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SKM POWER*TOOLS FOR WINDOWS
LOAD FLOW AND VOLTAGE DROP ANALYSIS REPORT
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*** SOLUTION COMMENTS ***

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SOLUTION PARAMETERS

BRANCH VOLTAGE CRITERIA : 3.00 %

BUS VOLTAGE CRITERIA : 5.00 %

UTILITY IMPEDANCE : YES

TRANSFORMER PHASE SHIFT : NO

LTC TRANSFORMER : NO

CALCULATION NETHOD : Newton Method

SOLUTION METHOD : EXACT

ALL PU VALUES ARE EXPRESSED ON A 100 MVA BASE

LOAD FLOW IS BASED ON CONNECTED LOADS.

LOAD ANALYSIS INCLUDES ALL LOADS.

<<PERCENT VOLTAGE DROPS ARE BASED ON NOMINAL DESIGN VOLTAGES>>

SWING GENERATORS

SOURCE NAME VOLTAGE ANGLE

=====

WP&L Feeder 1.000 0.00

GEN-HP 1.000 0.00

PV GENERATORS

SOURCE NAME VOLTAGE kW KVARMIN KVARMAX PARTICIPATION

=====

BUS VOLTAGE CONVERGENCY CRITERIA: 0.00001000 PU

LARGEST BUS VOLTAGE MISMATCH BUS-0351 -0.12529010 PU

LARGEST BUS VOLTAGE MISMATCH BUS-0351 -0.00291715 PU

LARGEST BUS VOLTAGE MISMATCH BUS-0351 -0.00000191 PU

BALANCED VOLTAGE DROP AND LOAD FLOW ANALYSIS (SWING GENERATORS)

SOURCE	VOLTAGE	ANGLE	KW	KVAR	VD%	(UTILITY IMPEDANCE)
WP&L Feeder	1.000	0.00	10206.81	5758.29	4.71	0.07654 +j 0.61231
GEN-HP	1.000	0.00	41.54	28.50	5.40	8.00000 +j 160.00000

BALANCED VOLTAGE DROP AND LOAD FLOW ANALYSIS (PV GENERATOR SCHEDULE REPORT)

---VOLTAGE--- -KVAR LIMITS- ---ACTUAL----

PV SOURCE NAME SCHED. ACTUAL MIN MAX KW KVAR

BALANCED VOLTAGE DROP AND LOAD FLOW ANALYSIS

VOLTAGE EFFECT ON LOADS MODELED

VOLTAGE DROP CRITERIA: BRANCH = 3.00% BUS = 5.00%

==== BUS: BUS-0021 DESIGN VOLTS: 208 BUS VOLTS: 193 %VD: 7.00 \$

===== PU BUS VOLTAGE: 0.930 ANGLE: -4.7 DEGREES

LOAD FROM: BUS-TDIS-0021 TDIS-0021 TRANSF AMPS: 431.1 VOLTAGE DROP: 4. %VD: 1.93

PROJECTED POWER FLOW: 130.0 KW 63.0 KVAR 144.4 KVA 0.90 LAGGING

LOSSES THRU TRANSF: 1.4 KW 4.0 KVAR 4.2 KVA

BRANCH DIVERSITY LOAD: 130.0 KW 63.0 KVAR

==== BUS: BUS-0031 DESIGN VOLTS: 208 BUS VOLTS: 195 %VD: 6.36 \$

===== PU BUS VOLTAGE: 0.936 ANGLE: -4.5 DEGREES

LOAD FROM: BUS-TDIS-0031P TDIS-0031 TRANSF AMPS: 349.1 VOLTAGE DROP: 3. %VD: 1.29

PROJECTED POWER FLOW: 106.0 KW 51.3 KVAR 117.8 KVA 0.90 LAGGING

LOSSES THRU TRANSF: 0.5 KW 2.6 KVAR 2.6 KVA

BRANCH DIVERSITY LOAD: 106.0 KW 51.3 KVAR

==== BUS: BUS-0041 DESIGN VOLTS: 480 BUS VOLTS: 452 %VD: 5.86 \$

===== PU BUS VOLTAGE: 0.941 ANGLE: -4.2 DEGREES

LOAD FROM: BUS-TDIS-0041P TDIS-0041 TRANSF AMPS: 295.3 VOLTAGE DROP: 4. %VD: 0.78

PROJECTED POWER FLOW: 208.0 KW 100.7 KVAR 231.1 KVA 0.90 LAGGING

LOSSES THRU TRANSF: 0.6 KW 3.2 KVAR 3.3 KVA

BRANCH DIVERSITY LOAD: 208.0 KW 100.7 KVAR

==== BUS: BUS-0051 DESIGN VOLTS: 480 BUS VOLTS: 446 %VD: 7.02 \$

===== PU BUS VOLTAGE: 0.930 ANGLE: -5.0 DEGREES

LOAD FROM: BUS-TDIS-0051 TDIS-0051 TRANSF AMPS: 379.5 VOLTAGE DROP: 9. %VD: 1.95

PROJECTED POWER FLOW: 264.0 KW 127.9 KVAR 293.3 KVA 0.90 LAGGING

LOSSES THRU TRANSF: 2.0 KW 9.8 KVAR 10.0 KVA

BRANCH DIVERSITY LOAD: 264.0 KW 127.9 KVAR

==== BUS: BUS-0071 DESIGN VOLTS: 208 BUS VOLTS: 189 %VD: 8.99 \$

===== PU BUS VOLTAGE: 0.910 ANGLE: -6.5 DEGREES

BALANCED VOLTAGE DROP AND LOAD FLOW ANALYSIS

VOLTAGE EFFECT ON LOADS MODELED

VOLTAGE DROP CRITERIA: BRANCH = 3.00% BUS = 5.00%

LOAD FROM: BUS-TDIS-0071P TDIS-0071 TRANSF AMPS: 1189.5 VOLTAGE DROP: 9. %VD: 4.14\$

PROJECTED POWER FLOW: 351.0 KW 170.0 KVAR 390.0 KVA 0.90 LAGGING

LOSSES THRU TRANSF: 6.1 KW 26.9 KVAR 27.5 KVA

BRANCH DIVERSITY LOAD: 351.0 KW 170.0 KVAR

==== BUS: BUS-0072 DESIGN VOLTS: 480 BUS VOLTS: 445 %VD: 7.39 \$

===== PU BUS VOLTAGE: 0.926 ANGLE: -5.4 DEGREES

LOAD FROM: BUS-TDIS-0072P TDIS-0072 TRANSF AMPS: 427.2 VOLTAGE DROP: 12. %VD: 2.53

PROJECTED POWER FLOW: 296.0 KW 143.4 KVAR 328.9 KVA 0.90 LAGGING

LOSSES THRU TRANSF: 3.0 KW 14.0 KVAR 14.3 KVA

BRANCH DIVERSITY LOAD: 296.0 KW 143.4 KVAR

==== BUS: BUS-0073 DESIGN VOLTS: 480 BUS VOLTS: 450 %VD: 6.27 \$

===== PU BUS VOLTAGE: 0.937 ANGLE: -4.6 DEGREES

LOAD FROM: BUS-TDIS-0072P TDIS-0073 TRANSF AMPS: 239.5 VOLTAGE DROP: 7. %VD: 1.41

PROJECTED POWER FLOW: 168.0 KW 81.4 KVAR 186.7 KVA 0.90 LAGGING

LOSSES THRU TRANSF: 0.9 KW 4.4 KVAR 4.5 KVA

BRANCH DIVERSITY LOAD: 168.0 KW 81.4 KVAR

==== BUS: BUS-0081 DESIGN VOLTS: 208 BUS VOLTS: 193 %VD: 7.31 \$

===== PU BUS VOLTAGE: 0.927 ANGLE: -5.3 DEGREES

LOAD FROM: BUS-TDIS-0081P TDIS-0081 TRANSF AMPS: 1028.1 VOLTAGE DROP: 5. %VD: 2.32

PROJECTED POWER FLOW: 309.0 KW 149.7 KVAR 343.3 KVA 0.90 LAGGING

LOSSES THRU TRANSF: 2.9 KW 13.4 KVAR 13.7 KVA

BRANCH DIVERSITY LOAD: 309.0 KW 149.7 KVAR

==== BUS: BUS-0100 DESIGN VOLTS: 12470 BUS VOLTS: 11866 %VD: 4.84

===== PU BUS VOLTAGE: 0.952 ANGLE: -3.5 DEGREES

BALANCED VOLTAGE DROP AND LOAD FLOW ANALYSIS

VOLTAGE EFFECT ON LOADS MODELED

VOLTAGE DROP CRITERIA: BRANCH = 3.00% BUS = 5.00%

LOAD FROM: PADS-0001 CABL-0201 FEEDER AMPS: 46.0 VOLTAGE DROP: 2. %VD: 0.02

PROJECTED POWER FLOW: 786.2 KW 526.3 KVAR 946.1 KVA 0.83 LAGGING

LOSSES THRU FEEDER: 0.2 KW 0.1 KVAR 0.2 KVA

LOAD TO: BUS-TDIS-0102P CABL-0201A FEEDER AMPS: 23.8 VOLTAGE DROP: 1. %VD: 0.00

PROJECTED POWER FLOW: 405.3 KW 273.8 KVAR 489.1 KVA 0.83 LAGGING

LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

LOAD TO: BUS-TDIS-0101P CABL-0201B FEEDER AMPS: 22.2 VOLTAGE DROP: 1. %VD: 0.00

PROJECTED POWER FLOW: 380.9 KW 252.5 KVAR 457.0 KVA 0.83 LAGGING

LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

==== BUS: BUS-0101 DESIGN VOLTS: 208 BUS VOLTS: 192 %VD: 7.64 \$

===== PU BUS VOLTAGE: 0.924 ANGLE: -5.3 DEGREES

LOAD FROM: BUS-TDIS-0101P TDIS-0101 TRANSF AMPS: 1332.9 VOLTAGE DROP: 6. %VD: 2.79

PROJECTED POWER FLOW: 377.0 KW 233.6 KVAR 443.5 KVA 0.85 LAGGING

LOSSES THRU TRANSF: 3.8 KW 18.8 KVAR 19.2 KVA

BRANCH DIVERSITY LOAD: 377.0 KW 233.6 KVAR

==== BUS: BUS-0102 DESIGN VOLTS: 480 BUS VOLTS: 439 %VD: 8.45 \$

===== PU BUS VOLTAGE: 0.916 ANGLE: -5.8 DEGREES

LOAD FROM: BUS-TDIS-0102P TDIS-0102 TRANSF AMPS: 618.2 VOLTAGE DROP: 17. %VD: 3.60\$

PROJECTED POWER FLOW: 400.0 KW 247.9 KVAR 470.6 KVA 0.85 LAGGING

LOSSES THRU TRANSF: 5.3 KW 25.9 KVAR 26.4 KVA

BRANCH DIVERSITY LOAD: 400.0 KW 247.9 KVAR

==== BUS: BUS-0111 DESIGN VOLTS: 480 BUS VOLTS: 448 %VD: 6.56 \$

===== PU BUS VOLTAGE: 0.934 ANGLE: -4.7 DEGREES

BALANCED VOLTAGE DROP AND LOAD FLOW ANALYSIS

VOLTAGE EFFECT ON LOADS MODELED

VOLTAGE DROP CRITERIA: BRANCH = 3.00% BUS = 5.00%

LOAD FROM: BUS-TDIS-0111P TDIS-0111 TRANSF AMPS: 360.4 VOLTAGE DROP: 7. %VD: 1.54

PROJECTED POWER FLOW: 252.0 KW 122.0 KVAR 280.0 KVA 0.90 LAGGING

LOSSES THRU TRANSF: 1.5 KW 7.3 KVAR 7.5 KVA

BRANCH DIVERSITY LOAD: 252.0 KW 122.0 KVAR

==== BUS: BUS-0113 DESIGN VOLTS: 208 BUS VOLTS: 194 %VD: 6.50 \$

===== PU BUS VOLTAGE: 0.935 ANGLE: -4.7 DEGREES

LOAD FROM: BUS-TDIS-0112P TDIS-0112 TRANSF AMPS: 663.0 VOLTAGE DROP: 3. %VD: 1.47

PROJECTED POWER FLOW: 201.0 KW 97.3 KVAR 223.3 KVA 0.90 LAGGING

LOSSES THRU TRANSF: 1.1 KW 5.6 KVAR 5.7 KVA

BRANCH DIVERSITY LOAD: 201.0 KW 97.3 KVAR

==== BUS: BUS-0114 DESIGN VOLTS: 480 BUS VOLTS: 449 %VD: 6.37 \$

===== PU BUS VOLTAGE: 0.936 ANGLE: -4.5 DEGREES

LOAD FROM: BUS-TDIS-0113P TDIS-0113 TRANSF AMPS: 428.2 VOLTAGE DROP: 6. %VD: 1.34

PROJECTED POWER FLOW: 300.0 KW 145.3 KVAR 333.3 KVA 0.90 LAGGING

LOSSES THRU TRANSF: 1.6 KW 7.5 KVAR 7.7 KVA

BRANCH DIVERSITY LOAD: 300.0 KW 145.3 KVAR

==== BUS: BUS-0115 DESIGN VOLTS: 480 BUS VOLTS: 0 %VD: 100.00 \$

===== PU BUS VOLTAGE: 0.000 ANGLE: 0.0 DEGREES

**** NO LOAD SPECIFIED ****

==== BUS: BUS-0121 DESIGN VOLTS: 480 BUS VOLTS: 451 %VD: 6.01 \$

===== PU BUS VOLTAGE: 0.940 ANGLE: -4.3 DEGREES

LOAD FROM: BUS-TDIS-0121P TDIS-0121 TRANSF AMPS: 300.0 VOLTAGE DROP: 5. %VD: 1.02

PROJECTED POWER FLOW: 211.0 KW 102.2 KVAR 234.4 KVA 0.90 LAGGING

LOSSES THRU TRANSF: 0.8 KW 4.1 KVAR 4.1 KVA

BRANCH DIVERSITY LOAD: 211.0 KW 102.2 KVAR

==== BUS: BUS-0125 DESIGN VOLTS: 480 BUS VOLTS: 441 %VD: 8.19 \$

===== PU BUS VOLTAGE: 0.918 ANGLE: -5.2 DEGREES

BALANCED VOLTAGE DROP AND LOAD FLOW ANALYSIS

VOLTAGE EFFECT ON LOADS MODELED

VOLTAGE DROP CRITERIA: BRANCH = 3.00% BUS = 5.00%

LOAD FROM: BUS-TDIS-0942 TDIS-0942 TRANSF AMPS: 884.3 VOLTAGE DROP: 15. %VD: 3.08\$

PROJECTED POWER FLOW: 540.0 KW 405.0 KVAR 675.0 KVA 0.80 LAGGING

LOSSES THRU TRANSF: 5.3 KW 30.1 KVAR 30.6 KVA

BRANCH DIVERSITY LOAD: 540.0 KW 405.0 KVAR

==== BUS: BUS-0141 DESIGN VOLTS: 480 BUS VOLTS: 441 %VD: 8.20 \$

===== PU BUS VOLTAGE: 0.918 ANGLE: -5.7 DEGREES

LOAD FROM: BUS-TDIS-0141P TDIS-0141 TRANSF AMPS: 1037.4 VOLTAGE DROP: 16. %VD: 3.38\$

PROJECTED POWER FLOW: 673.0 KW 417.1 KVAR 791.8 KVA 0.85 LAGGING

LOSSES THRU TRANSF: 7.4 KW 42.1 KVAR 42.8 KVA

BRANCH DIVERSITY LOAD: 673.0 KW 417.1 KVAR

==== BUS: BUS-0142 DESIGN VOLTS: 480 BUS VOLTS: 441 %VD: 8.11 \$

===== PU BUS VOLTAGE: 0.919 ANGLE: -5.7 DEGREES

LOAD FROM: BUS-TDIS-0141P TDIS-0142 TRANSF AMPS: 1010.2 VOLTAGE DROP: 16. %VD: 3.29\$

PROJECTED POWER FLOW: 656.0 KW 406.6 KVAR 771.8 KVA 0.85 LAGGING

LOSSES THRU TRANSF: 7.1 KW 39.9 KVAR 40.6 KVA

BRANCH DIVERSITY LOAD: 656.0 KW 406.6 KVAR

==== BUS: BUS-0331 DESIGN VOLTS: 480 BUS VOLTS: 437 %VD: 8.94 \$

===== PU BUS VOLTAGE: 0.911 ANGLE: -6.0 DEGREES

LOAD FROM: BUS-TDIS-0331P TDIS-0331 TRANSF AMPS: 508.4 VOLTAGE DROP: 19. %VD: 3.99\$

PROJECTED POWER FLOW: 330.1 KW 197.9 KVAR 384.9 KVA 0.86 LAGGING

LOSSES THRU TRANSF: 5.0 KW 23.7 KVAR 24.2 KVA

BRANCH DIVERSITY LOAD: 330.1 KW 197.9 KVAR

==== BUS: BUS-0341 DESIGN VOLTS: 208 BUS VOLTS: 187 %VD: 10.28 \$

===== PU BUS VOLTAGE: 0.897 ANGLE: -7.3 DEGREES

BALANCED VOLTAGE DROP AND LOAD FLOW ANALYSIS

VOLTAGE EFFECT ON LOADS MODELED

VOLTAGE DROP CRITERIA: BRANCH = 3.00% BUS = 5.00%

LOAD FROM: BUS-TDIS-0341P TDIS-0341 TRANSF AMPS: 2032.6 VOLTAGE DROP: 11. %VD: 5.38\$

PROJECTED POWER FLOW: 591.3 KW 286.4 KVAR 657.0 KVA 0.90 LAGGING

LOSSES THRU TRANSF: 14.1 KW 57.8 KVAR 59.5 KVA

BRANCH DIVERSITY LOAD: 591.3 KW 286.4 KVAR

==== BUS: BUS-0351 DESIGN VOLTS: 208 BUS VOLTS: 183 %VD: 11.96 \$

===== PU BUS VOLTAGE: 0.880 ANGLE: -8.0 DEGREES

LOAD FROM: BUS-TDIS-0351P TDIS-0351 TRANSF AMPS: 767.2 VOLTAGE DROP: 15. %VD: 7.07\$

PROJECTED POWER FLOW: 219.0 KW 106.1 KVAR 243.3 KVA 0.90 LAGGING

LOSSES THRU TRANSF: 7.9 KW 26.7 KVAR 27.8 KVA

BRANCH DIVERSITY LOAD: 219.0 KW 106.1 KVAR

==== BUS: BUS-0371 DESIGN VOLTS: 208 BUS VOLTS: 189 %VD: 8.96 \$

===== PU BUS VOLTAGE: 0.910 ANGLE: -6.1 DEGREES

LOAD FROM: BUS-TDIS-0371P TDIS-0371 TRANSF AMPS: 481.0 VOLTAGE DROP: 8. %VD: 3.96\$

PROJECTED POWER FLOW: 142.0 KW 68.8 KVAR 157.8 KVA 0.90 LAGGING

LOSSES THRU TRANSF: 2.7 KW 9.7 KVAR 10.1 KVA

BRANCH DIVERSITY LOAD: 142.0 KW 68.8 KVAR

==== BUS: BUS-0391 DESIGN VOLTS: 208 BUS VOLTS: 192 %VD: 7.48 \$

===== PU BUS VOLTAGE: 0.925 ANGLE: -4.8 DEGREES

LOAD FROM: BUS-TDIS-0391P TDIS-0391 TRANSF AMPS: 400.0 VOLTAGE DROP: 5. %VD: 2.49

PROJECTED POWER FLOW: 120.0 KW 58.1 KVAR 133.3 KVA 0.90 LAGGING

LOSSES THRU TRANSF: 1.8 KW 4.4 KVAR 4.8 KVA

BRANCH DIVERSITY LOAD: 120.0 KW 58.1 KVAR

==== BUS: BUS-0411 DESIGN VOLTS: 208 BUS VOLTS: 190 %VD: 8.72 \$

===== PU BUS VOLTAGE: 0.913 ANGLE: -6.0 DEGREES

BALANCED VOLTAGE DROP AND LOAD FLOW ANALYSIS

VOLTAGE EFFECT ON LOADS MODELED

VOLTAGE DROP CRITERIA: BRANCH = 3.00% BUS = 5.00%

LOAD FROM: BUS-TDIS-0411P TDIS-0411 TRANSF AMPS: 415.6 VOLTAGE DROP: 8. %VD: 3.72\$

PROJECTED POWER FLOW: 123.0 KW 59.6 KVAR 136.7 KVA 0.90 LAGGING

LOSSES THRU TRANSF: 2.2 KW 7.9 KVAR 8.2 KVA

BRANCH DIVERSITY LOAD: 123.0 KW 59.6 KVAR

==== BUS: BUS-0421 DESIGN VOLTS: 208 BUS VOLTS: 193 %VD: 7.05 \$

===== PU BUS VOLTAGE: 0.929 ANGLE: -4.8 DEGREES

LOAD FROM: BUS-TDIS-0421S CABL-HUG_208 FEEDER AMPS: 411.5 VOLTAGE DROP: 1. %VD: 0.26

PROJECTED POWER FLOW: 124.0 KW 60.1 KVAR 137.8 KVA 0.90 LAGGING

LOSSES THRU FEEDER: 0.3 KW 0.3 KVAR 0.4 KVA

BRANCH DIVERSITY LOAD: 124.0 KW 60.1 KVAR

==== BUS: BUS-0441 DESIGN VOLTS: 208 BUS VOLTS: 194 %VD: 6.69 \$

===== PU BUS VOLTAGE: 0.933 ANGLE: -4.7 DEGREES

LOAD FROM: BUS-TDIS-0441P TDIS-0441 TRANSF AMPS: 436.3 VOLTAGE DROP: 3. %VD: 1.68

PROJECTED POWER FLOW: 132.0 KW 63.9 KVAR 146.7 KVA 0.90 LAGGING

LOSSES THRU TRANSF: 1.0 KW 3.9 KVAR 4.0 KVA

BRANCH DIVERSITY LOAD: 132.0 KW 63.9 KVAR

==== BUS: BUS-0451 DESIGN VOLTS: 480 BUS VOLTS: 449 %VD: 6.45 \$

===== PU BUS VOLTAGE: 0.936 ANGLE: -4.8 DEGREES

LOAD FROM: BUS-TDIS-0451P TDIS-0451 TRANSF AMPS: 475.7 VOLTAGE DROP: 8. %VD: 1.62

PROJECTED POWER FLOW: 333.0 KW 161.3 KVAR 370.0 KVA 0.90 LAGGING

LOSSES THRU TRANSF: 2.1 KW 10.2 KVAR 10.4 KVA

BRANCH DIVERSITY LOAD: 333.0 KW 161.3 KVAR

==== BUS: BUS-0452 DESIGN VOLTS: 480 BUS VOLTS: 444 %VD: 7.55 \$

===== PU BUS VOLTAGE: 0.925 ANGLE: -5.7 DEGREES

BALANCED VOLTAGE DROP AND LOAD FLOW ANALYSIS

VOLTAGE EFFECT ON LOADS MODELED

VOLTAGE DROP CRITERIA: BRANCH = 3.00% BUS = 5.00%

LOAD FROM: BUS-TDIS-0451P TDIS-0452 TRANSF AMPS: 948.3 VOLTAGE DROP: 13. %VD: 2.73

PROJECTED POWER FLOW: 656.0 KW 317.7 KVAR 728.9 KVA 0.90 LAGGING

LOSSES THRU TRANSF: 6.2 KW 35.2 KVAR 35.7 KVA

BRANCH DIVERSITY LOAD: 656.0 KW 317.7 KVAR

==== BUS: BUS-0611_MDPH DESIGN VOLTS: 480 BUS VOLTS: 449 %VD: 6.40 \$

===== PU BUS VOLTAGE: 0.936 ANGLE: -4.6 DEGREES

LOAD FROM: SA-0611 TDIS-0611 TRANSF AMPS: 428.3 VOLTAGE DROP: 7. %VD: 1.46

PROJECTED POWER FLOW: 300.0 KW 145.3 KVAR 333.3 KVA 0.90 LAGGING

LOSSES THRU TRANSF: 1.7 KW 8.3 KVAR 8.5 KVA

BRANCH DIVERSITY LOAD: 300.0 KW 145.3 KVAR

==== BUS: BUS-0612_MDPL DESIGN VOLTS: 208 BUS VOLTS: 196 %VD: 5.93 \$

===== PU BUS VOLTAGE: 0.941 ANGLE: -4.3 DEGREES

LOAD FROM: SA-0611 TDIS-0612 TRANSF AMPS: 675.4 VOLTAGE DROP: 2. %VD: 0.99

PROJECTED POWER FLOW: 206.0 KW 99.8 KVAR 228.9 KVA 0.90 LAGGING

LOSSES THRU TRANSF: 0.8 KW 3.9 KVAR 3.9 KVA

BRANCH DIVERSITY LOAD: 206.0 KW 99.8 KVAR

==== BUS: BUS-0911 DESIGN VOLTS: 480 BUS VOLTS: 453 %VD: 5.72 \$

===== PU BUS VOLTAGE: 0.943 ANGLE: -3.9 DEGREES

LOAD FROM: BUS-GEN-HP CBL-GEN-HP FEEDER AMPS: 64.1 VOLTAGE DROP: 2. %VD: 0.31

PROJECTED POWER FLOW: 41.4 KW 28.4 KVAR 50.2 KVA 0.82 LAGGING

LOSSES THRU FEEDER: 0.2 KW 0.1 KVAR 0.2 KVA

LOAD FROM: BUS-TDIS-0911P TDIS-0911 TRANSF AMPS: 74.8 VOLTAGE DROP: 4. %VD: 0.92

PROJECTED POWER FLOW: 45.6 KW 36.8 KVAR 58.6 KVA 0.78 LAGGING

LOSSES THRU TRANSF: 0.2 KW 0.6 KVAR 0.7 KVA

BRANCH DIVERSITY LOAD: 87.0 KW 65.3 KVAR

==== BUS: BUS-091MAIN DESIGN VOLTS: 12470 BUS VOLTS: 11872 %VD: 4.80

===== PU BUS VOLTAGE: 0.952 ANGLE: -3.5 DEGREES

BALANCED VOLTAGE DROP AND LOAD FLOW ANALYSIS

VOLTAGE EFFECT ON LOADS MODELED

VOLTAGE DROP CRITERIA: BRANCH = 3.00% BUS = 5.00%

LOAD FROM: BUS-WP&L CABL-UTIL-0100 FEEDER AMPS: 569.4 VOLTAGE DROP: 11. %VD: 0.09

PROJECTED POWER FLOW: 10198.1 KW 5751.4 KVAR 11708.1 KVA 0.87 LAGGING

LOSSES THRU FEEDER: 8.8 KW 6.9 KVAR 11.1 KVA

LOAD TO: PADS-0007 CABL-0100 FEEDER AMPS: 113.6 VOLTAGE DROP: 12. %VD: 0.09

PROJECTED POWER FLOW: 2032.3 KW 1151.7 KVAR 2335.9 KVA 0.87 LAGGING

LOSSES THRU FEEDER: 2.0 KW 1.2 KVAR 2.3 KVA

LOAD TO: PADS-0001 CABL-0200 FEEDER AMPS: 115.1 VOLTAGE DROP: 3. %VD: 0.03

PROJECTED POWER FLOW: 2031.1 KW 1214.9 KVAR 2366.7 KVA 0.86 LAGGING

LOSSES THRU FEEDER: 0.6 KW 0.3 KVAR 0.7 KVA

LOAD TO: PADS-0006 CABL-0300 FEEDER AMPS: 149.5 VOLTAGE DROP: 7. %VD: 0.06

PROJECTED POWER FLOW: 2699.2 KW 1473.0 KVAR 3075.0 KVA 0.88 LAGGING

LOSSES THRU FEEDER: 1.5 KW 0.9 KVAR 1.8 KVA

LOAD TO: PADS-0012 CABL-0400 FEEDER AMPS: 195.1 VOLTAGE DROP: 1. %VD: 0.01

PROJECTED POWER FLOW: 3389.7 KW 2146.2 KVAR 4012.0 KVA 0.84 LAGGING

LOSSES THRU FEEDER: 0.4 KW 0.2 KVAR 0.4 KVA

LOAD TO: BUS-TDIS-0911P CABL-0500 FEEDER AMPS: 11.6 VOLTAGE DROP: 0. %VD: 0.00

PROJECTED POWER FLOW: 45.8 KW -234.5 KVAR 238.9 KVA 0.19 LEADING

LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

==== BUS: BUS-0941 DESIGN VOLTS: 480 BUS VOLTS: 444 %VD: 7.54 \$

===== PU BUS VOLTAGE: 0.925 ANGLE: -5.5 DEGREES

LOAD FROM: BUS-TDIS-0941 TDIS-0941 TRANSF AMPS: 861.5 VOLTAGE DROP: 12. %VD: 2.43

PROJECTED POWER FLOW: 596.0 KW 288.7 KVAR 662.2 KVA 0.90 LAGGING

LOSSES THRU TRANSF: 5.0 KW 28.6 KVAR 29.0 KVA

BRANCH DIVERSITY LOAD: 596.0 KW 288.7 KVAR

==== BUS: BUS-0951 DESIGN VOLTS: 208 BUS VOLTS: 195 %VD: 6.17 \$

===== PU BUS VOLTAGE: 0.938 ANGLE: -4.4 DEGREES

BALANCED VOLTAGE DROP AND LOAD FLOW ANALYSIS

VOLTAGE EFFECT ON LOADS MODELED

VOLTAGE DROP CRITERIA: BRANCH = 3.00% BUS = 5.00%

LOAD FROM: BUS-TDIS-0951P TDIS-0951 TRANSF AMPS: 348.4 VOLTAGE DROP: 2. %VD: 1.18

PROJECTED POWER FLOW: 106.0 KW 51.3 KVAR 117.8 KVA 0.90 LAGGING

LOSSES THRU TRANSF: 0.5 KW 2.2 KVAR 2.3 KVA

BRANCH DIVERSITY LOAD: 106.0 KW 51.3 KVAR

==== BUS: BUS-0952 DESIGN VOLTS: 208 BUS VOLTS: 0 %VD: 100.00 \$

===== PU BUS VOLTAGE: 0.000 ANGLE: 0.0 DEGREES

**** NO LOAD SPECIFIED ****

==== BUS: BUS-GEN-HP DESIGN VOLTS: 480 BUS VOLTS: 454 %VD: 5.40 \$

===== PU BUS VOLTAGE: 0.946 ANGLE: -3.9 DEGREES

*** PV TYPE GENERATOR:GEN-HP 41.54 KW 28.50 KVAR

LOAD TO: BUS-0911 CBL-GEN-HP FEEDER AMPS: 64.1 VOLTAGE DROP: 2. %VD: 0.31

PROJECTED POWER FLOW: 41.5 KW 28.5 KVAR 50.4 KVA 0.82 LAGGING

LOSSES THRU FEEDER: 0.2 KW 0.1 KVAR 0.2 KVA

==== BUS: BUS-SG-4TAP DESIGN VOLTS: 12470 BUS VOLTS: 11838 %VD: 5.07 \$

===== PU BUS VOLTAGE: 0.949 ANGLE: -3.5 DEGREES

LOAD FROM: BUS-TDIS-0041P CABL-0308 FEEDER AMPS: 11.4 VOLTAGE DROP: 1. %VD: 0.00

PROJECTED POWER FLOW: -208.6 KW -104.0 KVAR 233.0 KVA 0.89 LAGGING

LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

LOAD TO: PADS-0004 CABL-0308A FEEDER AMPS: 17.2 VOLTAGE DROP: 0. %VD: 0.00

PROJECTED POWER FLOW: -315.1 KW -157.9 KVAR 352.4 KVA 0.89 LAGGING

LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

LOAD FROM: BUS-TDIS-0031P CABL-0313 FEEDER AMPS: 5.8 VOLTAGE DROP: 0. %VD: 0.00

PROJECTED POWER FLOW: -106.5 KW -53.9 KVAR 119.4 KVA 0.89 LAGGING

LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

==== BUS: BUS-TDIS-0421S DESIGN VOLTS: 208 BUS VOLTS: 194 %VD: 6.80 \$

===== PU BUS VOLTAGE: 0.932 ANGLE: -4.8 DEGREES

BALANCED VOLTAGE DROP AND LOAD FLOW ANALYSIS

VOLTAGE EFFECT ON LOADS MODELED

VOLTAGE DROP CRITERIA: BRANCH = 3.00% BUS = 5.00%

LOAD TO: BUS-0421 CABL-HUG_208 FEEDER AMPS: 411.5 VOLTAGE DROP: 1. %VD: 0.26
PROJECTED POWER FLOW: 124.3 KW 60.3 KVAR 138.2 KVA 0.90 LAGGING
LOSSES THRU FEEDER: 0.3 KW 0.3 KVAR 0.4 KVA

LOAD FROM: BUS-TDIS-0421P TDIS-0421 TRANSF AMPS: 411.5 VOLTAGE DROP: 4. %VD: 1.79
PROJECTED POWER FLOW: 124.3 KW 60.3 KVAR 138.2 KVA 0.90 LAGGING
LOSSES THRU TRANSF: 1.0 KW 3.9 KVAR 4.0 KVA

==== BUS: PADS-0001 DESIGN VOLTS: 12470 BUS VOLTS: 11869 %VD: 4.82
===== PU BUS VOLTAGE: 0.952 ANGLE: -3.5 DEGREES

LOAD FROM: BUS-091MAIN CABL-0200 FEEDER AMPS: 115.1 VOLTAGE DROP: 3. %VD: 0.03

PROJECTED POWER FLOW: 2030.5 KW 1214.6 KVAR 2366.1 KVA 0.86 LAGGING

LOSSES THRU FEEDER: 0.6 KW 0.3 KVAR 0.7 KVA

LOAD FROM: PADS-0002 CABL-0202 FEEDER AMPS: 99.4 VOLTAGE DROP: 20. %VD: 0.16

PROJECTED POWER FLOW: -1783.4 KW -999.3 KVAR 2044.3 KVA 0.87 LAGGING

LOSSES THRU FEEDER: 2.9 KW 1.8 KVAR 3.4 KVA

LOAD TO: BUS-0100 CABL-0201 FEEDER AMPS: 46.0 VOLTAGE DROP: 2. %VD: 0.02

PROJECTED POWER FLOW: 786.3 KW 526.4 KVAR 946.3 KVA 0.83 LAGGING

LOSSES THRU FEEDER: 0.2 KW 0.1 KVAR 0.2 KVA

LOAD TO: PADS-0012 CABL-0207 FEEDER AMPS: 30.3 VOLTAGE DROP: 2. %VD: 0.02

PROJECTED POWER FLOW: -539.2 KW -311.1 KVAR 622.5 KVA 0.87 LAGGING

LOSSES THRU FEEDER: 0.1 KW 0.1 KVAR 0.1 KVA

==== BUS: PADS-0002 DESIGN VOLTS: 12470 BUS VOLTS: 11849 %VD: 4.98

===== PU BUS VOLTAGE: 0.950 ANGLE: -3.5 DEGREES

LOAD TO: PADS-0001 CABL-0202 FEEDER AMPS: 99.4 VOLTAGE DROP: 20. %VD: 0.16

PROJECTED POWER FLOW: -1780.5 KW -997.5 KVAR 2040.9 KVA 0.87 LAGGING

LOSSES THRU FEEDER: 2.9 KW 1.8 KVAR 3.4 KVA

BALANCED VOLTAGE DROP AND LOAD FLOW ANALYSIS

VOLTAGE EFFECT ON LOADS MODELED

VOLTAGE DROP CRITERIA: BRANCH = 3.00% BUS = 5.00%

LOAD TO: BUS-TDIS-0081P CABL-0203 FEEDER AMPS: 17.1 VOLTAGE DROP: 1. %VD: 0.01
PROJECTED POWER FLOW: 311.9 KW 163.1 KVAR 351.9 KVA 0.89 LAGGING
LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

LOAD TO: BUS-TDIS-0121P CABL-0204 FEEDER AMPS: 11.5 VOLTAGE DROP: 1. %VD: 0.01
PROJECTED POWER FLOW: 211.9 KW 106.3 KVAR 237.0 KVA 0.89 LAGGING
LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

LOAD FROM: PADS-0003 CABL-0205 FEEDER AMPS: 70.8 VOLTAGE DROP: 11. %VD: 0.09
PROJECTED POWER FLOW: -1256.8 KW -728.2 KVAR 1452.5 KVA 0.87 LAGGING
LOSSES THRU FEEDER: 1.1 KW 0.7 KVAR 1.3 KVA

==== BUS: PADS-0003 DESIGN VOLTS: 12470 BUS VOLTS: 11838 %VD: 5.07 \$

===== PU BUS VOLTAGE: 0.949 ANGLE: -3.5 DEGREES

LOAD FROM: PADS-0004 CABL-0208 FEEDER AMPS: 49.0 VOLTAGE DROP: 0. %VD: 0.00

PROJECTED POWER FLOW: -858.3 KW -522.9 KVAR 1005.0 KVA 0.85 LAGGING

LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

LOAD TO: BUS-TDIS-0021 CABL-0206 FEEDER AMPS: 7.2 VOLTAGE DROP: 0. %VD: 0.00

PROJECTED POWER FLOW: 131.4 KW 67.0 KVAR 147.4 KVA 0.89 LAGGING

LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

LOAD TO: BUS-TDIS-0051 CABL-DOUD FEEDER AMPS: 14.6 VOLTAGE DROP: 0. %VD: 0.00

PROJECTED POWER FLOW: 266.0 KW 137.6 KVAR 299.5 KVA 0.89 LAGGING

LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

LOAD TO: PADS-0002 CABL-0205 FEEDER AMPS: 70.8 VOLTAGE DROP: 11. %VD: 0.09

PROJECTED POWER FLOW: -1255.6 KW -727.5 KVAR 1451.1 KVA 0.87 LAGGING

LOSSES THRU FEEDER: 1.1 KW 0.7 KVAR 1.3 KVA

==== BUS: PADS-0004 DESIGN VOLTS: 12470 BUS VOLTS: 11838 %VD: 5.07 \$

===== PU BUS VOLTAGE: 0.949 ANGLE: -3.5 DEGREES

BALANCED VOLTAGE DROP AND LOAD FLOW ANALYSIS

VOLTAGE EFFECT ON LOADS MODELED

VOLTAGE DROP CRITERIA: BRANCH = 3.00% BUS = 5.00%

LOAD TO: PADS-0003 CABL-0208 FEEDER AMPS: 49.0 VOLTAGE DROP: 0. %VD: 0.00
PROJECTED POWER FLOW: -858.3 KW -522.9 KVAR 1005.0 KVA 0.85 LAGGING
LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

LOAD TO: MH-0037SPL CABL-0310 FEEDER AMPS: 35.0 VOLTAGE DROP: 1. %VD: 0.01
PROJECTED POWER FLOW: -603.6 KW -387.7 KVAR 717.4 KVA 0.84 LAGGING
LOSSES THRU FEEDER: 0.1 KW 0.0 KVAR 0.1 KVA

LOAD FROM: PADS-0004A CABL-0307 FEEDER AMPS: 66.9 VOLTAGE DROP: 4. %VD: 0.03
PROJECTED POWER FLOW: -1146.8 KW -752.7 KVAR 1371.8 KVA 0.84 LAGGING
LOSSES THRU FEEDER: 0.4 KW 0.3 KVAR 0.5 KVA

LOAD FROM: BUS-SG-4TAP CABL-0308A FEEDER AMPS: 17.2 VOLTAGE DROP: 0. %VD: 0.00

PROJECTED POWER FLOW: -315.1 KW -157.9 KVAR 352.4 KVA 0.89 LAGGING

LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

==== BUS: PADS-0004A DESIGN VOLTS: 12470 BUS VOLTS: 11833 %VD: 5.11 \$

===== PU BUS VOLTAGE: 0.949 ANGLE: -3.5 DEGREES

LOAD TO: PADS-0004 CABL-0307 FEEDER AMPS: 66.9 VOLTAGE DROP: 4. %VD: 0.03

PROJECTED POWER FLOW: -1146.4 KW -752.4 KVAR 1371.3 KVA 0.84 LAGGING

LOSSES THRU FEEDER: 0.4 KW 0.3 KVAR 0.5 KVA

LOAD FROM: BUS-TDIS-0941 CABL-0312 FEEDER AMPS: 33.2 VOLTAGE DROP: 1. %VD: 0.01

PROJECTED POWER FLOW: -601.0 KW -317.3 KVAR 679.7 KVA 0.88 LAGGING

LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

LOAD FROM: BUS-TDIS-0942 CABL-0314 FEEDER AMPS: 34.0 VOLTAGE DROP: 1. %VD: 0.01

PROJECTED POWER FLOW: -545.3 KW -435.2 KVAR 697.7 KVA 0.78 LAGGING

LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.1 KVA

==== BUS: PADS-0005 DESIGN VOLTS: 12470 BUS VOLTS: 11844 %VD: 5.02 \$

===== PU BUS VOLTAGE: 0.950 ANGLE: -3.5 DEGREES

BALANCED VOLTAGE DROP AND LOAD FLOW ANALYSIS

VOLTAGE EFFECT ON LOADS MODELED

VOLTAGE DROP CRITERIA: BRANCH = 3.00% BUS = 5.00%

LOAD TO: MH-0011SPL CABL-0311 FEEDER AMPS: 76.3 VOLTAGE DROP: 4. %VD: 0.03
PROJECTED POWER FLOW: -1361.3 KW -773.1 KVAR 1565.5 KVA 0.87 LAGGING
LOSSES THRU FEEDER: 0.4 KW 0.3 KVAR 0.5 KVA

LOAD TO: MH-0037SPL CABL-0306 FEEDER AMPS: 35.0 VOLTAGE DROP: 4. %VD: 0.04
PROJECTED POWER FLOW: 603.9 KW 387.9 KVAR 717.8 KVA 0.84 LAGGING
LOSSES THRU FEEDER: 0.2 KW 0.1 KVAR 0.3 KVA

LOAD FROM: BUS-TDIS-0111P demo CABL-0305 FEEDER AMPS: 13.9 VOLTAGE DROP: 1. %VD: 0.00
PROJECTED POWER FLOW: -253.5 KW -129.4 KVAR 284.6 KVA 0.89 LAGGING
LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

LOAD FROM: PADS-0013 CABL-030X FEEDER AMPS: 27.5 VOLTAGE DROP: 1. %VD: 0.01

PROJECTED POWER FLOW: -503.8 KW -255.8 KVAR 565.0 KVA 0.89 LAGGING

LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

==== BUS: PADS-0006 DESIGN VOLTS: 12470 BUS VOLTS: 11865 %VD: 4.85

===== PU BUS VOLTAGE: 0.951 ANGLE: -3.5 DEGREES

LOAD TO: MH-0006SPL CABL-0309 FEEDER AMPS: 104.0 VOLTAGE DROP: 8. %VD: 0.06

PROJECTED POWER FLOW: 1872.6 KW 1032.0 KVAR 2138.2 KVA 0.88 LAGGING

LOSSES THRU FEEDER: 1.2 KW 0.8 KVAR 1.5 KVA

LOAD FROM: BUS-091MAIN CABL-0300 FEEDER AMPS: 149.5 VOLTAGE DROP: 7. %VD: 0.06

PROJECTED POWER FLOW: 2697.7 KW 1472.1 KVAR 3073.2 KVA 0.88 LAGGING

LOSSES THRU FEEDER: 1.5 KW 0.9 KVAR 1.8 KVA

LOAD FROM: BUS-TDIS-0072P CABL-0302 FEEDER AMPS: 25.7 VOLTAGE DROP: 2. %VD: 0.01

PROJECTED POWER FLOW: -468.0 KW -243.2 KVAR 527.4 KVA 0.89 LAGGING

LOSSES THRU FEEDER: 0.1 KW 0.0 KVAR 0.1 KVA

LOAD FROM: BUS-TDIS-0071P CABL-0301 FEEDER AMPS: 19.8 VOLTAGE DROP: 1. %VD: 0.01

PROJECTED POWER FLOW: -357.1 KW -196.9 KVAR 407.8 KVA 0.88 LAGGING

LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

==== BUS: PADS-0007 DESIGN VOLTS: 12470 BUS VOLTS: 11860 %VD: 4.89

===== PU BUS VOLTAGE: 0.951 ANGLE: -3.5 DEGREES

BALANCED VOLTAGE DROP AND LOAD FLOW ANALYSIS

VOLTAGE EFFECT ON LOADS MODELED

VOLTAGE DROP CRITERIA: BRANCH = 3.00% BUS = 5.00%

LOAD FROM: BUS-091MAIN CABL-0100 FEEDER AMPS: 113.6 VOLTAGE DROP: 12. %VD: 0.09

PROJECTED POWER FLOW: 2030.3 KW 1150.5 KVAR 2333.6 KVA 0.87 LAGGING

LOSSES THRU FEEDER: 2.0 KW 1.2 KVAR 2.3 KVA

LOAD TO: BUS-TDIS-0341P CABL-0102 FEEDER AMPS: 33.9 VOLTAGE DROP: 1. %VD: 0.01

PROJECTED POWER FLOW: 605.5 KW 344.2 KVAR 696.5 KVA 0.87 LAGGING

LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

LOAD TO: BUS-TDIS-0351P CABL-0101 FEEDER AMPS: 12.8 VOLTAGE DROP: 1. %VD: 0.01

PROJECTED POWER FLOW: 226.9 KW 132.8 KVAR 262.9 KVA 0.86 LAGGING

LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

LOAD TO: PADS-0008 CABL-0103 FEEDER AMPS: 66.9 VOLTAGE DROP: 6. %VD: 0.05

PROJECTED POWER FLOW: 1197.9 KW 673.5 KVAR 1374.3 KVA 0.87 LAGGING

LOSSES THRU FEEDER: 0.6 KW 0.4 KVAR 0.7 KVA

==== BUS: PADS-0008 DESIGN VOLTS: 12470 BUS VOLTS: 11854 %VD: 4.94

===== PU BUS VOLTAGE: 0.951 ANGLE: -3.5 DEGREES

LOAD FROM: PADS-0009 CABL-0106 FEEDER AMPS: 41.6 VOLTAGE DROP: 7. %VD: 0.05

PROJECTED POWER FLOW: -757.0 KW -394.5 KVAR 853.7 KVA 0.89 LAGGING

LOSSES THRU FEEDER: 0.4 KW 0.2 KVAR 0.5 KVA

LOAD TO: BUS-TDIS-0331P CABL-0104 FEEDER AMPS: 19.6 VOLTAGE DROP: 1. %VD: 0.01

PROJECTED POWER FLOW: 335.2 KW 221.6 KVAR 401.8 KVA 0.83 LAGGING

LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

LOAD TO: BUS-TDIS-0361P CABL-0105 FEEDER AMPS: 5.8 VOLTAGE DROP: 0. %VD: 0.00

PROJECTED POWER FLOW: 105.1 KW 57.0 KVAR 119.6 KVA 0.88 LAGGING

LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

LOAD FROM: PADS-0007 CABL-0103 FEEDER AMPS: 66.9 VOLTAGE DROP: 6. %VD: 0.05

PROJECTED POWER FLOW: 1197.3 KW 673.1 KVAR 1373.6 KVA 0.87 LAGGING

LOSSES THRU FEEDER: 0.6 KW 0.4 KVAR 0.7 KVA

==== BUS: PADS-0009 DESIGN VOLTS: 12470 BUS VOLTS: 11848 %VD: 4.99

===== PU BUS VOLTAGE: 0.950 ANGLE: -3.5 DEGREES

BALANCED VOLTAGE DROP AND LOAD FLOW ANALYSIS

VOLTAGE EFFECT ON LOADS MODELED

VOLTAGE DROP CRITERIA: BRANCH = 3.00% BUS = 5.00%

LOAD TO: PADS-0008 CABL-0106 FEEDER AMPS: 41.6 VOLTAGE DROP: 7. %VD: 0.05
PROJECTED POWER FLOW: -756.6 KW -394.3 KVAR 853.2 KVA 0.89 LAGGING
LOSSES THRU FEEDER: 0.4 KW 0.2 KVAR 0.5 KVA

LOAD TO: PADS-0010 CABL-0109 FEEDER AMPS: 26.9 VOLTAGE DROP: 0. %VD: 0.00
PROJECTED POWER FLOW: 490.1 KW 253.2 KVAR 551.7 KVA 0.89 LAGGING
LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

LOAD FROM: BUS-TDIS-0371P CABL-0107 FEEDER AMPS: 8.0 VOLTAGE DROP: 0. %VD: 0.00
PROJECTED POWER FLOW: -144.7 KW -78.5 KVAR 164.6 KVA 0.88 LAGGING
LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

LOAD FROM: BUS-TDIS-0391P CABL-0108 FEEDER AMPS: 6.7 VOLTAGE DROP: 0. %VD: 0.00

PROJECTED POWER FLOW: -121.8 KW -62.6 KVAR 136.9 KVA 0.89 LAGGING

LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

==== BUS: PADS-0010 DESIGN VOLTS: 12470 BUS VOLTS: 11848 %VD: 4.99

===== PU BUS VOLTAGE: 0.950 ANGLE: -3.5 DEGREES

LOAD TO: PADS-0011 CABL-0112 FEEDER AMPS: 14.1 VOLTAGE DROP: 2. %VD: 0.02

PROJECTED POWER FLOW: 258.3 KW 132.1 KVAR 290.2 KVA 0.89 LAGGING

LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

LOAD FROM: PADS-0009 CABL-0109 FEEDER AMPS: 26.9 VOLTAGE DROP: 0. %VD: 0.00

PROJECTED POWER FLOW: 490.1 KW 253.2 KVAR 551.6 KVA 0.89 LAGGING

LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

LOAD FROM: BUS-TDIS-0951P CABL-0111 FEEDER AMPS: 5.8 VOLTAGE DROP: 0. %VD: 0.00

PROJECTED POWER FLOW: -106.5 KW -53.6 KVAR 119.3 KVA 0.89 LAGGING

LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

LOAD FROM: BUS-TDIS-0411P CABL-0110 FEEDER AMPS: 6.9 VOLTAGE DROP: 0. %VD: 0.00

PROJECTED POWER FLOW: -125.2 KW -67.5 KVAR 142.2 KVA 0.88 LAGGING

LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

==== BUS: PADS-0011 DESIGN VOLTS: 12470 BUS VOLTS: 11846 %VD: 5.01 \$

===== PU BUS VOLTAGE: 0.950 ANGLE: -3.5 DEGREES

BALANCED VOLTAGE DROP AND LOAD FLOW ANALYSIS

VOLTAGE EFFECT ON LOADS MODELED

VOLTAGE DROP CRITERIA: BRANCH = 3.00% BUS = 5.00%

LOAD TO: BUS-TDIS-0441P CABL-0114 FEEDER AMPS: 7.3 VOLTAGE DROP: 1. %VD: 0.00
PROJECTED POWER FLOW: 133.0 KW 67.9 KVAR 149.3 KVA 0.89 LAGGING
LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

LOAD FROM: PADS-0010 CABL-0112 FEEDER AMPS: 14.1 VOLTAGE DROP: 2. %VD: 0.02
PROJECTED POWER FLOW: 258.3 KW 132.1 KVAR 290.1 KVA 0.89 LAGGING
LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

LOAD TO: BUS-TDIS-0421P CABL-0113 FEEDER AMPS: 6.9 VOLTAGE DROP: 0. %VD: 0.00
PROJECTED POWER FLOW: 125.3 KW 64.3 KVAR 140.8 KVA 0.89 LAGGING
LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

==== BUS: PADS-0012 DESIGN VOLTS: 12470 BUS VOLTS: 11871 %VD: 4.81

===== PU BUS VOLTAGE: 0.952 ANGLE: -3.5 DEGREES

LOAD TO: BUS-TDIS-0141P CABL-0401 FEEDER AMPS: 78.8 VOLTAGE DROP: 2. %VD: 0.02

PROJECTED POWER FLOW: 1343.7 KW 905.8 KVAR 1620.5 KVA 0.83 LAGGING

LOSSES THRU FEEDER: 0.2 KW 0.1 KVAR 0.3 KVA

LOAD FROM: PADS-0001 CABL-0207 FEEDER AMPS: 30.3 VOLTAGE DROP: 2. %VD: 0.02

PROJECTED POWER FLOW: -539.3 KW -311.1 KVAR 622.6 KVA 0.87 LAGGING

LOSSES THRU FEEDER: 0.1 KW 0.1 KVAR 0.1 KVA

LOAD FROM: BUS-091MAIN CABL-0400 FEEDER AMPS: 195.1 VOLTAGE DROP: 1. %VD: 0.01

PROJECTED POWER FLOW: 3389.3 KW 2146.0 KVAR 4011.5 KVA 0.84 LAGGING

LOSSES THRU FEEDER: 0.4 KW 0.2 KVAR 0.4 KVA

LOAD TO: BUS-TDIS-0451P CABL-0402 FEEDER AMPS: 86.1 VOLTAGE DROP: 2. %VD: 0.02

PROJECTED POWER FLOW: 1506.2 KW 929.0 KVAR 1769.7 KVA 0.85 LAGGING

LOSSES THRU FEEDER: 0.3 KW 0.2 KVAR 0.3 KVA

==== BUS: PADS-0013 DESIGN VOLTS: 12470 BUS VOLTS: 11843 %VD: 5.03 \$

===== PU BUS VOLTAGE: 0.950 ANGLE: -3.5 DEGREES

BALANCED VOLTAGE DROP AND LOAD FLOW ANALYSIS

VOLTAGE EFFECT ON LOADS MODELED

VOLTAGE DROP CRITERIA: BRANCH = 3.00% BUS = 5.00%

LOAD FROM: BUS-TDIS-0113P CABL-0304A FEEDER AMPS: 16.5 VOLTAGE DROP: 0. %VD: 0.00

PROJECTED POWER FLOW: -301.6 KW -152.8 KVAR 338.1 KVA 0.89 LAGGING

LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

LOAD FROM: BUS-TDIS-0112P CABL-0304 FEEDER AMPS: 11.1 VOLTAGE DROP: 1. %VD: 0.01

PROJECTED POWER FLOW: -202.2 KW -102.9 KVAR 226.9 KVA 0.89 LAGGING

LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

LOAD TO: PADS-0005 CABL-030X FEEDER AMPS: 27.5 VOLTAGE DROP: 1. %VD: 0.01

PROJECTED POWER FLOW: -503.8 KW -255.8 KVAR 565.0 KVA 0.89 LAGGING

LOSSES THRU FEEDER: 0.0 KW 0.0 KVAR 0.0 KVA

==== BUS: SA-0611 DESIGN VOLTS: 12470 BUS VOLTS: 11854 %VD: 4.94

===== PU BUS VOLTAGE: 0.951 ANGLE: -3.5 DEGREES

LOAD FROM: MH-0006SPL CABL-0316 FEEDER AMPS: 104.0 VOLTAGE DROP: 3. %VD: 0.02

PROJECTED POWER FLOW: 1871.0 KW 1031.0 KVAR 2136.2 KVA 0.88 LAGGING

LOSSES THRU FEEDER: 0.4 KW 0.3 KVAR 0.5 KVA

LOAD FROM: MH-0011SPL CABL-0303 FEEDER AMPS: 76.3 VOLTAGE DROP: 7. %VD: 0.06

PROJECTED POWER FLOW: -1362.5 KW -773.8 KVAR 1566.9 KVA 0.87 LAGGING

LOSSES THRU FEEDER: 0.8 KW 0.5 KVAR 0.9 KVA

LOAD TO: BUS-0611_MDPH TDIS-0611 TRANSF AMPS: 16.5 VOLTAGE DROP: 182. %VD: 1.46

PROJECTED POWER FLOW: 301.7 KW 153.6 KVAR 338.5 KVA 0.89 LAGGING

LOSSES THRU TRANSF: 1.7 KW 8.3 KVAR 8.5 KVA

LOAD TO: BUS-0612_MDPL TDIS-0612 TRANSF AMPS: 11.3 VOLTAGE DROP: 124. %VD: 0.99

PROJECTED POWER FLOW: 206.8 KW 103.6 KVAR 231.3 KVA 0.89 LAGGING

LOSSES THRU TRANSF: 0.8 KW 3.9 KVAR 3.9 KVA

BALANCED VOLTAGE DROP AND LOAD FLOW BUS DATA SUMMARY

BUS NAME	BASE VOLT	PU VOLT	BUS NAME	BASE VOLT	PU VOLT
BUS-0021	208.	0.9300	BUS-0031	208.	0.9364
BUS-0041	480.	0.9414	BUS-0051	480.	0.9298
BUS-0071	208.	0.9101	BUS-0072	480.	0.9261
BUS-0073	480.	0.9373	BUS-0081	208.	0.9269
BUS-0100	12470.	0.9516	BUS-0101	208.	0.9236
BUS-0102	480.	0.9155	BUS-0111	480.	0.9344
BUS-0113	208.	0.9350	BUS-0114	480.	0.9363
BUS-0115	480.	0.0000	BUS-0121	480.	0.9399
BUS-0125	480.	0.9181	BUS-0129	480.	0.9227
BUS-0131	480.	0.0000	BUS-0137	480.	0.0000
BUS-0141	480.	0.9180	BUS-0142	480.	0.9189
BUS-0331	480.	0.9106	BUS-0341	208.	0.8972
BUS-0351	208.	0.8804	BUS-0361	208.	0.9097
BUS-0371	208.	0.9104	BUS-0391	208.	0.9252
BUS-0411	208.	0.9128	BUS-0421	208.	0.9295
BUS-0441	208.	0.9331	BUS-0451	480.	0.9355
BUS-0452	480.	0.9245	BUS-0611_MDPH	480.	0.9360

BUS-0612_MDPL	208.	0.9407	BUS-0910	12470.	0.9521
BUS-0911	480.	0.9428	BUS-091MAIN	12470.	0.9520
BUS-0941	480.	0.9246	BUS-0951	208.	0.9383
BUS-0952	208.	0.0000	BUS-GEN-HP	480.	0.9460
BUS-SG-4TAP	12470.	0.9493	BUS-TDIS-0021	12470.	0.9493
BUS-TDIS-0031P	12470.	0.9493	BUS-TDIS-0041P	12470.	0.9492
BUS-TDIS-0051	12470.	0.9493	BUS-TDIS-0071P	12470.	0.9514
BUS-TDIS-0072P	12470.	0.9514	BUS-TDIS-0081P	12470.	0.9501
BUS-TDIS-0101P	12470.	0.9515	BUS-TDIS-0102P	12470.	0.9515
BUS-TDIS-0111P	12470.	0.9497	BUS-TDIS-0112P	12470.	0.9497
BUS-TDIS-0113P	12470.	0.9497	BUS-TDIS-0113P	12470.	0.0000
BUS-TDIS-0121P	12470.	0.9501	BUS-TDIS-0141P	12470.	0.9518
BUS-TDIS-0331P	12470.	0.9505	BUS-TDIS-0341P	12470.	0.9510
BUS-TDIS-0351P	12470.	0.9510	BUS-TDIS-0361P	12470.	0.9506
BUS-TDIS-0371P	12470.	0.9501	BUS-TDIS-0391P	12470.	0.9501
BUS-TDIS-0411P	12470.	0.9501	BUS-TDIS-0421P	12470.	0.9499
BUS-TDIS-0421S	208.	0.9320	BUS-TDIS-0441P	12470.	0.9499
BUS-TDIS-0451P	12470.	0.9518	BUS-TDIS-0911P	12470.	0.9520
BUS-TDIS-0941	12470.	0.9489	BUS-TDIS-0942	12470.	0.9489
BUS-TDIS-0951P	12470.	0.9501	BUS-TDIS-0951P	12470.	0.0000
BUS-WP&L	12470.	0.9529	MH-0006SPL	12470.	0.9508
MH-0011SPL	12470.	0.9501	MH-0037SPL	12470.	0.9494
PADS-0001	12470.	0.9518	PADS-0002	12470.	0.9502
PADS-0003	12470.	0.9493	PADS-0004	12470.	0.9493

BALANCED VOLTAGE DROP AND LOAD FLOW BUS DATA SUMMARY

BUS NAME	BASE VOLT	PU VOLT	BUS NAME	BASE VOLT	PU VOLT
PADS-0004A	12470.	0.9489	PADS-0005	12470.	0.9498
PADS-0006	12470.	0.9515	PADS-0007	12470.	0.9511
PADS-0008	12470.	0.9506	PADS-0009	12470.	0.9501
PADS-0010	12470.	0.9501	PADS-0011	12470.	0.9499
PADS-0012	12470.	0.9519	PADS-0013	12470.	0.9497
SA-0611	12470.	0.9506			

BALANCED VOLTAGE DROP AND LOAD FLOW BRANCH DATA SUMMARY

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BRANCH NAME	FROM NAME	TO NAME	TYPE	VD%	AMPS	KVA	RATING%
CABL-UTIL-0100	BUS-WP&L	BUS-091MAIN	FDR	0.09	569.38	11719.08	120.05
CABL-0100	BUS-091MAIN	PADS-0007	FDR	0.09	113.60	2335.92	42.86
CABL-0200	BUS-091MAIN	PADS-0001	FDR	0.03	115.10	2366.73	43.42
CABL-0300	BUS-091MAIN	PADS-0006	FDR	0.06	149.54	3074.98	56.42
CABL-0400	BUS-091MAIN	PADS-0012	FDR	0.01	195.11	4011.96	73.61
CABL-0500	BUS-091MAIN	BUS-TDIS-0911P	FDR	-0.00	11.62	238.90	4.38
TDIS-0911	BUS-TDIS-0911P	BUS-0911	TX2	0.92	2.88	59.19	20.72
CABL-0202	PADS-0002	PADS-0001	FDR	-0.16	99.44	2040.89	37.52
CABL-0201	PADS-0001	BUS-0100	FDR	0.02	46.03	946.25	17.37
TDIS-0101	BUS-TDIS-0101P	BUS-0101	TX2	2.79	22.23	456.93	80.03
CABL-0103	PADS-0007	PADS-0008	FDR	0.05	66.90	1374.29	25.24
TDIS-0102	BUS-TDIS-0102P	BUS-0102	TX2	3.60	23.80	489.09	77.29
CABL-0201A	BUS-0100	BUS-TDIS-0102P	FDR	0.00	23.80	489.12	8.98
CABL-0205	PADS-0003	PADS-0002	FDR	-0.09	70.77	1451.15	26.70
TDIS-0051	BUS-TDIS-0051	BUS-0051	TX2	1.95	14.61	299.48	63.09
CABL-DOUD	PADS-0003	BUS-TDIS-0051	FDR	0.00	14.61	299.48	5.51

TDIS-0021	BUS-TDIS-0021	BUS-0021	TX2	1.93	7.19	147.44	51.77
CABL-0206	PADS-0003	BUS-TDIS-0021	FDR	0.00	7.19	147.45	2.71
CABL-0208	PADS-0004	PADS-0003	FDR	-0.00	49.02	1004.99	18.49
CABL-0311	PADS-0005	MH-0011SPL	FDR	-0.03	76.31	1565.45	28.79
CABL-0306	PADS-0005	MH-0037SPL	FDR	0.04	34.99	717.78	13.20
TDIS-0041	BUS-TDIS-0041P	BUS-0041	TX2	0.78	11.37	233.03	18.42
CABL-0308	BUS-TDIS-0041P	BUS-SG-4TAP	FDR	-0.00	11.37	233.03	4.14
CABL-0310	PADS-0004	MH-0037SPL	FDR	-0.01	34.99	717.43	13.20
CABL-0307	PADS-0004A	PADS-0004	FDR	-0.03	66.90	1371.25	25.24
TDIS-0941	BUS-TDIS-0941	BUS-0941	TX2	2.43	33.16	679.60	71.62
CBL-GEN-HP	BUS-GEN-HP	BUS-0911	FDR	0.31	64.06	50.38	37.68
TDIS-0111	BUS-TDIS-0111P	BUS-0111	TX2	1.54	13.87	284.61	37.46
demo CABL-0305	BUS-TDIS-0111P	PADS-0005	FDR	-0.00	13.87	284.61	5.23
CABL-0309	PADS-0006	MH-0006SPL	FDR	0.06	104.04	2138.17	39.25
CABL-030X	PADS-0013	PADS-0005	FDR	-0.01	27.54	564.98	10.39
TDIS-0112	BUS-TDIS-0112P	BUS-0113	TX2	1.47	11.06	226.84	35.92
TDIS-0113	BUS-TDIS-0113P	BUS-0114	TX2	1.34	16.48	338.11	35.60
CABL-0303	MH-0011SPL	SA-0611	FDR	-0.06	76.31	1565.94	28.79
TDIS-0071	BUS-TDIS-0071P	BUS-0071	TX2	4.14	19.84	407.73	107.14
CABL-0302	BUS-TDIS-0072P	PADS-0006	FDR	-0.01	25.66	527.33	9.68
TDIS-0072	BUS-TDIS-0072P	BUS-0072	TX2	2.53	16.44	337.87	53.25
CABL-0301	BUS-TDIS-0071P	PADS-0006	FDR	-0.01	19.84	407.73	7.49
CABL-0106	PADS-0009	PADS-0008	FDR	-0.05	41.58	853.20	15.69
CABL-0102	PADS-0007	BUS-TDIS-0341P	FDR	0.01	33.90	696.47	12.79
TDIS-0341	BUS-TDIS-0341P	BUS-0341	TX2	5.38	33.90	696.43	259.67

BALANCED VOLTAGE DROP AND LOAD FLOW BRANCH DATA SUMMARY

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BRANCH NAME	FROM NAME	TO NAME	TYPE	VD%	AMPS	KVA	RATING%
CABL-0101	PADS-0007	BUS-TDIS-0351P	FDR	0.01	12.80	262.89	4.83
TDIS-0351	BUS-TDIS-0351P	BUS-0351	TX2	7.07	12.80	262.87	245.69
TDIS-0331	BUS-TDIS-0331P	BUS-0331	TX2	3.99	19.57	401.76	84.54
CABL-0104	PADS-0008	BUS-TDIS-0331P	FDR	0.01	19.57	401.80	7.38
TDIS-0361	BUS-TDIS-0361P	BUS-0361	TX2	4.09	5.82	119.59	111.82
CABL-0105	PADS-0008	BUS-TDIS-0361P	FDR	0.00	5.82	119.59	2.20
CABL-0109	PADS-0009	PADS-0010	FDR	0.00	26.88	551.65	10.14
CABL-0107	BUS-TDIS-0371P	PADS-0009	FDR	-0.00	8.02	164.64	3.03
CABL-0108	BUS-TDIS-0391P	PADS-0009	FDR	-0.00	6.67	136.92	2.52
TDIS-0391	BUS-TDIS-0391P	BUS-0391	TX2	2.49	6.67	136.92	64.05
TDIS-0081	BUS-TDIS-0081P	BUS-0081	TX2	2.32	17.15	351.92	74.08
CABL-0203	PADS-0002	BUS-TDIS-0081P	FDR	0.01	17.15	351.94	6.47
TDIS-0121	BUS-TDIS-0121P	BUS-0121	TX2	1.02	11.55	236.99	25.01
CABL-0204	PADS-0002	BUS-TDIS-0121P	FDR	0.01	11.55	237.01	4.36
CABL-0110	BUS-TDIS-0411P	PADS-0010	FDR	-0.00	6.93	142.24	2.62
CABL-0112	PADS-0010	PADS-0011	FDR	0.02	14.14	290.18	5.34

CABL-0113	PADS-0011	BUS-TDIS-0421P	FDR	0.00	6.86	140.81	2.59
CABL-0114	PADS-0011	BUS-TDIS-0441P	FDR	0.00	7.28	149.32	2.75
TDIS-0421	BUS-TDIS-0421P	BUS-TDIS-0421S	TX2	1.79	6.86	140.81	65.88
CABL-HUG_208	BUS-TDIS-0421S	BUS-0421	FDR	0.26	411.46	138.16	58.78
TDIS-0441	BUS-TDIS-0441P	BUS-0441	TX2	1.68	7.28	149.31	52.40
CABL-0312	BUS-TDIS-0941	PADS-0004A	FDR	-0.01	33.16	679.60	12.51
CABL-0401	PADS-0012	BUS-TDIS-0141P	FDR	0.02	78.82	1620.55	29.74
CABL-0207	PADS-0001	PADS-0012	FDR	-0.02	30.28	622.52	11.43
TDIS-0411	BUS-TDIS-0411P	BUS-0411	TX2	3.72	6.93	142.24	99.81
CABL-0111	BUS-TDIS-0951P	PADS-0010	FDR	-0.00	5.81	119.26	2.19
TDIS-0951	BUS-TDIS-0951P	BUS-0951	TX2	1.18	5.81	119.26	41.84
TDIS-0371	BUS-TDIS-0371P	BUS-0371	TX2	3.96	8.02	164.64	115.53
CABL-0316	MH-0006SPL	SA-0611	FDR	0.02	104.04	2136.71	39.25
TDIS-0611	SA-0611	BUS-0611_MDPH	TX2	1.46	16.49	338.53	35.70
TDIS-0612	SA-0611	BUS-0612_MDPL	TX2	0.99	11.27	231.31	24.39
CABL-0304A	BUS-TDIS-0113P	PADS-0013	FDR	-0.00	16.48	338.11	6.22
CABL-0304	BUS-TDIS-0112P	PADS-0013	FDR	-0.01	11.06	226.84	4.17
CABL-0201B	BUS-0100	BUS-TDIS-0101P	FDR	0.00	22.23	456.95	8.39
TDIS-0141	BUS-TDIS-0141P	BUS-0141	TX2	3.38	39.93	820.90	86.25
CABL-0600	BUS-TDIS-0911P	BUS-0910	FDR	-0.00	13.22	271.92	4.99
CABL-0402	PADS-0012	BUS-TDIS-0451P	FDR	0.02	86.07	1769.68	32.47
TDIS-0451	BUS-TDIS-0451P	BUS-0451	TX2	1.62	18.31	376.42	52.73
TDIS-0031	BUS-TDIS-0031P	BUS-0031	TX2	1.29	5.82	119.40	41.93
CABL-0308A	BUS-SG-4TAP	PADS-0004	FDR	-0.00	17.19	352.44	6.27
CABL-0313	BUS-TDIS-0031P	BUS-SG-4TAP	FDR	-0.00	5.82	119.40	2.12

BALANCED VOLTAGE DROP AND LOAD FLOW BRANCH DATA SUMMARY

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BRANCH NAME	FROM NAME	TO NAME	TYPE	VD%	AMPS	KVA	RATING%
TDIS-0942	BUS-TDIS-0942	BUS-0125	TX2	3.08	34.04	697.62	73.52
CABL-0314	BUS-TDIS-0942	PADS-0004A	FDR	-0.01	34.04	697.62	12.84
TDIS-0073	BUS-TDIS-0072P	BUS-0073	TX2	1.41	9.22	189.47	29.86
TDIS-0142	BUS-TDIS-0141P	BUS-0142	TX2	3.29	38.89	799.37	83.99
TDIS-0452	BUS-TDIS-0451P	BUS-0452	TX2	2.73	36.50	750.38	78.84
TDIS-0912	BUS-TDIS-0451P	BUS-0129	TX2	2.90	31.61	649.82	68.28
TDIS-0114	BUS-TDIS-0113P	BUS-0115	TX2	0.00	0.00	0.00	0.00
TDIS-0453	BUS-TDIS-0951P	BUS-0952	TX2	0.00	0.00	0.00	0.00
TDIS-0915	BUS-TDIS-0341P	BUS-0131	FDR	0.00	0.00	0.00	0.00
TDIS-0914	BUS-TDIS-0911P	BUS-0137	FDR	0.00	0.00	0.00	0.00

NOTE: FDR RATING% = % AMPS RATING BASED ON LIBRARY FLA OR BRANCH INPUT FLA

TX2 RATING% = % KVA RATING BASED ON TRANSFORMER FL KVA

TOTAL SYSTEM LOSSES

134. KW 536. KVAR