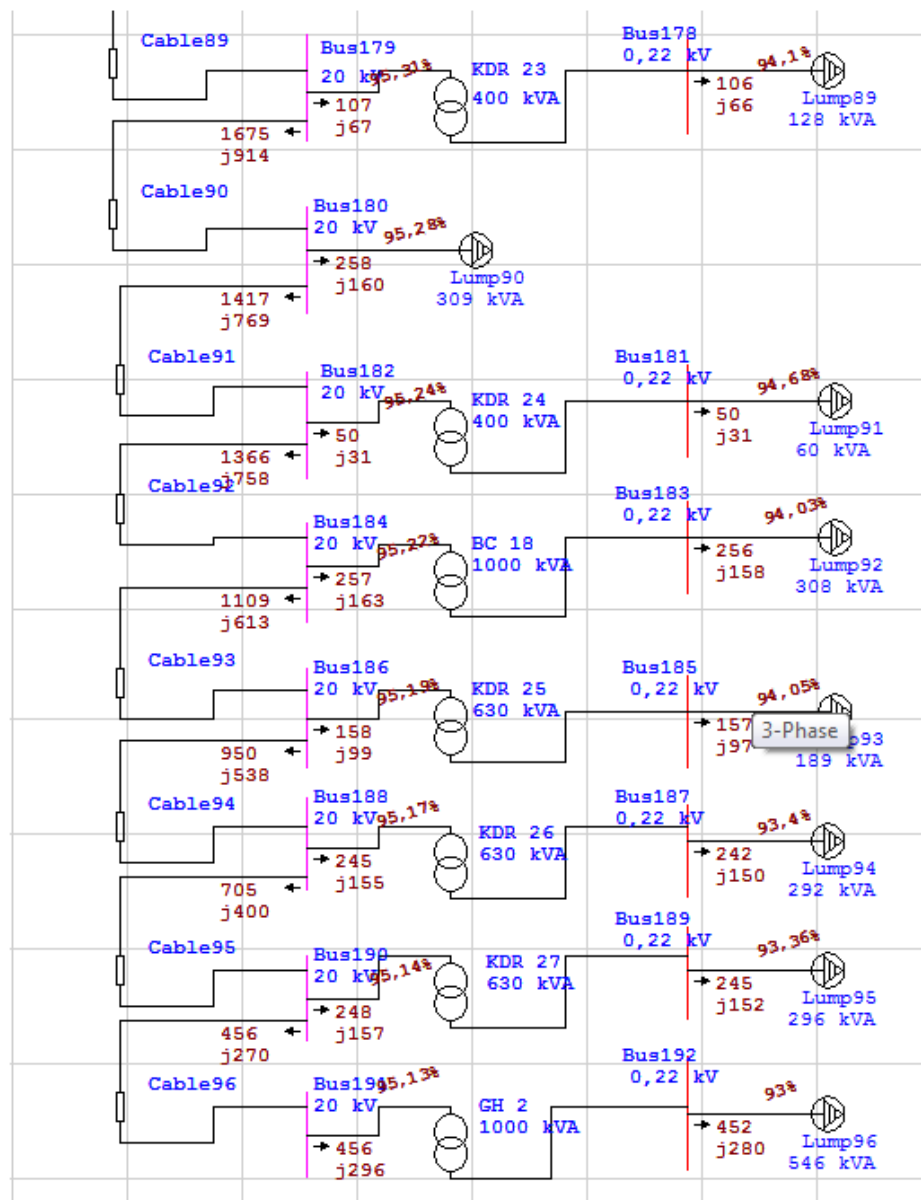
Jakarta, 31 Juli 2017

(Bimasyah Ramadhana)

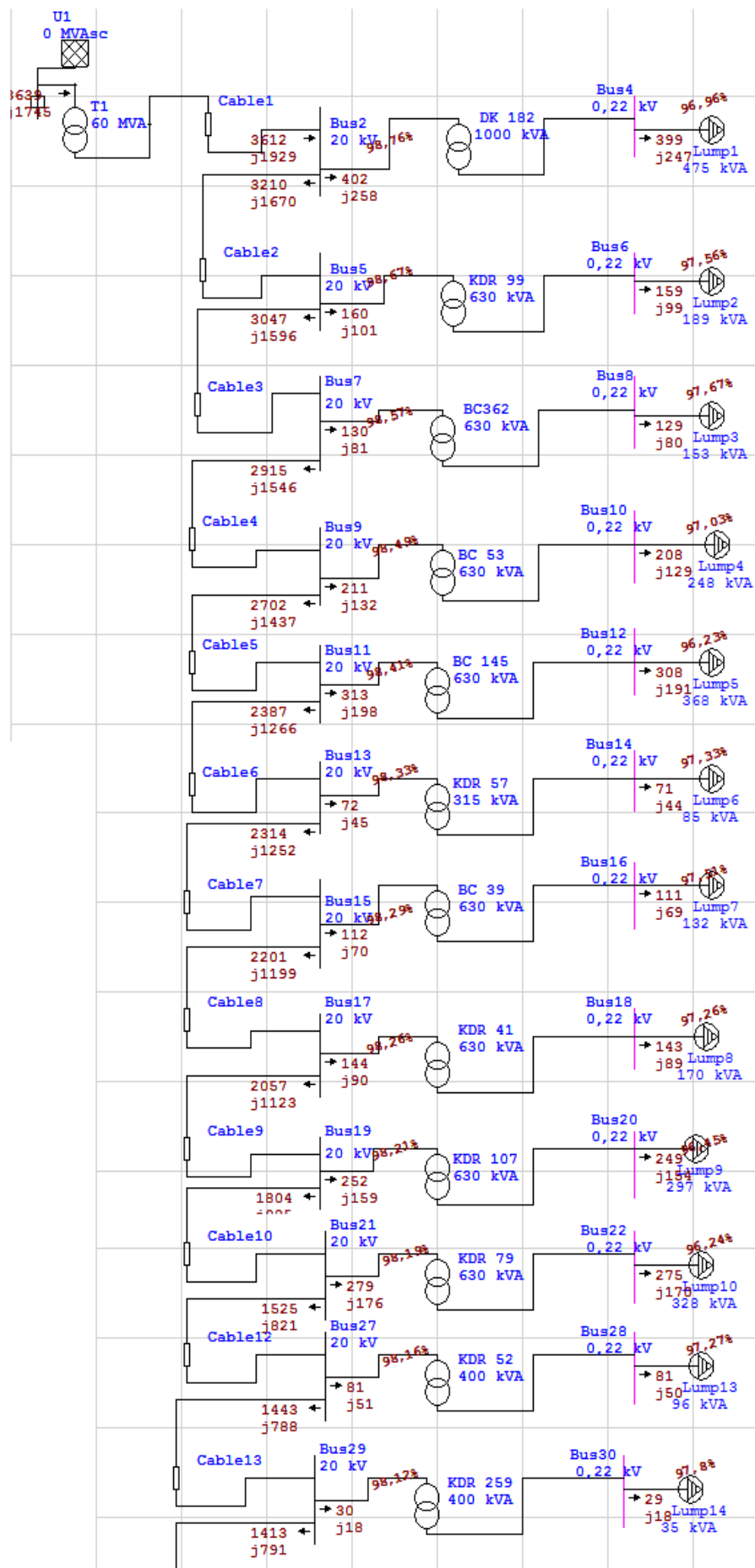
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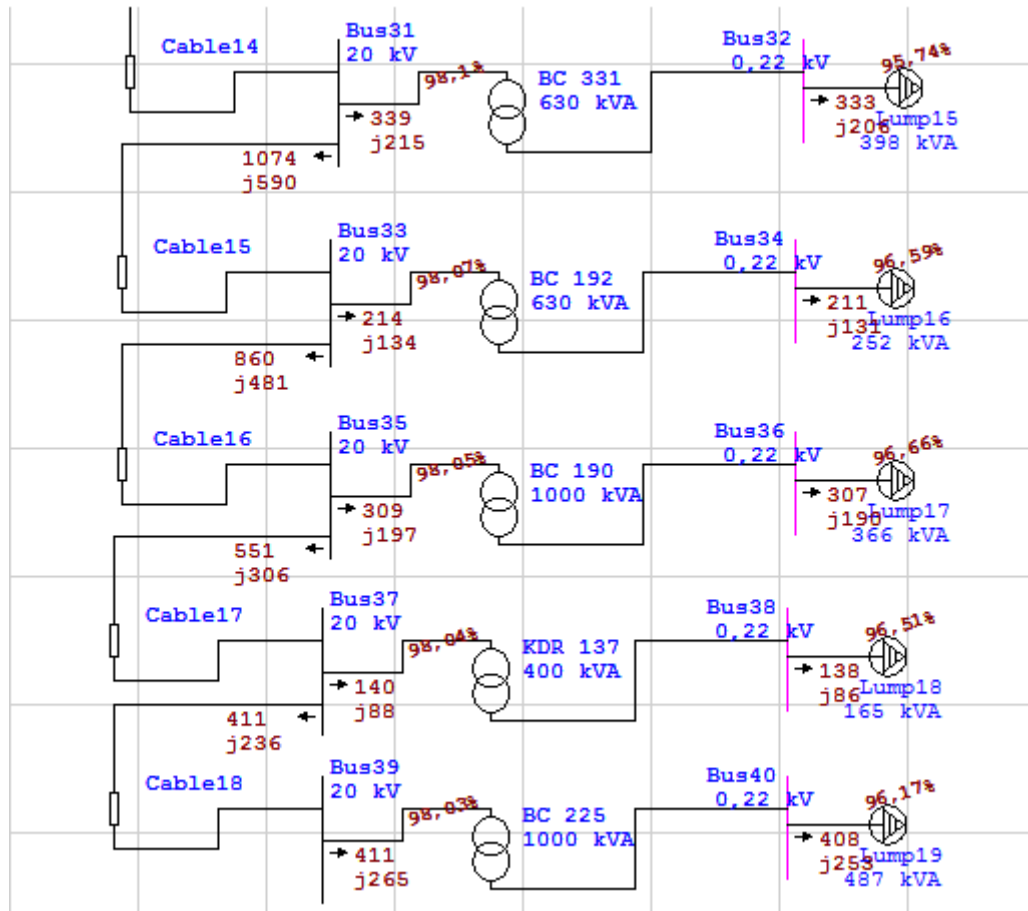




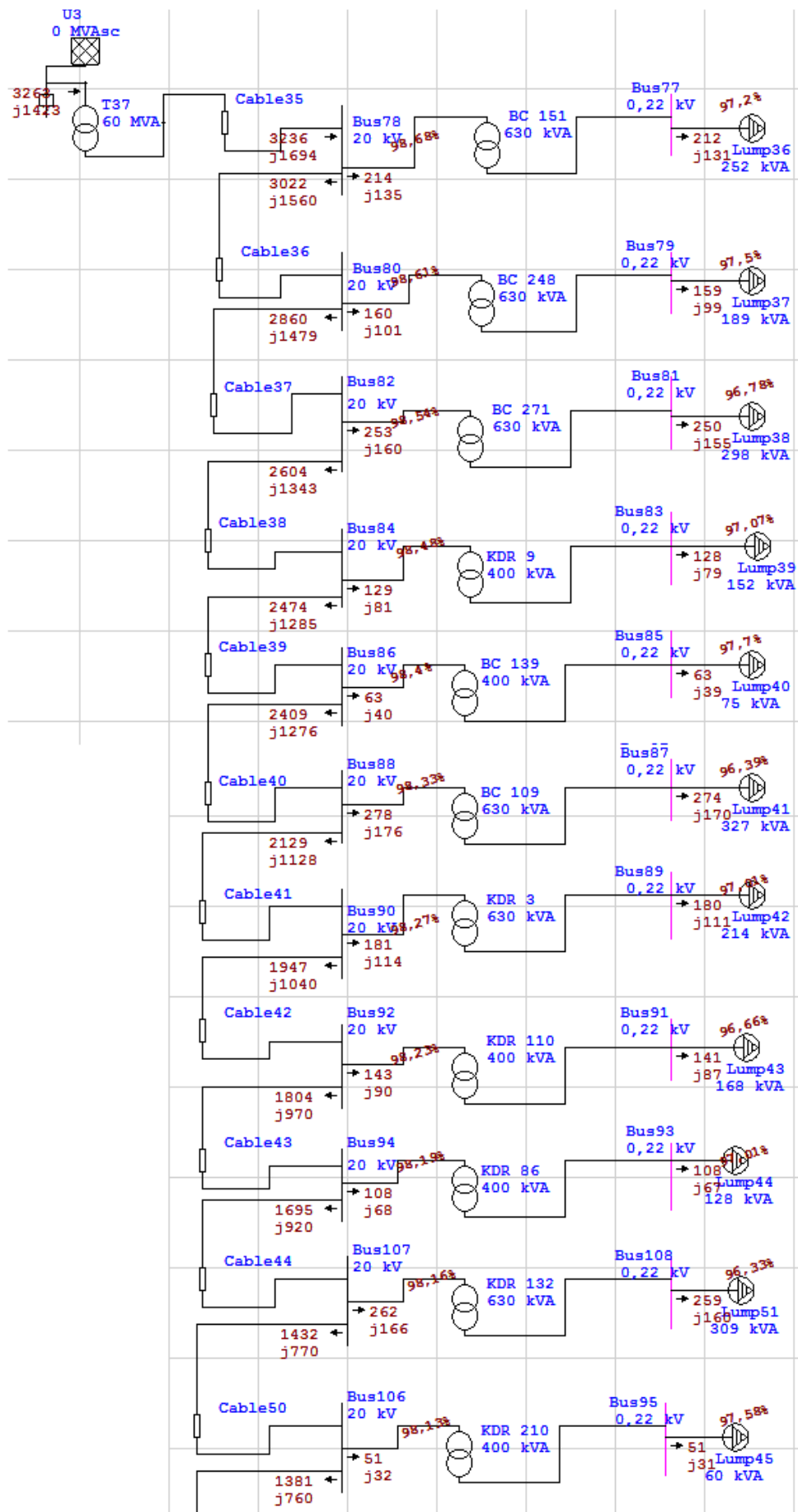


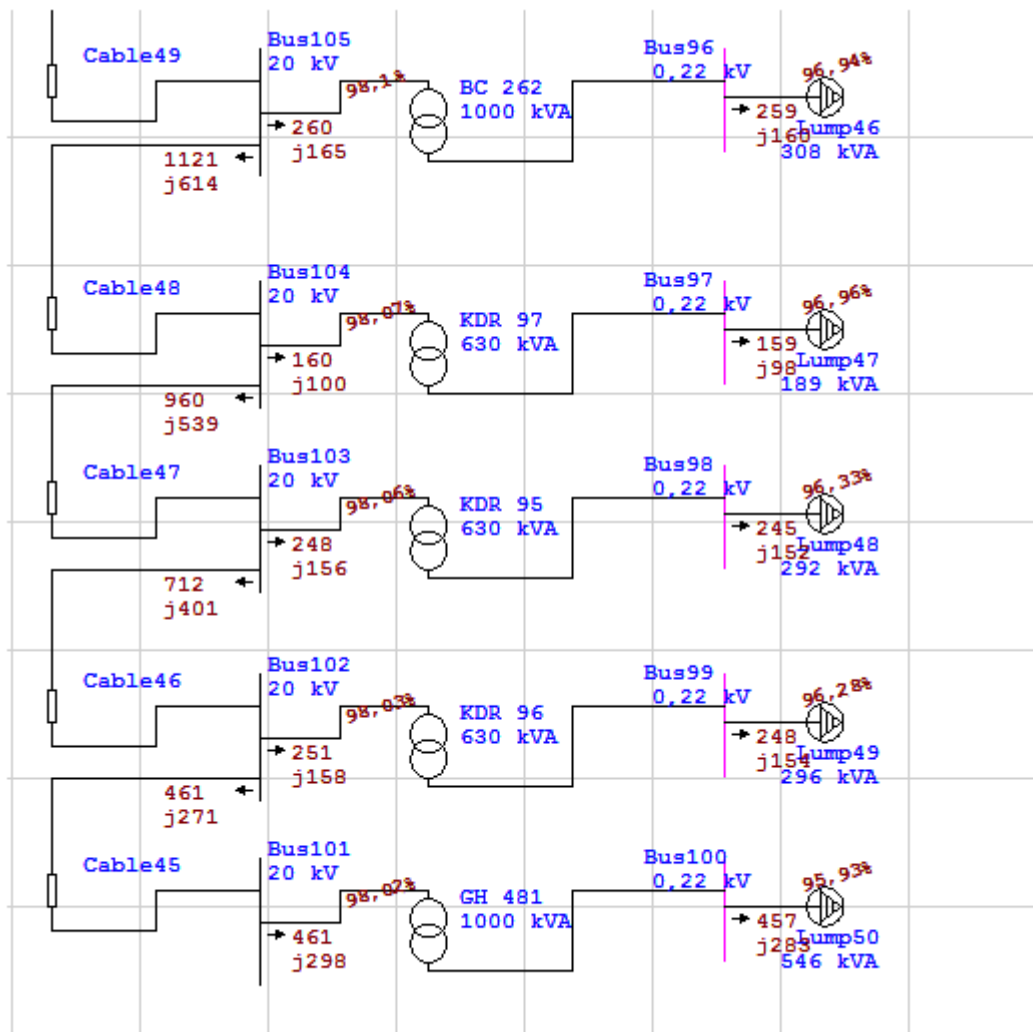
Gambar Simulasi Diagram Satu Garis Penyulang Gesper di ETAP 12.6.0



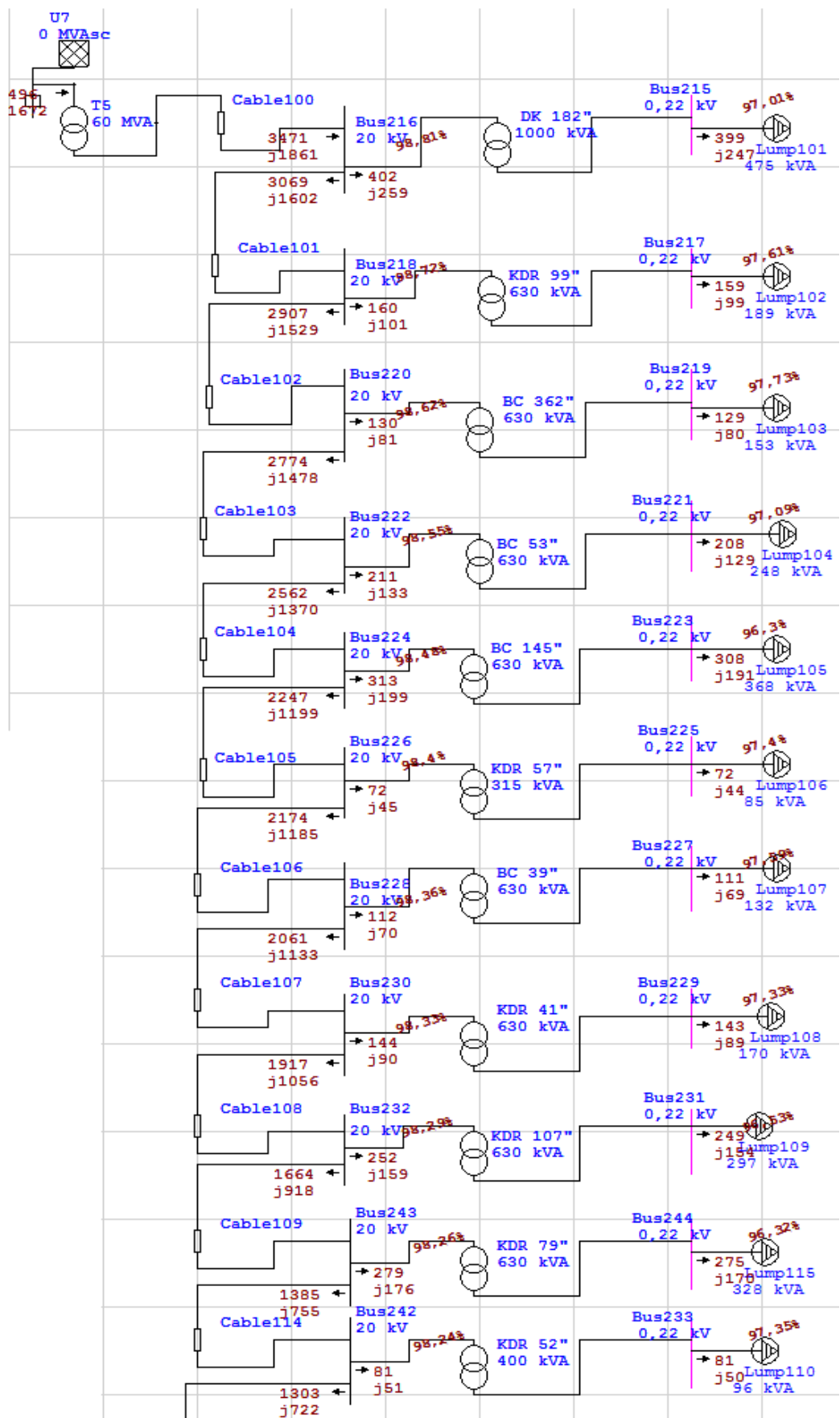


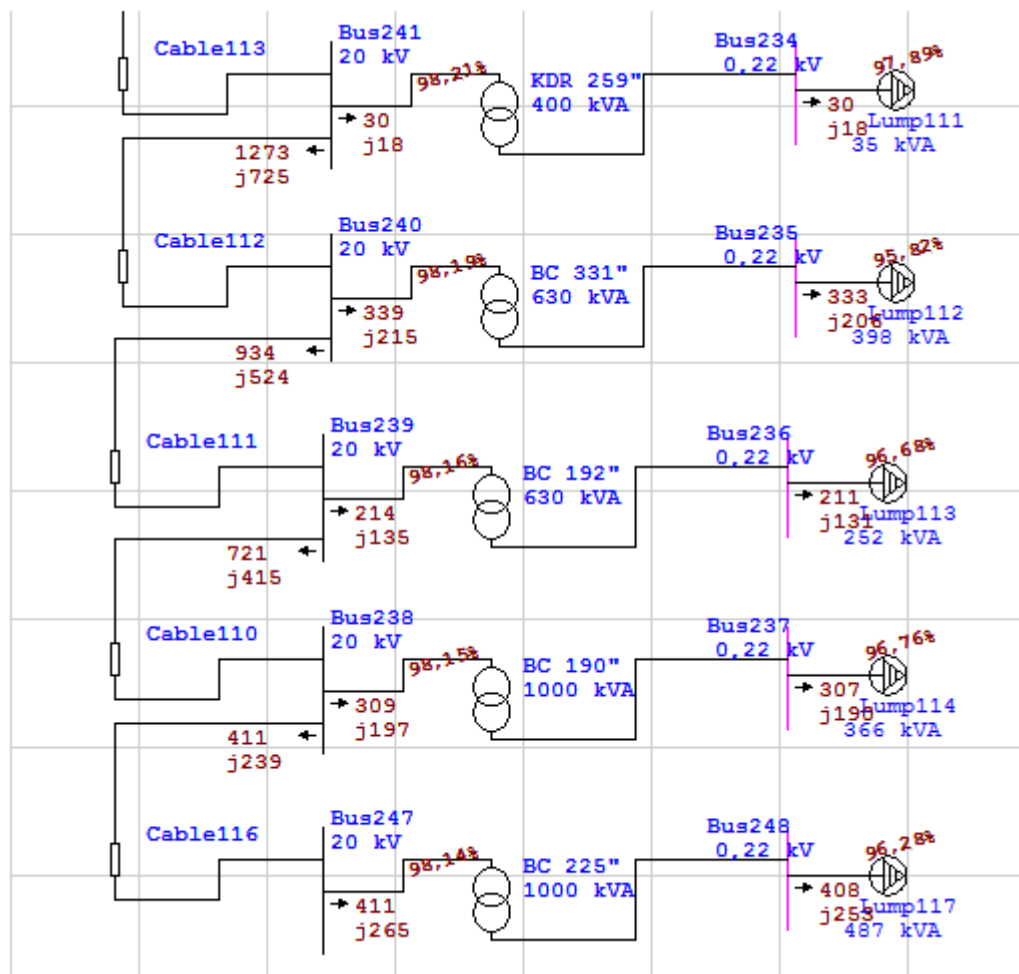
Gambar Simulasi Diagram Satu Garis Penyulang Gesper Setelah Dilakukan Pecah Beban Dengan Simulasi 1 Pada ETAP 12.6.0



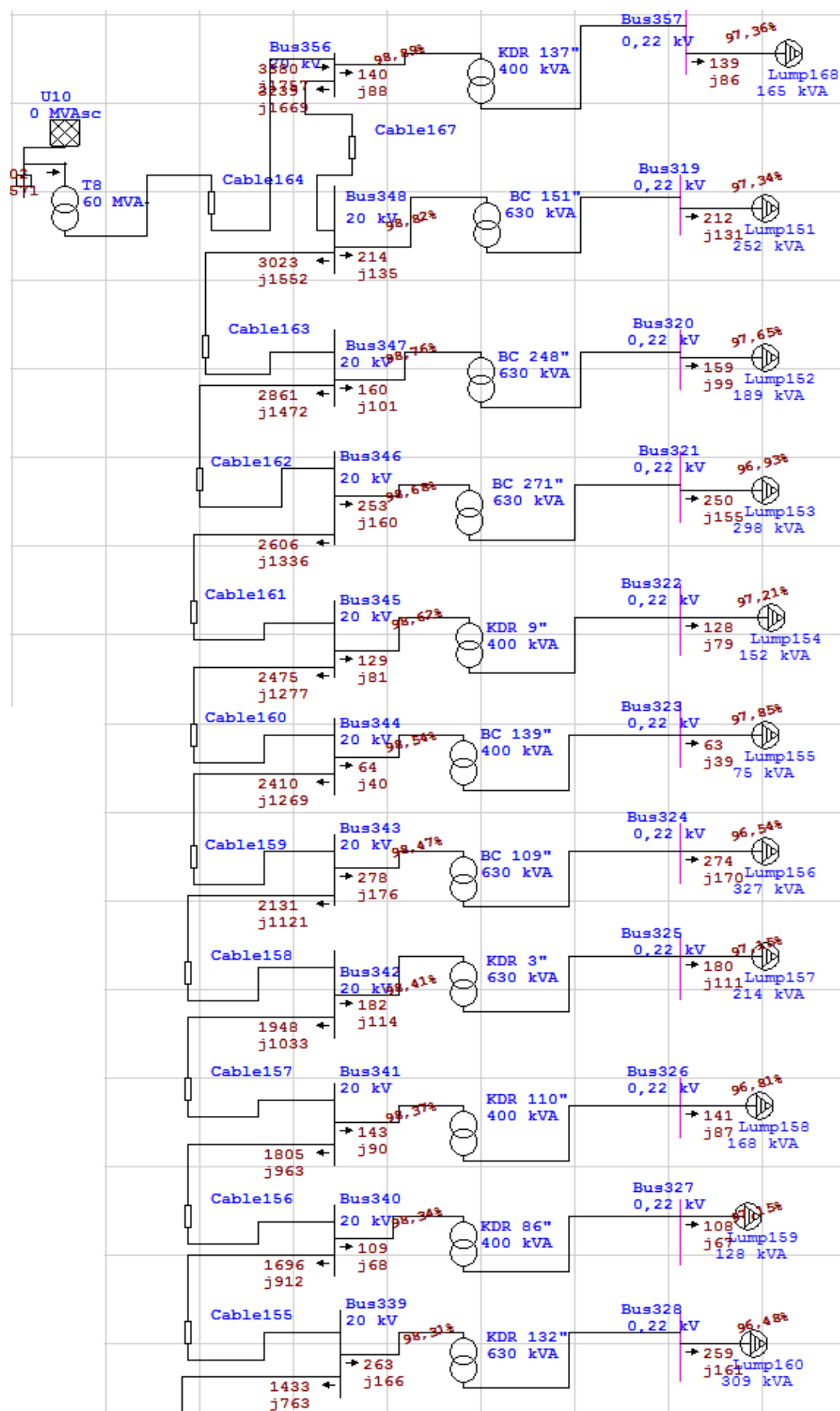


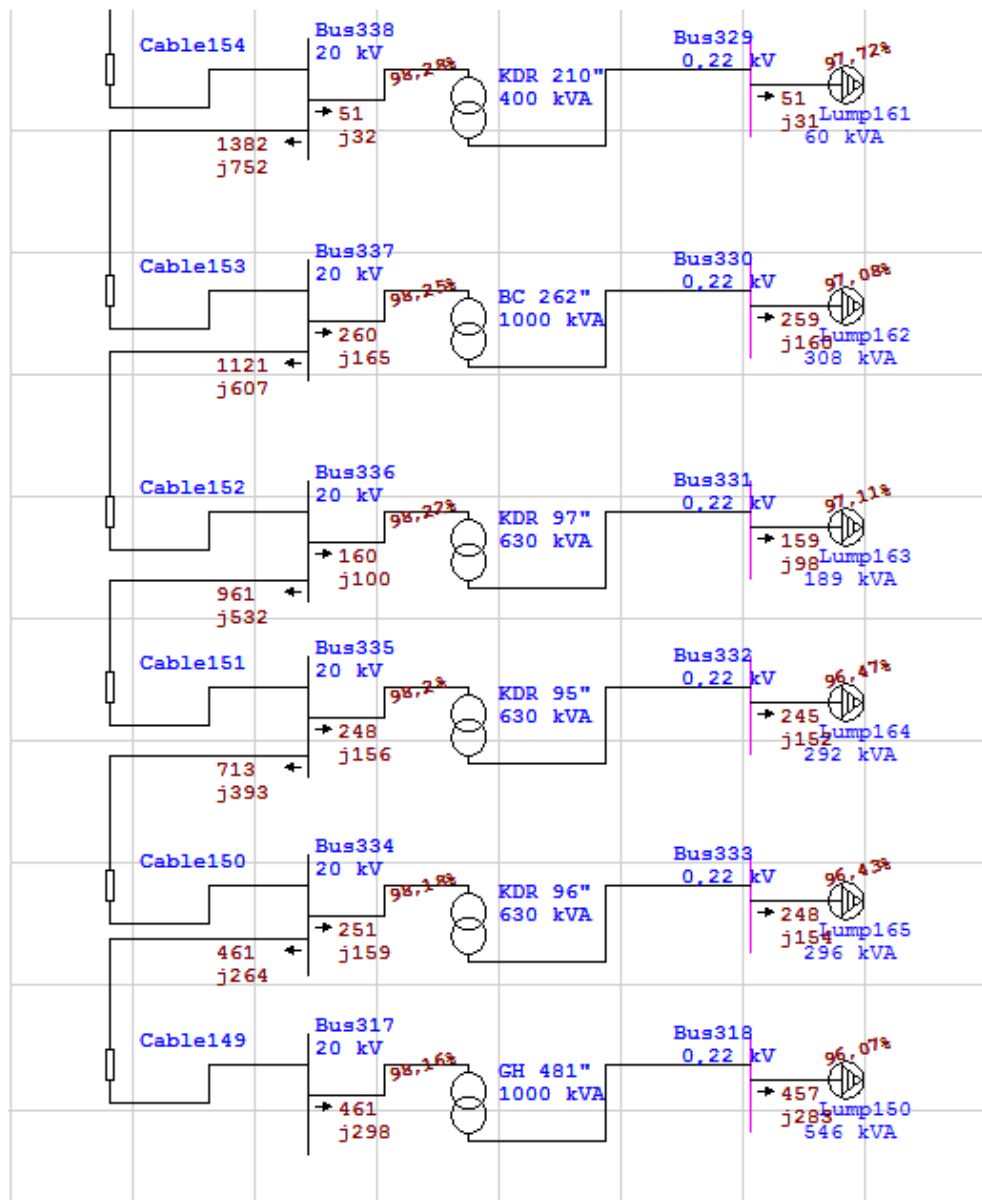
Gambar Simulasi Diagram Satu Garis Penyulang Scoopy Setelah Dilakukan Pecah Beban Dengan Simulasi 1 Pada ETAP 12.6.0





Gambar Simulasi Diagram Satu Garis Penyulang Gesper Setelah Dilakukan Pecah Beban Dengan Simulasi 2 Pada ETAP 12.6.0





Gambar Simulasi Diagram Satu Garis Penyulang Scoopy Setelah Dilakukan Pecah Beban Dengan Simulasi 2 Pada ETAP 12.6.0

Project:

ETAP

Page: 1

Location:

12 6 0H

Date: 08-21-2017

Contract:

SN:

Engineer:

Lampiran B

Study Case: LF

Revision: Base

Filename: REKONFIGURAI1

Config.: Normal



**SEKOLAH TINGGI TEKNIK - PLN
LEMBAR BIMBINGAN SKRIPSI**

Nama Mahasiswa : Bimasyah Ramadhana
NIM : 2013-11-261
Program Studi : Teknik Elektro
Pembimbing Utama (Materi) : Retno Aita Diantari, ST ,MT
Judul Tugas Akhir : REKONFIGURASI JARINGAN TEGANGAN
MENENGAH SISTEM 20 kV UNTUK
MENINGKATKAN KEANDALAN DI PT PLN
(PERSERO) AREA CENGKARENG

No	Tgl.	Materi Konsultasi	Paraf Pembimbing
1			
2			
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Project:

Location:

Contract:

Engineer:

Filename: REKONFIGURAI1

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Date: 08-21-2017

			SN:
8	Study Case: LF		Revision: Base Config.: Normal
9			
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Project:

Location:

Contract:

Engineer:

Filename: REKONFIGURAI1

ETAP

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Date: 08-21-2017

SN:

Revision: Base

Config.: Normal

Study Case: LF

Vd

ID	CKT / Branch			From-To Bus Flow			To-From Bus Flow		Losses			% Bus
	MW	Voltage	Mvar	MW	% Drop	Mvar	kW	kvar	From	To	in Vmag	
T3	6.671		3.476	-6.669		-3.359	2.6	117.9	100.0	99.3	0.75	
Cable65	6.669		3.359	-6.580		-3.507	88.6	-148.4	99.3	97.7	1.60	
DK 2	-0.397		-0.246	0.400		0.258	3.3	11.4	95.8	97.7	1.82	
Cable66	6.180		3.249	-6.170		-3.268	9.6	-18.7	97.7	97.5	0.18	
KDR 99*2	-0.158		-0.098	0.159		0.100	1.3	2.0	96.4	97.5	1.11	
Cable67	6.011		3.169	-6.001		-3.190	10.2	-21.4	97.5	97.3	0.20	
BC 362*2	-0.128		-0.079	0.129		0.081	0.9	1.3	96.4	97.3	0.90	
Cable68	5.872		3.109	-5.864		-3.126	7.6	-16.9	97.3	97.1	0.15	
BC 10	-0.207		-0.128	0.209		0.132	2.3	3.4	95.6	97.1	1.47	
Cable69	5.655		2.994	-5.647		-3.014	8.1	-19.9	97.1	96.9	0.17	
BC 11	-0.306		-0.190	0.311		0.198	5.1	7.6	94.7	96.9	2.20	
Cable70	5.335		2.817	-5.327		-2.840	8.2	-23.3	96.9	96.8	0.18	
KDR 57P2	-0.071		-0.044	0.072		0.045	0.5	0.8	95.8	96.8	1.01	
Cable71	5.256		2.795	-5.251		-2.808	4.4	-13.0	96.8	96.7	0.10	
BC 39*2	-0.110		-0.068	0.111		0.069	0.6	1.0	95.9	96.7	0.78	
Cable72	5.140		2.739	-5.137		-2.749	3.4	-10.5	96.7	96.6	0.08	
KDR 15	-0.142		-0.088	0.143		0.090	1.1	1.6	95.6	96.6	1.01	
Cable73	4.994		2.660	-4.989		-2.676	4.8	-16.0	96.6	96.5	0.11	
KDR 16	-0.246		-0.153	0.250		0.158	3.3	5.0	94.7	96.5	1.77	
Cable74	4.739		2.518	-4.735		-2.534	4.3	-16.5	96.5	96.4	0.11	
KDR 17	-0.273		-0.169	0.277		0.175	4.1	6.1	94.4	96.4	1.97	
Cable75	4.458		2.359	-4.455		-2.373	3.2	-14.1	96.4	96.3	0.08	
KDR 18	-0.080		-0.050	0.081		0.050	0.5	0.8	95.4	96.3	0.90	
Cable76	4.374		2.323	-4.370		-2.340	3.7	-17.1	96.3	96.2	0.10	
KDR 19	-0.165		-0.102	0.167		0.106	2.3	3.5	94.3	96.2	1.87	
Cable77	4.203		2.235	-4.201		-2.246	2.3	-11.5	96.2	96.1	0.06	
BC 12	-0.330		-0.205	0.336		0.214	6.0	9.1	93.7	96.1	2.40	
Cable78	3.865		2.032	-3.862		-2.053	3.4	-20.8	96.1	96.0	0.10	
BC 13	-0.210		-0.130	0.212		0.134	2.4	3.6	94.5	96.0	1.51	
Cable79	3.650		1.920	-3.647		-1.938	2.6	-18.1	96.0	95.9	0.08	
BC 14	-0.304		-0.189	0.306		0.196	2.0	6.9	94.5	95.9	1.41	
Cable80	3.341		1.742	-3.339		-1.758	1.8	-15.5	95.9	95.9	0.06	
KDR 20	-0.137		-0.085	0.139		0.087	1.6	2.4	94.3	95.9	1.56	
Cable81	3.200		1.670	-3.198		-1.687	1.8	-17.1	95.9	95.8	0.07	
BC 15	-0.209		-0.130	0.212		0.133	2.4	3.6	94.3	95.8	1.51	

Project:
Location:
Contract:
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Study Case: LF

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Revision: Base
Config.: Normal

Vd									
CKT / Branch		From-To Bus Flow		To-From Bus Flow		Losses		% Bus Voltage	
ID		MW	Mvar	MW	Mvar	kW	kvar	From	To
Cable82		2.986	1.554	-2.985	-1.573	1.7	-18.9	95.8	95.7
BC 248T2		-0.157	-0.097	0.159	0.099	1.3	2.0	94.6	95.7
Cable83		2.826	1.474	-2.824	-1.496	1.8	-22.3	95.7	95.7
Cable84		2.575	1.341	-2.574	-1.362	1.4	-20.9	95.7	95.6
KDR 21		-0.126	-0.078	0.128	0.080	1.4	2.1	94.2	95.6
Cable85		2.446	1.282	-2.444	-1.311	1.8	-29.1	95.6	95.5
BC 16		-0.062	-0.039	0.063	0.039	0.3	0.5	94.8	95.5
Cable86		2.382	1.272	-2.380	-1.298	1.5	-25.9	95.5	95.4
BC 17		-0.271	-0.168	0.275	0.174	4.1	6.1	93.5	95.4
Cable87		2.105	1.124	-2.104	-1.149	1.1	-24.6	95.4	95.4
KDR 3T2		-0.178	-0.110	0.179	0.113	1.7	2.6	94.1	95.4
Cable88		1.924	1.036	-1.924	-1.054	0.7	-18.2	95.4	95.3
KDR 22		-0.139	-0.086	0.141	0.089	1.7	2.5	93.7	95.3
Cable89		1.783	0.965	-1.782	-0.982	0.5	-16.6	95.3	95.3
KDR 23		-0.106	-0.066	0.107	0.067	1.0	1.5	94.1	95.3
Cable90		1.675	0.914	-1.674	-0.929	0.4	-15.0	95.3	95.3
Cable91		1.417	0.769	-1.416	-0.790	0.4	-20.1	95.3	95.2
KDR 24		-0.050	-0.031	0.050	0.031	0.2	0.3	94.7	95.2
Cable92		1.366	0.758	-1.366	-0.777	0.3	-18.4	95.2	95.2
BC 18		-0.256	-0.158	0.257	0.163	1.4	4.9	94.0	95.2
Cable93		1.109	0.613	-1.108	-0.637	0.3	-23.6	95.2	95.2
KDR 25		-0.157	-0.097	0.158	0.099	1.4	2.0	94.0	95.2
Cable94		0.950	0.538	-0.950	-0.555	0.2	-16.9	95.2	95.2
KDR 26		-0.242	-0.150	0.245	0.155	3.3	4.9	93.4	95.2
Cable95		0.705	0.400	-0.705	-0.427	0.1	-27.2	95.2	95.1
KDR 27		-0.245	-0.152	0.248	0.157	3.4	5.0	93.4	95.1
Cable96		0.456	0.270	-0.456	-0.296	0.1	-25.5	95.1	95.1
GH 2		0.456	0.296	-0.452	-0.280	4.5	15.7	95.1	93.0
						248.6	-504.1		

Project:

ETAP

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Location:

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Date: 08-21-2017

Contract:

SN:

Engineer:

Study Case: LF

Revision: Base

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Config.: Normal

Project:
Location:
Contract:
Engineer:
Filename: Bimbim

ETAP
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Study Case: LF

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Date: 08-21-2017
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Revision: Base
Config.: Normal

Branch Losses Summary Report

									Vd
CKT / Branch ID	From-To Bus Flow		To-From Bus Flow		Losses		% Bus Voltage		% Drop in Vmag
	MW	Mvar	MW	Mvar	kW	kvar	From	To	
T37	3.263	1.423	-3.263	-1.396	0.6	26.4	100.0	99.7	0.31
Cable35	3.263	1.396	-3.236	-1.694	27.1	-298.2	99.7	98.7	1.01
BC 151	-0.212	-0.131	0.214	0.135	2.3	3.5	97.2	98.7	1.48
Cable36	3.022	1.560	-3.020	-1.580	1.7	-20.3	98.7	98.6	0.07
BC 248	-0.159	-0.099	0.160	0.101	1.3	1.9	97.5	98.6	1.11
Cable37	2.860	1.479	-2.858	-1.503	1.7	-23.8	98.6	98.5	0.07
BC 271	-0.250	-0.155	0.253	0.160	3.3	4.9	96.8	98.5	1.76
Cable38	2.604	1.343	-2.603	-1.366	1.3	-22.4	98.5	98.5	0.06
KDR 9	-0.128	-0.079	0.129	0.081	1.3	2.0	97.1	98.5	1.41
Cable39	2.474	1.285	-2.472	-1.316	1.7	-31.1	98.5	98.4	0.08
BC 139	-0.063	-0.039	0.063	0.040	0.3	0.5	97.7	98.4	0.69
Cable40	2.409	1.276	-2.407	-1.304	1.4	-27.7	98.4	98.3	0.07
BC 109	-0.274	-0.170	0.278	0.176	3.9	5.9	96.4	98.3	1.94
Cable41	2.129	1.128	-2.128	-1.154	1.1	-26.2	98.3	98.3	0.06
KDR 3	-0.180	-0.111	0.181	0.114	1.7	2.5	97.0	98.3	1.26
Cable42	1.947	1.040	-1.946	-1.060	0.7	-19.3	98.3	98.2	0.04
KDR 110	-0.141	-0.087	0.143	0.090	1.6	2.4	96.7	98.2	1.56
Cable43	1.804	0.970	-1.803	-0.988	0.5	-17.7	98.2	98.2	0.03
KDR 86	-0.108	-0.067	0.108	0.068	0.9	1.4	97.0	98.2	1.19
Cable44	1.695	0.920	-1.694	-0.936	0.4	-15.9	98.2	98.2	0.03
KDR 210	-0.051	-0.031	0.051	0.032	0.2	0.3	97.6	98.1	0.55
BC 262	-0.259	-0.160	0.260	0.165	1.4	4.7	96.9	98.1	1.17
KDR 97	-0.159	-0.098	0.160	0.100	1.3	2.0	97.0	98.1	1.11
KDR 95	-0.245	-0.152	0.248	0.156	3.1	4.7	96.3	98.1	1.73
KDR 96	-0.248	-0.154	0.251	0.158	3.2	4.8	96.3	98.0	1.75
GH 481	-0.457	-0.283	0.461	0.298	4.3	15.1	95.9	98.0	2.09
Cable45	-0.461	-0.298	0.461	0.271	0.1	-27.1	98.0	98.0	0.01
Cable46	-0.712	-0.429	0.712	0.401	0.1	-28.9	98.0	98.1	0.02
Cable47	-0.960	-0.557	0.960	0.539	0.1	-18.0	98.1	98.1	0.02
Cable48	-1.120	-0.639	1.121	0.614	0.3	-25.1	98.1	98.1	0.03
Cable49	-1.381	-0.779	1.381	0.760	0.3	-19.6	98.1	98.1	0.03
Cable50	-1.432	-0.791	1.432	0.770	0.4	-21.4	98.1	98.2	0.03
KDR 132	0.262	0.166	-0.259	-0.160	3.5	5.3	98.2	96.3	1.83
					73.3	-554.3			

Project:
Location:
Contract:
Engineer:
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ETAP
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Study Case: LF

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Revision: Base
Config.: Normal

Branch Losses Summary Report

Vd									
CKT / Branch		From-To Bus Flow		To-From Bus Flow		Losses		% Bus Voltage	
ID		MW	Mvar	MW	Mvar	kW	kvar	From	To
T1		3.639	1.745	-3.638	-1.711	0.8	33.9	100.0	99.6
Cable1		-3.612	-1.929	3.638	1.711	25.8	-217.9	98.8	99.6
Cable2		3.210	1.670	-3.207	-1.697	2.5	-26.8	98.8	98.7
DK 182		0.402	0.258	-0.399	-0.247	3.2	11.3	98.8	97.0
Cable3		3.047	1.596	-3.044	-1.627	2.6	-30.3	98.7	98.6
KDR 99		0.160	0.101	-0.159	-0.099	1.3	1.9	98.7	97.6
Cable4		2.915	1.546	-2.913	-1.569	1.8	-23.7	98.6	98.5
BC362		0.130	0.081	-0.129	-0.080	0.8	1.3	98.6	97.7
Cable5		2.702	1.437	-2.700	-1.464	1.8	-27.3	98.5	98.4
BC 53		0.211	0.132	-0.208	-0.129	2.2	3.4	98.5	97.0
Cable6		2.387	1.266	-2.386	-1.297	1.6	-31.2	98.4	98.3
BC 145		0.313	0.198	-0.308	-0.191	5.0	7.5	98.4	96.2
Cable7		2.314	1.252	-2.313	-1.269	0.8	-17.3	98.3	98.3
KDR 57		0.072	0.045	-0.071	-0.044	0.5	0.8	98.3	97.3
Cable8		2.201	1.199	-2.200	-1.213	0.6	-13.9	98.3	98.3
BC 39		0.112	0.070	-0.111	-0.069	0.6	0.9	98.3	97.5
Cable9		2.057	1.123	-2.056	-1.144	0.8	-21.0	98.3	98.2
KDR 41		0.144	0.090	-0.143	-0.089	1.1	1.6	98.3	97.3
Cable10		1.804	0.985	-1.803	-0.997	0.4	-12.4	98.2	98.2
KDR 107		0.252	0.159	-0.249	-0.154	3.2	4.9	98.2	96.5
Cable12		1.525	0.821	-1.524	-0.839	0.4	-17.8	98.2	98.2
KDR 79		0.279	0.176	-0.275	-0.170	4.0	6.0	98.2	96.2
Cable13		1.443	0.788	-1.442	-0.810	0.4	-21.4	98.2	98.1
KDR 52		0.081	0.051	-0.081	-0.050	0.5	0.8	98.2	97.3
Cable14		1.413	0.791	-1.413	-0.805	0.3	-14.3	98.1	98.1
KDR 259		0.030	0.018	-0.029	-0.018	0.1	0.1	98.1	97.8
Cable15		1.074	0.590	-1.074	-0.616	0.3	-25.1	98.1	98.1
BC 331		0.339	0.215	-0.333	-0.206	5.9	8.8	98.1	95.7
Cable16		0.860	0.481	-0.860	-0.503	0.1	-21.6	98.1	98.1
BC 192		0.214	0.134	-0.211	-0.131	2.3	3.5	98.1	96.6
Cable17		0.551	0.306	-0.551	-0.324	0.0	-18.1	98.1	98.0
BC 190		0.309	0.197	-0.307	-0.190	1.9	6.7	98.1	96.7
Cable18		0.411	0.236	-0.411	-0.265	0.0	-29.0	98.0	98.0
KDR 137		0.140	0.088	-0.138	-0.086	1.6	2.4	98.0	96.5
BC 225		0.411	0.265	-0.408	-0.253	3.4	12.0	98.0	96.2

Vd									
CKT / Branch		From-To Bus Flow		To-From Bus Flow		Losses		% Bus Voltage	
ID		MW	Mvar	MW	Mvar	kW	kvar	From	To
								% Drop	
								in Vmag	
						78.8	-461.4		

Project:
Location:
Contract:
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Branch Losses Summary Report

									Vd
CKT / Branch		From-To Bus Flow		To-From Bus Flow		Losses		% Bus Voltage	
ID		MW	Mvar	MW	Mvar	kW	kvar	From	To
Cable149		-0.461	-0.298	0.461	0.264	0.1	-34.5	98.2	98.2
GH 481"		0.461	0.298	-0.457	-0.283	4.3	15.1	98.2	96.1
BC 151"		-0.212	-0.131	0.214	0.135	2.3	3.5	97.3	98.8
BC 248"		-0.159	-0.099	0.160	0.101	1.3	1.9	97.6	98.8
BC 271"		-0.250	-0.155	0.253	0.160	3.2	4.9	96.9	98.7
KDR 9"		-0.128	-0.079	0.129	0.081	1.3	2.0	97.2	98.6
BC 139"		-0.063	-0.039	0.064	0.040	0.3	0.5	97.8	98.5
BC 109"		-0.274	-0.170	0.278	0.176	3.9	5.9	96.5	98.5
KDR 3"		-0.180	-0.111	0.182	0.114	1.7	2.5	97.2	98.4
KDR 110"		-0.141	-0.087	0.143	0.090	1.6	2.4	96.8	98.4
KDR 86"		-0.108	-0.067	0.109	0.068	0.9	1.4	97.1	98.3
KDR 132"		-0.259	-0.161	0.263	0.166	3.5	5.3	96.5	98.3
KDR 210"		-0.051	-0.031	0.051	0.032	0.2	0.3	97.7	98.3
BC 262"		-0.259	-0.160	0.260	0.165	1.4	4.7	97.1	98.2
KDR 97"		-0.159	-0.098	0.160	0.100	1.3	2.0	97.1	98.2
KDR 95"		-0.245	-0.152	0.248	0.156	3.1	4.7	96.5	98.2
KDR 96"		-0.248	-0.154	0.251	0.159	3.2	4.8	96.4	98.2
Cable150		-0.713	-0.422	0.713	0.393	0.1	-29.0	98.2	98.2
Cable151		-0.961	-0.550	0.961	0.532	0.1	-18.0	98.2	98.2
Cable152		-1.121	-0.632	1.121	0.607	0.3	-25.2	98.2	98.2
Cable153		-1.381	-0.772	1.382	0.752	0.3	-19.7	98.2	98.3
Cable154		-1.432	-0.784	1.433	0.763	0.4	-21.5	98.3	98.3
Cable155		-1.695	-0.928	1.696	0.912	0.4	-16.0	98.3	98.3
Cable156		-1.804	-0.980	1.805	0.963	0.5	-17.7	98.3	98.4
Cable157		-1.947	-1.053	1.948	1.033	0.6	-19.4	98.4	98.4
Cable158		-2.130	-1.147	2.131	1.121	1.1	-26.3	98.4	98.5
Cable159		-2.409	-1.297	2.410	1.269	1.4	-27.8	98.5	98.5
Cable160		-2.474	-1.309	2.475	1.277	1.7	-31.2	98.5	98.6
Cable161		-2.604	-1.358	2.606	1.336	1.3	-22.5	98.6	98.7
Cable162		-2.859	-1.496	2.861	1.472	1.7	-23.9	98.7	98.8
Cable163		-3.021	-1.573	3.023	1.552	1.7	-20.3	98.8	98.8
Cable167		-3.237	-1.687	3.239	1.669	1.7	-18.4	98.8	98.9
Cable164		3.401	1.542	-3.380	-1.757	21.6	-215.3	99.7	98.9
T8		-3.401	-1.542	3.402	1.571	0.6	29.2	99.7	100.0
KDR 137"		0.140	0.088	-0.139	-0.086	1.6	2.3	98.9	97.4

Vd									
CKT / Branch	From-To Bus Flow		To-From Bus Flow		Losses		% Bus Voltage		% Drop
	MW	Mvar	MW	Mvar	kW	kvar	From	To	<u>in Vmag</u>
ID					71.1	-493.2			

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Branch Losses Summary Report

									Vd
CKT / Branch		From-To Bus Flow		To-From Bus Flow		Losses		% Bus Voltage	
ID	MW	Mvar	MW	Mvar	kW	kvar	From	To	% Drop in Vmag
T5	3.496	1.672	-3.495	-1.641	0.7	31.3	100.0	99.6	0.36
Cable100	3.495	1.641	-3.471	-1.861	23.8	-220.1	99.6	98.8	0.83
DK 182"	-0.399	-0.247	0.402	0.259	3.2	11.3	97.0	98.8	1.80
Cable101	3.069	1.602	-3.067	-1.629	2.3	-27.0	98.8	98.7	0.09
KDR 99"	-0.159	-0.099	0.160	0.101	1.3	1.9	97.6	98.7	1.11
Cable102	2.907	1.529	-2.904	-1.559	2.3	-30.6	98.7	98.6	0.10
BC 362"	-0.129	-0.080	0.130	0.081	0.8	1.3	97.7	98.6	0.90
Cable103	2.774	1.478	-2.773	-1.502	1.7	-23.9	98.6	98.6	0.07
BC 53"	-0.208	-0.129	0.211	0.133	2.2	3.4	97.1	98.6	1.46
Cable104	2.562	1.370	-2.561	-1.397	1.6	-27.6	98.6	98.5	0.08
BC 145"	-0.308	-0.191	0.313	0.199	5.0	7.5	96.3	98.5	2.18
Cable105	2.247	1.199	-2.246	-1.230	1.4	-31.4	98.5	98.4	0.08
KDR 57"	-0.072	-0.044	0.072	0.045	0.5	0.8	97.4	98.4	1.00
Cable106	2.174	1.185	-2.173	-1.202	0.7	-17.5	98.4	98.4	0.04
BC 39"	-0.111	-0.069	0.112	0.070	0.6	0.9	97.6	98.4	0.77
Cable107	2.061	1.133	-2.061	-1.147	0.5	-14.0	98.4	98.3	0.03
KDR 41"	-0.143	-0.089	0.144	0.090	1.1	1.6	97.3	98.3	1.00
Cable108	1.917	1.056	-1.916	-1.078	0.7	-21.1	98.3	98.3	0.04
KDR 107"	-0.249	-0.154	0.252	0.159	3.2	4.9	96.5	98.3	1.76
Cable109	1.664	0.918	-1.663	-0.931	0.3	-12.4	98.3	98.3	0.02
KDR 52"	-0.081	-0.050	0.081	0.051	0.5	0.8	97.4	98.2	0.89
KDR 259"	-0.030	-0.018	0.030	0.018	0.1	0.1	97.9	98.2	0.32
BC 331"	-0.333	-0.206	0.339	0.215	5.9	8.8	95.8	98.2	2.37
BC 192"	-0.211	-0.131	0.214	0.135	2.3	3.5	96.7	98.2	1.49
BC 190"	-0.307	-0.190	0.309	0.197	1.9	6.7	96.8	98.1	1.39
Cable110	-0.720	-0.436	0.721	0.415	0.1	-21.7	98.1	98.2	0.02
Cable116	0.411	0.239	-0.411	-0.265	0.0	-25.4	98.1	98.1	0.01
Cable111	-0.934	-0.549	0.934	0.524	0.2	-25.2	98.2	98.2	0.02
Cable112	-1.273	-0.739	1.273	0.725	0.2	-14.3	98.2	98.2	0.02
Cable113	-1.303	-0.743	1.303	0.722	0.3	-21.5	98.2	98.2	0.03
Cable114	-1.384	-0.772	1.385	0.755	0.3	-17.9	98.2	98.3	0.03
KDR 79"	0.279	0.176	-0.275	-0.170	4.0	6.0	98.3	96.3	1.94
BC 225"	0.411	0.265	-0.408	-0.253	3.4	11.9	98.1	96.3	1.86
					73.5	-449.2			

