

Project:
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ETAP
12.6.0H

Study Case: ULF

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Branch Losses Summary Report

CKT / Branch		From-To Bus Flow		To-From Bus Flow		Losses		% Bus Voltage		Vd % Drop in Vmag	Amperes in Buried Winding
ID	Phase	MW	Mvar	MW	Mvar	kW	kvar	From	To		
C.20	A	0.054	0.032	-0.054	-0.032	0.0	0.0	99.9	99.9	0.00	0.00
	B	0.054	0.032	-0.054	-0.032	0.0	0.0	99.9	99.9	0.00	0.00
	C	0.054	0.032	-0.054	-0.032	0.0	0.0	99.9	99.9	0.00	0.00
C56	A	0.036	0.020	-0.036	-0.020	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.036	0.020	-0.036	-0.020	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.036	0.020	-0.036	-0.020	0.0	0.0	100.0	100.0	0.00	0.00
C59	A	0.139	0.093	-0.139	-0.093	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.140	0.092	-0.140	-0.092	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.141	0.093	-0.141	-0.093	0.0	0.0	100.0	100.0	0.00	0.00
C60	A	0.000	0.000	0.000	0.000	0.0	0.0	99.9	99.9	0.00	0.00
	B	0.000	0.000	0.000	0.000	0.0	0.0	99.9	99.9	0.00	0.00
	C	0.000	0.000	0.000	0.000	0.0	0.0	99.9	99.9	0.00	0.00
C61	A	0.156	0.117	-0.156	-0.117	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.157	0.115	-0.157	-0.115	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.158	0.117	-0.158	-0.117	0.0	0.0	100.0	100.0	0.00	0.00
C80	A	0.025	0.016	-0.025	-0.016	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.025	0.016	-0.025	-0.016	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.025	0.016	-0.025	-0.016	0.0	0.0	100.0	100.0	0.00	0.00
C96	A	0.220	0.156	-0.220	-0.156	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.220	0.156	-0.220	-0.156	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.220	0.156	-0.220	-0.156	0.0	0.0	100.0	100.0	0.00	0.00
C97	A	0.104	0.092	-0.104	-0.092	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.104	0.092	-0.104	-0.092	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.104	0.092	-0.104	-0.092	0.0	0.0	100.0	100.0	0.00	0.00
C100	A	0.016	0.008	-0.016	-0.008	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.016	0.008	-0.016	-0.008	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.016	0.008	-0.016	-0.008	0.0	0.0	100.0	100.0	0.00	0.00
C107	A	0.013	0.007	-0.013	-0.007	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.013	0.007	-0.013	-0.007	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.013	0.007	-0.013	-0.007	0.0	0.0	100.0	100.0	0.00	0.00
C117	A	0.037	0.030	-0.037	-0.030	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.037	0.030	-0.037	-0.030	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.037	0.030	-0.037	-0.030	0.0	0.0	100.0	100.0	0.00	0.00
C120	A	0.066	0.073	-0.066	-0.073	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.066	0.073	-0.066	-0.073	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.066	0.073	-0.066	-0.073	0.0	0.0	100.0	100.0	0.00	0.00
C128	A	0.168	0.129	-0.168	-0.129	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.168	0.129	-0.168	-0.129	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.168	0.129	-0.168	-0.129	0.0	0.0	100.0	100.0	0.00	0.00
C160	A	0.106	0.093	-0.106	-0.093	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.106	0.093	-0.106	-0.093	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.106	0.093	-0.106	-0.093	0.0	0.0	100.0	100.0	0.00	0.00

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CKT / Branch		From-To Bus Flow		To-From Bus Flow		Losses		% Bus Voltage		Vd % Drop in Vmag	Amperes in Buried Winding
ID	Phase	MW	Mvar	MW	Mvar	kW	kvar	From	To		
C162	A	0.142	0.113	-0.142	-0.113	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.142	0.113	-0.142	-0.113	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.142	0.113	-0.142	-0.113	0.0	0.0	100.0	100.0	0.00	0.00
C163	A	-0.001	0.033	0.001	-0.033	0.0	0.0	100.0	100.0	0.00	0.00
	B	-0.001	0.033	0.001	-0.033	0.0	0.0	100.0	100.0	0.00	0.00
	C	-0.001	0.033	0.001	-0.033	0.0	0.0	100.0	100.0	0.00	0.00
C191	A	0.106	0.093	-0.106	-0.093	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.106	0.093	-0.106	-0.093	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.106	0.093	-0.106	-0.093	0.0	0.0	100.0	100.0	0.00	0.00
C193	A	0.001	0.002	-0.001	-0.002	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.001	0.002	-0.001	-0.002	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.001	0.002	-0.001	-0.002	0.0	0.0	100.0	100.0	0.00	0.00
C203	A	-0.068	-0.023	0.068	0.023	0.0	0.0	100.0	100.0	0.00	0.00
	B	-0.068	-0.023	0.068	0.023	0.0	0.0	100.0	100.0	0.00	0.00
	C	-0.068	-0.023	0.068	0.023	0.0	0.0	100.0	100.0	0.00	0.00
C216	A	0.066	0.073	-0.066	-0.073	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.066	0.073	-0.066	-0.073	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.066	0.073	-0.066	-0.073	0.0	0.0	100.0	100.0	0.00	0.00
C246	A	0.178	0.135	-0.178	-0.135	0.0	0.0	100.0	100.0	0.01	0.00
	B	0.178	0.135	-0.178	-0.135	0.0	0.0	100.0	100.0	0.01	0.00
	C	0.178	0.135	-0.178	-0.135	0.0	0.0	100.0	100.0	0.01	0.00
C280	A	0.007	0.003	-0.007	-0.003	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.007	0.003	-0.007	-0.003	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.007	0.003	-0.007	-0.003	0.0	0.0	100.0	100.0	0.00	0.00
C319	A	0.008	0.011	-0.008	-0.011	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.008	0.011	-0.008	-0.011	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.008	0.011	-0.008	-0.011	0.0	0.0	100.0	100.0	0.00	0.00
C322	A	-0.068	-0.023	0.068	0.023	0.0	0.0	100.0	100.0	0.00	0.00
	B	-0.068	-0.023	0.068	0.023	0.0	0.0	100.0	100.0	0.00	0.00
	C	-0.068	-0.023	0.068	0.023	0.0	0.0	100.0	100.0	0.00	0.00
C330	A	0.002	0.001	-0.002	-0.001	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.002	0.001	-0.002	-0.001	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.002	0.001	-0.002	-0.001	0.0	0.0	100.0	100.0	0.00	0.00
C352	A	0.081	0.048	-0.081	-0.048	0.0	0.0	99.9	99.9	0.00	0.00
	B	0.081	0.048	-0.081	-0.048	0.0	0.0	99.9	99.9	0.00	0.00
	C	0.081	0.048	-0.081	-0.048	0.0	0.0	99.9	99.9	0.00	0.00
C361	A	0.033	0.054	-0.033	-0.054	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.033	0.054	-0.033	-0.054	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.033	0.054	-0.033	-0.054	0.0	0.0	100.0	100.0	0.00	0.00
C365	A	-0.008	0.029	0.008	-0.029	0.0	0.0	100.0	100.0	0.00	0.00
	B	-0.008	0.029	0.008	-0.029	0.0	0.0	100.0	100.0	0.00	0.00
	C	-0.008	0.029	0.008	-0.029	0.0	0.0	100.0	100.0	0.00	0.00
C368	A	0.036	0.023	-0.036	-0.023	0.0	0.0	99.9	99.9	0.00	0.00
	B	0.036	0.023	-0.036	-0.023	0.0	0.0	99.9	99.9	0.00	0.00
	C	0.036	0.023	-0.036	-0.023	0.0	0.0	99.9	99.9	0.00	0.00

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CKT / Branch		From-To Bus Flow		To-From Bus Flow		Losses		% Bus Voltage		Vd % Drop in Vmag	Amperes in Buried Winding
ID	Phase	MW	Mvar	MW	Mvar	kW	kvar	From	To		
C399	A	0.039	0.039	-0.039	-0.039	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.039	0.039	-0.039	-0.039	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.039	0.039	-0.039	-0.039	0.0	0.0	100.0	100.0	0.00	0.00
C409	A	0.008	0.004	-0.008	-0.004	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.008	0.004	-0.008	-0.004	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.008	0.004	-0.008	-0.004	0.0	0.0	100.0	100.0	0.00	0.00
C419	A	0.007	0.003	-0.007	-0.003	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.007	0.003	-0.007	-0.003	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.007	0.003	-0.007	-0.003	0.0	0.0	100.0	100.0	0.00	0.00
C422	A	0.012	0.011	-0.012	-0.011	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.012	0.011	-0.012	-0.011	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.012	0.011	-0.012	-0.011	0.0	0.0	100.0	100.0	0.00	0.00
C440	A	0.002	0.002	-0.002	-0.002	0.0	0.0	99.9	99.9	0.00	0.00
	B	0.002	0.002	-0.002	-0.002	0.0	0.0	99.9	99.9	0.00	0.00
	C	0.002	0.002	-0.002	-0.002	0.0	0.0	99.9	99.9	0.00	0.00
C450	A	0.010	0.005	-0.010	-0.005	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.010	0.005	-0.010	-0.005	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.010	0.005	-0.010	-0.005	0.0	0.0	100.0	100.0	0.00	0.00
C.450	A	-0.116	-0.050	0.116	0.050	0.0	0.0	100.0	100.0	0.01	0.00
	B	-0.116	-0.050	0.116	0.050	0.0	0.0	100.0	100.0	0.01	0.00
	C	-0.116	-0.050	0.116	0.050	0.0	0.0	100.0	100.0	0.01	0.00
C461	A	0.008	0.004	-0.008	-0.004	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.008	0.004	-0.008	-0.004	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.008	0.004	-0.008	-0.004	0.0	0.0	100.0	100.0	0.00	0.00
C462	A	0.008	0.004	-0.008	-0.004	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.008	0.004	-0.008	-0.004	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.008	0.004	-0.008	-0.004	0.0	0.0	100.0	100.0	0.00	0.00
C463	A	0.002	0.001	-0.002	-0.001	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.002	0.001	-0.002	-0.001	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.002	0.001	-0.002	-0.001	0.0	0.0	100.0	100.0	0.00	0.00
C473	A	0.208	0.150	-0.208	-0.150	0.0	0.0	100.0	100.0	0.01	0.00
	B	0.208	0.150	-0.208	-0.150	0.0	0.0	100.0	100.0	0.01	0.00
	C	0.208	0.150	-0.208	-0.150	0.0	0.0	100.0	100.0	0.01	0.00
C476	A	0.018	0.013	-0.018	-0.013	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.018	0.013	-0.018	-0.013	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.018	0.013	-0.018	-0.013	0.0	0.0	100.0	100.0	0.00	0.00
C514	A	0.020	0.015	-0.020	-0.015	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.020	0.015	-0.020	-0.015	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.020	0.015	-0.020	-0.015	0.0	0.0	100.0	100.0	0.00	0.00
C517	A	-0.104	-0.044	0.104	0.044	0.0	0.0	100.0	100.0	0.01	0.00
	B	-0.104	-0.044	0.104	0.044	0.0	0.0	100.0	100.0	0.01	0.00
	C	-0.104	-0.044	0.104	0.044	0.0	0.0	100.0	100.0	0.01	0.00
C518	A	-0.092	-0.037	0.092	0.037	0.0	0.0	100.0	100.0	0.01	0.00
	B	-0.092	-0.037	0.092	0.037	0.0	0.0	100.0	100.0	0.01	0.00
	C	-0.092	-0.037	0.092	0.037	0.0	0.0	100.0	100.0	0.01	0.00

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CKT / Branch		From-To Bus Flow		To-From Bus Flow		Losses		% Bus Voltage		Vd % Drop in Vmag	Amperes in Buried Winding
ID	Phase	MW	Mvar	MW	Mvar	kW	kvar	From	To		
C526	A	0.017	0.014	-0.017	-0.014	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.017	0.014	-0.017	-0.014	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.017	0.014	-0.017	-0.014	0.0	0.0	100.0	100.0	0.00	0.00
C558	A	0.007	0.004	-0.007	-0.004	0.0	0.0	99.9	99.9	0.00	0.00
	B	0.007	0.004	-0.007	-0.004	0.0	0.0	99.9	99.9	0.00	0.00
	C	0.007	0.004	-0.007	-0.004	0.0	0.0	99.9	99.9	0.00	0.00
C577	A	-0.079	-0.030	0.079	0.030	0.0	0.0	100.0	100.0	0.01	0.00
	B	-0.079	-0.030	0.080	0.030	0.0	0.0	100.0	100.0	0.01	0.00
	C	-0.080	-0.030	0.080	0.030	0.0	0.0	100.0	100.0	0.01	0.00
C587	A	0.013	0.006	-0.013	-0.006	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.013	0.006	-0.013	-0.006	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.013	0.006	-0.013	-0.006	0.0	0.0	100.0	100.0	0.00	0.00
C603	A	-0.014	0.025	0.014	-0.025	0.0	0.0	100.0	100.0	0.00	0.00
	B	-0.014	0.025	0.014	-0.025	0.0	0.0	100.0	100.0	0.00	0.00
	C	-0.014	0.025	0.014	-0.025	0.0	0.0	100.0	100.0	0.00	0.00
C622	A	0.005	0.007	-0.005	-0.007	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.005	0.007	-0.005	-0.007	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.005	0.007	-0.005	-0.007	0.0	0.0	100.0	100.0	0.00	0.00
C727	A	0.009	0.007	-0.009	-0.007	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.009	0.007	-0.009	-0.007	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.009	0.007	-0.009	-0.007	0.0	0.0	100.0	100.0	0.00	0.00
C728	A	0.013	0.011	-0.013	-0.011	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.013	0.011	-0.013	-0.011	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.013	0.011	-0.013	-0.011	0.0	0.0	100.0	100.0	0.00	0.00
C806	A	0.074	0.044	-0.074	-0.044	0.0	0.0	99.9	99.9	0.01	0.00
	B	0.074	0.044	-0.074	-0.044	0.0	0.0	99.9	99.9	0.01	0.00
	C	0.074	0.044	-0.074	-0.044	0.0	0.0	99.9	99.9	0.01	0.00
C811	A	0.018	0.009	-0.018	-0.009	0.0	0.0	99.9	99.9	0.00	0.00
	B	0.018	0.009	-0.018	-0.009	0.0	0.0	99.9	99.9	0.00	0.00
	C	0.018	0.009	-0.018	-0.009	0.0	0.0	99.9	99.9	0.00	0.00
C815	A	-0.111	-0.046	0.111	0.046	0.0	0.0	100.0	100.0	0.01	0.00
	B	-0.111	-0.046	0.111	0.046	0.0	0.0	100.0	100.0	0.01	0.00
	C	-0.111	-0.046	0.111	0.046	0.0	0.0	100.0	100.0	0.01	0.00
C880	A	-0.116	-0.050	0.116	0.050	0.0	0.0	100.0	100.0	0.01	0.00
	B	-0.116	-0.050	0.116	0.050	0.0	0.0	100.0	100.0	0.01	0.00
	C	-0.116	-0.050	0.116	0.050	0.0	0.0	100.0	100.0	0.01	0.00
Co14	A	0.000	0.000	0.000	0.000	0.0	0.0	99.9	99.9	0.00	0.00
	B	0.000	0.000	0.000	0.000	0.0	0.0	99.9	99.9	0.00	0.00
	C	0.000	0.000	0.000	0.000	0.0	0.0	99.9	99.9	0.00	0.00
Co57	A	0.008	0.011	-0.008	-0.011	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.008	0.011	-0.008	-0.011	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.008	0.011	-0.008	-0.011	0.0	0.0	100.0	100.0	0.00	0.00
Co58	A	0.021	0.012	-0.021	-0.012	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.021	0.012	-0.021	-0.012	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.021	0.012	-0.021	-0.012	0.0	0.0	100.0	100.0	0.00	0.00

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CKT / Branch		From-To Bus Flow		To-From Bus Flow		Losses		% Bus Voltage		Vd % Drop in Vmag	Amperes in Buried Winding
ID	Phase	MW	Mvar	MW	Mvar	kW	kvar	From	To		
Co130	A	0.119	0.078	-0.119	-0.078	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.120	0.076	-0.120	-0.076	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.121	0.078	-0.121	-0.078	0.0	0.0	100.0	100.0	0.00	0.00
Co260	A	0.000	0.000	0.000	0.000	0.0	0.0	99.9	99.9	0.00	0.00
	B	0.000	0.000	0.000	0.000	0.0	0.0	99.9	99.9	0.00	0.00
	C	0.000	0.000	0.000	0.000	0.0	0.0	99.9	99.9	0.00	0.00
Co261	A	0.004	0.003	-0.004	-0.003	0.0	0.0	99.9	99.9	0.00	0.00
	B	0.004	0.003	-0.004	-0.003	0.0	0.0	99.9	99.9	0.00	0.00
	C	0.004	0.003	-0.004	-0.003	0.0	0.0	99.9	99.9	0.00	0.00
Co294	A	0.018	0.010	-0.018	-0.010	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.018	0.010	-0.018	-0.010	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.018	0.010	-0.018	-0.010	0.0	0.0	100.0	100.0	0.00	0.00
Co528	A	0.001	0.001	-0.001	-0.001	0.0	0.0	99.9	99.9	0.00	0.00
	B	0.001	0.001	-0.001	-0.001	0.0	0.0	99.9	99.9	0.00	0.00
	C	0.001	0.001	-0.001	-0.001	0.0	0.0	99.9	99.9	0.00	0.00
Co600	A	0.119	0.078	-0.119	-0.078	0.0	0.0	100.0	100.0	0.01	0.00
	B	0.120	0.076	-0.120	-0.076	0.0	0.0	100.0	100.0	0.01	0.00
	C	0.121	0.078	-0.121	-0.078	0.0	0.0	100.0	100.0	0.01	0.00
Co645	A	0.004	0.003	-0.004	-0.003	0.0	0.0	99.9	99.9	0.00	0.00
	B	0.004	0.003	-0.004	-0.003	0.0	0.0	99.9	99.9	0.00	0.00
	C	0.004	0.003	-0.004	-0.003	0.0	0.0	99.9	99.9	0.00	0.00
Co999	A	0.020	0.012	-0.020	-0.012	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.020	0.012	-0.020	-0.012	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.020	0.012	-0.020	-0.012	0.0	0.0	100.0	100.0	0.00	0.00
Co.1032	A	0.000	0.000	0.000	0.000	0.0	0.0	99.9	99.9	0.00	0.00
	B	0.000	0.000	0.000	0.000	0.0	0.0	99.9	99.9	0.00	0.00
	C	0.000	0.000	0.000	0.000	0.0	0.0	99.9	99.9	0.00	0.00
D240	A	0.002	0.001	-0.002	-0.001	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.002	0.001	-0.002	-0.001	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.002	0.001	-0.002	-0.001	0.0	0.0	100.0	100.0	0.00	0.00
D256	A	0.002	0.001	-0.002	-0.001	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.002	0.001	-0.002	-0.001	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.002	0.001	-0.002	-0.001	0.0	0.0	100.0	100.0	0.00	0.00
D276	A	0.002	0.001	-0.002	-0.001	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.002	0.001	-0.002	-0.001	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.002	0.001	-0.002	-0.001	0.0	0.0	100.0	100.0	0.00	0.00
D634	A	0.007	0.005	-0.007	-0.005	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.007	0.005	-0.007	-0.005	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.007	0.005	-0.007	-0.005	0.0	0.0	100.0	100.0	0.00	0.00
D655	A	0.018	0.010	-0.018	-0.010	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.018	0.010	-0.018	-0.010	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.018	0.010	-0.018	-0.010	0.0	0.0	100.0	100.0	0.00	0.00
D711	A	0.018	0.010	-0.018	-0.010	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.018	0.010	-0.018	-0.010	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.018	0.010	-0.018	-0.010	0.0	0.0	100.0	100.0	0.00	0.00

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CKT / Branch		From-To Bus Flow		To-From Bus Flow		Losses		% Bus Voltage		Vd % Drop in Vmag	Amperes in Buried Winding
ID	Phase	MW	Mvar	MW	Mvar	kW	kvar	From	To		
D718	A	0.002	0.001	-0.002	-0.001	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.002	0.001	-0.002	-0.001	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.002	0.001	-0.002	-0.001	0.0	0.0	100.0	100.0	0.00	0.00
R10	A	0.001	0.001	-0.001	-0.001	0.0	0.0	99.9	99.9	0.00	0.00
	B	0.001	0.001	-0.001	-0.001	0.0	0.0	99.9	99.9	0.00	0.00
	C	0.001	0.001	-0.001	-0.001	0.0	0.0	99.9	99.9	0.00	0.00
R36	A	0.376	0.273	-0.376	-0.273	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.377	0.272	-0.377	-0.272	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.378	0.273	-0.378	-0.273	0.0	0.0	100.0	100.0	0.00	0.00
R45	A	0.054	0.032	-0.054	-0.032	0.0	0.0	99.9	99.9	0.00	0.00
	B	0.054	0.032	-0.054	-0.032	0.0	0.0	99.9	99.9	0.00	0.00
	C	0.054	0.032	-0.054	-0.032	0.0	0.0	99.9	99.9	0.00	0.00
R106	A	0.156	0.117	-0.156	-0.117	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.157	0.115	-0.157	-0.115	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.158	0.117	-0.158	-0.117	0.0	0.0	100.0	100.0	0.00	0.00
R150	A	0.054	0.032	-0.054	-0.032	0.0	0.0	99.9	99.9	0.00	0.00
	B	0.054	0.032	-0.054	-0.032	0.0	0.0	99.9	99.9	0.00	0.00
	C	0.054	0.032	-0.054	-0.032	0.0	0.0	99.9	99.9	0.00	0.00
R164	A	0.088	0.055	-0.088	-0.055	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.088	0.055	-0.088	-0.055	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.088	0.055	-0.088	-0.055	0.0	0.0	100.0	100.0	0.00	0.00
R190	A	0.154	0.108	-0.154	-0.108	0.0	0.0	100.0	100.0	0.01	0.00
	B	0.155	0.106	-0.155	-0.106	0.0	0.0	100.0	100.0	0.01	0.00
	C	0.156	0.108	-0.156	-0.108	0.0	0.0	100.0	100.0	0.01	0.00
R380	A	0.054	0.032	-0.054	-0.032	0.0	0.0	99.9	99.9	0.00	0.00
	B	0.054	0.032	-0.054	-0.032	0.0	0.0	99.9	99.9	0.00	0.00
	C	0.054	0.032	-0.054	-0.032	0.0	0.0	99.9	99.9	0.00	0.00
R410	A	0.002	0.001	-0.002	-0.001	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.002	0.001	-0.002	-0.001	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.002	0.001	-0.002	-0.001	0.0	0.0	100.0	100.0	0.00	0.00
R436	A	0.154	0.108	-0.154	-0.108	0.0	0.0	100.0	100.0	0.01	0.00
	B	0.155	0.106	-0.155	-0.106	0.0	0.0	100.0	100.0	0.01	0.00
	C	0.156	0.108	-0.156	-0.108	0.0	0.0	100.0	100.0	0.01	0.00
R455	A	0.001	0.002	-0.001	-0.002	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.001	0.002	-0.001	-0.002	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.001	0.002	-0.001	-0.002	0.0	0.0	100.0	100.0	0.00	0.00
R560	A	0.000	0.000	0.000	0.000	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.000	0.000	0.000	0.000	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.000	0.000	0.000	0.000	0.0	0.0	100.0	100.0	0.00	0.00
R734	A	0.088	0.055	-0.088	-0.055	0.0	0.0	100.0	99.9	0.01	0.00
	B	0.088	0.055	-0.088	-0.055	0.0	0.0	100.0	99.9	0.01	0.00
	C	0.088	0.055	-0.088	-0.055	0.0	0.0	100.0	99.9	0.01	0.00
R803	A	0.012	0.007	-0.012	-0.007	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.012	0.007	-0.012	-0.007	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.012	0.007	-0.012	-0.007	0.0	0.0	100.0	100.0	0.00	0.00

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CKT / Branch		From-To Bus Flow		To-From Bus Flow		Losses		% Bus Voltage		Vd % Drop in Vmag	Amperes in Buried Winding
ID	Phase	MW	Mvar	MW	Mvar	kW	kvar	From	To		
R844	A	0.002	0.002	-0.002	-0.002	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.002	0.002	-0.002	-0.002	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.002	0.002	-0.002	-0.002	0.0	0.0	100.0	100.0	0.00	0.00
R950	A	0.009	0.007	-0.009	-0.007	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.009	0.007	-0.009	-0.007	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.009	0.007	-0.009	-0.007	0.0	0.0	100.0	100.0	0.00	0.00
R1435	A	0.010	0.007	-0.010	-0.007	0.0	0.0	99.9	99.9	0.00	0.00
	B	0.010	0.007	-0.010	-0.007	0.0	0.0	99.9	99.9	0.00	0.00
	C	0.010	0.007	-0.010	-0.007	0.0	0.0	99.9	99.9	0.00	0.00
R1499	A	0.002	0.001	-0.002	-0.001	0.0	0.0	100.0	100.0	0.00	0.00
	B	0.002	0.001	-0.002	-0.001	0.0	0.0	100.0	100.0	0.00	0.00
	C	0.002	0.001	-0.002	-0.001	0.0	0.0	100.0	100.0	0.00	0.00
T1 Al-masjid Al_kaber	A	0.027	0.014	-0.027	-0.012	0.3	1.2	100.0	99.6	0.36	0.00
	B	0.027	0.014	-0.027	-0.012	0.3	1.2	100.0	99.6	0.36	0.00
	C	0.027	0.014	-0.027	-0.012	0.3	1.2	100.0	99.6	0.36	0.00
T2 Mothalath Al_borg	A	0.027	0.014	-0.027	-0.012	0.3	1.2	100.0	99.6	0.36	0.00
	B	0.027	0.014	-0.027	-0.012	0.3	1.2	100.0	99.6	0.36	0.00
	C	0.027	0.014	-0.027	-0.012	0.3	1.2	100.0	99.6	0.36	0.00
T3 Maskaneh	A	0.027	0.014	-0.027	-0.012	0.3	1.2	100.0	99.6	0.36	0.00
	B	0.027	0.014	-0.027	-0.012	0.3	1.2	100.0	99.6	0.36	0.00
	C	0.027	0.014	-0.027	-0.012	0.3	1.2	100.0	99.6	0.36	0.00
T4 Bear mtawi'	A	0.015	0.015	-0.015	-0.014	0.3	1.1	100.0	99.6	0.35	0.00
	B	0.015	0.015	-0.015	-0.014	0.3	1.1	100.0	99.6	0.35	0.00
	C	0.015	0.015	-0.015	-0.014	0.3	1.1	100.0	99.6	0.35	0.00
T5 Wad algamary 1	A	0.011	0.008	-0.011	-0.008	0.2	0.7	100.0	99.6	0.35	0.00
	B	0.011	0.008	-0.011	-0.008	0.2	0.7	100.0	99.6	0.35	0.00
	C	0.011	0.008	-0.011	-0.008	0.2	0.7	100.0	99.6	0.35	0.00
T6 Wad algamary 2	A	0.001	0.002	-0.001	-0.002	0.1	0.4	100.0	99.8	0.12	0.00
	B	0.001	0.002	-0.001	-0.002	0.1	0.4	100.0	99.8	0.12	0.00
	C	0.001	0.002	-0.001	-0.002	0.1	0.4	100.0	99.8	0.12	0.00
T7 Al_deir 1	A	0.020	0.010	-0.020	-0.009	0.2	0.8	100.0	99.5	0.45	0.00
	B	0.020	0.010	-0.020	-0.009	0.2	0.8	100.0	99.5	0.45	0.00
	C	0.020	0.010	-0.020	-0.009	0.2	0.8	100.0	99.5	0.45	0.00
T8 Karam al_ashqar	A	0.010	0.005	-0.010	-0.005	0.2	0.7	99.9	99.7	0.24	0.00
	B	0.010	0.005	-0.010	-0.005	0.2	0.7	99.9	99.7	0.24	0.00
	C	0.010	0.005	-0.010	-0.005	0.2	0.7	99.9	99.7	0.24	0.00
T9 Abu al_humas	A	0.020	0.010	-0.020	-0.009	0.2	0.8	100.0	99.5	0.45	0.00
	B	0.020	0.010	-0.020	-0.009	0.2	0.8	100.0	99.5	0.45	0.00
	C	0.020	0.010	-0.020	-0.009	0.2	0.8	100.0	99.5	0.45	0.00
T10 Meqtaa' duma	A	0.015	0.009	-0.015	-0.008	0.2	0.7	100.0	99.6	0.39	0.00
	B	0.015	0.009	-0.015	-0.008	0.2	0.7	100.0	99.6	0.39	0.00
	C	0.015	0.009	-0.015	-0.008	0.2	0.7	100.0	99.6	0.39	0.00
T11 Wad ali	A	0.016	0.008	-0.016	-0.007	0.2	0.7	99.9	99.6	0.36	0.00
	B	0.016	0.008	-0.016	-0.007	0.2	0.7	99.9	99.6	0.36	0.00
	C	0.016	0.008	-0.016	-0.007	0.2	0.7	99.9	99.6	0.36	0.00

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CKT / Branch		From-To Bus Flow		To-From Bus Flow		Losses		% Bus Voltage		Vd % Drop in Vmag	Amperes in Buried Winding
ID	Phase	MW	Mvar	MW	Mvar	kW	kvar	From	To		
T12 Aqabit ghararah	A	0.013	0.007	-0.012	-0.006	0.2	0.7	100.0	99.6	0.35	0.00
	B	0.013	0.007	-0.012	-0.006	0.2	0.7	100.0	99.6	0.35	0.00
	C	0.013	0.007	-0.012	-0.006	0.2	0.7	100.0	99.6	0.35	0.00
T13 Qata't al_jamal	A	0.006	0.007	-0.005	-0.006	0.2	0.7	100.0	99.7	0.25	0.00
	B	0.006	0.007	-0.005	-0.006	0.2	0.7	100.0	99.7	0.25	0.00
	C	0.006	0.007	-0.005	-0.006	0.2	0.7	100.0	99.7	0.25	0.00
T14 Al_markaz	A	0.016	0.008	-0.016	-0.007	0.2	0.7	100.0	99.6	0.38	0.00
	B	0.016	0.008	-0.016	-0.007	0.2	0.7	100.0	99.6	0.38	0.00
	C	0.016	0.008	-0.016	-0.007	0.2	0.7	100.0	99.6	0.38	0.00
T15 Abu hashim	A	0.036	0.023	-0.035	-0.022	0.3	1.2	99.9	98.9	1.00	0.00
	B	0.036	0.023	-0.035	-0.022	0.3	1.2	99.9	98.9	1.00	0.00
	C	0.036	0.023	-0.035	-0.022	0.3	1.2	99.9	98.9	1.00	0.00
T16 Sa'ada	A	0.011	0.005	-0.010	-0.004	0.2	0.7	100.0	99.7	0.24	0.00
	B	0.011	0.005	-0.010	-0.004	0.2	0.7	100.0	99.7	0.24	0.00
	C	0.011	0.005	-0.010	-0.004	0.2	0.7	100.0	99.7	0.24	0.00
T17 Al_baladiya	A	0.011	0.005	-0.010	-0.004	0.2	0.7	100.0	99.7	0.24	0.00
	B	0.011	0.005	-0.010	-0.004	0.2	0.7	100.0	99.7	0.24	0.00
	C	0.011	0.005	-0.010	-0.004	0.2	0.7	100.0	99.7	0.24	0.00
T18 Al_sheehk	A	0.018	0.011	-0.018	-0.011	0.2	0.8	100.0	99.5	0.50	0.00
	B	0.018	0.011	-0.018	-0.011	0.2	0.8	100.0	99.5	0.50	0.00
	C	0.018	0.011	-0.018	-0.011	0.2	0.8	100.0	99.5	0.50	0.00
T19 Kerbit alama	A	0.007	0.002	-0.006	-0.002	0.1	0.4	100.0	99.7	0.23	0.00
	B	0.007	0.002	-0.006	-0.002	0.1	0.4	100.0	99.7	0.24	0.00
	C	0.007	0.002	-0.006	-0.002	0.1	0.4	100.0	99.7	0.24	0.00
T20 Aqabit al_tarsha	A	0.012	0.007	-0.012	-0.006	0.1	0.5	100.0	99.4	0.55	0.00
	B	0.012	0.007	-0.012	-0.006	0.1	0.5	100.0	99.4	0.55	0.00
	C	0.012	0.007	-0.012	-0.006	0.1	0.5	100.0	99.4	0.55	0.00
T21 Al_mustashfah	A	0.005	0.007	-0.005	-0.006	0.1	0.4	100.0	99.5	0.43	0.00
	B	0.005	0.007	-0.005	-0.006	0.1	0.4	100.0	99.5	0.43	0.00
	C	0.005	0.007	-0.005	-0.006	0.1	0.4	100.0	99.5	0.43	0.00
T22 Da'na	A	0.002	0.009	-0.002	-0.009	0.1	0.4	100.0	99.5	0.47	0.00
	B	0.002	0.009	-0.002	-0.009	0.1	0.4	100.0	99.5	0.47	0.00
	C	0.002	0.009	-0.002	-0.009	0.1	0.4	100.0	99.5	0.47	0.00
T23 Kurza	A	0.012	0.007	-0.012	-0.006	0.1	0.5	100.0	99.4	0.55	0.00
	B	0.012	0.007	-0.012	-0.006	0.1	0.5	100.0	99.4	0.55	0.00
	C	0.012	0.007	-0.012	-0.006	0.1	0.5	100.0	99.4	0.55	0.00
T24 Al-deire 2	A	0.005	0.007	-0.005	-0.006	0.1	0.4	100.0	99.5	0.43	0.00
	B	0.005	0.007	-0.005	-0.006	0.1	0.4	100.0	99.5	0.43	0.00
	C	0.005	0.007	-0.005	-0.006	0.1	0.4	100.0	99.5	0.43	0.00
T25 Rasmi wahab	A	0.002	0.009	-0.002	-0.009	0.1	0.4	100.0	99.5	0.47	0.00
	B	0.002	0.009	-0.002	-0.009	0.1	0.4	100.0	99.5	0.47	0.00
	C	0.002	0.009	-0.002	-0.009	0.1	0.4	100.0	99.5	0.47	0.00
T26 Baten alqar'	A	0.008	0.009	-0.008	-0.007	0.1	1.5	100.0	99.4	0.53	0.00
	B	0.009	0.007	-0.010	-0.007	-0.7	0.0	100.0	99.4	0.57	0.00
	C	0.010	0.009	-0.009	-0.009	1.0	0.0	100.0	99.3	0.62	0.00

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CKT / Branch		From-To Bus Flow		To-From Bus Flow		Losses		% Bus Voltage		Vd % Drop in Vmag	Amperes in Buried Winding
ID	Phase	MW	Mvar	MW	Mvar	kW	kvar	From	To		
T27 Al_muntazah	A	0.011	0.006	-0.011	-0.005	0.1	0.5	100.0	99.5	0.49	0.00
	B	0.011	0.006	-0.011	-0.005	0.1	0.5	100.0	99.5	0.49	0.00
	C	0.011	0.006	-0.011	-0.005	0.1	0.5	100.0	99.5	0.49	0.00
T28 Domet al_wridat	A	0.013	0.006	-0.013	-0.006	0.1	0.5	100.0	99.4	0.56	0.00
	B	0.013	0.006	-0.013	-0.006	0.1	0.5	100.0	99.4	0.56	0.00
	C	0.013	0.006	-0.013	-0.006	0.1	0.5	100.0	99.4	0.56	0.00
T29 Juret al_dama	A	0.010	0.005	-0.010	-0.004	0.1	0.5	100.0	99.5	0.41	0.00
	B	0.010	0.005	-0.010	-0.004	0.1	0.5	100.0	99.5	0.42	0.00
	C	0.010	0.005	-0.010	-0.004	0.1	0.5	100.0	99.5	0.42	0.00
T30 Kafar joul	A	0.007	0.004	-0.007	-0.004	0.1	0.4	99.9	99.6	0.32	0.00
	B	0.007	0.004	-0.007	-0.004	0.1	0.4	99.9	99.6	0.32	0.00
	C	0.007	0.004	-0.007	-0.004	0.1	0.4	99.9	99.6	0.32	0.00
T31 Sam'a	A	0.002	0.002	-0.002	-0.001	0.1	0.4	99.9	99.8	0.10	0.00
	B	0.002	0.002	-0.002	-0.001	0.1	0.4	99.9	99.8	0.10	0.00
	C	0.002	0.002	-0.002	-0.001	0.1	0.4	99.9	99.8	0.10	0.00
T32 Khalet al_ayaseh	A	0.008	0.004	-0.007	-0.004	0.1	0.4	100.0	99.6	0.35	0.00
	B	0.008	0.004	-0.007	-0.004	0.1	0.4	100.0	99.6	0.36	0.00
	C	0.008	0.004	-0.007	-0.004	0.1	0.4	100.0	99.6	0.36	0.00
T33 Al_mizrab	A	0.002	0.002	-0.002	-0.001	0.1	0.4	100.0	99.9	0.11	0.00
	B	0.002	0.002	-0.002	-0.001	0.1	0.4	100.0	99.9	0.11	0.00
	C	0.002	0.002	-0.002	-0.001	0.1	0.4	100.0	99.9	0.11	0.00
T34 Al_shadaqa	A	0.002	0.002	-0.002	-0.001	0.1	0.4	100.0	99.9	0.11	0.00
	B	0.002	0.002	-0.002	-0.001	0.1	0.4	100.0	99.9	0.11	0.00
	C	0.002	0.002	-0.002	-0.001	0.1	0.4	100.0	99.9	0.11	0.00
T35 Al_shuqfan	A	0.007	0.004	-0.007	-0.003	0.1	0.3	99.9	99.4	0.54	0.00
	B	0.007	0.004	-0.007	-0.003	0.1	0.3	99.9	99.4	0.54	0.00
	C	0.007	0.004	-0.007	-0.003	0.1	0.3	99.9	99.4	0.54	0.00
T36 Al_estad	A	0.002	0.002	-0.002	-0.001	0.1	0.4	99.9	99.8	0.11	0.00
	B	0.002	0.002	-0.002	-0.001	0.1	0.4	99.9	99.8	0.11	0.00
	C	0.002	0.002	-0.002	-0.001	0.1	0.4	99.9	99.8	0.11	0.00
T37 Eshreeteh	A	0.007	0.003	-0.007	-0.003	0.1	0.4	100.0	99.7	0.28	0.00
	B	0.007	0.003	-0.007	-0.003	0.1	0.4	100.0	99.7	0.28	0.00
	C	0.007	0.003	-0.007	-0.003	0.1	0.4	100.0	99.7	0.28	0.00
T38 Al_muhtasib	A	0.006	0.004	-0.005	-0.003	0.1	0.4	100.0	99.7	0.28	0.00
	B	0.006	0.004	-0.005	-0.003	0.1	0.4	100.0	99.7	0.28	0.00
	C	0.006	0.004	-0.005	-0.003	0.1	0.4	100.0	99.7	0.28	0.00
T39 Jammoq	A	0.008	0.004	-0.008	-0.004	0.1	0.4	100.0	99.6	0.33	0.00
	B	0.008	0.004	-0.008	-0.004	0.1	0.4	100.0	99.6	0.34	0.00
	C	0.008	0.004	-0.008	-0.004	0.1	0.4	100.0	99.6	0.34	0.00
T40 Al_helal	A	0.000	0.001	0.000	0.000	0.1	0.4	100.0	99.9	0.02	0.00
	B	0.000	0.001	0.000	0.000	0.1	0.4	100.0	99.9	0.02	0.00
	C	0.000	0.001	0.000	0.000	0.1	0.4	100.0	99.9	0.02	0.00
T41 Al_muntazah 2	A	0.005	0.003	-0.005	-0.003	0.1	0.4	100.0	99.7	0.25	0.00
	B	0.005	0.003	-0.005	-0.003	0.1	0.4	100.0	99.7	0.25	0.00
	C	0.005	0.003	-0.005	-0.003	0.1	0.4	100.0	99.7	0.25	0.00

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CKT / Branch		From-To Bus Flow		To-From Bus Flow		Losses		% Bus Voltage		Vd % Drop in Vmag	Amperes in Buried Winding
ID	Phase	MW	Mvar	MW	Mvar	kW	kvar	From	To		
T42 Abu njeem 2	A	0.005	0.003	-0.005	-0.003	0.1	0.4	100.0	99.7	0.25	0.00
	B	0.005	0.003	-0.005	-0.003	0.1	0.4	100.0	99.7	0.25	0.00
	C	0.005	0.003	-0.005	-0.003	0.1	0.4	100.0	99.7	0.25	0.00
T43 Al jame'a	A	0.004	0.003	-0.004	-0.003	0.1	0.4	100.0	99.7	0.23	0.00
	B	0.004	0.003	-0.004	-0.003	0.1	0.4	100.0	99.7	0.23	0.00
	C	0.004	0.003	-0.004	-0.003	0.1	0.4	100.0	99.7	0.23	0.00
T44 Alghwla	A	0.001	0.001	-0.001	-0.001	0.1	0.4	99.9	99.9	0.08	0.00
	B	0.001	0.001	-0.001	-0.001	0.1	0.4	99.9	99.9	0.08	0.00
	C	0.001	0.001	-0.001	-0.001	0.1	0.4	99.9	99.9	0.08	0.00
T45 Masafi	A	0.005	0.004	-0.005	-0.003	0.1	0.4	100.0	99.7	0.26	0.00
	B	0.005	0.004	-0.005	-0.003	0.1	0.4	100.0	99.7	0.27	0.00
	C	0.005	0.004	-0.005	-0.003	0.1	0.4	100.0	99.7	0.27	0.00
T46 Al_jebreni	A	0.008	0.007	-0.008	-0.007	0.1	0.5	100.0	99.5	0.50	0.00
	B	0.008	0.007	-0.008	-0.007	0.1	0.5	100.0	99.5	0.50	0.00
	C	0.008	0.007	-0.008	-0.007	0.1	0.5	100.0	99.5	0.50	0.00
T47 Abu_njeem 1	A	0.002	0.001	-0.002	-0.001	0.1	0.3	100.0	99.8	0.18	0.00
	B	0.002	0.001	-0.002	-0.001	0.1	0.3	100.0	99.8	0.18	0.00
	C	0.002	0.001	-0.002	-0.001	0.1	0.3	100.0	99.8	0.18	0.00
T48 Inab al_kabeer	A	0.002	0.001	-0.002	-0.001	0.1	0.3	100.0	99.8	0.17	0.00
	B	0.002	0.001	-0.002	-0.001	0.1	0.3	100.0	99.8	0.17	0.00
	C	0.002	0.001	-0.002	-0.001	0.1	0.3	100.0	99.8	0.17	0.00
T49 Shweki	A	0.002	0.001	-0.002	-0.001	0.1	0.3	100.0	99.8	0.17	0.00
	B	0.002	0.001	-0.002	-0.001	0.1	0.3	100.0	99.8	0.17	0.00
	C	0.002	0.001	-0.002	-0.001	0.1	0.3	100.0	99.8	0.17	0.00
T50 Al-baha	A	0.007	0.005	-0.007	-0.005	0.1	0.3	100.0	99.3	0.64	0.00
	B	0.007	0.005	-0.007	-0.005	0.1	0.3	100.0	99.3	0.64	0.00
	C	0.007	0.005	-0.007	-0.005	0.1	0.3	100.0	99.3	0.64	0.00
T51 Inab al_sagher	A	0.007	0.007	-0.007	-0.007	0.1	0.3	99.9	99.1	0.81	0.00
	B	0.007	0.007	-0.007	-0.007	0.1	0.3	99.9	99.1	0.81	0.00
	C	0.007	0.007	-0.007	-0.007	0.1	0.3	99.9	99.1	0.81	0.00
T52 Bank al_eskan	A	0.002	0.001	-0.002	-0.001	0.1	0.3	100.0	99.8	0.18	0.00
	B	0.002	0.001	-0.002	-0.001	0.1	0.3	100.0	99.8	0.18	0.00
	C	0.002	0.001	-0.002	-0.001	0.1	0.3	100.0	99.8	0.18	0.00
T53 Al_tork	A	0.008	0.011	-0.008	-0.010	0.3	1.1	100.0	99.7	0.25	0.00
	B	0.008	0.011	-0.008	-0.010	0.3	1.1	100.0	99.7	0.26	0.00
	C	0.008	0.011	-0.008	-0.010	0.3	1.1	100.0	99.7	0.25	0.00
T54 Wad algamary 3	A	0.002	0.001	-0.002	-0.001	0.1	0.3	100.0	99.8	0.18	0.00
	B	0.002	0.001	-0.002	-0.001	0.1	0.3	100.0	99.8	0.18	0.00
	C	0.002	0.001	-0.002	-0.001	0.1	0.3	100.0	99.8	0.18	0.00
T55 Mana'	A	0.001	0.001	0.000	-0.001	0.1	0.4	100.0	99.9	0.06	0.00
	B	0.001	0.001	0.000	-0.001	0.1	0.4	100.0	99.9	0.06	0.00
	C	0.001	0.001	0.000	-0.001	0.1	0.4	100.0	99.9	0.06	0.00
T56 Al jebreny step up	A	0.127	0.061	-0.124	-0.057	2.3	4.1	99.9	100.0	0.14	0.00
	B	0.127	0.061	-0.124	-0.057	2.3	4.1	99.9	100.0	0.14	0.00
	C	0.127	0.061	-0.124	-0.057	2.3	4.1	99.9	100.0	0.14	0.00

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For branches below center-tap transformers, Phases A, B, and C correspond to (1), (2), and (N) respectively.

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