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Bus Input Data

Bus						Initial Voltage		Generation		Load		Mvar Limits	
ID	Conn.	Type	kV	Sub-sys	Ph	% Mag.	Ang.	MW	Mvar	MW	Mvar	Max.	Min.
Bus1	3-Phase	Swing	33.000	1	A	100.0	0.0	0.946	0.455	0	0	0.000	0.000
					B	100.0	-120.0	0.913	0.478	0	0		
					C	100.0	120.0	0.910	0.438	0	0		
Bus2	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus3	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus4	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus5	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.018	0.009	0.000	0.000
					B	100.0	-90.0	0	0	0.009	0.004		
					C	100.0	150.0	0	0	0.014	0.007		
Bus6	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus7	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus8	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.037	0.025	0.000	0.000
					B	100.0	-90.0	0	0	0.033	0.025		
					C	100.0	150.0	0	0	0.053	0.019		
Bus9	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus10	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus11	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus12	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.009	0.004	0.000	0.000
					B	100.0	-90.0	0	0	0.008	0.004		
					C	100.0	150.0	0	0	0.036	0.017		

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Bus					Initial Voltage			Generation		Load		Mvar Limits	
ID	Conn.	Type	kV	Sub-sys	Ph	% Mag.	Ang.	MW	Mvar	MW	Mvar	Max.	Min.
Bus13	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus14	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.012	0.005	0.000	0.000
					B	100.0	-90.0	0	0	0.007	0.003		
					C	100.0	150.0	0	0	0.011	0.004		
Bus15	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus17	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus18	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus19	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.007	0.004	0.000	0.000
					B	100.0	-90.0	0	0	0.007	0.003		
					C	100.0	150.0	0	0	0.009	0.005		
Bus20	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.034	0.014	0.000	0.000
					B	100.0	-90.0	0	0	0.032	0.014		
					C	100.0	150.0	0	0	0.031	0.015		
Bus21	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus22	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.024	0.008	0.000	0.000
					B	100.0	-90.0	0	0	0.023	0.008		
					C	100.0	150.0	0	0	0.025	0.006		
Bus24	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus25	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.008	0.004	0.000	0.000
					B	100.0	-90.0	0	0	0.009	0.004		
					C	100.0	150.0	0	0	0.010	0.005		
Bus26	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus27	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.008	0.004	0.000	0.000
					B	100.0	-90.0	0	0	0.009	0.004		
					C	100.0	150.0	0	0	0.010	0.005		
Bus28	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		

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Bus					Initial Voltage			Generation		Load		Mvar Limits	
ID	Conn.	Type	kV	Sub-sys	Ph	% Mag.	Ang.	MW	Mvar	MW	Mvar	Max.	Min.
Bus30	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.021	0.006	0.000	0.000
					B	100.0	-90.0	0	0	0.019	0.004		
					C	100.0	150.0	0	0	0.016	0.005		
Bus31	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus32	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus34	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.038	0.011	0.000	0.000
					B	100.0	-90.0	0	0	0.038	0.011		
					C	100.0	150.0	0	0	0.041	0.013		
Bus35	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus37	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.008	0.004	0.000	0.000
					B	100.0	-90.0	0	0	0.008	0.005		
					C	100.0	150.0	0	0	0.007	0.005		
Bus38	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus41	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.068	0.027	0.000	0.000
					B	100.0	-90.0	0	0	0.050	0.015		
					C	100.0	150.0	0	0	0.063	0.021		
Bus42	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus43	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus44	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus46	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.018	0.006	0.000	0.000
					B	100.0	-90.0	0	0	0.019	0.004		
					C	100.0	150.0	0	0	0.017	0.003		
Bus47	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus51	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		

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ID	Conn.	Type	kV	Sub-sys	Ph	% Mag.	Ang.	MW	Mvar	MW	Mvar	Max.	Min.
Bus52	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.004	0.001	0.000	0.000
					B	100.0	-90.0	0	0	0.006	0.002		
					C	100.0	150.0	0	0	0.004	0.002		
Bus53	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus54	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus56	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.006	0.002	0.000	0.000
					B	100.0	-90.0	0	0	0.005	0.002		
					C	100.0	150.0	0	0	0.006	0.002		
Bus57	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus59	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.068	0.027	0.000	0.000
					B	100.0	-90.0	0	0	0.050	0.015		
					C	100.0	150.0	0	0	0.063	0.021		
Bus60	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus62	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.023	0.011	0.000	0.000
					B	100.0	-90.0	0	0	0.027	0.012		
					C	100.0	150.0	0	0	0.022	0.011		
Bus63	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus64	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus66	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.041	0.018	0.000	0.000
					B	100.0	-90.0	0	0	0.036	0.014		
					C	100.0	150.0	0	0	0.038	0.018		
Bus68	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.023	0.009	0.000	0.000
					B	100.0	-90.0	0	0	0.026	0.007		
					C	100.0	150.0	0	0	0.020	0.005		
Bus69	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus70	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		

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ID	Conn.	Type	kV	Sub-sys	Ph	% Mag.	Ang.	MW	Mvar	MW	Mvar	Max.	Min.
Bus72	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.038	0.011	0.000	0.000
					B	100.0	-90.0	0	0	0.038	0.011		
					C	100.0	150.0	0	0	0.041	0.013		
Bus73	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus75	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.020	0.008	0.000	0.000
					B	100.0	-90.0	0	0	0.015	0.006		
					C	100.0	150.0	0	0	0.011	0.005		
Bus76	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus78	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.006	0.005	0.000	0.000
					B	100.0	-90.0	0	0	0.004	0.003		
					C	100.0	150.0	0	0	0.005	0.004		
Bus79	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus81	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.018	0.005	0.000	0.000
					B	100.0	-90.0	0	0	0.014	0.002		
					C	100.0	150.0	0	0	0.020	0.006		
Bus82	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus83	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus85	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.018	0.006	0.000	0.000
					B	100.0	-90.0	0	0	0.019	0.004		
					C	100.0	150.0	0	0	0.017	0.003		
Bus86	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus87	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus89	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.019	0.007	0.000	0.000
					B	100.0	-90.0	0	0	0.013	0.004		
					C	100.0	150.0	0	0	0.015	0.006		
Bus90	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		

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ID	Conn.	Type	kV	Sub-sys	Ph	% Mag.	Ang.	MW	Mvar	MW	Mvar	Max.	Min.
Bus92	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.028	0.008	0.000	0.000
					B	100.0	-90.0	0	0	0.031	0.013		
					C	100.0	150.0	0	0	0.026	0.012		
Bus93	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus95	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.008	0.004	0.000	0.000
					B	100.0	-90.0	0	0	0.008	0.005		
					C	100.0	150.0	0	0	0.007	0.005		
Bus96	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus98	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.021	0.006	0.000	0.000
					B	100.0	-90.0	0	0	0.019	0.004		
					C	100.0	150.0	0	0	0.016	0.005		
Bus99	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus101	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.022	0.022	0.000	0.000
					B	100.0	-90.0	0	0	0.026	0.026		
					C	100.0	150.0	0	0	0.020	0.027		
Bus102	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus103	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus105	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.020	0.008	0.000	0.000
					B	100.0	-90.0	0	0	0.015	0.006		
					C	100.0	150.0	0	0	0.011	0.005		
Bus106	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus108	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.022	0.007	0.000	0.000
					B	100.0	-90.0	0	0	0.020	0.008		
					C	100.0	150.0	0	0	0.025	0.006		
Bus113	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus114	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		

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Bus					Initial Voltage			Generation		Load		Mvar Limits	
ID	Conn.	Type	kV	Sub-sys	Ph	% Mag.	Ang.	MW	Mvar	MW	Mvar	Max.	Min.
Bus116	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.006	0.003	0.000	0.000
					B	100.0	-90.0	0	0	0.012	0.005		
					C	100.0	150.0	0	0	0.014	0.006		
Bus119	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.007	0.002	0.000	0.000
					B	100.0	-90.0	0	0	0.011	0.002		
					C	100.0	150.0	0	0	0.006	0.003		
Bus120	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus121	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus124	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus125	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.029	0.007	0.000	0.000
					B	100.0	-90.0	0	0	0.029	0.011		
					C	100.0	150.0	0	0	0.027	0.010		
Bus126	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus127	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus129	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.008	0.004	0.000	0.000
					B	100.0	-90.0	0	0	0.009	0.004		
					C	100.0	150.0	0	0	0.010	0.005		
Bus132	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus133	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.010	0.004	0.000	0.000
					B	100.0	-90.0	0	0	0.013	0.004		
					C	100.0	150.0	0	0	0.016	0.005		
Bus134	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus135	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus138	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		

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Bus					Initial Voltage			Generation		Load		Mvar Limits	
ID	Conn.	Type	kV	Sub-sys	Ph	% Mag.	Ang.	MW	Mvar	MW	Mvar	Max.	Min.
Bus139	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.022	0.012	0.000	0.000
					B	100.0	-90.0	0	0	0.022	0.011		
					C	100.0	150.0	0	0	0.022	0.011		
Bus142	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus143	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.024	0.008	0.000	0.000
					B	100.0	-90.0	0	0	0.023	0.008		
					C	100.0	150.0	0	0	0.025	0.006		
Bus145	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus146	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus148	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.019	0.009	0.000	0.000
					B	100.0	-90.0	0	0	0.019	0.013		
					C	100.0	150.0	0	0	0.019	0.009		
Bus150	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.006	0.002	0.000	0.000
					B	100.0	-90.0	0	0	0.005	0.002		
					C	100.0	150.0	0	0	0.006	0.002		
Bus151	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus152	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus154	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.002	0.001	0.000	0.000
					B	100.0	-90.0	0	0	0.002	0.001		
					C	100.0	150.0	0	0	0.003	0.001		
Bus155	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus157	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.006	0.002	0.000	0.000
					B	100.0	-90.0	0	0	0.005	0.002		
					C	100.0	150.0	0	0	0.006	0.002		
Bus158	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus159	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		

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Bus					Initial Voltage			Generation		Load		Mvar Limits	
ID	Conn.	Type	kV	Sub-sys	Ph	% Mag.	Ang.	MW	Mvar	MW	Mvar	Max.	Min.
Bus160	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus162	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.007	0.004	0.000	0.000
					B	100.0	-90.0	0	0	0.007	0.003		
					C	100.0	150.0	0	0	0.009	0.005		
Bus163	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus165	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.012	0.005	0.000	0.000
					B	100.0	-90.0	0	0	0.007	0.003		
					C	100.0	150.0	0	0	0.011	0.004		
Bus166	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus167	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus168	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus170	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.004	0.001	0.000	0.000
					B	100.0	-90.0	0	0	0.006	0.002		
					C	100.0	150.0	0	0	0.004	0.002		
Bus171	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus172	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus173	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus175	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.020	0.005	0.000	0.000
					B	100.0	-90.0	0	0	0.015	0.007		
					C	100.0	150.0	0	0	0.019	0.006		
Bus176	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus178	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.014	0.004	0.000	0.000
					B	100.0	-90.0	0	0	0.013	0.004		
					C	100.0	150.0	0	0	0.014	0.005		

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Bus					Initial Voltage			Generation		Load		Mvar Limits	
ID	Conn.	Type	kV	Sub-sys	Ph	% Mag.	Ang.	MW	Mvar	MW	Mvar	Max.	Min.
Bus179	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus180	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus181	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus183	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.064	0.031	0.000	0.000
					B	100.0	-90.0	0	0	0.040	0.019		
					C	100.0	150.0	0	0	0.036	0.017		
Bus184	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus185	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus188	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.006	0.002	0.000	0.000
					B	100.0	-90.0	0	0	0.005	0.002		
					C	100.0	150.0	0	0	0.006	0.002		
Bus189	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus191	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.005	0.002	0.000	0.000
					B	100.0	-90.0	0	0	0.002	0.001		
					C	100.0	150.0	0	0	0.004	0.002		
Bus192	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus193	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus194	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus195	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus196	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		

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Bus						Initial Voltage		Generation		Load		Mvar Limits	
ID	Conn.	Type	kV	Sub-sys	Ph	% Mag.	Ang.	MW	Mvar	MW	Mvar	Max.	Min.
Bus197	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus198	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus200	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.041	0.018	0.000	0.000
					B	100.0	-90.0	0	0	0.036	0.014		
					C	100.0	150.0	0	0	0.038	0.018		
Bus201	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus203	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.004	0.001	0.000	0.000
					B	100.0	-90.0	0	0	0.006	0.002		
					C	100.0	150.0	0	0	0.004	0.002		
Bus204	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus205	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus206	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus208	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.024	0.008	0.000	0.000
					B	100.0	-90.0	0	0	0.023	0.007		
					C	100.0	150.0	0	0	0.010	0.003		
Bus209	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Bus211	3-Phase	Load	0.400	1	A	100.0	30.0	0	0	0.029	0.009	0.000	0.000
					B	100.0	-90.0	0	0	0.027	0.008		
					C	100.0	150.0	0	0	0.036	0.011		
Bus212	3-Phase	Voltage Control	0.400	1	A	100.0	30.0	0.127	0	0	0	0.000	0.000
					B	100.0	-90.0	0.127	0	0	0		
					C	100.0	150.0	0.127	0	0	0		
Bus213	3-Phase	Load	33.000	1	A	100.0	0.0	0	0	0	0	0.000	0.000
					B	100.0	-120.0	0	0	0	0		
					C	100.0	120.0	0	0	0	0		
Total Number of Buses: 151								3.149	1.372	3.117	1.245		