

Project:  
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**ETAP**  
**12.6.0H**  
  
Study Case: LF

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### Branch Losses Summary Report

CKT / Branch		From-To Bus Flow		To-From Bus Flow		Losses		% Bus Voltage		Vd
ID		MW	Mvar	MW	Mvar	kW	kvar	From	To	% Drop in Vmag
Line2		4.394	4.013	-4.394	-4.013	0.8	0.3	100.0	100.0	0.01
Line3		0.031	0.017	-0.031	-0.017	0.0	-0.2	100.0	100.0	0.00
Line5		4.363	3.997	-4.359	-3.989	4.1	7.1	100.0	99.8	0.17
Line4		0.031	0.017	-0.031	-0.022	0.0	-4.9	100.0	100.0	0.01
aqapeh main		0.031	0.022	-0.031	-0.021	0.2	0.3	100.0	99.1	0.88
Line6		4.229	3.945	-4.192	-3.931	37.3	14.2	99.8	99.1	0.69
tayseer main		0.129	0.044	-0.128	-0.042	1.7	2.5	99.8	98.1	1.73
Line7		4.168	3.922	-4.165	-3.921	3.1	1.2	99.1	99.1	0.06
midical harps		0.024	0.009	-0.024	-0.009	0.1	0.1	99.1	98.6	0.52
Line8		4.165	3.921	-4.160	-3.919	5.3	2.0	99.1	99.0	0.10
T4		4.160	3.919	-4.153	-3.786	6.7	133.2	99.0	97.3	1.65
Line9		4.153	3.786	-4.139	-3.780	14.5	5.6	97.3	97.1	0.27
Line10		4.053	3.757	-4.036	-3.751	16.9	6.5	97.1	96.7	0.32
al-thoghrah		0.086	0.023	-0.084	-0.021	1.2	1.7	97.1	95.4	1.70
Line11		3.949	3.725	-3.940	-3.721	9.2	3.5	96.7	96.6	0.17
toop factory		0.087	0.026	-0.086	-0.025	0.5	0.7	96.7	96.0	0.72
Line12		3.940	3.721	-3.934	-3.719	5.7	2.1	96.6	96.5	0.11
Line13		3.915	3.713	-3.913	-3.712	2.7	1.0	96.5	96.4	0.05
sameeh.		0.019	0.006	-0.019	-0.006	0.0	0.1	96.5	96.2	0.26
Line14		0.717	0.587	-0.717	-0.587	0.3	-0.9	96.4	96.4	0.03
Line129		3.196	3.125	-3.196	-3.125	0.3	0.2	96.4	96.4	0.01
Line15		0.608	0.550	-0.608	-0.551	0.1	-0.4	96.4	96.4	0.01
karag		0.108	0.037	-0.107	-0.035	1.3	1.9	96.4	94.9	1.50
Line16		0.274	0.069	-0.274	-0.069	0.0	-0.5	96.4	96.4	0.00
Line21		0.334	0.482	-0.334	-0.482	0.0	-0.3	96.4	96.4	0.01
Line17		0.184	0.049	-0.184	-0.049	0.0	-0.4	96.4	96.4	0.00
Line18		0.090	0.021	-0.090	-0.021	0.0	-0.2	96.4	96.4	0.00
mahta		0.184	0.049	-0.182	-0.046	2.2	3.3	96.4	94.9	1.47
Line19		0.090	0.021	-0.090	-0.022	0.0	-0.6	96.4	96.4	0.00
Line20		0.090	0.022	-0.090	-0.023	0.0	-1.2	96.4	96.4	0.00
masriya		0.090	0.023	-0.089	-0.022	0.3	0.5	96.4	95.9	0.45
Line22		0.334	0.482	-0.334	-0.483	0.0	-0.4	96.4	96.4	0.01
Cable1		0.130	0.031	-0.130	-0.049	0.0	-17.3	96.4	96.3	0.00
Line23		0.079	0.408	-0.079	-0.410	0.1	-1.3	96.4	96.3	0.01
al-helal		0.125	0.043	-0.123	-0.041	1.7	2.5	96.4	94.6	1.74

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CKT / Branch ID	From-To Bus Flow		To-From Bus Flow		Losses		% Bus Voltage		Vd % Drop in Vmag
	MW	Mvar	MW	Mvar	kW	kvar	From	To	
al-hawooz 1	0.130	0.049	-0.129	-0.047	1.2	1.7	96.3	95.2	1.16
Line24	0.039	-0.003	-0.039	0.002	0.0	-0.3	96.3	96.3	0.00
Line27	-0.086	0.379	0.086	-0.382	0.1	-2.9	96.3	96.3	0.01
al-daqnya	0.125	0.033	-0.124	-0.031	1.6	2.4	96.3	94.7	1.61
Line25	0.039	-0.002	-0.039	0.000	0.0	-2.6	96.3	96.3	0.00
Line26	0.030	-0.002	-0.030	0.000	0.0	-2.3	96.3	96.3	0.00
span	0.009	0.002	-0.009	-0.002	0.0	0.0	96.3	96.1	0.28
stone cutter	0.030	0.000	-0.030	0.000	0.1	0.1	96.3	96.1	0.28
Line28	0.026	0.006	-0.026	-0.008	0.0	-1.8	96.3	96.3	0.00
Line29	-0.112	0.376	0.112	-0.377	0.0	-0.5	96.3	96.3	0.00
safya north	0.026	0.008	-0.026	-0.008	0.1	0.1	96.3	96.0	0.34
Line30	-0.142	0.356	0.142	-0.357	0.0	-0.3	96.3	96.3	0.00
al-aqapeh	0.030	0.020	-0.030	-0.020	0.1	0.1	96.3	96.0	0.35
Cable2	0.140	0.039	-0.140	-0.068	0.0	-29.4	96.3	96.3	0.00
Line32	-0.281	0.318	0.281	-0.319	0.0	-0.7	96.3	96.3	0.00
Line31	0.139	0.068	-0.139	-0.068	0.0	-0.2	96.3	96.3	0.00
tupas hospital 1	0.001	0.000	-0.001	0.000	0.0	0.0	96.3	96.3	0.00
tubas hospital 2	0.139	0.068	-0.138	-0.067	0.9	1.4	96.3	95.4	0.88
Line33	-0.339	0.295	0.340	-0.298	0.2	-3.1	96.3	96.4	0.02
gas station	0.058	0.023	-0.058	-0.023	0.4	0.6	96.3	95.5	0.86
Line34	0.024	0.004	-0.024	-0.006	0.0	-2.4	96.4	96.3	0.00
Line36	-0.503	0.258	0.503	-0.259	0.1	-1.3	96.4	96.4	0.01
eastren aqapa	0.140	0.037	-0.138	-0.035	1.2	1.9	96.4	95.2	1.11
Line35	0.007	-0.001	-0.007	-0.002	0.0	-3.0	96.3	96.3	0.00
dawajen	0.017	0.007	-0.017	-0.007	0.0	0.0	96.3	96.1	0.26
salhab	0.007	0.002	-0.007	-0.002	0.0	0.0	96.3	96.1	0.23
Line37	-0.636	0.201	0.637	-0.205	0.6	-4.1	96.4	96.4	0.07
westwern aqapa	0.133	0.058	-0.132	-0.056	1.3	1.9	96.4	95.1	1.26
Line38	-0.659	0.198	0.659	-0.199	0.1	-0.6	96.4	96.4	0.01
hawooz aqapa	0.022	0.007	-0.022	-0.007	0.1	0.1	96.4	96.1	0.30
Line39	-0.659	0.199	0.659	-0.199	0.1	-0.4	96.4	96.5	0.01
Line40	-0.659	0.199	0.659	-0.199	0.1	-0.4	96.5	96.5	0.01
Line41	0.000	-0.004	0.000	0.002	0.0	-1.5	96.5	96.5	0.00
Line44	-0.659	0.203	0.659	-0.203	0.1	-0.4	96.5	96.5	0.01
Line42	0.000	-0.002	0.000	0.002	0.0	-0.5	96.5	96.5	0.00
Line43	0.000	-0.002	0.000	0.000	0.0	-1.6	96.5	96.5	0.00
Line45	-0.668	0.199	0.668	-0.202	0.0	-2.2	96.5	96.5	0.00

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CKT / Branch ID	From-To Bus Flow		To-From Bus Flow		Losses		% Bus Voltage		Vd % Drop in Vmag
	MW	Mvar	MW	Mvar	kW	kvar	From	To	
al kafeer main	0.009	0.004	-0.009	-0.004	0.0	0.0	96.5	96.1	0.35
Line46	-0.679	0.193	0.680	-0.196	0.5	-2.8	96.5	96.5	0.05
mahajeer 1	0.011	0.008	-0.011	-0.008	0.0	0.0	96.5	96.3	0.21
Line47	-0.681	0.079	0.681	-0.080	0.1	-0.9	96.5	96.5	0.02
eastren zababdeh	0.002	0.117	-0.001	-0.116	0.5	0.8	96.5	95.9	0.65
Line48	-2.295	-0.434	2.295	0.434	0.6	-0.1	96.5	96.6	0.03
Line81	1.613	0.514	-1.613	-0.515	0.6	-0.4	96.5	96.5	0.04
Cable3	0.099	0.014	-0.099	-0.030	0.0	-15.8	96.6	96.6	0.00
Line49	-2.394	-0.449	2.395	0.448	0.7	-0.1	96.6	96.6	0.03
shcool zababdeh	0.099	0.030	-0.098	-0.028	1.0	1.5	96.6	95.3	1.31
Line50	-2.521	-0.500	2.522	0.500	0.6	0.0	96.6	96.6	0.02
middle zababdeh	0.127	0.051	-0.126	-0.050	1.1	1.7	96.6	95.4	1.17
Line51	0.143	0.017	-0.143	-0.017	0.0	-0.2	96.6	96.6	0.00
Line53	-2.665	-0.517	2.667	0.517	2.8	0.1	96.6	96.7	0.11
Cable4	0.064	-0.012	-0.064	-0.012	0.0	-24.2	96.6	96.6	0.00
westren zababdeh	0.079	0.029	-0.078	-0.028	0.4	0.6	96.6	95.9	0.70
Line52	0.064	0.012	-0.064	-0.013	0.0	-0.4	96.6	96.6	0.00
Cable5	0.064	0.013	-0.064	-0.024	0.0	-11.0	96.6	96.6	0.00
sefferya zababdeh	0.064	0.024	-0.064	-0.023	0.4	0.7	96.6	95.7	0.91
Line54	-2.736	-0.527	2.749	0.528	13.0	0.8	96.7	97.2	0.49
arciticular college	0.068	0.010	-0.068	-0.010	0.3	0.4	96.7	96.2	0.48
Line55	-2.783	-0.546	2.788	0.546	4.9	0.3	97.2	97.4	0.18
manasheer meselya	0.035	0.018	-0.035	-0.018	0.1	0.1	97.2	97.0	0.22
Line56	-2.873	-0.568	2.875	0.568	2.6	0.2	97.4	97.5	0.09
eastren maslya	0.084	0.022	-0.084	-0.021	0.4	0.7	97.4	96.7	0.66
Line57	0.250	0.143	-0.250	-0.145	0.0	-1.7	97.5	97.5	0.02
Line59	-3.126	-0.711	3.126	0.711	0.2	0.0	97.5	97.5	0.01
Line58	0.207	0.132	-0.207	-0.136	0.1	-3.8	97.5	97.4	0.03
masalya	0.043	0.013	-0.043	-0.012	0.5	0.7	97.5	96.0	1.42
weels	0.207	0.136	-0.205	-0.132	2.3	3.4	97.4	96.0	1.48
Line60	-3.194	-0.738	3.222	0.743	28.4	4.8	97.5	98.4	0.92
westren maslya	0.068	0.027	-0.068	-0.027	0.3	0.5	97.5	96.9	0.62
Line61	0.081	0.032	-0.081	-0.033	0.0	-1.4	98.4	98.4	0.00
Line62	-3.387	-0.816	3.391	0.817	3.1	0.6	98.4	98.5	0.10
jarpa main	0.085	0.042	-0.084	-0.041	0.5	0.8	98.4	97.6	0.83
east jarpa	0.081	0.033	-0.079	-0.031	1.1	1.6	98.4	96.6	1.83
Line63	0.023	0.018	-0.023	-0.018	0.0	-0.3	98.5	98.5	0.00

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CKT / Branch ID	From-To Bus Flow		To-From Bus Flow		Losses		% Bus Voltage		Vd % Drop in Vmag
	MW	Mvar	MW	Mvar	kW	kvar	From	To	
Line64	-3.413	-0.835	3.431	0.839	17.8	3.6	98.5	99.1	0.54
plastic factory	0.023	0.018	-0.023	-0.018	0.1	0.1	98.5	98.1	0.45
Line65	0.008	0.001	-0.008	-0.002	0.0	-0.6	99.1	99.1	0.00
Line66	-3.439	-0.840	3.443	0.841	3.7	0.7	99.1	99.2	0.11
wadi al efsHa	0.008	0.002	-0.008	-0.002	0.0	0.0	99.1	98.6	0.50
Line67	-3.842	-0.936	3.866	0.942	24.3	6.2	99.2	99.8	0.66
Line71	0.399	0.095	-0.399	-0.095	0.0	-0.7	99.2	99.2	0.01
Line68	0.014	0.010	-0.014	-0.011	0.0	-1.2	99.8	99.8	0.00
Line69	-3.880	-0.952	3.887	0.953	6.3	1.6	99.8	100.0	0.17
eastren zawya	0.014	0.011	-0.014	-0.011	0.0	0.1	99.8	99.4	0.43
Line70	0.024	0.005	-0.024	-0.006	0.0	-1.0	100.0	100.0	0.00
3en zaya	0.034	0.009	-0.034	-0.008	0.3	0.4	100.0	99.0	1.04
westren zayah 2	0.024	0.006	-0.024	-0.006	0.1	0.1	100.0	99.7	0.29
Line72	0.059	0.014	-0.059	-0.015	0.0	-0.3	99.2	99.2	0.00
Line74	0.339	0.081	-0.339	-0.083	0.0	-1.3	99.2	99.1	0.01
Line73	0.019	0.003	-0.019	-0.008	0.0	-4.2	99.2	99.2	0.00
abo omar	0.041	0.011	-0.040	-0.010	0.8	1.2	99.2	96.6	2.54
wadi d3oqa	0.019	0.008	-0.019	-0.007	0.1	0.1	99.2	98.5	0.68
Line75	0.013	0.000	-0.013	-0.003	0.0	-3.4	99.1	99.1	0.00
Line76	0.234	0.059	-0.234	-0.061	0.0	-2.3	99.1	99.1	0.02
shcool maraqa	0.093	0.024	-0.092	-0.023	0.5	0.8	99.1	98.4	0.72
water pumb	0.013	0.003	-0.013	-0.003	0.0	0.0	99.1	99.0	0.10
Line77	0.199	0.046	-0.199	-0.048	0.0	-2.0	99.1	99.1	0.01
masria	0.035	0.015	-0.035	-0.015	0.3	0.5	99.1	97.8	1.29
Line78	0.163	0.047	-0.162	-0.052	0.0	-5.0	99.1	99.1	0.03
hafreya	0.036	0.000	-0.036	0.000	0.3	0.4	99.1	98.3	0.82
Line79	0.068	0.028	-0.068	-0.031	0.0	-3.4	99.1	99.1	0.01
beer al- basha	0.095	0.024	-0.094	-0.024	0.5	0.8	99.1	98.4	0.73
eastren beer basha	0.068	0.031	-0.067	-0.031	0.5	0.8	99.1	98.1	1.03
Line83	1.613	0.515	-1.612	-0.515	0.2	-0.2	96.5	96.5	0.01
Line84	0.267	0.105	-0.267	-0.105	0.0	-0.3	96.5	96.5	0.00
Line94	1.345	0.410	-1.345	-0.410	0.2	-0.2	96.5	96.5	0.01
Line85	0.198	0.075	-0.198	-0.077	0.0	-1.2	96.5	96.5	0.01
AUU intersiction ZA	0.070	0.030	-0.069	-0.030	0.2	0.3	96.5	96.1	0.42
Line86	0.183	0.065	-0.183	-0.072	0.1	-7.0	96.5	96.4	0.04
manasheer ZA	0.015	0.012	-0.015	-0.012	0.0	0.1	96.5	96.2	0.30
Line87	0.183	0.072	-0.183	-0.072	0.0	-0.3	96.4	96.4	0.00

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ID		MW	Mvar	MW	Mvar	kW	kvar	From	To	
Line88		0.183	0.076	-0.183	-0.078	0.0	-1.8	96.4	96.4	0.01
Line93		0.000	-0.004	0.000	0.000	0.0	-4.1	96.4	96.4	0.00
Line89		0.139	0.059	-0.139	-0.060	0.0	-1.0	96.4	96.4	0.00
rahwa.		0.043	0.019	-0.043	-0.018	0.5	0.8	96.4	94.8	1.65
Line90		0.096	0.041	-0.096	-0.043	0.0	-2.2	96.4	96.4	0.01
rahwa		0.043	0.018	-0.043	-0.018	0.1	0.2	96.4	96.0	0.41
Line91		0.096	0.043	-0.096	-0.044	0.0	-0.6	96.4	96.4	0.00
Line92		0.048	0.019	-0.048	-0.021	0.0	-1.7	96.4	96.4	0.00
middle of raba		0.048	0.025	-0.048	-0.024	0.3	0.4	96.4	95.6	0.79
east of raba		0.048	0.021	-0.048	-0.020	0.3	0.4	96.4	95.7	0.73
T63		0.000	0.000	0.000	0.000			96.4	96.4	0.00
Line95		1.345	0.410	-1.341	-0.415	4.1	-4.8	96.5	96.2	0.31
Line96		0.076	0.002	-0.076	-0.002	0.0	-0.3	96.2	96.2	0.00
Line97		1.265	0.413	-1.265	-0.414	0.5	-0.6	96.2	96.1	0.04
tlfeet		0.076	0.002	-0.074	0.000	1.4	2.1	96.2	94.4	1.78
Line98		0.692	0.187	-0.692	-0.188	0.1	-0.9	96.1	96.1	0.02
Line114		0.572	0.227	-0.572	-0.227	0.1	-0.5	96.1	96.1	0.01
Line99		-0.305	-0.088	0.305	0.087	0.0	-0.4	96.1	96.1	0.00
Line100		0.191	0.067	-0.191	-0.067	0.0	-0.3	96.1	96.1	0.00
dream land 1		0.044	0.006	-0.044	-0.006	0.1	0.1	96.1	95.9	0.20
dream land 2		0.070	0.015	-0.069	-0.014	0.3	0.5	96.1	95.6	0.53
Line101		0.133	0.039	-0.133	-0.039	0.0	-0.2	96.1	96.1	0.00
midecin		0.058	0.028	-0.058	-0.028	0.2	0.2	96.1	95.7	0.37
Line102		0.133	0.039	-0.133	-0.039	0.0	-0.3	96.1	96.1	0.00
west 1 AUU		0.075	0.011	-0.075	-0.011	0.3	0.5	96.1	95.6	0.53
west 2 AUU		0.058	0.028	-0.058	-0.028	0.2	0.2	96.1	95.7	0.37
Line103		0.388	0.101	-0.388	-0.105	0.2	-4.5	96.1	96.0	0.06
Line104		0.386	0.105	-0.386	-0.107	0.1	-1.7	96.0	96.0	0.02
khrrpet aisha		0.002	0.000	-0.002	0.000	0.0	0.0	96.0	96.0	0.04
Line105		0.341	0.097	-0.341	-0.100	0.1	-2.3	96.0	96.0	0.03
westren jalqnosa		0.045	0.010	-0.045	-0.009	0.3	0.5	96.0	95.2	0.85
Line106		0.058	0.015	-0.058	-0.020	0.0	-5.3	96.0	96.0	0.01
Line109		0.207	0.059	-0.207	-0.062	0.0	-2.6	96.0	96.0	0.02
middle jalqumya		0.076	0.025	-0.075	-0.025	0.4	0.6	96.0	95.3	0.66
Line108		0.058	0.020	-0.058	-0.021	0.0	-1.2	96.0	96.0	0.00
main om toot		0.058	0.021	-0.058	-0.021	0.2	0.3	96.0	95.5	0.52
Line110		0.188	0.047	-0.188	-0.049	0.0	-2.6	96.0	96.0	0.02

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CKT / Branch ID	From-To Bus Flow		To-From Bus Flow		Losses		% Bus Voltage		Vd % Drop in Vmag
	MW	Mvar	MW	Mvar	kW	kvar	From	To	
eastren al-jalquoua	0.019	0.015	-0.019	-0.015	0.1	0.1	96.0	95.4	0.61
Line111	0.163	0.043	-0.163	-0.047	0.0	-3.8	96.0	95.9	0.02
marah karas	0.025	0.006	-0.025	-0.006	0.2	0.2	96.0	95.2	0.80
Line112	0.084	0.023	-0.084	-0.024	0.0	-0.9	95.9	95.9	0.00
wastren al-maghayer	0.078	0.024	-0.078	-0.023	0.6	1.0	95.9	94.9	1.05
Line113	0.011	-0.001	-0.011	-0.004	0.0	-5.3	95.9	95.9	0.00
eastern al-maghura	0.073	0.025	-0.073	-0.024	0.6	0.9	95.9	94.9	1.02
al-mtalleh	0.011	0.004	-0.011	-0.004	0.0	0.0	95.9	95.7	0.25
Line115	0.055	0.022	-0.055	-0.022	0.0	-0.3	96.1	96.1	0.00
Line116	0.517	0.205	-0.517	-0.206	0.1	-0.7	96.1	96.1	0.01
administration college	0.055	0.022	-0.055	-0.022	0.2	0.3	96.1	95.6	0.51
Line117	0.426	0.183	-0.426	-0.183	0.0	-0.3	96.1	96.1	0.00
registration bulding	0.091	0.023	-0.091	-0.023	0.3	0.5	96.1	95.6	0.46
Line118	0.314	0.139	-0.314	-0.140	0.0	-1.2	96.1	96.1	0.01
Line123	0.112	0.044	-0.112	-0.046	0.0	-1.3	96.1	96.1	0.00
Cable7	0.140	0.000	-0.140	-0.021	0.0	-21.2	96.1	96.1	0.00
Line120	0.099	0.129	-0.099	-0.130	0.0	-0.7	96.1	96.1	0.00
princec palce	0.075	0.012	-0.075	-0.011	0.6	0.8	96.1	95.2	0.85
Cable8	0.085	0.009	-0.085	-0.018	0.0	-8.4	96.1	96.1	0.00
grand plaza DL	0.055	0.012	-0.055	-0.011	0.3	0.5	96.1	95.4	0.67
royal	0.085	0.018	-0.084	-0.017	0.3	0.4	96.1	95.7	0.41
Line121	0.056	0.011	-0.056	-0.012	0.0	-0.6	96.1	96.1	0.00
Line122	0.043	0.119	-0.043	-0.119	0.0	-0.3	96.1	96.1	0.00
dream land	0.056	0.012	-0.056	-0.011	0.2	0.3	96.1	95.7	0.42
sport stidum 1	0.021	0.059	-0.021	-0.059	0.1	0.2	96.1	95.8	0.33
sport stidum 2	0.021	0.059	-0.021	-0.059	0.1	0.2	96.1	95.8	0.33
Line124	0.030	0.003	-0.030	-0.004	0.0	-1.2	96.1	96.1	0.00
Line125	0.082	0.042	-0.082	-0.046	0.0	-3.2	96.1	96.1	0.01
tneen main	0.030	0.004	-0.030	-0.004	0.1	0.2	96.1	95.6	0.53
Line126	0.081	0.045	-0.081	-0.046	0.0	-0.7	96.1	96.1	0.00
esfalt	0.001	0.000	-0.001	0.000	0.0	0.0	96.1	96.1	0.01
Line127	0.061	0.037	-0.061	-0.037	0.0	-0.2	96.1	96.1	0.00
mass stone	0.020	0.009	-0.020	-0.009	0.0	0.0	96.1	96.0	0.12
Line244	0.001	0.000	-0.001	0.000	0.0	-0.6	96.1	96.1	0.00
mass stones	0.060	0.037	-0.059	-0.037	0.2	0.3	96.1	95.7	0.42
zakarneh 1	0.001	0.000	-0.001	0.000	0.0	0.0	96.1	96.1	0.01
Line130	0.125	0.042	-0.125	-0.043	0.0	-0.6	96.4	96.4	0.00

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	MW	Mvar	MW	Mvar	kW	kvar	From	To	
Line131	3.071	3.083	-3.069	-3.082	1.2	0.4	96.4	96.4	0.03
al-masa3eed	0.125	0.043	-0.123	-0.040	1.7	2.5	96.4	94.7	1.73
Line132	3.049	3.079	-3.046	-3.078	3.0	1.0	96.4	96.3	0.07
anabosa	0.021	0.003	-0.021	-0.003	0.0	0.1	96.4	96.1	0.23
Line133	2.872	3.019	-2.871	-3.018	1.0	0.3	96.3	96.3	0.02
abu omar	0.174	0.060	-0.172	-0.056	2.0	3.0	96.3	94.8	1.51
Line134	2.871	3.018	-2.864	-3.016	6.9	2.1	96.3	96.1	0.17
Line161	2.679	2.977	-2.678	-2.977	1.2	0.4	96.1	96.1	0.03
abo shehab	0.185	0.039	-0.183	-0.037	1.4	2.0	96.1	95.2	0.89
Line136	2.678	2.977	-2.675	-2.976	3.3	0.9	96.1	96.0	0.08
Line137	0.130	0.065	-0.130	-0.065	0.0	-0.3	96.0	96.0	0.00
Line138	2.544	2.911	-2.542	-2.910	2.2	0.6	96.0	95.9	0.06
tubas weel	0.130	0.065	-0.128	-0.062	2.1	3.1	96.0	93.9	2.10
Line139	2.542	2.910	-2.539	-2.909	3.2	0.9	95.9	95.9	0.08
Line162	1.058	0.312	-1.058	-0.313	0.3	-0.6	95.9	95.8	0.02
Line175	1.448	2.586	-1.444	-2.586	4.6	0.6	95.9	95.7	0.14
amnawaqa2	0.032	0.011	-0.032	-0.010	0.2	0.3	95.9	95.2	0.69
Line141	0.038	0.004	-0.038	-0.008	0.0	-3.3	95.8	95.8	0.00
Line145	1.020	0.309	-1.020	-0.309	0.2	-0.5	95.8	95.8	0.02
Line142	0.038	0.008	-0.038	-0.010	0.0	-2.6	95.8	95.8	0.00
Line143	0.034	0.009	-0.034	-0.010	0.0	-1.1	95.8	95.8	0.00
khalt el looz	0.004	0.001	-0.004	-0.001	0.0	0.0	95.8	95.7	0.08
Line144	0.034	0.010	-0.034	-0.011	0.0	-0.9	95.8	95.8	0.00
shereen	0.034	0.011	-0.034	-0.011	0.2	0.3	95.8	95.1	0.73
Line146	0.953	0.276	-0.953	-0.278	0.5	-1.5	95.8	95.8	0.06
mo2ayad fridges	0.067	0.033	-0.066	-0.032	0.4	0.6	95.8	95.1	0.74
Line147	0.034	0.007	-0.034	-0.009	0.0	-1.2	95.8	95.8	0.00
Line148	0.919	0.270	-0.918	-0.274	1.1	-3.3	95.8	95.6	0.12
mohafada	0.034	0.009	-0.034	-0.008	0.1	0.2	95.8	95.3	0.43
Line149	0.870	0.260	-0.869	-0.262	0.7	-2.3	95.6	95.6	0.08
weel	0.048	0.014	-0.048	-0.014	0.1	0.1	95.6	95.4	0.25
Line150	0.095	0.032	-0.095	-0.032	0.0	-0.3	95.6	95.6	0.00
Line163	0.774	0.230	-0.774	-0.230	0.1	-0.3	95.6	95.5	0.01
first of the town	0.095	0.032	-0.094	-0.031	1.0	1.5	95.6	94.2	1.33
Line152	0.719	0.218	-0.719	-0.219	0.2	-0.9	95.5	95.5	0.02
police	0.055	0.012	-0.055	-0.011	0.3	0.5	95.5	94.9	0.67
Line153	0.075	0.022	-0.075	-0.023	0.0	-0.6	95.5	95.5	0.00

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	MW	Mvar	MW	Mvar	kW	kvar	From	To	
Line154	0.047	0.016	-0.047	-0.016	0.0	-0.6	95.5	95.5	0.00
Line155	0.596	0.182	-0.596	-0.183	0.2	-1.7	95.5	95.5	0.04
burhan	0.075	0.023	-0.074	-0.022	0.6	0.9	95.5	94.5	1.01
al-battman	0.047	0.016	-0.047	-0.015	0.6	0.9	95.5	93.9	1.65
Line156	0.397	0.132	-0.397	-0.134	0.1	-1.3	95.5	95.5	0.02
Line164	0.123	0.031	-0.123	-0.031	0.0	-0.1	95.5	95.5	0.00
national security	0.077	0.020	-0.076	-0.019	1.0	1.4	95.5	93.9	1.55
Line157	0.255	0.085	-0.255	-0.085	0.0	-0.3	95.5	95.5	0.00
alrfaid	0.141	0.049	-0.139	-0.046	2.2	3.3	95.5	93.5	1.98
Line158	0.217	0.075	-0.217	-0.076	0.0	-1.2	95.5	95.5	0.01
Line160	0.038	0.010	-0.038	-0.011	0.0	-1.4	95.5	95.5	0.00
Line159	0.147	0.055	-0.147	-0.056	0.0	-1.5	95.5	95.4	0.01
alBATTAH	0.070	0.021	-0.069	-0.020	0.8	1.2	95.5	94.0	1.48
ALMISHMAS	0.147	0.056	-0.144	-0.052	2.4	3.6	95.4	93.3	2.14
alrass	0.038	0.011	-0.038	-0.011	0.2	0.2	95.5	95.0	0.51
Line165	0.123	0.031	-0.123	-0.033	0.0	-2.3	95.5	95.5	0.01
Line167	0.107	0.028	-0.107	-0.031	0.0	-3.8	95.5	95.5	0.01
RAS AL-MATTALEH	0.016	0.005	-0.016	-0.005	0.0	0.1	95.5	95.1	0.35
Line168	0.016	-0.003	-0.016	0.002	0.0	-1.6	95.5	95.5	0.00
Line171	0.091	0.035	-0.091	-0.035	0.0	-0.8	95.5	95.5	0.00
Line169	0.008	-0.005	-0.008	-0.002	0.0	-6.7	95.5	95.5	0.00
ALJALHOOM	0.008	0.003	-0.008	-0.003	0.0	0.0	95.5	95.3	0.18
ATOOF	0.008	0.002	-0.008	-0.002	0.0	0.0	95.5	95.3	0.16
Line172	0.080	0.032	-0.080	-0.032	0.0	-0.3	95.5	95.5	0.00
Line173	0.011	0.004	-0.011	-0.006	0.0	-2.3	95.5	95.5	0.00
MAWAFAQ FAKHRY	0.080	0.032	-0.079	-0.031	0.3	0.4	95.5	95.0	0.47
HAKIM	0.011	0.006	-0.011	-0.006	0.0	0.0	95.5	95.4	0.07
Line176	1.444	2.586	-1.437	-2.585	6.2	0.8	95.7	95.5	0.18
Line177	0.063	0.030	-0.063	-0.031	0.0	-0.6	95.5	95.5	0.00
Line178	1.374	2.554	-1.373	-2.554	1.5	0.2	95.5	95.5	0.04
pickle factory	0.063	0.031	-0.063	-0.030	0.3	0.4	95.5	94.9	0.63
Line179	0.003	0.001	-0.003	-0.002	0.0	-0.6	95.5	95.5	0.00
Line180	1.370	2.553	-1.368	-2.553	2.2	0.3	95.5	95.4	0.07
keshda main	0.003	0.002	-0.003	-0.002	0.0	0.0	95.5	95.2	0.25
Line181	-2.080	1.203	2.081	-1.203	1.0	-0.1	95.4	95.4	0.02
Line182	3.447	1.350	-3.443	-1.349	4.5	1.2	95.4	95.3	0.13
Line192	-2.081	1.203	2.082	-1.203	1.0	-0.1	95.4	95.5	0.02



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	MW	Mvar	MW	Mvar	kW	kvar	From	To	
Line183	3.343	1.284	-3.339	-1.283	3.8	1.0	95.3	95.2	0.11
dewan	0.100	0.065	-0.099	-0.064	0.9	1.3	95.3	94.1	1.15
Line184	1.001	0.518	-1.001	-0.518	0.2	-0.3	95.2	95.2	0.02
Line200	2.338	0.765	-2.336	-0.765	1.4	0.0	95.2	95.1	0.06
Line185	0.746	0.393	-0.745	-0.394	0.3	-1.2	95.2	95.1	0.04
Line196	0.256	0.125	-0.256	-0.125	0.0	-0.3	95.2	95.2	0.00
Line186	0.745	0.394	-0.745	-0.395	0.1	-0.5	95.1	95.1	0.02
Line187	0.675	0.365	-0.675	-0.366	0.1	-0.6	95.1	95.1	0.02
Line195	0.070	0.029	-0.070	-0.030	0.0	-0.9	95.1	95.1	0.00
Line188	0.272	0.162	-0.272	-0.165	0.1	-3.0	95.1	95.1	0.03
Line189	0.135	0.070	-0.135	-0.070	0.0	-0.3	95.1	95.1	0.00
khalet al qaser 1	0.202	0.112	-0.198	-0.107	3.3	4.9	95.1	92.9	2.15
khalet al qaser 2	0.067	0.022	-0.067	-0.022	0.2	0.3	95.1	94.7	0.37
mohammad al basher	0.272	0.165	-0.268	-0.159	3.9	5.9	95.1	93.1	1.92
Line190	0.135	0.070	-0.135	-0.072	0.0	-2.2	95.1	95.1	0.01
Line191	0.030	0.015	-0.030	-0.019	0.0	-3.3	95.1	95.1	0.00
faysel well	0.105	0.057	-0.104	-0.056	0.6	0.8	95.1	94.4	0.71
huseen al araj	0.030	0.019	-0.030	-0.018	0.1	0.2	95.1	94.5	0.54
Cable44	0.055	-0.018	-0.054	0.018	0.8	0.1	115.2	113.7	1.50
Cable45	0.487	-0.164	-0.379	0.208	107.9	44.2	113.7	95.7	18.04
Cable48	-0.054	0.018	0.055	-0.018	0.8	0.1	113.7	115.2	1.50
Cable49	-0.054	0.018	0.055	-0.018	0.8	0.1	113.7	115.2	1.50
Cable50	-0.054	0.018	0.055	-0.018	0.8	0.1	113.7	115.2	1.50
Cable51	-0.054	0.018	0.055	-0.018	0.8	0.1	113.7	115.2	1.50
Cable52	-0.054	0.018	0.055	-0.018	0.8	0.1	113.7	115.2	1.50
Cable53	-0.054	0.018	0.055	-0.018	0.8	0.1	113.7	115.2	1.50
Cable54	-0.054	0.018	0.055	-0.018	0.8	0.1	113.7	115.2	1.50
Cable126	-0.054	0.018	0.055	-0.018	0.8	0.1	113.7	115.2	1.50
T1	0.379	-0.208	-0.372	0.219	7.2	10.8	95.7	95.5	0.20
T2	-0.372	0.219	0.379	-0.208	7.2	10.8	95.5	95.7	0.21
T3	-0.336	0.187	0.341	-0.179	5.7	8.6	95.5	95.7	0.24
T6	-0.228	0.112	0.232	-0.106	3.9	5.9	95.5	95.9	0.38
T7	-0.403	0.248	0.411	-0.235	8.6	12.9	95.5	95.6	0.17
T8	-0.372	0.219	0.379	-0.208	7.2	10.8	95.5	95.7	0.20
Cable66	0.049	-0.016	-0.049	0.016	0.7	0.1	115.1	113.8	1.35
Cable86	-0.049	0.016	0.049	-0.016	0.7	0.1	113.8	115.1	1.35
Cable87	-0.049	0.016	0.049	-0.016	0.7	0.1	113.8	115.1	1.35

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	MW	Mvar	MW	Mvar	kW	kvar	From	To	
Cable88	-0.049	0.016	0.049	-0.016	0.7	0.1	113.8	115.1	1.35
Cable89	-0.049	0.016	0.049	-0.016	0.7	0.1	113.8	115.1	1.35
Cable90	-0.049	0.016	0.049	-0.016	0.7	0.1	113.8	115.1	1.35
Cable91	-0.049	0.016	0.049	-0.016	0.7	0.1	113.8	115.1	1.35
Cable92	-0.049	0.016	0.049	-0.016	0.7	0.1	113.8	115.1	1.35
Cable93	-0.049	0.016	0.049	-0.016	0.7	0.1	113.8	115.1	1.35
Cable120	0.487	-0.163	-0.379	0.208	108.2	44.3	113.8	95.7	18.07
Cable128	-0.049	0.016	0.049	-0.016	0.7	0.1	113.8	115.1	1.35
Cable67	0.049	-0.016	-0.049	0.016	0.7	0.1	113.3	111.9	1.37
Cable69	-0.054	0.018	0.055	-0.018	0.9	0.1	111.9	113.5	1.52
Cable70	-0.054	0.018	0.055	-0.018	0.9	0.1	111.9	113.5	1.52
Cable71	-0.054	0.018	0.055	-0.018	0.9	0.1	111.9	113.5	1.52
Cable72	-0.054	0.018	0.055	-0.018	0.9	0.1	111.9	113.5	1.52
Cable73	-0.054	0.018	0.055	-0.018	0.9	0.1	111.9	113.5	1.52
Cable118	-0.054	0.018	0.055	-0.018	0.9	0.1	111.9	113.5	1.52
Cable121	0.427	-0.144	-0.341	0.179	85.8	35.1	111.9	95.7	16.23
Cable130	-0.054	0.018	0.055	-0.018	0.9	0.1	111.9	113.5	1.52
Cable79	0.055	-0.018	-0.054	0.018	0.9	0.1	108.5	106.9	1.59
Cable80	0.055	-0.018	-0.054	0.018	0.9	0.1	108.5	106.9	1.59
Cable81	0.055	-0.018	-0.054	0.018	0.9	0.1	108.5	106.9	1.59
Cable82	0.055	-0.018	-0.054	0.018	0.9	0.1	108.5	106.9	1.59
Cable83	0.055	-0.018	-0.054	0.018	0.9	0.1	108.5	106.9	1.59
Cable122	0.270	-0.091	-0.232	0.106	37.6	15.4	106.9	95.9	11.01
Cable123	-0.411	0.235	0.541	-0.182	129.8	53.2	95.6	115.3	19.62
Cable124	-0.379	0.208	0.487	-0.164	107.9	44.2	95.7	113.7	18.04
mawfak al-fakhry	0.070	0.030	-0.070	-0.030	0.2	0.3	95.1	94.7	0.43
Line197	0.184	0.083	-0.184	-0.085	0.0	-1.8	95.2	95.2	0.01
agricultural project	0.072	0.043	-0.071	-0.042	0.3	0.4	95.2	94.7	0.50
Line198	0.096	0.060	-0.096	-0.060	0.0	-0.5	95.2	95.1	0.00
Line199	0.067	0.019	-0.067	-0.022	0.0	-3.3	95.2	95.1	0.01
kazeyt samara	0.021	0.006	-0.021	-0.006	0.0	0.0	95.2	95.0	0.18
thiab	0.096	0.060	-0.096	-0.059	0.5	0.8	95.1	94.5	0.69
al-ashqar stone cutter	0.067	0.022	-0.067	-0.022	0.2	0.3	95.1	94.8	0.37
Line201	0.116	0.074	-0.116	-0.075	0.0	-1.1	95.1	95.1	0.01
Line203	2.220	0.692	-2.219	-0.692	0.6	-0.1	95.1	95.1	0.03
Line202	0.116	0.075	-0.116	-0.076	0.0	-1.0	95.1	95.1	0.00
abo hameed	0.116	0.076	-0.116	-0.075	0.8	1.1	95.1	94.3	0.85

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CKT / Branch ID	From-To Bus Flow		To-From Bus Flow		Losses		% Bus Voltage		Vd % Drop in Vmag
	MW	Mvar	MW	Mvar	kW	kvar	From	To	
Line204	0.035	0.019	-0.035	-0.020	0.0	-1.0	95.1	95.1	0.00
Line205	2.185	0.673	-2.182	-0.673	2.1	-0.2	95.1	95.0	0.10
al-kharaz	0.035	0.020	-0.035	-0.020	0.2	0.4	95.1	94.2	0.95
Line206	1.123	0.402	-1.123	-0.403	0.5	-0.9	95.0	95.0	0.04
Line231	1.059	0.271	-1.059	-0.271	0.2	-0.3	95.0	95.0	0.02
Line207	0.217	0.086	-0.217	-0.086	0.0	-0.6	95.0	94.9	0.01
Line209	0.905	0.318	-0.905	-0.319	0.5	-1.6	95.0	94.9	0.06
Line208	0.058	0.017	-0.058	-0.019	0.0	-2.1	94.9	94.9	0.00
refat	0.080	0.034	-0.079	-0.034	0.5	0.7	94.9	94.2	0.77
refat 2	0.080	0.034	-0.079	-0.034	0.5	0.7	94.9	94.2	0.77
safeena	0.058	0.019	-0.058	-0.019	0.2	0.3	94.9	94.4	0.51
Line210	0.757	0.251	-0.757	-0.251	0.0	-0.2	94.9	94.9	0.01
Line225	0.068	0.028	-0.068	-0.030	0.0	-1.2	94.9	94.9	0.00
Line226	0.080	0.040	-0.080	-0.044	0.0	-3.6	94.9	94.9	0.01
Line215	0.552	0.192	-0.552	-0.194	0.2	-1.9	94.9	94.8	0.04
Line243	0.205	0.059	-0.205	-0.060	0.0	-0.5	94.9	94.9	0.00
Line212	0.169	0.046	-0.169	-0.048	0.0	-1.4	94.9	94.9	0.01
al-hesba	0.036	0.013	-0.036	-0.013	0.1	0.2	94.9	94.4	0.52
Line213	0.069	0.018	-0.069	-0.019	0.0	-1.2	94.9	94.9	0.00
kazeya	0.100	0.030	-0.099	-0.029	0.7	1.0	94.9	94.0	0.85
Line214	0.039	0.008	-0.039	-0.010	0.0	-1.8	94.9	94.9	0.00
school	0.030	0.011	-0.030	-0.011	0.1	0.1	94.9	94.6	0.27
abo shehadeh	0.039	0.010	-0.039	-0.010	0.2	0.2	94.9	94.4	0.50
Line216	0.396	0.131	-0.396	-0.133	0.1	-2.2	94.8	94.8	0.03
al bassateen	0.156	0.063	-0.155	-0.061	1.1	1.7	94.8	93.9	0.93
Line217	0.305	0.105	-0.305	-0.108	0.1	-2.7	94.8	94.8	0.03
abo khadeer	0.091	0.028	-0.090	-0.026	0.9	1.3	94.8	93.6	1.23
Line218	0.269	0.099	-0.269	-0.099	0.0	-0.2	94.8	94.8	0.00
abo tareq	0.036	0.009	-0.036	-0.009	0.1	0.1	94.8	94.6	0.18
Line219	0.269	0.099	-0.269	-0.102	0.1	-2.9	94.8	94.8	0.03
Line220	0.072	0.029	-0.072	-0.029	0.0	-0.3	94.8	94.8	0.00
Line221	0.076	0.018	-0.076	-0.020	0.0	-1.1	94.8	94.8	0.00
Line222	0.121	0.055	-0.121	-0.055	0.0	-0.4	94.8	94.8	0.00
mamdooh	0.072	0.029	-0.072	-0.028	0.4	0.6	94.8	94.1	0.67
farah	0.076	0.020	-0.076	-0.019	0.4	0.6	94.8	94.1	0.62
Line223	0.100	0.048	-0.100	-0.049	0.0	-0.6	94.8	94.8	0.00
Line224	0.021	0.007	-0.021	-0.008	0.0	-1.4	94.8	94.8	0.00

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CKT / Branch ID	From-To Bus Flow		To-From Bus Flow		Losses		% Bus Voltage		Vd % Drop in Vmag
	MW	Mvar	MW	Mvar	kW	kvar	From	To	
sameer motlaq	0.100	0.049	-0.099	-0.048	0.8	1.1	94.8	93.7	1.01
essawi	0.021	0.008	-0.021	-0.008	0.1	0.1	94.8	94.4	0.31
al hafria	0.068	0.030	-0.068	-0.029	0.5	0.8	94.9	93.8	1.05
Line227	0.011	0.007	-0.011	-0.007	0.0	-0.3	94.9	94.9	0.00
Line228	0.069	0.037	-0.069	-0.038	0.0	-1.2	94.9	94.9	0.00
yaseed east	0.011	0.007	-0.011	-0.007	0.0	0.0	94.9	94.7	0.20
Line229	0.008	0.003	-0.008	-0.003	0.0	-0.6	94.9	94.9	0.00
Line230	0.061	0.036	-0.061	-0.038	0.0	-2.5	94.9	94.9	0.01
kasaret abo asaad	0.061	0.038	-0.061	-0.038	0.3	0.5	94.9	94.2	0.69
yaseed west	0.008	0.003	-0.008	-0.003	0.0	0.0	94.9	94.8	0.12
Line232	0.248	0.070	-0.248	-0.070	0.0	-0.2	95.0	95.0	0.00
Line233	0.154	0.031	-0.154	-0.032	0.0	-0.7	95.0	95.0	0.00
Line236	0.656	0.169	-0.656	-0.170	0.1	-0.6	95.0	95.0	0.01
weastern	0.248	0.070	-0.242	-0.061	6.6	9.8	95.0	91.7	3.27
Line234	0.018	0.002	-0.018	-0.003	0.0	-0.3	95.0	95.0	0.00
Line235	0.136	0.030	-0.136	-0.030	0.0	-0.2	95.0	95.0	0.00
school.	0.136	0.030	-0.134	-0.027	1.9	2.9	95.0	93.3	1.68
tubas well	0.018	0.003	-0.018	-0.003	0.0	0.0	95.0	94.9	0.13
Line237	0.568	0.151	-0.568	-0.152	0.1	-0.9	95.0	95.0	0.02
al-shareef	0.088	0.018	-0.088	-0.018	0.3	0.5	95.0	94.5	0.43
Line238	0.074	0.015	-0.074	-0.015	0.0	-0.5	95.0	95.0	0.00
Line239	0.474	0.129	-0.474	-0.130	0.0	-0.5	95.0	94.9	0.01
Line242	0.012	0.002	-0.012	-0.003	0.0	-0.6	95.0	95.0	0.00
malhameh	0.008	0.006	-0.008	-0.006	0.0	0.0	95.0	94.9	0.06
al-3een	0.074	0.015	-0.074	-0.015	0.2	0.3	95.0	94.6	0.36
Line240	0.391	0.074	-0.391	-0.074	0.0	-0.1	94.9	94.9	0.00
well	0.083	0.056	-0.082	-0.055	0.6	0.9	94.9	94.0	0.97
Line241	0.338	0.058	-0.338	-0.058	0.0	-0.2	94.9	94.9	0.00
stadium	0.053	0.016	-0.053	-0.015	0.3	0.5	94.9	94.2	0.71
old station	0.338	0.058	-0.331	-0.047	7.2	10.9	94.9	92.5	2.45
sameeh abo khezaran	0.012	0.003	-0.012	-0.003	0.0	0.0	95.0	94.9	0.10
Cable95	0.055	-0.018	-0.054	0.018	0.8	0.1	116.7	115.3	1.48
Cable98	0.055	-0.018	-0.054	0.018	0.8	0.1	116.7	115.3	1.48
Cable99	0.055	-0.018	-0.054	0.018	0.8	0.1	116.7	115.3	1.48
Cable100	0.055	-0.018	-0.054	0.018	0.8	0.1	116.7	115.3	1.48
Cable101	0.055	-0.018	-0.054	0.018	0.8	0.1	116.7	115.3	1.48
Cable102	0.055	-0.018	-0.054	0.018	0.8	0.1	116.7	115.3	1.48

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CKT / Branch ID	From-To Bus Flow		To-From Bus Flow		Losses		% Bus Voltage		Vd % Drop in Vmag
	MW	Mvar	MW	Mvar	kW	kvar	From	To	
Cable103	0.055	-0.018	-0.054	0.018	0.8	0.1	116.7	115.3	1.48
Cable104	0.055	-0.018	-0.054	0.018	0.8	0.1	116.7	115.3	1.48
Cable105	0.055	-0.018	-0.054	0.018	0.8	0.1	116.7	115.3	1.48
Cable106	0.055	-0.018	-0.054	0.018	0.8	0.1	116.7	115.3	1.48
Cable107	0.055	-0.018	-0.054	0.018	0.8	0.1	115.2	113.7	1.50
Cable108	0.055	-0.018	-0.054	0.018	0.8	0.1	115.2	113.7	1.50
Cable109	0.055	-0.018	-0.054	0.018	0.8	0.1	115.2	113.7	1.50
Cable110	0.055	-0.018	-0.054	0.018	0.8	0.1	115.2	113.7	1.50
Cable111	0.055	-0.018	-0.054	0.018	0.8	0.1	115.2	113.7	1.50
Cable112	0.055	-0.018	-0.054	0.018	0.8	0.1	115.2	113.7	1.50
Cable113	0.055	-0.018	-0.054	0.018	0.8	0.1	115.2	113.7	1.50
Cable114	0.055	-0.018	-0.054	0.018	0.8	0.1	115.2	113.7	1.50
Cable115	0.055	-0.018	-0.054	0.018	0.8	0.1	115.2	113.7	1.50
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