



ANEXO VII

REPORTES DE CORTOCIRCUITO

CORTO PLAZO

1. 2025 ESTACIÓN SECA

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2025CA_MODMAX_SEC

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES
- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

			THREE PHASE FAULT		X----LG FAULT---X	
X-----	BUS	-----X	/I+/	AN(I+)	/3I0/	AN(I+)
6001	[PAN230	230.00] AMP	8544.1	-104.71	0.0	0.00
6002	[PAN115	115.00] AMP	15367.2	-107.25	0.0	0.00
6003	[PANII230	230.00] AMP	8143.8	-105.29	93.7	47.26
6004	[PANII115	115.00] AMP	11869.6	-111.18	0.0	0.00
6005	[CHO230	230.00] AMP	7717.6	-106.05	0.0	0.00
6007	[CHO34	34.500] AMP	22188.9	-119.19	0.0	0.00
6008	[LSA230	230.00] AMP	8019.1	-104.79	0.0	0.00
6009	[LSA115	115.00] AMP	10482.0	-109.35	0.0	0.00
6010	[LSA34	34.500] AMP	16450.3	-85.85	0.0	0.00
6011	[MDN230	230.00] AMP	7687.2	-106.40	0.0	0.00
6012	[MDN115	115.00] AMP	9528.9	-109.53	0.0	0.00
6013	[MDN34	34.500] AMP	12615.8	-110.09	0.0	0.00
6014	[PRO230	230.00] AMP	5976.5	-104.99	0.0	0.00
6015	[PRO115	115.00] AMP	6844.6	-106.93	0.0	0.00
6016	[PRO34	34.500] AMP	11343.9	-105.22	0.0	0.00
6018	[CAC115	115.00] AMP	15196.7	-107.44	0.0	0.00
6087	[CAL115	115.00] AMP	6564.0	-110.06	0.0	0.00
6179	[GUA230	230.00] AMP	7001.7	-107.65	0.0	0.00
6182	[VEL230	230.00] AMP	8189.2	-106.32	0.0	0.00
6240	[EHIG230	230.00] AMP	5885.5	-108.41	0.0	0.00
6262	[CHA34	34.500] AMP	7318.9	-113.73	0.0	0.00
6340	[CAN230	230.00] AMP	4356.5	-107.65	0.0	0.00
6370	[BOQIII34B	34.500] AMP	18834.8	-108.13	0.0	0.00
6380	[BOQIII230	230.00] AMP	6502.7	-105.79	0.0	0.00
6381	[BOQIII34	34.500] AMP	18834.8	-108.13	0.0	0.00
6460	[ECO230	230.00] AMP	6466.9	-106.88	0.0	0.00
6520	[SBA230	230.00] AMP	6595.2	-107.78	0.0	0.00
6521	[SBA115	115.00] AMP	3584.7	-117.98	0.0	0.00
6522	[SBA34	34.500] AMP	4093.8	-119.54	3644.1	-119.93
6840	[PAN3 230	230.00] AMP	8578.6	-104.68	0.0	0.00

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2025CA_MODMEDAM_SEC

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION

- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES
- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

			THREE PHASE FAULT		X----LG FAULT---X	
X----- BUS -----X			/I+/	AN(I+)	/3I0/	AN(I+)
6001	[PAN230	230.00] AMP	7655.1	-108.16	0.0	0.00
6002	[PAN115	115.00] AMP	13282.9	-110.52	0.0	0.00
6003	[PANII230	230.00] AMP	7366.7	-108.84	93.7	42.63
6004	[PANII115	115.00] AMP	10914.6	-114.66	0.0	0.00
6005	[CHO230	230.00] AMP	7106.2	-109.55	0.0	0.00
6007	[CHO34	34.500] AMP	21520.7	-122.90	0.0	0.00
6008	[LSA230	230.00] AMP	7755.1	-108.72	0.0	0.00
6009	[LSA115	115.00] AMP	10195.4	-113.48	0.0	0.00
6010	[LSA34	34.500] AMP	16428.5	-89.98	0.0	0.00
6011	[MDN230	230.00] AMP	7581.9	-110.21	0.0	0.00
6012	[MDN115	115.00] AMP	9411.9	-113.43	0.0	0.00
6013	[MDN34	34.500] AMP	12815.0	-114.08	0.0	0.00
6014	[PRO230	230.00] AMP	5919.8	-108.87	0.0	0.00
6015	[PRO115	115.00] AMP	6794.0	-111.02	0.0	0.00
6016	[PRO34	34.500] AMP	11274.0	-109.71	0.0	0.00
6018	[CAC115	115.00] AMP	13139.5	-110.69	0.0	0.00
6087	[CAL115	115.00] AMP	6520.7	-113.67	0.0	0.00
6179	[GUA230	230.00] AMP	6916.0	-111.41	0.0	0.00
6182	[VEL230	230.00] AMP	8009.5	-110.15	0.0	0.00
6240	[EHIG230	230.00] AMP	5611.6	-112.13	0.0	0.00
6262	[CHA34	34.500] AMP	7329.4	-117.34	0.0	0.00
6340	[CAN230	230.00] AMP	4326.0	-111.34	0.0	0.00
6370	[BOQIII34B	34.500] AMP	18753.1	-111.93	0.0	0.00
6380	[BOQIII230	230.00] AMP	6436.1	-109.62	0.0	0.00
6381	[BOQIII34	34.500] AMP	18753.1	-111.93	0.0	0.00
6460	[ECO230	230.00] AMP	6280.7	-110.91	0.0	0.00
6520	[SBA230	230.00] AMP	6446.8	-111.67	0.0	0.00
6521	[SBA115	115.00] AMP	3540.4	-121.96	0.0	0.00
6522	[SBA34	34.500] AMP	4059.7	-123.58	3614.9	-123.97
6840	[PAN3 230	230.00] AMP	7720.8	-108.18	0.0	0.00

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

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PLAN DE EXPANSION ETESA 2020-2034

2025CA_MODMEDNOCT_SEC

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES
- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

			THREE PHASE FAULT		X----LG FAULT---X	
X----- BUS -----X			/I+/	AN(I+)	/3I0/	AN(I+)
6001	[PAN230	230.00] AMP	9703.1	-104.58	0.0	0.00
6002	[PAN115	115.00] AMP	16331.4	-106.88	0.0	0.00

6003	[PANII230	230.00]	AMP	9333.9	-104.89	96.7	52.86
6004	[PANII115	115.00]	AMP	12914.5	-110.03	0.0	0.00
6005	[CHO230	230.00]	AMP	8705.9	-106.29	0.0	0.00
6007	[CHO34	34.500]	AMP	23072.1	-117.82	0.0	0.00
6008	[LSA230	230.00]	AMP	8590.6	-109.10	0.0	0.00
6009	[LSA115	115.00]	AMP	10760.5	-114.29	0.0	0.00
6010	[LSA34	34.500]	AMP	16710.4	-91.19	0.0	0.00
6011	[MDN230	230.00]	AMP	8183.7	-112.36	0.0	0.00
6012	[MDN115	115.00]	AMP	9535.9	-116.37	0.0	0.00
6013	[MDN34	34.500]	AMP	12214.7	-120.03	0.0	0.00
6014	[PRO230	230.00]	AMP	5933.5	-111.53	0.0	0.00
6015	[PRO115	115.00]	AMP	6546.6	-115.49	0.0	0.00
6016	[PRO34	34.500]	AMP	10282.9	-118.17	0.0	0.00
6018	[CAC115	115.00]	AMP	16108.0	-106.99	0.0	0.00
6087	[CAL115	115.00]	AMP	6572.9	-116.31	0.0	0.00
6179	[GUA230	230.00]	AMP	7626.8	-112.99	0.0	0.00
6182	[VEL230	230.00]	AMP	8723.5	-111.33	0.0	0.00
6240	[EHIG230	230.00]	AMP	6274.3	-109.64	0.0	0.00
6262	[CHA34	34.500]	AMP	7268.5	-117.73	0.0	0.00
6340	[CAN230	230.00]	AMP	4546.2	-112.17	0.0	0.00
6370	[BOQIII34B	34.500]	AMP	18449.8	-115.74	0.0	0.00
6380	[BOQIII230	230.00]	AMP	6640.3	-112.04	0.0	0.00
6381	[BOQIII34	34.500]	AMP	18449.8	-115.74	0.0	0.00
6460	[ECO230	230.00]	AMP	6925.8	-110.41	0.0	0.00
6520	[SBA230	230.00]	AMP	6833.9	-112.23	0.0	0.00
6521	[SBA115	115.00]	AMP	3620.7	-120.90	0.0	0.00
6522	[SBA34	34.500]	AMP	4120.6	-122.00	3665.5	-122.32
6840	[PAN3 230	230.00]	AMP	9821.0	-104.62	0.0	0.00

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

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OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES
- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

				THREE PHASE FAULT		X----LG FAULT---X	
X----- BUS -----X				/I+/ AN(I+)	/3I0/ AN(I+)		
6001	[PAN230	230.00]	AMP	8791.7	-107.66	0.0	0.00
6002	[PAN115	115.00]	AMP	14931.7	-109.98	0.0	0.00
6003	[PANII230	230.00]	AMP	8442.4	-108.12	92.1	47.69
6004	[PANII115	115.00]	AMP	11918.8	-113.50	0.0	0.00
6005	[CHO230	230.00]	AMP	7908.8	-109.30	0.0	0.00
6007	[CHO34	34.500]	AMP	21929.6	-121.35	0.0	0.00
6008	[LSA230	230.00]	AMP	8196.8	-109.49	0.0	0.00
6009	[LSA115	115.00]	AMP	10399.7	-114.09	0.0	0.00
6010	[LSA34	34.500]	AMP	16057.0	-90.17	0.0	0.00
6011	[MDN230	230.00]	AMP	7679.6	-111.18	0.0	0.00
6012	[MDN115	115.00]	AMP	9421.6	-114.44	0.0	0.00
6013	[MDN34	34.500]	AMP	12800.2	-115.86	0.0	0.00
6014	[PRO230	230.00]	AMP	5925.1	-110.26	0.0	0.00
6015	[PRO115	115.00]	AMP	6775.5	-113.30	0.0	0.00
6016	[PRO34	34.500]	AMP	11227.3	-114.00	0.0	0.00
6018	[CAC115	115.00]	AMP	14742.5	-110.11	0.0	0.00

6087	[CAL115	115.00]	AMP	6496.1	-114.59	0.0	0.00
6179	[GUA230	230.00]	AMP	7004.8	-112.01	0.0	0.00
6182	[VEL230	230.00]	AMP	8293.9	-111.02	0.0	0.00
6240	[EHIG230	230.00]	AMP	5919.8	-111.75	0.0	0.00
6262	[CHA34	34.500]	AMP	7128.6	-117.31	0.0	0.00
6340	[CAN230	230.00]	AMP	4317.6	-111.53	0.0	0.00
6370	[BOQIII34B	34.500]	AMP	18710.3	-113.77	0.0	0.00
6380	[BOQIII230	230.00]	AMP	6464.1	-110.79	0.0	0.00
6381	[BOQIII34	34.500]	AMP	18710.3	-113.77	0.0	0.00
6460	[ECO230	230.00]	AMP	6569.3	-110.93	0.0	0.00
6520	[SBA230	230.00]	AMP	6625.2	-112.22	0.0	0.00
6521	[SBA115	115.00]	AMP	3501.4	-121.14	0.0	0.00
6522	[SBA34	34.500]	AMP	4000.6	-122.35	3558.1	-122.68
6840	[PAN3 230	230.00]	AMP	8885.5	-107.68	0.0	0.00

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2025CA_MODMIN_SEC

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES
- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

				THREE PHASE FAULT		X----LG FAULT---X	
X----- BUS -----X				/I+/	AN(I+)	/3I0/	AN(I+)
6001	[PAN230	230.00]	AMP	7916.1	-101.43	0.0	0.00
6002	[PAN115	115.00]	AMP	13047.2	-103.62	0.0	0.00
6003	[PANII230	230.00]	AMP	7728.2	-101.79	95.5	55.39
6004	[PANII115	115.00]	AMP	11160.1	-106.67	0.0	0.00
6005	[CHO230	230.00]	AMP	7263.4	-103.30	0.0	0.00
6007	[CHO34	34.500]	AMP	21168.5	-114.55	0.0	0.00
6008	[LSA230	230.00]	AMP	7613.5	-105.58	0.0	0.00
6009	[LSA115	115.00]	AMP	9916.8	-110.70	0.0	0.00
6010	[LSA34	34.500]	AMP	16262.0	-87.44	0.0	0.00
6011	[MDN230	230.00]	AMP	7308.4	-108.35	0.0	0.00
6012	[MDN115	115.00]	AMP	9052.7	-112.33	0.0	0.00
6013	[MDN34	34.500]	AMP	11733.8	-115.92	0.0	0.00
6014	[PRO230	230.00]	AMP	5628.3	-107.86	0.0	0.00
6015	[PRO115	115.00]	AMP	6342.6	-111.66	0.0	0.00
6016	[PRO34	34.500]	AMP	10105.6	-114.29	0.0	0.00
6018	[CAC115	115.00]	AMP	12880.5	-103.70	0.0	0.00
6087	[CAL115	115.00]	AMP	6368.7	-112.08	0.0	0.00
6179	[GUA230	230.00]	AMP	6747.4	-108.84	0.0	0.00
6182	[VEL230	230.00]	AMP	7794.3	-107.46	0.0	0.00
6240	[EHIG230	230.00]	AMP	5579.8	-106.31	0.0	0.00
6262	[CHA34	34.500]	AMP	7190.1	-114.28	0.0	0.00
6340	[CAN230	230.00]	AMP	4241.0	-108.42	0.0	0.00
6370	[BOQIII34B	34.500]	AMP	18085.1	-111.52	0.0	0.00
6380	[BOQIII230	230.00]	AMP	6178.7	-108.17	0.0	0.00
6381	[BOQIII34	34.500]	AMP	18085.1	-111.52	0.0	0.00
6460	[ECO230	230.00]	AMP	6232.5	-106.89	0.0	0.00
6520	[SBA230	230.00]	AMP	6226.2	-108.43	0.0	0.00
6521	[SBA115	115.00]	AMP	3505.2	-117.28	0.0	0.00
6522	[SBA34	34.500]	AMP	4053.8	-118.60	3613.8	-118.96

6840 [PAN3 230 230.00] AMP 8051.7 -101.48 0.0 0.00

2. 2025 - ESTACIÓN LLUVIOSA

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2025CA_MODMAX_LLUV

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES

SEQUENCES

- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

			THREE PHASE FAULT		X----LG FAULT---X	
X-----	BUS	-----X	/I+/ AN(I+)	/3I0/ AN(I+)		
6001	[PAN230	230.00] AMP	7437.2	-109.85	2502.7	26.85
6002	[PAN115	115.00] AMP	12412.6	-112.43	118.2	33.11
6003	[PANII230	230.00] AMP	7333.7	-110.91	2578.4	26.31
6004	[PANII115	115.00] AMP	10782.4	-117.21	0.0	0.00
6005	[CHO230	230.00] AMP	7018.4	-110.50	2456.8	31.32
6007	[CHO34	34.500] AMP	21093.5	-125.62	494.1	-141.62
6008	[LSA230	230.00] AMP	8248.7	-105.37	2297.1	48.80
6009	[LSA115	115.00] AMP	10755.4	-110.96	0.0	0.00
6010	[LSA34	34.500] AMP	16748.3	-87.78	489.0	-95.11
6011	[MDN230	230.00] AMP	10274.6	-97.94	3222.5	61.07
6012	[MDN115	115.00] AMP	11738.7	-98.92	22.6	74.40
6013	[MDN34	34.500] AMP	14228.5	-98.34	494.1	-106.41
6014	[PRO230	230.00] AMP	6899.6	-94.41	6674.0	27.19
6015	[PRO115	115.00] AMP	7341.1	-96.79	0.0	0.00
6016	[PRO34	34.500] AMP	11648.7	-95.89	487.4	-99.34
6018	[CAC115	115.00] AMP	12270.8	-112.62	118.2	33.02
6087	[CAL115	115.00] AMP	8465.3	-96.28	22.8	78.22
6179	[GUA230	230.00] AMP	9730.4	-99.24	3282.2	61.30
6182	[VEL230	230.00] AMP	9442.3	-102.19	2439.1	58.62
6240	[EHIG230	230.00] AMP	5644.1	-111.89	2653.3	36.17
6262	[CHA34	34.500] AMP	7962.6	-99.26	0.0	0.00
6340	[CAN230	230.00] AMP	5178.2	-96.83	6665.2	28.28
6370	[BOQIII34B	34.500] AMP	25257.3	-96.02	0.0	0.00
6380	[BOQIII230	230.00] AMP	7877.1	-95.73	4470.6	52.84
6381	[BOQIII34	34.500] AMP	25257.3	-96.02	0.0	0.00
6460	[ECO230	230.00] AMP	6424.0	-111.05	2842.3	40.67
6520	[SBA230	230.00] AMP	7056.0	-105.67	2617.1	53.92
6521	[SBA115	115.00] AMP	3787.8	-114.58	0.0	0.00
6522	[SBA34	34.500] AMP	4898.7	-111.65	3999.8	-111.98
6840	[PAN3 230	230.00] AMP	7505.9	-109.96	2506.0	27.48

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2025CA_MODMEDAM_LLUV

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT

- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
 - LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
 - LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES
 - LOAD REPRESENTED IN +/-0 SEQUENCES
 - DC LINES AND FACTS DEVICES BLOCKED
 - IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

X----- BUS -----X			THREE PHASE FAULT		X----LG FAULT---X	
			/I+/	AN(I+)	/3I0/	AN(I+)
6001	[PAN230	230.00] AMP	5545.3	-103.64	2621.3	18.62
6002	[PAN115	115.00] AMP	9926.6	-106.17	119.4	30.30
6003	[PANII230	230.00] AMP	5476.9	-104.83	2706.6	17.71
6004	[PANIII115	115.00] AMP	8979.3	-111.63	0.0	0.00
6005	[CHO230	230.00] AMP	5473.8	-104.19	2567.1	23.91
6007	[CHO34	34.500] AMP	19629.9	-121.90	503.2	-143.73
6008	[LSA230	230.00] AMP	6825.2	-99.64	2373.9	44.13
6009	[LSA115	115.00] AMP	9687.9	-106.98	0.0	0.00
6010	[LSA34	34.500] AMP	16235.7	-86.52	495.8	-96.91
6011	[MDN230	230.00] AMP	9910.8	-96.38	3247.7	60.05
6012	[MDN115	115.00] AMP	11519.9	-98.51	22.8	74.38
6013	[MDN34	34.500] AMP	14013.9	-98.73	496.8	-105.66
6014	[PRO230	230.00] AMP	6896.5	-94.10	6659.4	26.70
6015	[PRO115	115.00] AMP	7344.0	-96.79	0.0	0.00
6016	[PRO34	34.500] AMP	11648.5	-96.09	488.3	-99.39
6018	[CAC115	115.00] AMP	9844.2	-106.40	119.4	30.22
6087	[CAL115	115.00] AMP	8410.0	-96.07	22.9	78.28
6179	[GUA230	230.00] AMP	9389.8	-97.65	3306.3	60.08
6182	[VEL230	230.00] AMP	8518.9	-98.21	2479.5	55.95
6240	[EHIG230	230.00] AMP	4822.1	-106.83	2756.2	29.62
6262	[CHA34	34.500] AMP	8025.0	-99.41	0.0	0.00
6340	[CAN230	230.00] AMP	5113.1	-96.47	6659.1	26.86
6370	[BOQIII34B	34.500] AMP	25206.0	-95.87	0.0	0.00
6380	[BOQIII230	230.00] AMP	7765.5	-95.03	4489.4	52.00
6381	[BOQIII34	34.500] AMP	25206.0	-95.87	0.0	0.00
6460	[ECO230	230.00] AMP	5109.0	-105.37	3002.0	33.09
6520	[SBA230	230.00] AMP	6386.6	-101.95	2676.2	50.33
6521	[SBA115	115.00] AMP	3739.6	-114.66	0.0	0.00
6522	[SBA34	34.500] AMP	4909.6	-112.92	4016.5	-113.43
6840	[PAN3 230	230.00] AMP	5563.5	-103.70	2627.5	19.15

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2025CA_MODMEDNOCT_LLUV

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
 - SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
 - SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
 - TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
 - LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
 - LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES
 - LOAD REPRESENTED IN +/-0 SEQUENCES
 - DC LINES AND FACTS DEVICES BLOCKED
 - IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

X----- BUS -----X			THREE PHASE FAULT		X----LG FAULT---X	
			/I+/	AN(I+)	/3I0/	AN(I+)
6001	[PAN230	230.00] AMP	6007.3	-108.65	2670.1	19.43
6002	[PAN115	115.00] AMP	10545.2	-111.30	121.4	29.85
6003	[PANII230	230.00] AMP	5955.7	-109.63	2751.4	18.81

6004	[PANII115	115.00]	AMP	9518.9	-116.09	0.0	0.00
6005	[CHO230	230.00]	AMP	5780.3	-109.22	2603.2	23.66
6007	[CHO34	34.500]	AMP	19634.9	-125.86	505.9	-146.27
6008	[LSA230	230.00]	AMP	6811.2	-104.59	2372.2	41.69
6009	[LSA115	115.00]	AMP	9439.4	-112.47	0.0	0.00
6010	[LSA34	34.500]	AMP	15869.7	-92.91	497.5	-103.11
6011	[MDN230	230.00]	AMP	9884.5	-97.53	3226.3	59.39
6012	[MDN115	115.00]	AMP	11337.9	-100.43	22.7	72.49
6013	[MDN34	34.500]	AMP	13474.1	-103.08	500.5	-110.26
6014	[PRO230	230.00]	AMP	7276.1	-94.88	6527.2	28.25
6015	[PRO115	115.00]	AMP	7220.6	-98.98	0.0	0.00
6016	[PRO34	34.500]	AMP	10650.7	-101.34	488.2	-104.80
6018	[CAC115	115.00]	AMP	10448.0	-111.49	121.4	29.78
6087	[CAL115	115.00]	AMP	8340.1	-98.06	22.9	76.31
6179	[GUA230	230.00]	AMP	9335.9	-98.38	3287.1	59.87
6182	[VEL230	230.00]	AMP	8415.9	-101.16	2461.6	54.37
6240	[EHIG230	230.00]	AMP	4889.1	-111.49	2780.0	27.92
6262	[CHA34	34.500]	AMP	8016.9	-99.45	0.0	0.00
6340	[CAN230	230.00]	AMP	5090.6	-96.82	6628.6	26.74
6370	[BOQIII34B	34.500]	AMP	24245.2	-98.21	0.0	0.00
6380	[BOQIII230	230.00]	AMP	7846.1	-96.13	4444.8	51.42
6381	[BOQIII34	34.500]	AMP	24245.2	-98.21	0.0	0.00
6460	[ECO230	230.00]	AMP	5177.5	-110.63	3030.7	30.90
6520	[SBA230	230.00]	AMP	6211.3	-105.53	2676.1	47.95
6521	[SBA115	115.00]	AMP	3610.6	-118.02	0.0	0.00
6522	[SBA34	34.500]	AMP	4508.6	-117.89	3823.6	-118.40
6840	[PAN3 230	230.00]	AMP	6042.1	-108.72	2672.8	19.96

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2025CA_MODMEDPM_LLUV

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES

SEQUENCES

- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

				THREE PHASE FAULT		X---LG FAULT---X	
X----- BUS -----X				/I+/	AN(I+)	/3I0/	AN(I+)
6001	[PAN230	230.00]	AMP	6216.5	-110.15	2611.5	19.65
6002	[PAN115	115.00]	AMP	10840.6	-112.76	119.3	29.03
6003	[PANII230	230.00]	AMP	6152.1	-111.17	2691.1	19.00
6004	[PANII115	115.00]	AMP	9669.7	-117.54	0.0	0.00
6005	[CHO230	230.00]	AMP	6000.3	-110.77	2550.1	24.23
6007	[CHO34	34.500]	AMP	20175.2	-127.36	499.2	-146.41
6008	[LSA230	230.00]	AMP	7130.6	-105.76	2344.9	42.79
6009	[LSA115	115.00]	AMP	9851.1	-113.31	0.0	0.00
6010	[LSA34	34.500]	AMP	16319.9	-92.84	495.0	-101.89
6011	[MDN230	230.00]	AMP	10151.3	-97.90	3208.9	59.97
6012	[MDN115	115.00]	AMP	11687.8	-100.42	22.7	72.85
6013	[MDN34	34.500]	AMP	14416.5	-102.44	499.5	-109.69
6014	[PRO230	230.00]	AMP	7465.5	-94.96	6492.3	29.45
6015	[PRO115	115.00]	AMP	7626.5	-98.67	0.0	0.00
6016	[PRO34	34.500]	AMP	11835.4	-100.28	487.6	-103.45
6018	[CAC115	115.00]	AMP	10736.0	-112.96	119.2	28.95
6087	[CAL115	115.00]	AMP	8453.4	-97.83	22.8	76.65

6179	[GUA230	230.00]	AMP	9502.3	-98.76	3275.2	60.35
6182	[VEL230	230.00]	AMP	8748.2	-102.11	2442.1	55.17
6240	[EHIG230	230.00]	AMP	5063.6	-112.82	2730.8	29.09
6262	[CHA34	34.500]	AMP	8023.2	-99.37	0.0	0.00
6340	[CAN230	230.00]	AMP	5124.1	-96.87	6629.7	27.37
6370	[BOQIII34B	34.500]	AMP	25427.0	-97.81	0.0	0.00
6380	[BOQIII230	230.00]	AMP	8061.9	-96.24	4411.7	52.25
6381	[BOQIII34	34.500]	AMP	25427.0	-97.81	0.0	0.00
6460	[ECO230	230.00]	AMP	5325.3	-111.55	2983.0	32.25
6520	[SBA230	230.00]	AMP	6521.7	-106.48	2639.5	49.14
6521	[SBA115	115.00]	AMP	3726.1	-117.98	0.0	0.00
6522	[SBA34	34.500]	AMP	4889.2	-117.18	3998.0	-117.62
6840	[PAN3 230	230.00]	AMP	6253.8	-110.23	2614.7	20.21

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2025CA_MODMIN_LUV

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0

SEQUENCES

- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

				THREE PHASE FAULT		X----LG FAULT---X	
X----- BUS -----X				/I+/	AN(I+)	/3I0/	AN(I+)
6001	[PAN230	230.00]	AMP	3807.5	-90.52	0.0	0.00
6002	[PAN115	115.00]	AMP	7219.9	-92.82	0.0	0.00
6003	[PANII230	230.00]	AMP	3698.3	-91.50	99.2	35.85
6004	[PANII115	115.00]	AMP	6676.0	-97.38	0.0	0.00
6005	[CHO230	230.00]	AMP	3945.7	-90.92	0.0	0.00
6007	[CHO34	34.500]	AMP	17133.0	-109.92	0.0	0.00
6008	[LSA230	230.00]	AMP	5392.9	-87.86	0.0	0.00
6009	[LSA115	115.00]	AMP	8289.0	-97.86	0.0	0.00
6010	[LSA34	34.500]	AMP	15616.5	-82.39	0.0	0.00
6011	[MDN230	230.00]	AMP	9406.0	-89.37	0.0	0.00
6012	[MDN115	115.00]	AMP	11154.7	-94.31	0.0	0.00
6013	[MDN34	34.500]	AMP	13551.9	-97.66	0.0	0.00
6014	[PRO230	230.00]	AMP	7080.6	-89.39	0.0	0.00
6015	[PRO115	115.00]	AMP	7143.6	-94.07	0.0	0.00
6016	[PRO34	34.500]	AMP	10628.2	-96.77	0.0	0.00
6018	[CAC115	115.00]	AMP	7183.0	-93.04	0.0	0.00
6087	[CAL115	115.00]	AMP	8298.4	-92.48	0.0	0.00
6179	[GUA230	230.00]	AMP	8912.6	-90.25	0.0	0.00
6182	[VEL230	230.00]	AMP	7370.5	-87.68	0.0	0.00
6240	[EHIG230	230.00]	AMP	3843.9	-94.56	0.0	0.00
6262	[CHA34	34.500]	AMP	8014.2	-95.31	0.0	0.00
6340	[CAN230	230.00]	AMP	5011.5	-91.30	0.0	0.00
6370	[BOQIII34B	34.500]	AMP	24106.7	-93.03	0.0	0.00
6380	[BOQIII230	230.00]	AMP	7618.7	-89.76	0.0	0.00
6381	[BOQIII34	34.500]	AMP	24106.7	-93.03	0.0	0.00
6460	[ECO230	230.00]	AMP	4184.3	-93.92	0.0	0.00
6520	[SBA230	230.00]	AMP	5481.3	-91.93	0.0	0.00
6521	[SBA115	115.00]	AMP	3591.9	-110.95	0.0	0.00
6522	[SBA34	34.500]	AMP	4544.9	-112.97	3863.0	-113.84
6840	[PAN3 230	230.00]	AMP	3820.0	-90.52	0.0	0.00

3. 2026 ESTACIÓN SECA

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2026CA_MODMAX_SEC

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0

SEQUENCES

- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

				THREE PHASE FAULT		X----LG FAULT---X	
X----- BUS -----X				/I+/	AN(I+)	/3I0/	AN(I+)
6001	[PAN230	230.00]	AMP	8731.3	-87.43	2468.4	54.24
6002	[PAN115	115.00]	AMP	14776.6	-90.26	119.4	59.03
6003	[PANII230	230.00]	AMP	8384.6	-88.23	2546.4	53.47
6004	[PANII115	115.00]	AMP	12058.8	-94.72	0.0	0.00
6005	[CHO230	230.00]	AMP	7937.4	-89.15	2436.5	57.18
6007	[CHO34	34.500]	AMP	23061.3	-102.57	502.4	-116.42
6008	[LSA230	230.00]	AMP	8313.5	-88.18	2284.6	68.27
6009	[LSA115	115.00]	AMP	10878.9	-92.47	0.0	0.00
6010	[LSA34	34.500]	AMP	17293.0	-67.58	497.9	-74.33
6011	[MDN230	230.00]	AMP	7648.5	-89.80	3336.8	65.91
6012	[MDN115	115.00]	AMP	9483.1	-92.84	23.1	78.54
6013	[MDN34	34.500]	AMP	12634.3	-93.27	493.2	-102.48
6014	[PRO230	230.00]	AMP	5763.0	-88.50	6665.2	29.85
6015	[PRO115	115.00]	AMP	6705.1	-90.46	0.0	0.00
6016	[PRO34	34.500]	AMP	11227.3	-88.84	489.6	-92.98
6018	[CAC115	115.00]	AMP	14594.3	-90.45	119.4	58.95
6087	[CAL115	115.00]	AMP	6541.1	-93.31	23.1	79.45
6179	[GUA230	230.00]	AMP	6850.2	-91.09	3487.6	65.03
6182	[VEL230	230.00]	AMP	8292.5	-89.75	2463.3	70.90
6240	[EHIG230	230.00]	AMP	6013.4	-91.84	2637.2	59.44
6262	[CHA34	34.500]	AMP	7341.2	-96.97	0.0	0.00
6340	[CAN230	230.00]	AMP	4326.7	-91.06	6881.5	27.93
6370	[BOQIII34B	34.500]	AMP	22898.7	-91.51	0.0	0.00
6380	[BOQIII230	230.00]	AMP	6470.3	-89.19	4545.9	56.78
6381	[BOQIII34	34.500]	AMP	22898.7	-91.51	0.0	0.00
6460	[ECO230	230.00]	AMP	6631.8	-90.28	2778.5	64.18
6520	[SBA230	230.00]	AMP	6727.7	-91.06	2599.9	69.21
6521	[SBA115	115.00]	AMP	3741.5	-99.16	0.0	0.00
6522	[SBA34	34.500]	AMP	4728.9	-95.53	3911.6	-95.88
6840	[PAN3 230	230.00]	AMP	8814.4	-87.45	2467.1	54.74

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2026CA_MODMEDAM_SEC

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0

SEQUENCES

- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

X----- BUS -----X				THREE PHASE FAULT		X----LG FAULT---X	
				/I+/	AN(I+)	/3I0/	AN(I+)
6001	[PAN230	230.00]	AMP	7100.8	-83.41	2578.7	49.97
6002	[PAN115	115.00]	AMP	12003.0	-86.09	123.9	57.59
6003	[PANII230	230.00]	AMP	6865.5	-84.31	2660.4	49.09
6004	[PANIII115	115.00]	AMP	10483.0	-90.96	0.0	0.00
6005	[CHO230	230.00]	AMP	6775.0	-85.31	2541.8	53.50
6007	[CHO34	34.500]	AMP	21956.8	-100.51	517.3	-117.26
6008	[LSA230	230.00]	AMP	7660.1	-85.56	2374.0	66.11
6009	[LSA115	115.00]	AMP	10444.7	-90.94	0.0	0.00
6010	[LSA34	34.500]	AMP	17336.7	-67.44	506.8	-75.46
6011	[MDN230	230.00]	AMP	7632.3	-88.89	3390.8	65.61
6012	[MDN115	115.00]	AMP	9494.9	-92.46	23.5	79.05
6013	[MDN34	34.500]	AMP	12914.5	-93.29	496.1	-101.06
6014	[PRO230	230.00]	AMP	6050.6	-88.08	6620.8	31.99
6015	[PRO115	115.00]	AMP	6898.7	-90.33	0.0	0.00
6016	[PRO34	34.500]	AMP	11379.5	-89.06	492.3	-92.81
6018	[CAC115	115.00]	AMP	11877.1	-86.29	123.9	57.51
6087	[CAL115	115.00]	AMP	6579.2	-92.79	23.4	80.05
6179	[GUA230	230.00]	AMP	6800.3	-90.18	3550.8	64.33
6182	[VEL230	230.00]	AMP	7995.9	-87.95	2527.5	69.67
6240	[EHIG230	230.00]	AMP	5536.5	-89.16	2748.2	56.33
6262	[CHA34	34.500]	AMP	7365.7	-96.86	0.0	0.00
6340	[CAN230	230.00]	AMP	4335.6	-90.63	6945.3	27.05
6370	[BOQIII34B	34.500]	AMP	23134.4	-91.16	0.0	0.00
6380	[BOQIII230	230.00]	AMP	6595.4	-88.57	4568.8	57.05
6381	[BOQIII34	34.500]	AMP	23134.4	-91.16	0.0	0.00
6460	[ECO230	230.00]	AMP	6187.7	-87.99	2887.7	61.17
6520	[SBA230	230.00]	AMP	6489.9	-89.42	2680.1	67.52
6521	[SBA115	115.00]	AMP	3766.2	-99.37	0.0	0.00
6522	[SBA34	34.500]	AMP	4768.1	-96.67	3948.6	-97.10
6840	[PAN3 230	230.00]	AMP	7167.4	-83.44	2577.5	50.49

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2026CA_MODMEDNOCT_SEC

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0

SEQUENCES

- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

				THREE PHASE FAULT		X----LG FAULT---X	
X----- BUS -----X				/I+/ AN(I+)		/3I0/ AN(I+)	
6001	[PAN230	230.00]	AMP	9190.2	-88.37	2499.6	58.76
6002	[PAN115	115.00]	AMP	15437.0	-91.03	118.7	63.28
6003	[PANI230	230.00]	AMP	8828.8	-88.86	2574.9	58.19
6004	[PANI115	115.00]	AMP	12447.8	-94.62	0.0	0.00
6005	[CHO230	230.00]	AMP	8327.8	-90.26	2438.3	60.76
6007	[CHO34	34.500]	AMP	22877.3	-102.69	493.6	-115.10
6008	[LSA230	230.00]	AMP	8699.9	-91.84	2242.3	67.87
6009	[LSA115	115.00]	AMP	10755.9	-97.42	0.0	0.00

6010	[LSA34	34.500]	AMP	16845.5	-74.41	488.5	-80.54
6011	[MDN230	230.00]	AMP	9202.2	-92.77	3154.4	66.96
6012	[MDN115	115.00]	AMP	10035.5	-96.67	22.7	76.75
6013	[MDN34	34.500]	AMP	11935.9	-99.96	483.6	-107.45
6014	[PRO230	230.00]	AMP	6185.6	-91.89	6476.8	30.59
6015	[PRO115	115.00]	AMP	6659.2	-95.76	0.0	0.00
6016	[PRO34	34.500]	AMP	10300.0	-98.29	489.9	-102.16
6018	[CAC115	115.00]	AMP	15226.6	-91.16	118.7	63.22
6087	[CAL115	115.00]	AMP	6673.3	-96.09	22.8	77.55
6179	[GUA230	230.00]	AMP	8633.9	-93.39	3240.8	67.80
6182	[VEL230	230.00]	AMP	9249.1	-92.97	2374.9	70.89
6240	[EHIG230	230.00]	AMP	6140.2	-93.40	2623.8	61.00
6262	[CHA34	34.500]	AMP	7237.2	-97.11	0.0	0.00
6340	[CAN230	230.00]	AMP	4803.8	-91.97	6485.5	34.66
6370	[BOQIII34B	34.500]	AMP	22529.8	-95.91	0.0	0.00
6380	[BOQIII230	230.00]	AMP	7111.1	-92.29	4352.4	56.82
6381	[BOQIII34	34.500]	AMP	22529.8	-95.91	0.0	0.00
6460	[ECO230	230.00]	AMP	6841.8	-93.67	2768.2	63.91
6520	[SBA230	230.00]	AMP	7006.5	-94.37	2539.6	68.47
6521	[SBA115	115.00]	AMP	3574.5	-103.05	0.0	0.00
6522	[SBA34	34.500]	AMP	4039.3	-104.08	3588.5	-104.38
6840	[PAN3 230	230.00]	AMP	9295.5	-88.40	2494.8	59.21

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

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PLAN DE EXPANSION ETESA 2020-2034

2026CA_MODMEDPM_SEC

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES

SEQUENCES

- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

				THREE PHASE FAULT		X----LG FAULT---X	
X----- BUS -----X				/I+/	AN(I+)	/3I0/	AN(I+)
6001	[PAN230	230.00]	AMP	8580.7	-85.24	2536.4	56.90
6002	[PAN115	115.00]	AMP	14002.0	-88.01	122.3	61.99
6003	[PANII230	230.00]	AMP	8298.8	-85.91	2614.4	56.30
6004	[PANII115	115.00]	AMP	11916.8	-92.14	0.0	0.00
6005	[CHO230	230.00]	AMP	7871.7	-87.44	2495.5	59.34
6007	[CHO34	34.500]	AMP	23187.2	-101.02	511.9	-114.62
6008	[LSA230	230.00]	AMP	8379.9	-88.48	2308.3	68.86
6009	[LSA115	115.00]	AMP	10901.9	-93.56	0.0	0.00
6010	[LSA34	34.500]	AMP	17527.8	-69.52	501.9	-75.93
6011	[MDN230	230.00]	AMP	7933.9	-90.82	3305.2	66.08
6012	[MDN115	115.00]	AMP	9635.9	-94.13	23.1	78.10
6013	[MDN34	34.500]	AMP	12508.9	-95.41	504.6	-103.49
6014	[PRO230	230.00]	AMP	6120.2	-90.09	6558.0	31.52
6015	[PRO115	115.00]	AMP	6927.7	-93.11	0.0	0.00
6016	[PRO34	34.500]	AMP	11388.6	-93.76	490.0	-97.51
6018	[CAC115	115.00]	AMP	13820.0	-88.17	122.3	61.91
6087	[CAL115	115.00]	AMP	6596.5	-94.15	23.1	79.02
6179	[GUA230	230.00]	AMP	7192.7	-91.69	3428.5	65.85
6182	[VEL230	230.00]	AMP	8544.0	-90.41	2449.4	71.28
6240	[EHIG230	230.00]	AMP	6027.3	-90.89	2687.6	60.81
6262	[CHA34	34.500]	AMP	7169.5	-97.01	0.0	0.00
6340	[CAN230	230.00]	AMP	4423.3	-91.33	6778.8	29.81

6370	[BOQIII34B	34.500]	AMP	23255.7	-93.54	0.0	0.00
6380	[BOQIII230	230.00]	AMP	6731.3	-90.53	4484.7	56.86
6381	[BOQIII34	34.500]	AMP	23255.7	-93.54	0.0	0.00
6460	[ECO230	230.00]	AMP	6662.1	-90.09	2820.6	64.94
6520	[SBA230	230.00]	AMP	6848.0	-91.65	2603.8	69.46
6521	[SBA115	115.00]	AMP	3785.1	-100.16	0.0	0.00
6522	[SBA34	34.500]	AMP	4811.2	-98.65	3978.5	-98.98
6840	[PAN3 230	230.00]	AMP	8693.0	-85.28	2532.7	57.43

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

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PLAN DE EXPANSION ETESA 2020-2034

2026CA_MODMIN_SEC

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES
- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

				THREE PHASE FAULT		X----LG FAULT---X	
X-----	BUS	-----X		/I+/	AN(I+)	/3I0/	AN(I+)
6001	[PAN230	230.00]	AMP	8016.1	-84.85	2608.5	62.55
6002	[PAN115	115.00]	AMP	13399.6	-87.24	119.3	68.20
6003	[PANII230	230.00]	AMP	7792.0	-85.24	2681.8	62.14
6004	[PANIII115	115.00]	AMP	11355.5	-90.43	0.0	0.00
6005	[CHO230	230.00]	AMP	7337.3	-86.84	2548.6	63.98
6007	[CHO34	34.500]	AMP	21984.5	-98.36	501.1	-110.34
6008	[LSA230	230.00]	AMP	7723.6	-89.23	2354.3	69.61
6009	[LSA115	115.00]	AMP	10017.1	-94.49	0.0	0.00
6010	[LSA34	34.500]	AMP	16597.0	-71.20	506.1	-77.62
6011	[MDN230	230.00]	AMP	7528.6	-92.04	3352.8	65.12
6012	[MDN115	115.00]	AMP	9195.4	-96.08	23.0	77.12
6013	[MDN34	34.500]	AMP	11890.3	-99.58	487.4	-105.43
6014	[PRO230	230.00]	AMP	5827.3	-91.65	6692.9	28.05
6015	[PRO115	115.00]	AMP	6471.1	-95.55	0.0	0.00
6016	[PRO34	34.500]	AMP	10273.9	-98.18	492.3	-101.74
6018	[CAC115	115.00]	AMP	13222.8	-87.33	119.3	68.14
6087	[CAL115	115.00]	AMP	6428.8	-95.72	23.1	77.96
6179	[GUA230	230.00]	AMP	6927.5	-92.48	3460.8	65.25
6182	[VEL230	230.00]	AMP	7975.1	-91.14	2488.8	71.12
6240	[EHIG230	230.00]	AMP	5648.6	-89.99	2758.4	63.59
6262	[CHA34	34.500]	AMP	7228.0	-97.57	0.0	0.00
6340	[CAN230	230.00]	AMP	4342.1	-91.95	6845.7	28.56
6370	[BOQIII34B	34.500]	AMP	21889.0	-95.51	0.0	0.00
6380	[BOQIII230	230.00]	AMP	6395.5	-91.93	4581.9	54.89
6381	[BOQIII34	34.500]	AMP	21889.0	-95.51	0.0	0.00
6460	[ECO230	230.00]	AMP	6313.9	-90.60	2909.8	65.83
6520	[SBA230	230.00]	AMP	6335.5	-92.15	2668.1	69.20
6521	[SBA115	115.00]	AMP	3541.3	-101.13	0.0	0.00
6522	[SBA34	34.500]	AMP	4078.0	-102.46	3634.5	-102.82
6840	[PAN3 230	230.00]	AMP	8122.4	-84.88	2601.6	62.99

4. 2026 - ESTACIÓN LLUVIOSA

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

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PLAN DE EXPANSION ETESA 2020-2034

2026CA_MODMAX_LLUV

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES

SEQUENCES

- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

				THREE PHASE FAULT		X----LG FAULT---X	
X----- BUS -----X				/I+/ AN(I+)		/3I0/ AN(I+)	
6001	[PAN230	230.00]	AMP	6796.6	-107.90	2308.8	21.56
6002	[PAN115	115.00]	AMP	11761.7	-110.58	116.5	31.56
6003	[PANII230	230.00]	AMP	6670.7	-108.99	2380.6	20.53
6004	[PANII115	115.00]	AMP	10143.0	-115.83	0.0	0.00
6005	[CHO230	230.00]	AMP	6554.0	-108.59	2254.9	26.77
6007	[CHO34	34.500]	AMP	20792.0	-124.87	489.2	-142.66
6008	[LSA230	230.00]	AMP	7984.5	-103.46	1956.9	48.57
6009	[LSA115	115.00]	AMP	10636.3	-109.54	0.0	0.00
6010	[LSA34	34.500]	AMP	16951.6	-86.19	478.6	-93.72
6011	[MDN230	230.00]	AMP	9692.9	-96.07	2565.5	63.99
6012	[MDN115	115.00]	AMP	11426.9	-97.34	22.4	75.60
6013	[MDN34	34.500]	AMP	14042.2	-96.87	489.5	-104.88
6014	[PRO230	230.00]	AMP	8450.8	-94.63	3350.1	59.90
6015	[PRO115	115.00]	AMP	8053.1	-97.23	0.0	0.00
6016	[PRO34	34.500]	AMP	12079.1	-96.07	485.5	-99.17
6018	[CAC115	115.00]	AMP	11650.8	-110.78	116.5	31.50
6087	[CAL115	115.00]	AMP	8347.9	-95.00	22.7	79.36
6179	[GUA230	230.00]	AMP	8391.6	-97.46	2718.7	62.05
6182	[VEL230	230.00]	AMP	8899.7	-100.29	2053.4	59.08
6240	[EHIG230	230.00]	AMP	5407.2	-110.55	2188.0	35.66
6262	[CHA34	34.500]	AMP	7893.7	-98.96	0.0	0.00
6340	[CAN230	230.00]	AMP	4838.0	-95.98	0.0	0.00
6370	[BOQIII34B	34.500]	AMP	25062.7	-95.51	0.0	0.00
6380	[BOQIII230	230.00]	AMP	7725.6	-95.51	3161.8	60.93
6381	[BOQIII34	34.500]	AMP	25062.7	-95.51	0.0	0.00
6460	[ECO230	230.00]	AMP	6206.1	-109.57	2356.7	40.40
6520	[SBA230	230.00]	AMP	6794.7	-103.97	2181.7	54.50
6521	[SBA115	115.00]	AMP	3818.0	-112.17	0.0	0.00
6522	[SBA34	34.500]	AMP	5492.8	-105.32	4195.3	-105.68
6840	[PAN3 230	230.00]	AMP	6831.7	-107.92	2310.0	21.95

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

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PLAN DE EXPANSION ETESA 2020-2034

2026CA_MODMEDAM_LLUV

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES

- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-/0 SEQUENCES

- LOAD REPRESENTED IN +/-/0 SEQUENCES

- DC LINES AND FACTS DEVICES BLOCKED

- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

X----- BUS -----X				THREE PHASE FAULT		X----LG FAULT---X	
				/I+/ AN(I+)		/3I0/ AN(I+)	
6001	[PAN230	230.00]	AMP	5200.2	-98.51	2414.0	16.00
6002	[PAN115	115.00]	AMP	9571.8	-101.13	118.6	31.42
6003	[PANII230	230.00]	AMP	5093.8	-99.72	2487.7	14.54
6004	[PANII115	115.00]	AMP	8548.3	-106.85	0.0	0.00
6005	[CHO230	230.00]	AMP	5233.9	-99.13	2363.5	21.91
6007	[CHO34	34.500]	AMP	20100.0	-118.05	497.1	-142.25
6008	[LSA230	230.00]	AMP	6720.7	-95.04	2061.3	45.83
6009	[LSA115	115.00]	AMP	9798.2	-103.04	0.0	0.00
6010	[LSA34	34.500]	AMP	16987.9	-82.89	494.9	-93.81
6011	[MDN230	230.00]	AMP	9374.8	-93.02	2612.4	63.94
6012	[MDN115	115.00]	AMP	11324.4	-95.58	22.7	76.69
6013	[MDN34	34.500]	AMP	14220.1	-95.80	492.9	-102.80
6014	[PRO230	230.00]	AMP	8101.3	-92.84	3413.2	59.48
6015	[PRO115	115.00]	AMP	7937.4	-96.19	0.0	0.00
6016	[PRO34	34.500]	AMP	12044.9	-95.51	489.0	-98.69
6018	[CAC115	115.00]	AMP	9504.6	-101.36	118.6	31.36
6087	[CAL115	115.00]	AMP	8345.0	-93.52	22.9	80.60
6179	[GUA230	230.00]	AMP	8348.1	-94.14	2756.5	62.29
6182	[VEL230	230.00]	AMP	8175.1	-94.23	2119.0	57.87
6240	[EHIG230	230.00]	AMP	4719.3	-102.46	2301.5	31.78
6262	[CHA34	34.500]	AMP	7944.4	-98.30	0.0	0.00
6340	[CAN230	230.00]	AMP	4853.2	-94.26	0.0	0.00
6370	[BOQIII34B	34.500]	AMP	24988.3	-94.31	0.0	0.00
6380	[BOQIII230	230.00]	AMP	7529.9	-93.46	3214.7	60.76
6381	[BOQIII34	34.500]	AMP	24988.3	-94.31	0.0	0.00
6460	[ECO230	230.00]	AMP	5038.5	-101.00	2515.3	35.36
6520	[SBA230	230.00]	AMP	6266.6	-98.02	2267.4	52.57
6521	[SBA115	115.00]	AMP	3838.3	-110.68	0.0	0.00
6522	[SBA34	34.500]	AMP	5555.6	-105.45	4250.6	-105.99
6840	[PAN3 230	230.00]	AMP	5216.3	-98.50	2415.8	16.36

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

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PLAN DE EXPANSION ETESA 2020-2034

2026CA_MODMEDNOCT_LLUV

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION

- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION

- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT

- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED

- LINE CHARGING REPRESENTED IN +/-/0 SEQUENCES

- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-/0 SEQUENCES

- LOAD REPRESENTED IN +/-/0 SEQUENCES

- DC LINES AND FACTS DEVICES BLOCKED

- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

X----- BUS -----X				THREE PHASE FAULT		X----LG FAULT---X	
				/I+/ AN(I+)		/3I0/ AN(I+)	
6001	[PAN230	230.00]	AMP	6330.9	-108.47	2432.7	18.92
6002	[PAN115	115.00]	AMP	11274.7	-111.22	119.0	30.84
6003	[PANII230	230.00]	AMP	6259.8	-109.48	2501.4	17.99
6004	[PANII115	115.00]	AMP	9792.2	-116.17	0.0	0.00
6005	[CHO230	230.00]	AMP	6054.9	-109.29	2367.8	23.12

6007	[CHO34	34.500]	AMP	20040.6	-126.21	495.9	-146.02
6008	[LSA230	230.00]	AMP	7014.3	-104.84	2061.0	42.65
6009	[LSA115	115.00]	AMP	9598.6	-112.74	0.0	0.00
6010	[LSA34	34.500]	AMP	16072.9	-92.88	494.6	-102.62
6011	[MDN230	230.00]	AMP	10604.2	-97.75	2563.7	62.41
6012	[MDN115	115.00]	AMP	11644.9	-100.48	22.8	72.98
6013	[MDN34	34.500]	AMP	13641.8	-102.74	499.2	-109.47
6014	[PRO230	230.00]	AMP	8616.5	-97.01	3359.9	57.34
6015	[PRO115	115.00]	AMP	7815.6	-101.31	0.0	0.00
6016	[PRO34	34.500]	AMP	11011.6	-103.48	488.1	-106.67
6018	[CAC115	115.00]	AMP	11173.7	-111.42	118.9	30.79
6087	[CAL115	115.00]	AMP	8438.6	-97.93	22.9	76.64
6179	[GUA230	230.00]	AMP	9563.8	-98.48	2691.9	61.78
6182	[VEL230	230.00]	AMP	8648.1	-101.44	2096.9	55.31
6240	[EHIG230	230.00]	AMP	5029.2	-111.69	2304.9	30.58
6262	[CHA34	34.500]	AMP	7970.0	-99.51	0.0	0.00
6340	[CAN230	230.00]	AMP	5138.3	-96.80	0.0	0.00
6370	[BOQIII34B	34.500]	AMP	24376.3	-99.17	0.0	0.00
6380	[BOQIII230	230.00]	AMP	8013.5	-97.78	3166.8	58.67
6381	[BOQIII34	34.500]	AMP	24376.3	-99.17	0.0	0.00
6460	[ECO230	230.00]	AMP	5313.4	-110.83	2537.6	33.15
6520	[SBA230	230.00]	AMP	6346.5	-105.75	2264.5	49.21
6521	[SBA115	115.00]	AMP	3623.6	-117.89	0.0	0.00
6522	[SBA34	34.500]	AMP	4499.8	-117.65	3814.2	-118.13
6840	[PAN3 230	230.00]	AMP	6361.7	-108.46	2431.9	19.27

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2026CA_MODMEDPM_LLUV

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES

SEQUENCES

- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

				THREE PHASE FAULT		X----LG FAULT---X	
X-----	BUS	-----X		/I+/	AN(I+)	/3I0/	AN(I+)
6001	[PAN230	230.00]	AMP	6010.0	-109.82	2427.6	14.93
6002	[PAN115	115.00]	AMP	10960.7	-112.52	118.4	27.46
6003	[PANII230	230.00]	AMP	5904.8	-110.77	2499.6	13.86
6004	[PANII115	115.00]	AMP	9493.2	-117.56	0.0	0.00
6005	[CHO230	230.00]	AMP	5902.2	-110.63	2364.0	19.93
6007	[CHO34	34.500]	AMP	20795.4	-128.22	493.2	-148.29
6008	[LSA230	230.00]	AMP	7334.5	-106.08	2024.8	41.95
6009	[LSA115	115.00]	AMP	10176.9	-114.25	0.0	0.00
6010	[LSA34	34.500]	AMP	17072.8	-93.88	489.9	-102.66
6011	[MDN230	230.00]	AMP	11000.8	-98.15	2539.4	62.66
6012	[MDN115	115.00]	AMP	12023.3	-100.50	22.7	73.21
6013	[MDN34	34.500]	AMP	14567.4	-102.12	497.0	-108.99
6014	[PRO230	230.00]	AMP	8922.3	-97.19	3327.5	57.90
6015	[PRO115	115.00]	AMP	8267.1	-101.11	0.0	0.00
6016	[PRO34	34.500]	AMP	12220.0	-102.51	487.4	-105.42
6018	[CAC115	115.00]	AMP	10872.8	-112.74	118.4	27.41
6087	[CAL115	115.00]	AMP	8551.0	-97.59	22.8	77.03
6179	[GUA230	230.00]	AMP	9905.0	-98.98	2665.5	61.95

6182	[VEL230	230.00]	AMP	9054.2	-102.42	2064.5	55.10
6240	[EHIG230	230.00]	AMP	5073.8	-113.20	2280.7	28.71
6262	[CHA34	34.500]	AMP	7980.9	-99.52	0.0	0.00
6340	[CAN230	230.00]	AMP	5197.3	-97.00	0.0	0.00
6370	[BOQIII34B	34.500]	AMP	25576.5	-98.87	0.0	0.00
6380	[BOQIII230	230.00]	AMP	8280.3	-97.98	3133.8	59.15
6381	[BOQIII34	34.500]	AMP	25576.5	-98.87	0.0	0.00
6460	[ECO230	230.00]	AMP	5393.8	-111.98	2492.6	32.03
6520	[SBA230	230.00]	AMP	6703.9	-106.99	2216.8	49.09
6521	[SBA115	115.00]	AMP	3882.9	-118.49	0.0	0.00
6522	[SBA34	34.500]	AMP	5632.5	-116.88	4303.7	-117.29
6840	[PAN3 230	230.00]	AMP	6025.1	-109.82	2428.1	15.25

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2026CA_MODMIN_LUV

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES

SEQUENCES

- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

				THREE PHASE FAULT		X----LG FAULT---X	
X----- BUS -----X				/I+/	AN(I+)	/3I0/	AN(I+)
6001	[PAN230	230.00]	AMP	3803.8	-95.24	2418.9	8.19
6002	[PAN115	115.00]	AMP	7293.8	-97.70	116.3	30.93
6003	[PANII230	230.00]	AMP	3700.8	-96.23	2477.9	6.28
6004	[PANII115	115.00]	AMP	6626.3	-102.39	0.0	0.00
6005	[CHO230	230.00]	AMP	3945.0	-95.69	2359.1	14.31
6007	[CHO34	34.500]	AMP	16822.0	-114.58	488.0	-144.83
6008	[LSA230	230.00]	AMP	5497.4	-92.67	2060.2	39.39
6009	[LSA115	115.00]	AMP	8277.8	-102.69	0.0	0.00
6010	[LSA34	34.500]	AMP	15168.8	-86.58	491.9	-101.40
6011	[MDN230	230.00]	AMP	10161.8	-93.78	2570.1	62.32
6012	[MDN115	115.00]	AMP	11455.6	-98.38	22.9	74.32
6013	[MDN34	34.500]	AMP	13790.3	-101.23	495.9	-106.64
6014	[PRO230	230.00]	AMP	8449.8	-94.76	3366.4	57.36
6015	[PRO115	115.00]	AMP	7755.2	-100.01	0.0	0.00
6016	[PRO34	34.500]	AMP	10979.2	-102.63	489.4	-105.70
6018	[CAC115	115.00]	AMP	7254.0	-97.90	116.3	30.89
6087	[CAL115	115.00]	AMP	8387.7	-96.24	23.0	78.04
6179	[GUA230	230.00]	AMP	9178.0	-94.52	2695.5	61.26
6182	[VEL230	230.00]	AMP	7603.1	-92.37	2093.3	54.02
6240	[EHIG230	230.00]	AMP	3832.5	-99.30	2305.9	24.29
6262	[CHA34	34.500]	AMP	8025.4	-99.19	0.0	0.00
6340	[CAN230	230.00]	AMP	5059.7	-95.12	0.0	0.00
6370	[BOQIII34B	34.500]	AMP	24241.7	-97.93	0.0	0.00
6380	[BOQIII230	230.00]	AMP	7831.8	-95.22	3172.2	58.63
6381	[BOQIII34	34.500]	AMP	24241.7	-97.93	0.0	0.00
6460	[ECO230	230.00]	AMP	4195.0	-98.69	2525.9	27.36
6520	[SBA230	230.00]	AMP	5563.0	-96.57	2261.6	47.01
6521	[SBA115	115.00]	AMP	3532.4	-114.65	0.0	0.00
6522	[SBA34	34.500]	AMP	4486.3	-116.49	3809.9	-117.27
6840	[PAN3 230	230.00]	AMP	3817.9	-95.21	2418.8	8.53

5. 2027 ESTACIÓN SECA

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2027CA_MODMAX_SEC

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0

SEQUENCES

- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

				THREE PHASE FAULT		X----LG FAULT---X	
X----- BUS -----X				/I+/	AN(I+)	/3I0/	AN(I+)
6001	[PAN230	230.00]	AMP	6972.4	-87.01	2576.3	36.75
6002	[PAN115	115.00]	AMP	12281.6	-89.91	121.0	48.83
6003	[PANII230	230.00]	AMP	6693.4	-88.15	2662.4	35.05
6004	[PANII115	115.00]	AMP	10400.1	-95.55	0.0	0.00
6005	[CHO230	230.00]	AMP	6854.3	-88.35	2516.6	42.42
6007	[CHO34	34.500]	AMP	22046.4	-106.11	508.6	-125.24
6008	[LSA230	230.00]	AMP	8614.4	-85.87	2162.2	64.68
6009	[LSA115	115.00]	AMP	11638.0	-91.83	0.0	0.00
6010	[LSA34	34.500]	AMP	19282.1	-68.30	501.0	-75.92
6011	[MDN230	230.00]	AMP	8582.7	-89.27	2900.6	67.60
6012	[MDN115	115.00]	AMP	10034.4	-92.97	23.2	78.35
6013	[MDN34	34.500]	AMP	12981.4	-93.55	492.7	-103.02
6014	[PRO230	230.00]	AMP	7213.0	-89.57	3870.6	60.09
6015	[PRO115	115.00]	AMP	7549.6	-92.07	0.0	0.00
6016	[PRO34	34.500]	AMP	11817.5	-90.31	491.0	-94.09
6018	[CAC115	115.00]	AMP	12171.5	-90.14	120.9	48.77
6087	[CAL115	115.00]	AMP	6735.2	-93.39	23.2	79.30
6179	[GUA230	230.00]	AMP	7590.6	-90.34	3111.2	66.17
6182	[VEL230	230.00]	AMP	8878.0	-88.04	2285.7	69.61
6240	[EHIG230	230.00]	AMP	5752.0	-92.11	2440.9	51.65
6262	[CHA34	34.500]	AMP	7361.2	-97.02	0.0	0.00
6340	[CAN230	230.00]	AMP	4548.2	-90.74	0.0	0.00
6370	[BOQIII34B	34.500]	AMP	23601.4	-92.04	0.0	0.00
6380	[BOQIII230	230.00]	AMP	6936.8	-89.97	3618.7	62.63
6381	[BOQIII34	34.500]	AMP	23601.4	-92.04	0.0	0.00
6460	[ECO230	230.00]	AMP	6699.1	-89.32	2587.0	59.01
6520	[SBA230	230.00]	AMP	7210.4	-89.19	2411.1	68.20
6521	[SBA115	115.00]	AMP	4201.1	-93.69	0.0	0.00
6522	[SBA34	34.500]	AMP	6419.6	-78.05	4571.3	-78.38
6840	[PAN3 230	230.00]	AMP	7025.3	-86.99	2575.6	37.22

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2027CA_MODMEDAM_SEC

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED

- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES
- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

X----- BUS -----X			THREE PHASE FAULT		X----LG FAULT---X	
			/I+/ AN(I+)		/3I0/ AN(I+)	
6001	[PAN230	230.00] AMP	6637.8	-88.00	2635.4	38.97
6002	[PAN115	115.00] AMP	11773.8	-90.55	120.3	51.47
6003	[PANII230	230.00] AMP	6384.2	-89.05	2724.1	37.35
6004	[PANII115	115.00] AMP	10017.9	-95.92	0.0	0.00
6005	[CHO230	230.00] AMP	6537.0	-89.02	2558.2	44.50
6007	[CHO34	34.500] AMP	21482.4	-104.98	506.6	-122.69
6008	[LSA230	230.00] AMP	8188.6	-86.33	2149.8	65.71
6009	[LSA115	115.00] AMP	11087.3	-91.76	0.0	0.00
6010	[LSA34	34.500] AMP	17543.0	-67.81	495.8	-75.09
6011	[MDN230	230.00] AMP	7867.5	-89.00	2916.1	67.31
6012	[MDN115	115.00] AMP	8718.5	-92.97	23.1	78.44
6013	[MDN34	34.500] AMP	12136.5	-93.73	494.7	-102.16
6014	[PRO230	230.00] AMP	6654.1	-89.43	3930.0	58.96
6015	[PRO115	115.00] AMP	7226.6	-92.19	0.0	0.00
6016	[PRO34	34.500] AMP	11561.9	-91.09	488.4	-94.79
6018	[CAC115	115.00] AMP	11667.8	-90.76	120.3	51.42
6087	[CAL115	115.00] AMP	5277.1	-92.63	23.1	78.70
6179	[GUA230	230.00] AMP	7235.1	-90.15	3098.0	66.33
6182	[VEL230	230.00] AMP	8481.4	-88.20	2247.6	70.30
6240	[EHIG230	230.00] AMP	5518.8	-92.05	2463.8	53.33
6262	[CHA34	34.500] AMP	7307.5	-96.82	0.0	0.00
6340	[CAN230	230.00] AMP	4420.9	-90.48	0.0	0.00
6370	[BOQIII34B	34.500] AMP	23041.5	-91.98	0.0	0.00
6380	[BOQIII230	230.00] AMP	6481.6	-89.76	3653.3	61.95
6381	[BOQIII34	34.500] AMP	23041.5	-91.98	0.0	0.00
6460	[ECO230	230.00] AMP	6413.2	-89.48	2588.9	60.07
6520	[SBA230	230.00] AMP	6968.2	-89.30	2364.1	69.03
6521	[SBA115	115.00] AMP	4158.7	-93.40	0.0	0.00
6522	[SBA34	34.500] AMP	6567.5	-78.39	4608.4	-78.70
6840	[PAN3 230	230.00] AMP	6689.3	-88.00	2633.2	39.42

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2027CA_MODMEDNOCT_SEC

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES

SEQUENCES

- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

X----- BUS -----X			THREE PHASE FAULT		X----LG FAULT---X	
			/I+/ AN(I+)		/3I0/ AN(I+)	
6001	[PAN230	230.00] AMP	9844.1	-85.25	2557.5	60.84
6002	[PAN115	115.00] AMP	16833.6	-87.16	119.7	69.05
6003	[PANII230	230.00] AMP	9413.6	-85.66	2631.9	60.05
6004	[PANII115	115.00] AMP	12998.9	-91.18	0.0	0.00
6005	[CHO230	230.00] AMP	8904.7	-87.17	2490.5	62.93

6007	[CHO34	34.500]	AMP	22805.0	-99.01	504.1	-110.65
6008	[LSA230	230.00]	AMP	9076.8	-89.91	2139.4	70.54
6009	[LSA115	115.00]	AMP	11431.7	-94.97	0.0	0.00
6010	[LSA34	34.500]	AMP	17578.0	-71.53	492.0	-77.10
6011	[MDN230	230.00]	AMP	9760.0	-93.01	2786.5	68.33
6012	[MDN115	115.00]	AMP	10308.1	-96.84	22.7	76.68
6013	[MDN34	34.500]	AMP	11989.0	-100.05	485.9	-107.86
6014	[PRO230	230.00]	AMP	7497.6	-92.97	3794.2	59.37
6015	[PRO115	115.00]	AMP	7358.6	-96.84	0.0	0.00
6016	[PRO34	34.500]	AMP	10791.9	-99.04	492.3	-102.48
6018	[CAC115	115.00]	AMP	16622.6	-87.27	119.7	69.02
6087	[CAL115	115.00]	AMP	6764.9	-96.17	22.8	77.49
6179	[GUA230	230.00]	AMP	8872.6	-93.62	2951.3	68.21
6182	[VEL230	230.00]	AMP	9561.3	-91.96	2208.4	72.29
6240	[EHIG230	230.00]	AMP	6391.2	-90.79	2433.6	65.37
6262	[CHA34	34.500]	AMP	7360.6	-97.29	0.0	0.00
6340	[CAN230	230.00]	AMP	4860.5	-92.12	0.0	0.00
6370	[BOQIII34B	34.500]	AMP	22789.8	-96.35	0.0	0.00
6380	[BOQIII230	230.00]	AMP	7328.6	-93.39	3522.9	62.34
6381	[BOQIII34	34.500]	AMP	22789.8	-96.35	0.0	0.00
6460	[ECO230	230.00]	AMP	7075.3	-91.22	2601.8	67.25
6520	[SBA230	230.00]	AMP	7209.5	-92.88	2371.4	70.44
6521	[SBA115	115.00]	AMP	3617.2	-101.25	0.0	0.00
6522	[SBA34	34.500]	AMP	4076.7	-102.16	3620.0	-102.45
6840	[PAN3 230	230.00]	AMP	9938.1	-85.28	2553.4	61.17

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2027CA_MODMEDPM_SEC

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES

SEQUENCES

- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

				THREE PHASE FAULT		X----LG FAULT---X	
X-----	BUS	-----X		/I+/	AN(I+)	/3I0/	AN(I+)
6001	[PAN230	230.00]	AMP	7544.7	-85.44	2599.5	47.68
6002	[PAN115	115.00]	AMP	13189.0	-88.02	118.3	58.35
6003	[PANII230	230.00]	AMP	7234.3	-86.22	2685.4	46.34
6004	[PANII115	115.00]	AMP	10930.1	-92.90	0.0	0.00
6005	[CHO230	230.00]	AMP	7312.2	-87.42	2515.8	51.90
6007	[CHO34	34.500]	AMP	22381.5	-102.58	499.5	-118.07
6008	[LSA230	230.00]	AMP	8895.5	-87.61	2125.1	68.54
6009	[LSA115	115.00]	AMP	11615.2	-93.00	0.0	0.00
6010	[LSA34	34.500]	AMP	18190.4	-69.02	494.2	-75.18
6011	[MDN230	230.00]	AMP	8631.2	-90.60	2865.6	68.26
6012	[MDN115	115.00]	AMP	9986.9	-94.06	23.1	78.41
6013	[MDN34	34.500]	AMP	12911.8	-95.28	493.7	-103.53
6014	[PRO230	230.00]	AMP	7218.6	-90.90	3839.2	60.07
6015	[PRO115	115.00]	AMP	7530.1	-94.19	0.0	0.00
6016	[PRO34	34.500]	AMP	11776.5	-94.68	488.9	-98.15
6018	[CAC115	115.00]	AMP	13049.6	-88.20	118.2	58.30
6087	[CAL115	115.00]	AMP	6705.8	-93.95	23.1	79.28
6179	[GUA230	230.00]	AMP	7630.8	-91.27	3067.2	67.26

6182	[VEL230	230.00]	AMP	9105.8	-89.66	2227.8	71.80
6240	[EHIG230	230.00]	AMP	5920.7	-91.24	2431.5	58.57
6262	[CHA34	34.500]	AMP	7355.9	-96.80	0.0	0.00
6340	[CAN230	230.00]	AMP	4535.8	-90.93	0.0	0.00
6370	[BOQIII34B	34.500]	AMP	23596.0	-93.82	0.0	0.00
6380	[BOQIII230	230.00]	AMP	6945.6	-91.25	3585.9	62.78
6381	[BOQIII34	34.500]	AMP	23596.0	-93.82	0.0	0.00
6460	[ECO230	230.00]	AMP	6843.3	-89.73	2566.7	63.95
6520	[SBA230	230.00]	AMP	7388.1	-90.66	2343.6	70.63
6521	[SBA115	115.00]	AMP	4317.0	-94.89	0.0	0.00
6522	[SBA34	34.500]	AMP	7312.9	-82.83	4838.6	-83.07
6840	[PAN3 230	230.00]	AMP	7616.8	-85.44	2595.6	48.13

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2027CA_MODMIN_SEC

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES

SEQUENCES

- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

X----- BUS -----X				THREE PHASE FAULT		X----LG FAULT---X	
				/I+/	AN(I+)	/3I0/	AN(I+)
6001	[PAN230	230.00]	AMP	8308.1	-84.92	2705.7	59.56
6002	[PAN115	115.00]	AMP	14146.3	-86.70	123.3	69.25
6003	[PANII230	230.00]	AMP	8040.0	-85.30	2779.1	58.84
6004	[PANII115	115.00]	AMP	11619.0	-90.34	0.0	0.00
6005	[CHO230	230.00]	AMP	7596.8	-86.89	2643.0	61.23
6007	[CHO34	34.500]	AMP	21862.6	-98.37	517.5	-110.25
6008	[LSA230	230.00]	AMP	7998.2	-89.18	2253.6	69.61
6009	[LSA115	115.00]	AMP	10640.3	-94.13	0.0	0.00
6010	[LSA34	34.500]	AMP	17314.6	-70.80	506.8	-76.88
6011	[MDN230	230.00]	AMP	8034.8	-92.09	2965.9	66.87
6012	[MDN115	115.00]	AMP	9529.1	-96.14	23.3	77.22
6013	[MDN34	34.500]	AMP	12104.3	-99.54	491.9	-105.50
6014	[PRO230	230.00]	AMP	6816.6	-92.41	3984.9	57.87
6015	[PRO115	115.00]	AMP	7070.2	-96.48	0.0	0.00
6016	[PRO34	34.500]	AMP	10693.5	-98.94	500.9	-102.20
6018	[CAC115	115.00]	AMP	13986.7	-86.78	123.3	69.23
6087	[CAL115	115.00]	AMP	6567.0	-95.63	23.3	78.10
6179	[GUA230	230.00]	AMP	7145.7	-92.41	3189.2	65.88
6182	[VEL230	230.00]	AMP	8234.3	-91.02	2325.3	71.26
6240	[EHIG230	230.00]	AMP	5813.7	-90.19	2579.0	64.11
6262	[CHA34	34.500]	AMP	7462.8	-97.57	0.0	0.00
6340	[CAN230	230.00]	AMP	4431.3	-91.88	0.0	0.00
6370	[BOQIII34B	34.500]	AMP	22152.0	-95.86	0.0	0.00
6380	[BOQIII230	230.00]	AMP	6548.6	-92.73	3726.0	60.76
6381	[BOQIII34	34.500]	AMP	22152.0	-95.86	0.0	0.00
6460	[ECO230	230.00]	AMP	6487.3	-90.55	2746.4	65.98
6520	[SBA230	230.00]	AMP	6514.5	-92.04	2500.4	69.37
6521	[SBA115	115.00]	AMP	3597.6	-100.99	0.0	0.00
6522	[SBA34	34.500]	AMP	4128.5	-102.25	3677.8	-102.60
6840	[PAN3 230	230.00]	AMP	8400.2	-84.95	2699.4	59.92

6. 2027 - ESTACIÓN LLUVIOSA

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2027CA_MODMAX_LLUV

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0

SEQUENCES

- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

				THREE PHASE FAULT		X----LG FAULT---X	
X----- BUS -----X				/I+/	AN(I+)	/3I0/	AN(I+)
6001	[PAN230	230.00]	AMP	6101.1	-98.07	2542.6	19.13
6002	[PAN115	115.00]	AMP	10866.7	-100.97	118.6	33.26
6003	[PANII230	230.00]	AMP	5937.2	-99.38	2629.8	17.44
6004	[PANII115	115.00]	AMP	9558.4	-106.99	0.0	0.00
6005	[CHO230	230.00]	AMP	6159.8	-98.92	2470.3	25.94
6007	[CHO34	34.500]	AMP	21047.3	-118.30	496.2	-140.07
6008	[LSA230	230.00]	AMP	8419.7	-94.71	2106.5	53.03
6009	[LSA115	115.00]	AMP	11451.0	-101.86	0.0	0.00
6010	[LSA34	34.500]	AMP	17906.5	-79.68	489.9	-87.80
6011	[MDN230	230.00]	AMP	9809.2	-91.73	2753.0	67.05
6012	[MDN115	115.00]	AMP	11240.0	-93.92	22.6	78.61
6013	[MDN34	34.500]	AMP	14033.6	-93.77	492.4	-102.29
6014	[PRO230	230.00]	AMP	8524.4	-90.54	3630.8	62.46
6015	[PRO115	115.00]	AMP	8112.9	-93.37	0.0	0.00
6016	[PRO34	34.500]	AMP	12142.9	-92.32	487.7	-95.56
6018	[CAC115	115.00]	AMP	10779.4	-101.22	118.5	33.19
6087	[CAL115	115.00]	AMP	7788.4	-91.96	22.8	81.85
6179	[GUA230	230.00]	AMP	8671.8	-93.32	2925.2	65.07
6182	[VEL230	230.00]	AMP	9405.2	-93.83	2182.5	63.40
6240	[EHIG230	230.00]	AMP	5420.2	-102.46	2380.3	37.28
6262	[CHA34	34.500]	AMP	7843.1	-97.39	0.0	0.00
6340	[CAN230	230.00]	AMP	4820.9	-92.90	0.0	0.00
6370	[BOQIII34B	34.500]	AMP	25386.3	-91.43	0.0	0.00
6380	[BOQIII230	230.00]	AMP	7811.1	-91.40	3423.0	63.64
6381	[BOQIII34	34.500]	AMP	25386.3	-91.43	0.0	0.00
6460	[ECO230	230.00]	AMP	6616.1	-100.67	2523.7	44.99
6520	[SBA230	230.00]	AMP	7325.8	-96.77	2321.3	59.74
6521	[SBA115	115.00]	AMP	4247.6	-102.31	0.0	0.00
6522	[SBA34	34.500]	AMP	7054.7	-86.89	4756.2	-87.21
6840	[PAN3 230	230.00]	AMP	6129.5	-98.06	2543.6	19.57

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2027CA_MODMEDAM_LLUV

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES

- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-/0 SEQUENCES

- LOAD REPRESENTED IN +/-/0 SEQUENCES

- DC LINES AND FACTS DEVICES BLOCKED

- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

X----- BUS -----X				THREE PHASE FAULT		X----LG FAULT---X	
				/I+/ AN(I+)		/3I0/ AN(I+)	
6001	[PAN230	230.00]	AMP	4913.7	-88.26	2529.5	18.12
6002	[PAN115	115.00]	AMP	9185.7	-91.02	116.4	36.76
6003	[PANII230	230.00]	AMP	4743.0	-89.47	2603.6	16.07
6004	[PANII115	115.00]	AMP	8171.8	-96.98	0.0	0.00
6005	[CHO230	230.00]	AMP	5120.0	-89.22	2478.2	25.22
6007	[CHO34	34.500]	AMP	19866.0	-110.12	497.4	-136.55
6008	[LSA230	230.00]	AMP	7332.0	-87.04	2133.4	52.71
6009	[LSA115	115.00]	AMP	10625.7	-95.70	0.0	0.00
6010	[LSA34	34.500]	AMP	17559.6	-76.16	493.4	-86.62
6011	[MDN230	230.00]	AMP	9556.3	-89.33	2761.4	67.41
6012	[MDN115	115.00]	AMP	11406.9	-92.11	22.7	80.16
6013	[MDN34	34.500]	AMP	14270.8	-92.64	493.0	-99.89
6014	[PRO230	230.00]	AMP	8236.6	-89.45	3660.5	62.05
6015	[PRO115	115.00]	AMP	7992.7	-92.90	0.0	0.00
6016	[PRO34	34.500]	AMP	12062.8	-92.44	488.1	-95.62
6018	[CAC115	115.00]	AMP	9125.9	-91.28	116.4	36.70
6087	[CAL115	115.00]	AMP	8346.9	-90.12	22.9	83.96
6179	[GUA230	230.00]	AMP	8457.4	-90.79	2930.6	65.31
6182	[VEL230	230.00]	AMP	8766.7	-88.71	2180.0	63.52
6240	[EHIG230	230.00]	AMP	4824.4	-94.06	2408.6	36.81
6262	[CHA34	34.500]	AMP	7827.9	-96.85	0.0	0.00
6340	[CAN230	230.00]	AMP	4770.5	-91.51	0.0	0.00
6370	[BOQIII34B	34.500]	AMP	25262.5	-90.65	0.0	0.00
6380	[BOQIII230	230.00]	AMP	7639.9	-89.90	3439.4	63.67
6381	[BOQIII34	34.500]	AMP	25262.5	-90.65	0.0	0.00
6460	[ECO230	230.00]	AMP	5517.6	-92.45	2589.1	43.02
6520	[SBA230	230.00]	AMP	6868.5	-91.56	2322.6	59.64
6521	[SBA115	115.00]	AMP	4254.3	-100.47	0.0	0.00
6522	[SBA34	34.500]	AMP	7423.3	-86.27	4868.5	-86.67
6840	[PAN3 230	230.00]	AMP	4934.5	-88.24	2531.1	18.54

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2027CA_MODMEDNOCT_LLUV

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION

- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION

- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT

- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED

- LINE CHARGING REPRESENTED IN +/-/0 SEQUENCES

- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-/0 SEQUENCES

- LOAD REPRESENTED IN +/-/0 SEQUENCES

- DC LINES AND FACTS DEVICES BLOCKED

- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

X----- BUS -----X				THREE PHASE FAULT		X----LG FAULT---X	
				/I+/ AN(I+)		/3I0/ AN(I+)	
6001	[PAN230	230.00]	AMP	7283.1	-112.45	2677.7	21.17
6002	[PAN115	115.00]	AMP	13014.3	-115.06	119.4	32.50
6003	[PANII230	230.00]	AMP	7184.3	-113.35	2751.1	20.32
6004	[PANII115	115.00]	AMP	10908.7	-119.75	0.0	0.00
6005	[CHO230	230.00]	AMP	6805.5	-112.95	2601.5	25.20
6007	[CHO34	34.500]	AMP	21151.4	-127.87	500.0	-144.69

6008	[LSA230	230.00]	AMP	7542.6	-107.63	2218.5	44.16
6009	[LSA115	115.00]	AMP	10365.9	-114.00	0.0	0.00
6010	[LSA34	34.500]	AMP	17308.8	-92.79	495.5	-100.99
6011	[MDN230	230.00]	AMP	10804.5	-98.57	2736.5	62.22
6012	[MDN115	115.00]	AMP	11750.1	-100.74	22.9	72.95
6013	[MDN34	34.500]	AMP	13841.0	-102.81	500.4	-109.73
6014	[PRO230	230.00]	AMP	8714.2	-97.35	3638.0	56.51
6015	[PRO115	115.00]	AMP	7879.0	-101.43	0.0	0.00
6016	[PRO34	34.500]	AMP	11086.0	-103.49	490.8	-106.67
6018	[CAC115	115.00]	AMP	12884.7	-115.24	119.4	32.45
6087	[CAL115	115.00]	AMP	8465.9	-97.86	23.1	76.77
6179	[GUA230	230.00]	AMP	9756.9	-99.70	2888.4	61.19
6182	[VEL230	230.00]	AMP	9055.2	-103.40	2219.6	55.90
6240	[EHIG230	230.00]	AMP	5422.7	-114.44	2520.0	32.44
6262	[CHA34	34.500]	AMP	8007.0	-99.65	0.0	0.00
6340	[CAN230	230.00]	AMP	5196.4	-97.40	0.0	0.00
6370	[BOQIII34B	34.500]	AMP	24533.4	-99.09	0.0	0.00
6380	[BOQIII230	230.00]	AMP	8115.9	-98.19	3420.3	58.05
6381	[BOQIII34	34.500]	AMP	24533.4	-99.09	0.0	0.00
6460	[ECO230	230.00]	AMP	5680.0	-113.29	2765.0	34.90
6520	[SBA230	230.00]	AMP	6672.0	-107.63	2402.7	50.21
6521	[SBA115	115.00]	AMP	3688.9	-118.06	0.0	0.00
6522	[SBA34	34.500]	AMP	4570.8	-117.25	3871.4	-117.65
6840	[PAN3 230	230.00]	AMP	7318.5	-112.46	2676.2	21.51

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2027CA_MODMEDPM_LLUV

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES

SEQUENCES

- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

				THREE PHASE FAULT		X---LG FAULT---X	
X----- BUS -----X				/I+/	AN(I+)	/3I0/	AN(I+)
6001	[PAN230	230.00]	AMP	6626.9	-111.96	2709.8	14.62
6002	[PAN115	115.00]	AMP	11971.4	-114.70	120.9	27.55
6003	[PANII230	230.00]	AMP	6498.8	-112.92	2789.9	13.48
6004	[PANII115	115.00]	AMP	10230.9	-119.69	0.0	0.00
6005	[CHO230	230.00]	AMP	6542.8	-112.81	2625.8	20.09
6007	[CHO34	34.500]	AMP	21963.9	-129.67	507.0	-148.05
6008	[LSA230	230.00]	AMP	8515.3	-108.56	2185.0	43.36
6009	[LSA115	115.00]	AMP	11558.0	-115.58	0.0	0.00
6010	[LSA34	34.500]	AMP	18624.9	-94.01	504.4	-101.22
6011	[MDN230	230.00]	AMP	11449.5	-99.25	2712.1	62.30
6012	[MDN115	115.00]	AMP	12236.5	-101.12	22.9	72.87
6013	[MDN34	34.500]	AMP	14703.6	-102.51	499.8	-109.60
6014	[PRO230	230.00]	AMP	9116.6	-97.74	3599.6	56.96
6015	[PRO115	115.00]	AMP	8373.9	-101.43	0.0	0.00
6016	[PRO34	34.500]	AMP	12320.4	-102.70	490.1	-105.59
6018	[CAC115	115.00]	AMP	11864.8	-114.91	120.9	27.50
6087	[CAL115	115.00]	AMP	8611.7	-97.94	23.0	76.74
6179	[GUA230	230.00]	AMP	10355.1	-100.49	2859.2	61.25
6182	[VEL230	230.00]	AMP	10049.9	-104.66	2194.6	55.60

6240	[EHIG230	230.00]	AMP	5591.9	-115.36	2509.1	29.55
6262	[CHA34	34.500]	AMP	7997.8	-99.78	0.0	0.00
6340	[CAN230	230.00]	AMP	5308.7	-97.80	0.0	0.00
6370	[BOQIII34B	34.500]	AMP	26004.8	-98.98	0.0	0.00
6380	[BOQIII230	230.00]	AMP	8497.8	-98.63	3382.2	58.42
6381	[BOQIII34	34.500]	AMP	26004.8	-98.98	0.0	0.00
6460	[ECO230	230.00]	AMP	6292.6	-114.20	2689.6	34.17
6520	[SBA230	230.00]	AMP	7606.5	-109.07	2364.8	50.25
6521	[SBA115	115.00]	AMP	4484.3	-117.90	0.0	0.00
6522	[SBA34	34.500]	AMP	7894.3	-113.07	5033.4	-113.32
6840	[PAN3 230	230.00]	AMP	6651.6	-111.96	2709.1	14.98

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2027CA_MODMIN_LLUV

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES

SEQUENCES

- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

X----- BUS -----X				THREE PHASE FAULT		X---LG FAULT---X	
				/I+/	AN(I+)	/3I0/	AN(I+)
6001	[PAN230	230.00]	AMP	4426.1	-100.74	2777.2	7.07
6002	[PAN115	115.00]	AMP	8207.9	-103.10	124.5	29.45
6003	[PANII230	230.00]	AMP	4335.6	-101.78	2852.3	5.34
6004	[PANII115	115.00]	AMP	7484.7	-107.89	0.0	0.00
6005	[CHO230	230.00]	AMP	4516.2	-101.17	2696.3	13.17
6007	[CHO34	34.500]	AMP	17925.1	-119.42	519.2	-146.48
6008	[LSA230	230.00]	AMP	5937.9	-97.50	2295.8	38.21
6009	[LSA115	115.00]	AMP	9011.3	-106.10	0.0	0.00
6010	[LSA34	34.500]	AMP	16250.6	-88.89	512.4	-102.22
6011	[MDN230	230.00]	AMP	10303.6	-95.73	2759.1	60.99
6012	[MDN115	115.00]	AMP	11541.4	-99.64	23.1	73.32
6013	[MDN34	34.500]	AMP	13883.3	-102.16	499.1	-107.68
6014	[PRO230	230.00]	AMP	8521.3	-96.02	3655.8	55.57
6015	[PRO115	115.00]	AMP	7814.8	-101.03	0.0	0.00
6016	[PRO34	34.500]	AMP	11062.3	-103.54	493.0	-106.58
6018	[CAC115	115.00]	AMP	8159.2	-103.29	124.5	29.40
6087	[CAL115	115.00]	AMP	8409.4	-97.10	23.1	77.26
6179	[GUA230	230.00]	AMP	9318.1	-96.88	2910.3	59.49
6182	[VEL230	230.00]	AMP	7916.6	-96.13	2262.6	52.60
6240	[EHIG230	230.00]	AMP	4225.4	-104.44	2615.7	23.14
6262	[CHA34	34.500]	AMP	7984.7	-99.88	0.0	0.00
6340	[CAN230	230.00]	AMP	5112.3	-96.67	0.0	0.00
6370	[BOQIII34B	34.500]	AMP	24377.3	-98.65	0.0	0.00
6380	[BOQIII230	230.00]	AMP	7911.3	-96.63	3440.1	56.97
6381	[BOQIII34	34.500]	AMP	24377.3	-98.65	0.0	0.00
6460	[ECO230	230.00]	AMP	4559.0	-103.50	2855.5	26.11
6520	[SBA230	230.00]	AMP	5831.2	-100.46	2485.6	45.55
6521	[SBA115	115.00]	AMP	3641.7	-116.85	0.0	0.00
6522	[SBA34	34.500]	AMP	4576.8	-117.93	3887.2	-118.64
6840	[PAN3 230	230.00]	AMP	4440.8	-100.71	2777.7	7.41

7. 2028 ESTACIÓN SECA

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2028CA_MODMAX_SEC

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES

SEQUENCES

- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

				THREE PHASE FAULT		X----LG FAULT---X	
X----- BUS -----X				/I+/	AN(I+)	/3I0/	AN(I+)
6001	[PAN230	230.00]	AMP	7673.8	-92.29	2587.9	36.91
6002	[PAN115	115.00]	AMP	13484.9	-94.84	121.2	47.60
6003	[PANII230	230.00]	AMP	7346.9	-93.51	2680.0	35.30
6004	[PANII115	115.00]	AMP	11140.8	-100.70	0.0	0.00
6005	[CHO230	230.00]	AMP	7473.6	-93.10	2523.7	42.79
6007	[CHO34	34.500]	AMP	22696.8	-109.63	510.3	-126.77
6008	[LSA230	230.00]	AMP	9376.5	-89.00	2186.2	65.17
6009	[LSA115	115.00]	AMP	12196.3	-94.61	0.0	0.00
6010	[LSA34	34.500]	AMP	18550.8	-70.60	510.3	-77.18
6011	[MDN230	230.00]	AMP	9019.5	-90.71	2892.3	67.60
6012	[MDN115	115.00]	AMP	11252.5	-92.92	23.3	77.48
6013	[MDN34	34.500]	AMP	13577.2	-95.11	499.7	-105.01
6014	[PRO230	230.00]	AMP	7588.7	-90.57	3829.5	60.56
6015	[PRO115	115.00]	AMP	7434.1	-93.96	0.0	0.00
6016	[PRO34	34.500]	AMP	10829.6	-94.57	492.7	-98.48
6018	[CAC115	115.00]	AMP	13345.6	-95.07	121.2	47.52
6087	[CAL115	115.00]	AMP	12511.8	-94.00	23.3	78.44
6179	[GUA230	230.00]	AMP	8129.0	-91.73	3090.9	66.57
6182	[VEL230	230.00]	AMP	9523.2	-90.44	2294.3	69.76
6240	[EHIG230	230.00]	AMP	6111.3	-95.65	2451.8	52.04
6262	[CHA34	34.500]	AMP	7415.0	-97.33	0.0	0.00
6340	[CAN230	230.00]	AMP	4707.1	-91.51	0.0	0.00
6370	[BOQIII34B	34.500]	AMP	23936.3	-93.17	0.0	0.00
6380	[BOQIII230	230.00]	AMP	7218.2	-91.13	3598.2	62.76
6381	[BOQIII34	34.500]	AMP	23936.3	-93.17	0.0	0.00
6460	[ECO230	230.00]	AMP	7505.1	-91.76	2561.5	61.19
6520	[SBA230	230.00]	AMP	7757.3	-91.68	2419.5	68.46
6521	[SBA115	115.00]	AMP	8299.1	-96.57	0.0	0.00
6522	[SBA34	34.500]	AMP	12964.0	-94.38	6046.1	-95.72
6840	[PAN3 230	230.00]	AMP	7738.6	-92.30	2587.5	37.41

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2028CA_MODMEDAM_SEC

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES

- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-/0 SEQUENCES

- LOAD REPRESENTED IN +/-/0 SEQUENCES

- DC LINES AND FACTS DEVICES BLOCKED

- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

X----- BUS -----X				THREE PHASE FAULT		X----LG FAULT---X	
				/I+/ AN(I+)		/3I0/ AN(I+)	
6001	[PAN230	230.00]	AMP	5411.0	-88.27	2577.3	23.65
6002	[PAN115	115.00]	AMP	9969.5	-90.69	119.8	40.57
6003	[PANII230	230.00]	AMP	5191.1	-89.49	2661.9	21.60
6004	[PANII115	115.00]	AMP	8712.4	-96.81	0.0	0.00
6005	[CHO230	230.00]	AMP	5670.1	-89.44	2511.4	30.81
6007	[CHO34	34.500]	AMP	20759.5	-109.50	504.7	-133.27
6008	[LSA230	230.00]	AMP	8377.1	-88.95	2126.4	56.85
6009	[LSA115	115.00]	AMP	11396.6	-96.89	0.0	0.00
6010	[LSA34	34.500]	AMP	17903.6	-75.52	498.0	-84.11
6011	[MDN230	230.00]	AMP	8736.1	-94.97	2843.6	61.47
6012	[MDN115	115.00]	AMP	10972.4	-97.95	23.0	72.06
6013	[MDN34	34.500]	AMP	13332.3	-100.87	497.6	-109.49
6014	[PRO230	230.00]	AMP	7398.1	-95.59	3788.5	54.28
6015	[PRO115	115.00]	AMP	7301.5	-99.54	0.0	0.00
6016	[PRO34	34.500]	AMP	10680.7	-100.60	488.0	-104.41
6018	[CAC115	115.00]	AMP	9896.7	-90.94	119.8	40.51
6087	[CAL115	115.00]	AMP	12230.2	-98.81	23.0	72.87
6179	[GUA230	230.00]	AMP	7878.9	-95.79	3024.4	60.44
6182	[VEL230	230.00]	AMP	9015.4	-92.80	2219.0	62.77
6240	[EHIG230	230.00]	AMP	5267.5	-94.67	2422.7	41.84
6262	[CHA34	34.500]	AMP	7329.9	-101.83	0.0	0.00
6340	[CAN230	230.00]	AMP	4601.2	-96.06	0.0	0.00
6370	[BOQIII34B	34.500]	AMP	23666.8	-98.80	0.0	0.00
6380	[BOQIII230	230.00]	AMP	7041.8	-96.01	3549.7	56.54
6381	[BOQIII34	34.500]	AMP	23666.8	-98.80	0.0	0.00
6460	[ECO230	230.00]	AMP	6707.6	-92.13	2520.4	51.69
6520	[SBA230	230.00]	AMP	7333.3	-94.36	2339.6	60.91
6521	[SBA115	115.00]	AMP	8040.0	-101.57	0.0	0.00
6522	[SBA34	34.500]	AMP	12806.3	-101.37	5976.6	-103.12
6840	[PAN3 230	230.00]	AMP	5439.4	-88.27	2578.1	24.11

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2028CA_MODMEDNOCT_SEC

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION

- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION

- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT

- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED

- LINE CHARGING REPRESENTED IN +/-/0 SEQUENCES

- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-/0 SEQUENCES

- LOAD REPRESENTED IN +/-/0 SEQUENCES

- DC LINES AND FACTS DEVICES BLOCKED

- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

X----- BUS -----X				THREE PHASE FAULT		X----LG FAULT---X	
				/I+/ AN(I+)		/3I0/ AN(I+)	
6001	[PAN230	230.00]	AMP	9384.5	-91.05	2611.6	52.52
6002	[PAN115	115.00]	AMP	16559.8	-92.99	120.5	61.37
6003	[PANII230	230.00]	AMP	8978.0	-91.68	2686.3	51.58
6004	[PANII115	115.00]	AMP	12671.9	-97.37	0.0	0.00
6005	[CHO230	230.00]	AMP	8657.7	-92.39	2537.4	55.55

6007	[CHO34	34.500]	AMP	23138.0	-104.98	504.8	-117.64
6008	[LSA230	230.00]	AMP	9071.0	-93.13	2165.1	66.15
6009	[LSA115	115.00]	AMP	11495.4	-98.46	0.0	0.00
6010	[LSA34	34.500]	AMP	17846.2	-75.41	494.0	-81.26
6011	[MDN230	230.00]	AMP	9802.9	-93.58	2792.4	67.41
6012	[MDN115	115.00]	AMP	11651.3	-95.81	22.8	76.26
6013	[MDN34	34.500]	AMP	12612.7	-100.10	488.8	-108.49
6014	[PRO230	230.00]	AMP	7518.6	-93.80	3801.3	58.31
6015	[PRO115	115.00]	AMP	7381.0	-97.76	0.0	0.00
6016	[PRO34	34.500]	AMP	10819.7	-100.00	493.1	-103.54
6018	[CAC115	115.00]	AMP	16353.2	-93.12	120.5	61.34
6087	[CAL115	115.00]	AMP	13457.9	-96.39	22.9	77.90
6179	[GUA230	230.00]	AMP	9061.9	-94.13	2947.9	67.48
6182	[VEL230	230.00]	AMP	9600.0	-93.95	2219.6	69.61
6240	[EHIG230	230.00]	AMP	6351.0	-95.48	2469.2	59.25
6262	[CHA34	34.500]	AMP	7274.4	-97.77	0.0	0.00
6340	[CAN230	230.00]	AMP	4912.1	-92.67	0.0	0.00
6370	[BOQIII34B	34.500]	AMP	22840.7	-97.23	0.0	0.00
6380	[BOQIII230	230.00]	AMP	7353.0	-94.13	3529.4	61.35
6381	[BOQIII34	34.500]	AMP	22840.7	-97.23	0.0	0.00
6460	[ECO230	230.00]	AMP	7051.3	-95.37	2634.4	61.89
6520	[SBA230	230.00]	AMP	7239.3	-95.52	2388.3	67.10
6521	[SBA115	115.00]	AMP	7183.2	-101.61	0.0	0.00
6522	[SBA34	34.500]	AMP	9736.9	-104.85	5545.9	-106.18
6840	[PAN3 230	230.00]	AMP	9466.6	-91.09	2607.1	52.87

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2028CA_MODMEDPM_SEC

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES

SEQUENCES

- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

				THREE PHASE FAULT		X----LG FAULT---X	
X-----	BUS	-----X		/I+/	AN(I+)	/3I0/	AN(I+)
6001	[PAN230	230.00]	AMP	7062.2	-96.21	2573.1	33.56
6002	[PAN115	115.00]	AMP	12503.8	-98.61	118.3	45.21
6003	[PANII230	230.00]	AMP	6761.0	-97.22	2659.2	32.01
6004	[PANII115	115.00]	AMP	10387.7	-103.91	0.0	0.00
6005	[CHO230	230.00]	AMP	7037.2	-97.50	2486.5	39.11
6007	[CHO34	34.500]	AMP	21904.6	-113.63	496.6	-130.43
6008	[LSA230	230.00]	AMP	9233.5	-96.01	2130.7	59.39
6009	[LSA115	115.00]	AMP	11936.8	-101.80	0.0	0.00
6010	[LSA34	34.500]	AMP	18484.1	-78.04	497.8	-84.25
6011	[MDN230	230.00]	AMP	8940.1	-98.04	2870.5	60.83
6012	[MDN115	115.00]	AMP	11133.1	-100.21	23.2	70.77
6013	[MDN34	34.500]	AMP	13611.7	-102.64	495.3	-111.47
6014	[PRO230	230.00]	AMP	7545.3	-98.28	3812.6	53.19
6015	[PRO115	115.00]	AMP	7402.1	-101.96	0.0	0.00
6016	[PRO34	34.500]	AMP	10817.4	-103.31	492.7	-107.04
6018	[CAC115	115.00]	AMP	12376.7	-98.81	118.2	45.15
6087	[CAL115	115.00]	AMP	12403.0	-101.06	23.1	71.74
6179	[GUA230	230.00]	AMP	8055.9	-98.65	3059.0	60.15

6182	[VEL230	230.00]	AMP	9412.5	-97.64	2259.8	63.38
6240	[EHIG230	230.00]	AMP	5889.9	-100.87	2410.6	47.43
6262	[CHA34	34.500]	AMP	7334.6	-102.70	0.0	0.00
6340	[CAN230	230.00]	AMP	4666.0	-97.78	0.0	0.00
6370	[BOQIII34B	34.500]	AMP	23852.2	-101.36	0.0	0.00
6380	[BOQIII230	230.00]	AMP	7168.6	-98.70	3578.3	55.57
6381	[BOQIII34	34.500]	AMP	23852.2	-101.36	0.0	0.00
6460	[ECO230	230.00]	AMP	7312.6	-98.44	2521.9	55.22
6520	[SBA230	230.00]	AMP	7663.9	-99.06	2381.2	61.88
6521	[SBA115	115.00]	AMP	8227.7	-104.50	0.0	0.00
6522	[SBA34	34.500]	AMP	12953.9	-104.21	6040.5	-105.48
6840	[PAN3 230	230.00]	AMP	7121.7	-96.22	2571.0	34.03

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2028CA_MODMIN_SEC

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES

SEQUENCES

- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

X----- BUS -----X				THREE PHASE FAULT		X----LG FAULT---X	
				/I+/ AN(I+)		/3I0/ AN(I+)	
6001	[PAN230	230.00]	AMP	8732.7	-87.01	2675.5	59.81
6002	[PAN115	115.00]	AMP	15650.7	-88.61	119.7	69.10
6003	[PANII230	230.00]	AMP	8375.9	-87.46	2749.8	58.95
6004	[PANII115	115.00]	AMP	12074.6	-92.31	0.0	0.00
6005	[CHO230	230.00]	AMP	8058.0	-88.26	2601.5	62.18
6007	[CHO34	34.500]	AMP	22543.0	-99.13	507.8	-110.16
6008	[LSA230	230.00]	AMP	8361.0	-89.76	2220.7	70.61
6009	[LSA115	115.00]	AMP	10909.8	-94.47	0.0	0.00
6010	[LSA34	34.500]	AMP	17539.2	-70.75	500.2	-76.30
6011	[MDN230	230.00]	AMP	8184.9	-91.94	2923.5	67.67
6012	[MDN115	115.00]	AMP	10420.1	-94.34	23.1	77.75
6013	[MDN34	34.500]	AMP	12532.7	-98.65	490.5	-105.18
6014	[PRO230	230.00]	AMP	6875.2	-92.13	3942.5	58.65
6015	[PRO115	115.00]	AMP	7080.0	-96.10	0.0	0.00
6016	[PRO34	34.500]	AMP	10726.3	-98.49	494.4	-101.72
6018	[CAC115	115.00]	AMP	15461.6	-88.69	119.7	69.08
6087	[CAL115	115.00]	AMP	11733.9	-94.72	23.1	78.71
6179	[GUA230	230.00]	AMP	7450.2	-92.35	3106.4	67.07
6182	[VEL230	230.00]	AMP	8511.2	-91.26	2290.4	72.15
6240	[EHIG230	230.00]	AMP	6024.3	-90.97	2538.9	65.08
6262	[CHA34	34.500]	AMP	7340.9	-97.10	0.0	0.00
6340	[CAN230	230.00]	AMP	4502.6	-91.56	0.0	0.00
6370	[BOQIII34B	34.500]	AMP	22157.4	-95.46	0.0	0.00
6380	[BOQIII230	230.00]	AMP	6613.7	-92.47	3680.1	61.57
6381	[BOQIII34	34.500]	AMP	22157.4	-95.46	0.0	0.00
6460	[ECO230	230.00]	AMP	6686.8	-91.28	2708.7	66.81
6520	[SBA230	230.00]	AMP	6696.3	-92.28	2461.9	70.34
6521	[SBA115	115.00]	AMP	6948.3	-97.96	0.0	0.00
6522	[SBA34	34.500]	AMP	9673.5	-101.21	5566.5	-102.60
6840	[PAN3 230	230.00]	AMP	8808.1	-87.05	2670.2	60.12

8. 2028 - ESTACIÓN LLUVIOSA

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

2025 22:34

PLAN DE EXPANSION ETESA 2020-2034

2028CA_MODMAX_LLUV

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0

SEQUENCES

- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

				THREE PHASE FAULT		X----LG FAULT---X	
X----- BUS -----X				/I+/	AN(I+)	/3I0/	AN(I+)
6001	[PAN230	230.00]	AMP	6046.3	-93.78	2448.1	22.56
6002	[PAN115	115.00]	AMP	10892.7	-96.49	115.8	36.65
6003	[PANII230	230.00]	AMP	5822.5	-95.15	2532.3	20.70
6004	[PANII115	115.00]	AMP	9421.8	-102.98	0.0	0.00
6005	[CHO230	230.00]	AMP	6225.3	-94.77	2386.5	29.78
6007	[CHO34	34.500]	AMP	21138.4	-114.87	484.1	-136.87
6008	[LSA230	230.00]	AMP	8980.4	-91.79	2076.9	56.91
6009	[LSA115	115.00]	AMP	11917.5	-99.21	0.0	0.00
6010	[LSA34	34.500]	AMP	18199.8	-76.86	490.3	-84.52
6011	[MDN230	230.00]	AMP	10092.8	-91.03	2744.0	68.11
6012	[MDN115	115.00]	AMP	12381.7	-92.98	22.7	78.10
6013	[MDN34	34.500]	AMP	14657.7	-94.41	493.8	-103.49
6014	[PRO230	230.00]	AMP	8475.0	-90.00	3631.6	62.92
6015	[PRO115	115.00]	AMP	7767.0	-93.49	0.0	0.00
6016	[PRO34	34.500]	AMP	10973.1	-94.06	486.9	-97.67
6018	[CAC115	115.00]	AMP	10802.2	-96.76	115.7	36.58
6087	[CAL115	115.00]	AMP	14579.8	-93.64	22.8	79.61
6179	[GUA230	230.00]	AMP	8987.6	-92.58	2903.9	66.41
6182	[VEL230	230.00]	AMP	9817.1	-92.24	2173.1	65.78
6240	[EHIG230	230.00]	AMP	5549.6	-98.97	2318.4	41.24
6262	[CHA34	34.500]	AMP	7867.6	-96.76	0.0	0.00
6340	[CAN230	230.00]	AMP	4912.4	-92.12	0.0	0.00
6370	[BOQIII34B	34.500]	AMP	25468.7	-90.85	0.0	0.00
6380	[BOQIII230	230.00]	AMP	7887.6	-90.77	3414.2	64.45
6381	[BOQIII34	34.500]	AMP	25468.7	-90.85	0.0	0.00
6460	[ECO230	230.00]	AMP	7087.3	-97.04	2458.2	50.06
6520	[SBA230	230.00]	AMP	7739.9	-94.73	2296.7	62.91
6521	[SBA115	115.00]	AMP	8272.1	-100.81	0.0	0.00
6522	[SBA34	34.500]	AMP	13325.4	-98.83	6031.8	-100.31
6840	[PAN3 230	230.00]	AMP	6077.9	-93.77	2449.8	23.03

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

TUE, APR 01

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PLAN DE EXPANSION ETESA 2020-2034

2028CA_MODMEDAM_LLUV

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED

- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES
- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

X----- BUS -----X				THREE PHASE FAULT		X----LG FAULT---X	
				/I+/ AN(I+)		/3I0/ AN(I+)	
6001	[PAN230	230.00]	AMP	5924.4	-94.90	2641.2	24.46
6002	[PAN115	115.00]	AMP	10925.9	-97.28	121.1	39.50
6003	[PANII230	230.00]	AMP	5719.1	-96.08	2728.7	22.73
6004	[PANII115	115.00]	AMP	9280.6	-103.02	0.0	0.00
6005	[CHO230	230.00]	AMP	6048.0	-95.67	2559.0	31.13
6007	[CHO34	34.500]	AMP	21110.4	-113.76	508.0	-134.62
6008	[LSA230	230.00]	AMP	8392.9	-92.58	2142.6	56.32
6009	[LSA115	115.00]	AMP	11466.4	-99.54	0.0	0.00
6010	[LSA34	34.500]	AMP	18096.0	-77.28	499.1	-85.12
6011	[MDN230	230.00]	AMP	9650.0	-91.80	2767.9	67.22
6012	[MDN115	115.00]	AMP	11894.9	-93.92	22.8	77.44
6013	[MDN34	34.500]	AMP	14023.2	-96.04	499.3	-103.85
6014	[PRO230	230.00]	AMP	8338.8	-90.62	3656.5	62.24
6015	[PRO115	115.00]	AMP	7714.8	-94.22	0.0	0.00
6016	[PRO34	34.500]	AMP	10951.5	-95.05	488.5	-98.36
6018	[CAC115	115.00]	AMP	10841.4	-97.52	121.1	39.44
6087	[CAL115	115.00]	AMP	13894.3	-94.45	22.8	78.78
6179	[GUA230	230.00]	AMP	8587.6	-93.28	2929.8	65.49
6182	[VEL230	230.00]	AMP	9462.3	-93.01	2172.7	65.20
6240	[EHIG230	230.00]	AMP	5391.5	-99.21	2453.4	41.69
6262	[CHA34	34.500]	AMP	7630.9	-97.41	0.0	0.00
6340	[CAN230	230.00]	AMP	4793.7	-92.72	0.0	0.00
6370	[BOQIII34B	34.500]	AMP	22640.3	-93.55	0.0	0.00
6380	[BOQIII230	230.00]	AMP	7553.9	-91.65	3459.6	63.17
6381	[BOQIII34	34.500]	AMP	22640.3	-93.55	0.0	0.00
6460	[ECO230	230.00]	AMP	6345.7	-97.15	2597.9	48.55
6520	[SBA230	230.00]	AMP	7494.0	-95.55	2308.8	62.12
6521	[SBA115	115.00]	AMP	8092.7	-102.01	0.0	0.00
6522	[SBA34	34.500]	AMP	12893.8	-101.51	6004.3	-103.04
6840	[PAN3 230	230.00]	AMP	5947.0	-94.89	2641.4	24.87

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

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PLAN DE EXPANSION ETESA 2020-2034

2028CA_MODMEDNOCT_LLUV

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES
- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

X----- BUS -----X				THREE PHASE FAULT		X----LG FAULT---X	
				/I+/ AN(I+)		/3I0/ AN(I+)	
6001	[PAN230	230.00]	AMP	7470.9	-113.11	2669.7	20.21
6002	[PAN115	115.00]	AMP	13361.1	-115.53	122.1	31.48
6003	[PANII230	230.00]	AMP	7355.8	-114.07	2744.3	19.37
6004	[PANII115	115.00]	AMP	11059.3	-120.48	0.0	0.00

6005	[CHO230	230.00]	AMP	7008.6	-113.56	2596.8	24.47
6007	[CHO34	34.500]	AMP	21332.1	-128.80	511.5	-145.80
6008	[LSA230	230.00]	AMP	7874.5	-108.26	2195.6	43.96
6009	[LSA115	115.00]	AMP	10672.6	-114.76	0.0	0.00
6010	[LSA34	34.500]	AMP	17301.3	-93.53	501.4	-101.48
6011	[MDN230	230.00]	AMP	11073.1	-99.11	2708.3	61.95
6012	[MDN115	115.00]	AMP	12876.0	-100.95	22.9	71.41
6013	[MDN34	34.500]	AMP	14460.9	-104.32	497.0	-111.77
6014	[PRO230	230.00]	AMP	8809.2	-97.76	3611.1	56.27
6015	[PRO115	115.00]	AMP	7914.0	-101.80	0.0	0.00
6016	[PRO34	34.500]	AMP	11096.3	-103.82	489.8	-107.05
6018	[CAC115	115.00]	AMP	13225.3	-115.72	122.1	31.43
6087	[CAL115	115.00]	AMP	15766.6	-100.86	22.9	73.83
6179	[GUA230	230.00]	AMP	10201.9	-100.10	2839.4	61.39
6182	[VEL230	230.00]	AMP	9441.5	-104.12	2176.3	55.80
6240	[EHIG230	230.00]	AMP	5580.1	-115.20	2502.9	31.93
6262	[CHA34	34.500]	AMP	8022.2	-99.72	0.0	0.00
6340	[CAN230	230.00]	AMP	5283.4	-97.58	0.0	0.00
6370	[BOQIII34B	34.500]	AMP	24604.4	-99.47	0.0	0.00
6380	[BOQIII230	230.00]	AMP	8221.2	-98.64	3388.4	57.82
6381	[BOQIII34	34.500]	AMP	24604.4	-99.47	0.0	0.00
6460	[ECO230	230.00]	AMP	5854.2	-114.08	2735.3	34.59
6520	[SBA230	230.00]	AMP	6900.1	-108.39	2362.5	50.10
6521	[SBA115	115.00]	AMP	7137.3	-115.74	0.0	0.00
6522	[SBA34	34.500]	AMP	10147.5	-119.18	5619.9	-120.90
6840	[PAN3 230	230.00]	AMP	7507.6	-113.12	2668.4	20.56

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

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PLAN DE EXPANSION ETESA 2020-2034

2028CA_MODMEDPM_LUV

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES

SEQUENCES

- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

				THREE PHASE FAULT		X---LG FAULT---X	
X----- BUS -----X				/I+/	AN(I+)	/3I0/	AN(I+)
6001	[PAN230	230.00]	AMP	6633.7	-112.53	2636.0	13.03
6002	[PAN115	115.00]	AMP	11704.3	-114.94	122.4	26.05
6003	[PANII230	230.00]	AMP	6491.0	-113.65	2722.0	11.80
6004	[PANII115	115.00]	AMP	10097.3	-120.47	0.0	0.00
6005	[CHO230	230.00]	AMP	6662.5	-113.44	2540.8	19.11
6007	[CHO34	34.500]	AMP	21642.8	-131.02	507.9	-149.61
6008	[LSA230	230.00]	AMP	9142.7	-109.51	2096.6	43.62
6009	[LSA115	115.00]	AMP	11993.0	-116.75	0.0	0.00
6010	[LSA34	34.500]	AMP	18765.8	-94.90	496.6	-101.54
6011	[MDN230	230.00]	AMP	11898.3	-99.69	2659.4	62.46
6012	[MDN115	115.00]	AMP	13489.9	-101.25	22.7	71.59
6013	[MDN34	34.500]	AMP	15209.9	-103.89	496.0	-111.50
6014	[PRO230	230.00]	AMP	9470.8	-98.00	3536.3	57.32
6015	[PRO115	115.00]	AMP	8150.8	-101.65	0.0	0.00
6016	[PRO34	34.500]	AMP	11216.2	-103.10	488.4	-106.21
6018	[CAC115	115.00]	AMP	11595.7	-115.15	122.3	25.99
6087	[CAL115	115.00]	AMP	16329.5	-101.14	22.7	73.97

6179	[GUA230	230.00]	AMP	10905.4	-100.77	2788.5	61.84
6182	[VEL230	230.00]	AMP	10712.5	-105.57	2105.2	56.05
6240	[EHIG230	230.00]	AMP	5728.5	-116.35	2414.3	29.11
6262	[CHA34	34.500]	AMP	8034.8	-99.69	0.0	0.00
6340	[CAN230	230.00]	AMP	5394.5	-97.74	0.0	0.00
6370	[BOQIII34B	34.500]	AMP	26122.0	-99.13	0.0	0.00
6380	[BOQIII230	230.00]	AMP	8719.7	-98.91	3321.6	58.67
6381	[BOQIII34	34.500]	AMP	26122.0	-99.13	0.0	0.00
6460	[ECO230	230.00]	AMP	6746.1	-115.37	2560.9	34.73
6520	[SBA230	230.00]	AMP	8093.5	-110.17	2247.3	50.79
6521	[SBA115	115.00]	AMP	8428.8	-117.02	0.0	0.00
6522	[SBA34	34.500]	AMP	13506.9	-118.74	6088.2	-119.92
6840	[PAN3 230	230.00]	AMP	6667.3	-112.55	2635.4	13.44

PSS(R)E-33.12.1 ASCC SHORT CIRCUIT CURRENTS

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PLAN DE EXPANSION ETESA 2020-2034

2028CA_MODMIN_LUV

OPTIONS USED:

- SET PRE-FAULT VOLTAGES AND PHASE SHIFT ANGLES TO POWER FLOW SOLUTION
- SET SYNCHRONOUS/ASYNCHRONOUS MACHINE POWER OUTPUTS TO POWER FLOW SOLUTION
- SET GENERATOR POSITIVE SEQUENCE REACTANCES TO SUBTRANSIENT
- TRANSFORMER TAP RATIOS AND PHASE SHIFT ANGLES UNCHANGED
- LINE CHARGING REPRESENTED IN +/-0 SEQUENCES
- LINE/FIXED/SWITCHED SHUNTS AND TRANSFORMER MAGNETIZING ADMITTANCE REPRESENTED IN +/-0 SEQUENCES

SEQUENCES

- LOAD REPRESENTED IN +/-0 SEQUENCES
- DC LINES AND FACTS DEVICES BLOCKED
- IMPEDANCE CORRECTIONS NOT APPLIED TO TRANSFORMER ZERO SEQUENCE IMPEDANCES

				THREE PHASE FAULT		X----LG FAULT---X	
X-----	BUS	-----X		/I+/	AN(I+)	/3I0/	AN(I+)
6001	[PAN230	230.00]	AMP	4202.6	-96.90	2635.6	5.93
6002	[PAN115	115.00]	AMP	8060.6	-99.24	119.4	29.29
6003	[PANII230	230.00]	AMP	4079.8	-97.98	2703.9	3.89
6004	[PANII115	115.00]	AMP	7243.3	-104.52	0.0	0.00
6005	[CHO230	230.00]	AMP	4386.6	-97.41	2564.8	12.75
6007	[CHO34	34.500]	AMP	17968.7	-117.10	502.8	-146.50
6008	[LSA230	230.00]	AMP	6067.8	-94.68	2218.4	38.85
6009	[LSA115	115.00]	AMP	9173.7	-104.17	0.0	0.00
6010	[LSA34	34.500]	AMP	16431.0	-87.90	502.1	-101.67
6011	[MDN230	230.00]	AMP	10576.3	-95.45	2721.5	61.18
6012	[MDN115	115.00]	AMP	12605.7	-99.15	23.0	71.93
6013	[MDN34	34.500]	AMP	14629.4	-103.45	495.3	-109.56
6014	[PRO230	230.00]	AMP	8619.6	-95.91	3619.2	55.70
6015	[PRO115	115.00]	AMP	7845.6	-100.98	0.0	0.00
6016	[PRO34	34.500]	AMP	11059.6	-103.49	491.2	-106.57
6018	[CAC115	115.00]	AMP	8012.5	-99.46	119.4	29.24
6087	[CAL115	115.00]	AMP	15456.5	-99.03	22.9	73.95
6179	[GUA230	230.00]	AMP	9757.1	-96.38	2848.5	60.28
6182	[VEL230	230.00]	AMP	8217.7	-94.60	2194.3	53.31
6240	[EHIG230	230.00]	AMP	4204.5	-101.51	2502.4	23.23
6262	[CHA34	34.500]	AMP	8013.7	-99.68	0.0	0.00
6340	[CAN230	230.00]	AMP	5197.5	-96.30	0.0	0.00
6370	[BOQIII34B	34.500]	AMP	24442.9	-98.68	0.0	0.00
6380	[BOQIII230	230.00]	AMP	8020.2	-96.50	3398.2	57.15
6381	[BOQIII34	34.500]	AMP	24442.9	-98.68	0.0	0.00
6460	[ECO230	230.00]	AMP	4579.1	-100.81	2737.7	26.47
6520	[SBA230	230.00]	AMP	6006.6	-98.88	2393.4	46.39
6521	[SBA115	115.00]	AMP	6765.6	-110.53	0.0	0.00
6522	[SBA34	34.500]	AMP	9979.3	-117.46	5587.8	-120.61
6840	[PAN3 230	230.00]	AMP	4218.7	-96.88	2636.0	6.30

