Attachment 3

Southwest Connecticut Transmission Expansion, East Shore to Norwalk 345 KV OH/UG Alternative: Transmission Loading and Voltage Analysis @ 27.7 GW Load, 387 Line Re-conductored, New Haven Harbor Station On-Line, NE-NY 0 MW, PowerGEM Report 10021.001-3 dated January 28, 2004

PowerGEM

Power Grid Engineering & Markets

Southwest Connecticut Transmission Expansion

East Shore to Norwalk 345 KV OH/UG Alternative :

Transmission Loading and Voltage Analysis @ 27.7 GW Load.
387 Line Reconductored, New Haven Harbor Station On-Line,
NE-NY 0 MW

Prepared for:

The United Illuminating Company

and

Northeast Utilities

Prepared by:

Johnny R. Willis
PowerGEM
jwillis@power-gem.com

PowerGEM Report 10021.001-3
January 28, 2004

Executive Summary

This report summarizes power flow analysis conducted for The United Illuminating Company (UI) and Northeast Utilities (NU) for one option for expanding the New England 345 kV transmission system into southwest Connecticut (SWCT). The transmission option examined, called "East Shore 27-OH/UG" in this report, is for a 345 kV transmission path from East Shore to Norwalk substations, with interconnecting substations between these stations.[1] The "East Shore 27-OH/UG" transmission option, which consists primarily of underground cables with one section of overhead line, is described as follows:

From	To	Distance	Transmission
East Shore	Orange (cable to overhead line transition station)	7 miles	345 kV underground, 2500 kcmil HPFF, three parallel cables
Orange (cable to overhead line transition station)	East Devon	9.4 miles	345 kV overhead bundled 1590 ACSR conductor, single circuit
East Devon	Singer	8 miles	345 kV underground, 2500 kcmil HPFF, two parallel cables
Singer	Norwalk	15 miles	345 kV underground, 2500 kcmil HPFF, two parallel cables

In addition to the above transmission alternative, the study assumes re-conductoring of the limiting portion of the East Shore to Scovill Rock 345 kV line (387 line) from a single 2156 ACSR conductor to a bundled 2 x 954 ACSR conductor. This raises the normal rating of the line from 1240 MVA to 1488 MVA, and the long-time emergency rating from 1604 MVA to 1912 MVA. It also results in a reduction in the impedance of the line of about 9%.

The objective of this study is to analyze and document the performance of this transmission configuration for steady-state base case and post-contingency transmission power flows and voltages. Power flow analysis was conducted for a 27.7 GW New England load level for four southwest Connecticut generation dispatches. In all cases, the New Haven Harbor Station, which has a significant impact on the flows on the 387 line, was in service. Loading and voltage performance of the Connecticut system was monitored for the 115 kV and 345 kV transmission systems.

The loading analysis found that twenty-three 115 kV transmission lines, and one 345/115 kV autotransformer at Southington, exhibited post-contingency overloads.

[1] A planned 345 kV transmission expansion from the Plumtree to Norwalk substations, which is called Bethel to Norwalk, is assumed to be in-service in this analysis.

Three of the overloaded 115 kV lines were also overloaded in the base case (all lines in) for some generation dispatches.

Voltage analysis indicated violations of voltage criteria for nine Connecticut 115 kV substations. There were no voltage violations for 345 kV substations.

1. Introduction

This report summarizes power flow analysis conducted for The United Illuminating Company (UI) and Northeast Utilities (NU) for one option for expanding the New England 345 kV transmission system into southwest Connecticut (SWCT). The transmission option examined, called "East Shore 27-OH/UG" in this report, is for a 345 kV transmission path from East Shore to Norwalk substations, with interconnecting substations between these stations.[2] The "East Shore 27-OH/UG" transmission option, which consists primarily of underground cables with one section of overhead line, is described as follows:

From	To	Distance	Transmission
East Shore	Orange (cable to overhead line transition station)	7 miles	345 kV underground, 2500 kcmil HPFF, three parallel cables
Orange (cable to overhead line transition station)	East Devon	9.4 miles	345 kV overhead bundled 1590 ACSR conductor, single circuit
East Devon	Singer	8 miles	345 kV underground, 2500 kcmil HPFF, two parallel cables
Singer	Norwalk	15 miles	345 kV underground, 2500 kcmil HPFF, two parallel cables

In addition to the above transmission alternative, the study assumes re-conductoring of the limiting portion of the East Shore to Scovill Rock 345 kV line (387 line) from a single 2156 ACSR conductor to a bundled 2 x 954 ACSR conductor. This raises the normal rating of the line from 1240 MVA to 1488 MVA, and the long-time emergency rating from 1604 MVA to 1912 MVA. It also results in a reduction in the impedance of the line of about 9%.

The objective of this study is to analyze and document the performance of this transmission configuration for steady-state base case and post-contingency transmission power flows and voltages. Performance, is examined for a 27.7 GW New England load level and for four dispatches of New England generation. In all cases, the New Haven Harbor Station (447 MW), which has a significant impact on the flows on the 387 line, was in service. References 1 thru 3 are companion reports for other system conditions studied.

The following Appendices are included in this report:

Appendix A "East Shore 27-OH/UG" Transmission Modeling Data
Appendix B Power Flow Base Case One-Line Diagrams

[2] A planned 345 kV transmission expansion from Plumtree to Norwalk substations, which is called Bethel to Norwalk, is assumed to be in-service in this analysis.

2. Database

This section discusses the data developed and used in the study.

2.1. Power Flow Base Cases

Four power flow base cases, which included the approved Bethel to Norwalk 345-kV project in service, were utilized. PowerGEM revised each of the four cases to add the "East Shore 27-OH/UG" transmission project. Details regarding the modeling of these circuits are provided in Appendix A. In addition to this, the rating of the East Shore to Scovill Rock 345 kV line was increased to reflect the line rating by reconfiguring the East Shore Substation and removing the 345/115 kV autotransformers from the 387 line path. The line ratings used were 1240 MVA normal and 1604 MVA long-time emergency.

Details regarding the modeling of these circuits are provided in Appendix A.

Further, the impedance and ratings of the East Shore to Scovill Rock 345 kV line (387 line) were revised to reflect re-conductoring. The existing line has a portion with a single 2156 ACSR conductor (Black Pond Junction to Scovill Rock Switching station) and a portion with 2x 954 bundled ACSR conductor (Black Pond Junction to East Shore Substation). The data used in this analysis for re-conductoring assumed that the 2156 ACSR conductor is replaced by 2 x 954 conductor ACSR. The data is given below.

.

East Shore to Scovill Rock 345 kV Line Modeling Data						
	Impedances (p.u)			Ratings MVA		
	R	X	B	Normal	LTE	STE
Existing Line	0.00137	0.01767	0.26688	1240	1604	1966
Re-conductored Line	0.00136	0.01618	0.28561	1488	1912	2098

The re-conductoring results in about a 9% decrease in the line impedance, and about a 20% increase in the line loading capability.

Each of the four base cases had different generation dispatches, and are denoted dispatches 2C, 3C, 4C, and 5C. These dispatches were preserved for the base cases. Appendix D contains a list of the on-line generation for dispatch 2C, and the differences in dispatches 3C, 4C, and 5C as compared for dispatch 2C. Significant changes to dispatch for the four cases were restricted to New England generation.

A one-line diagram showing power flows and voltages on the "East Shore 27-OH/UG" (and Bethel to Norwalk) transmission for each of the four base cases is included in Appendix B.

2.2. Contingency File

A contingency file was modified as appropriate for this study, and is contained in Appendix C. There are several assumptions in the contingencies, including:

- Loss of multiple 345 kV underground cables on the "East Shore 27-OH/UG" configuration between Orange and East Shore, or loss of parallel cables between Devon and Norwalk, is not considered. (Simultaneous loss of one cable from Devon to Singer and Singer to Norwalk is included as a contingency).

- For loss of the Orange to East Devon 345 kV overhead line, all three 345 kV underground cables from Orange to East Shore were opened.

3. Methodology and Results Files

This section describes the technical approach to the study, performance criteria, solution assumptions, and the format of the results.

3.1. Software

Set up of the power flow base cases used PTI's PSS/E software (Rev. 28). Base case and contingency analysis was conducted using PTI's MUST software (Rev. 5). Results from the MUST program are stored in Excel spreadsheets.

3.2. Performance Criteria

The criteria for checking overload and voltage performance were as follows:

- Buses and transmission branches in Connecticut 115 kV and above were monitored.
- For base case loading performance, transmission lines and transformers were checked against 100% of their normal ratings.
- For post-contingency loading performance, overloads of transmission lines and transformers were checked against 100% of the long-time emergency ratings.
- Buses 230 kV and above were checked for voltages less than 95% and greater than 105%. Buses in the 115 kV system were checked for voltages less than 90% and more than 105%.

3.3. Solution Options

For the analysis, tap-changing transformer and phase-shifting transformer adjustments were held fixed. For contingencies involving loss of generation/load the imbalance was made up by the system swing generator located outside New England.

4. Results

The results of the analysis for transmission system loading and voltage violations are provided below.

4.1. Overload Results

A summary of the overload results is shown in Table 1. The values shown are the percentage overload over the long-time emergency rating. If a table entry is blank, there is no overload. More detailed results are provided in Appendix E.

Table 1

Highest Overload: 27.7 GW NE Load, Dispatches 2C, 3C, 4C and 5C

	OverLoad >= 30%
	10% < Over Load < 30%
	5% < Over Load < 10%
	OverLoad < 5%

From bus To bus CKT	Generation Dispatch ID 2C	3C	4C	5C
73106 SOUTHGTN 345 73154 SGTN B 115 2	17.8	9.6	5.7	19.4
73162 WATERSDE 115 73163 COS COB 115 1	24.8	24.8	24.8	24.8
73162 WATERSDE 115 73168 GLNBROOK 115 1	2.5	2.5	2.5	2.5
73167 SO.END 115 73294 GLNBRK J 115 1	23.2	23.2	23.2	23.2
73168 GLNBROOK 115 73169 RYTN J A 115 1				1.6
73168 GLNBROOK 115 73237 ELYAVE 115 1			50.8	53.5
73168 GLNBROOK 115 73271 RYTN J B 115 1	19.2	15.8	38.1	46.5
73169 RYTN J A 115 73171 NWLK HAR 115 1			43.8	43.1
73169 RYTN J A 115 73172 NORWALK 115 1	81.8	75.8		
73170 PLUMTREE 115 73176 TRIANGLE 115 1	77.2	74.9	72.8	75.3
73170 PLUMTREE 115 73176 TRIANGLE 115 2	35.1	34.9	34.7	34.8
73170 PLUMTREE 115 73268 MIDDLRIV 115 1	184.2	183.5	183.0	183.5
73171 NWLK HAR 115 73237 ELYAVE 115 1			49.6	57.4
73171 NWLK HAR 115 73271 RYTN J B 115 1			4.3	4.3
73172 NORWALK 115 73207 FLAX HIL 115 1	96.2	90.3		
73183 SHAWSHIL 115 73185 BUNKER H 115 1	2.9			3.1
73188 BCNFL PF 115 73192 DRBY J B 115 1	29.8	27.5	26.5	32.0
73207 FLAX HIL 115 73271 RYTN J B 115 1	78.8	72.8		
73224 TRMB J A 115 73700 PEQUONIC 115 1			2.3	
73230 HADDAM 115 73231 BOKUM 115 1	7.7			7.6
73268 MIDDLRIV 115 73176 TRIANGLE 115 1	123.1	122.6	122.1	122.6
73669 GRAND AV 115 73681 WEST RIV 115 1				2.7
73669 GRAND AV 115 73681 WEST RIV 115 2				2.7
73701 CRRA JCT 115 73703 ASHCREEK 115 1	0.3	0.6		

Indicates branch also overloaded in base case

Any transmission line or transformer in the study area at 115 kV or above that experiences a post-contingency overload in this study is listed in the first column of Table 1. The remaining four columns, one for each of the four Connecticut generation dispatches studied, show the **maximum overload of the branch in %** (considering all contingencies) for each dispatch. The overloads are color-coded as indicated at the top of the table in order to make the relative severity of the overloads more apparent. If a Table 1 entry is blank, then the branch is not overloaded for that dispatch. To find more detail, for example which contingency causes the overload, and whether other contingencies could overload the branch, the reader should refer to Appendix E.

As indicated in Table 1, there are no 345 kV transmission line overloads. Base case loadings for the 387 line were as follows:

Generation Dispatch ID	387 Line Base Case Loading (% of normal rating)
2C	84%
3C	59%
4C	46%
5C	82%

A 345/115 kV autotransformer at Southington overloads by about 20%. The contingency causing the overload is a stuck breaker contingency at Southington.

Finally, there are twenty-three 115 kV line overloads that vary widely from slight overloads to severe overloads. Some overloads are sensitive to generation dispatch, while others are not. Three branches are overloaded in the base case, as indicated by the shaded branch names. The base case overloads range from very slight to about 20%. More detail is given in Appendix F.

4.2. Voltage Violation Results

A summary of the most severe low voltage violations is provided in Table 2 (following page). More detailed results on the voltage analysis are provided in Appendix F. Since violations of high voltage limits were minor, they are not included in the table below but are included in Appendix F.

The table shows the bus number, bus name, and base kV, as well as area and zone numbers in the load flow data base. The "# Viols" column is the total number of violations for this bus and dispatch condition. If "# Viols" equals one, then the indicated contingency is the only one causing a violation. If "# Viols" exceeds one, then other contingencies also cause a voltage violation, but none are more severe than the indicated contingency. (Appendix F could be used to assess the comparative severity of multiple contingencies causing a voltage violation for a particular bus.)

Some observations on the results from of Table 2 are as follows:

- There are no voltage violations for 345 kV buses reported.
- Seven 115 kV buses are found to have low voltage violations. (Two 115 kV buses have minor high voltage violations but are not shown in the table.)
- The generation dispatch does not have a dramatic effect on the magnitude of the voltage violations, though the worst voltage violations tend to be for dispatch 5C.

Table 2

Voltage Violations, Worst & Total: 27.7 GW NE Load, Dispatches 2C, 3C, 4C and 5C

Lo Violation > 3%
1% < Lo Violation < 3%
0.5%< Lo Violation < 1%
Lo Violation < 0.5%

Sorted by bus, then low violation, then high violation

Bus #	Bus Name	KV	Area	Zone	# Viols	WorstLo Vio	Ncon Lo	Cont Name Worst Lo	Dispatch	Controls
73160	BALDWINB	115.0	701	171	2	0.035	244	1272-1721DCT	5C	FIX
73160	BALDWINB	115.0	701	171	1	0.023	244	1272-1721DCT	2C	FIX
73160	BALDWINB	115.0	701	171	1	0.016	244	1272-1721DCT	4C	FIX
73160	BALDWINB	115.0	701	171	1	0.015	244	1272-1721DCT	3C	FIX
73188	BCNFL PF	115.0	701	171	1	0.006	244	1272-1721DCT	5C	FIX
73185	BUNKER H	115.0	701	171	2	0.035	244	1272-1721DCT	5C	FIX
73185	BUNKER H	115.0	701	171	1	0.023	244	1272-1721DCT	2C	FIX
73185	BUNKER H	115.0	701	171	1	0.015	244	1272-1721DCT	3C	FIX
73185	BUNKER H	115.0	701	171	1	0.015	244	1272-1721DCT	4C	FIX
73682	ELMWST A	115.0	701	185	1	0.004	372	GRNDAV6TSTK	2C	FIX
73682	ELMWST A	115.0	701	185	2	0.004	373	GRNDAV7TSTK	5C	FIX
73683	ELMWST B	115.0	701	185	3	0.006	370	GRNDAV4TSTK	5C	FIX
73683	ELMWST B	115.0	701	185	1	0.006	371	GRNDAV5TSTK	2C	FIX
73189	FREIGHT	115.0	701	171	1	0.036	244	1272-1721DCT	5C	FIX
73189	FREIGHT	115.0	701	171	1	0.024	244	1272-1721DCT	2C	FIX
73189	FREIGHT	115.0	701	171	1	0.017	244	1272-1721DCT	3C	FIX
73189	FREIGHT	115.0	701	171	1	0.017	244	1272-1721DCT	4C	FIX
73199	SO.NAUG	115.0	701	171	1	0.005	244	1272-1721DCT	5C	FIX

The value in the "**Worst Lo Vio**" column indicates the amount, in per-unit, that the bus voltage is below the low voltage criteria. The contingency and dispatch for which this occurs is also indicated. More detailed information on the results of the voltage analysis may be found in Appendix F, *including explanations on interpreting values in the tables*.

5. References

1. Southwest Connecticut Transmission Expansion, East Shore to Norwalk 345 KV OH/UG Alternative: Transmission Loading and Voltage Analysis @ 27.7 GW Load, New Haven Harbor Station On-Line, NE-NY 0 MW, PowerGEM Report 10021.001-1 Revised, dated January 28, 2004.

2. Southwest Connecticut Transmission Expansion, East Shore to Norwalk 345 KV OH/UG Alternative: Transmission Loading and Voltage Analysis @ 27.7 GW Load, New Haven Harbor Station Off-Line, NE-NY 0 MW, PowerGEM Report 10021.001-2 dated January 28, 2004.

3. Southwest Connecticut Transmission Expansion, East Shore to Norwalk 345 KV OH/UG Alternative: Transmission Loading and Voltage Analysis @ 27.7 GW Load, 387 Line Re-conductored, New Haven Harbor Station Off-Line, NE-NY 0 MW, PowerGEM Report 10021.001-4 dated January 28, 2004.

Appendix A

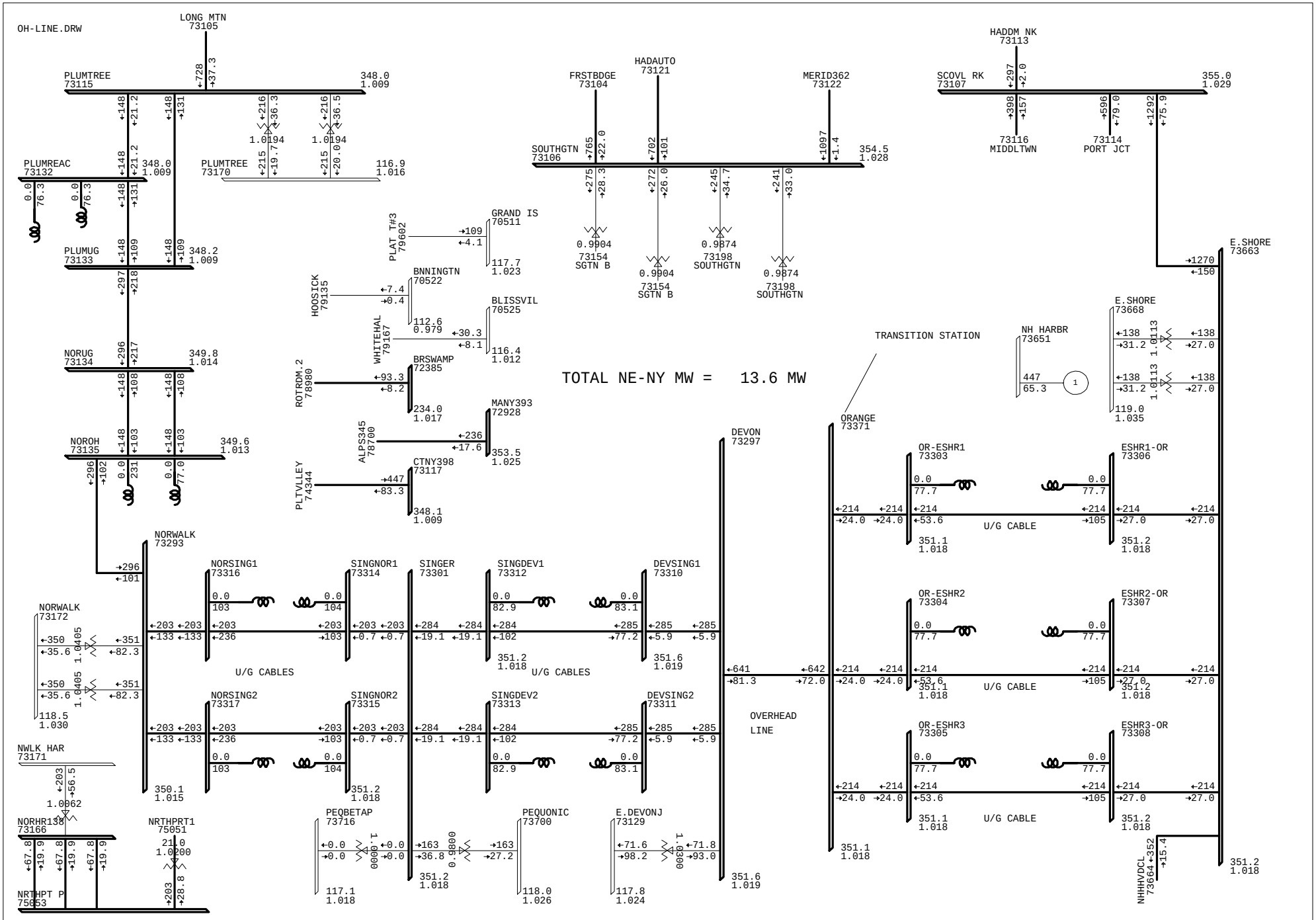
East Shore 27-OH/G
Transmission Modeling Data

Phase 2 Circuit Parameters: East Shore to Norwalk 345 kV														
					Each Circuit								Each Cable	
From	To	No. of Ckts	Miles	Type	R (total)	X (total)	B (total)	R/mile	X/mile	B/mile	Ratings (MVA)	Comments	From Bus Reactor	To Bus Reactor
Norwalk	Singer	2	15	2500 kcmil HPFF U/G	0.00062	0.00307	3.28943	0.00004133	0.00020467	0.21929533	632 / 794 / 794	Already in base case	85	85
Singer	E.Devon	2	8	2500 kcmil HPFF U/G	0.00033	0.00163	1.74022	0.00004125	0.0002038	0.2175275	632 / 794 / 794	Already in base case	80	80
E. Devon	Orange	1	9.4	1590 bund. ACSR O/H	0.00027	0.00442	0.08272	0.000029	0.00047	0.0088	2038 / 2634 / 3090	Add to base case	none	none
Orange	E.Shore	3	7	2500 kcmil HPFF U/G	0.00029	0.00143	1.53507	0.000041	0.000205	0.219295	632 / 794 / 794	Add to base case	75	75

Appendix B

Power Flow Base Case
One-Line Diagrams

Base Cases 2C, 3C, 4C, and 5C

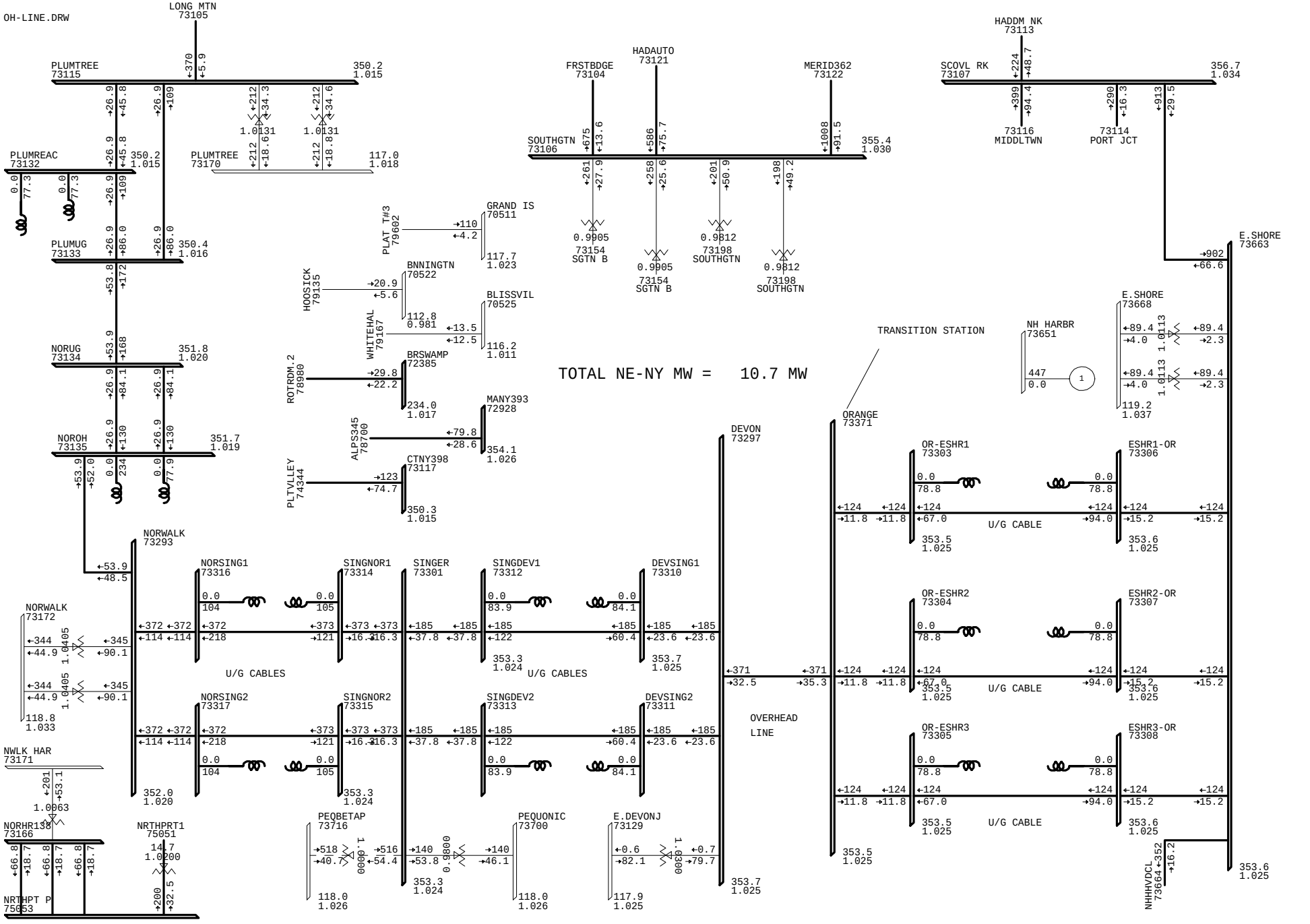


EN277-2C, 27.7 GW,DISP 2, E.SHR-NRWK U/G+O/H, RECONDUCT 387
PH1-XP, PH2 HPFF DEV-SING-NOR & ORG-ESHR, O/H ORANG-E.DEV
BASE CASE FRI, JAN 16 2004 13:27

100% RATEA
0.950 UV 1.050 OV
KV: ≤115

BUS - VOLTAGE(KV/PU)
BRANCH - MW/MVAR
EQUIPMENT - MW/MVAR

POWER TECHNOLOGIES INC.

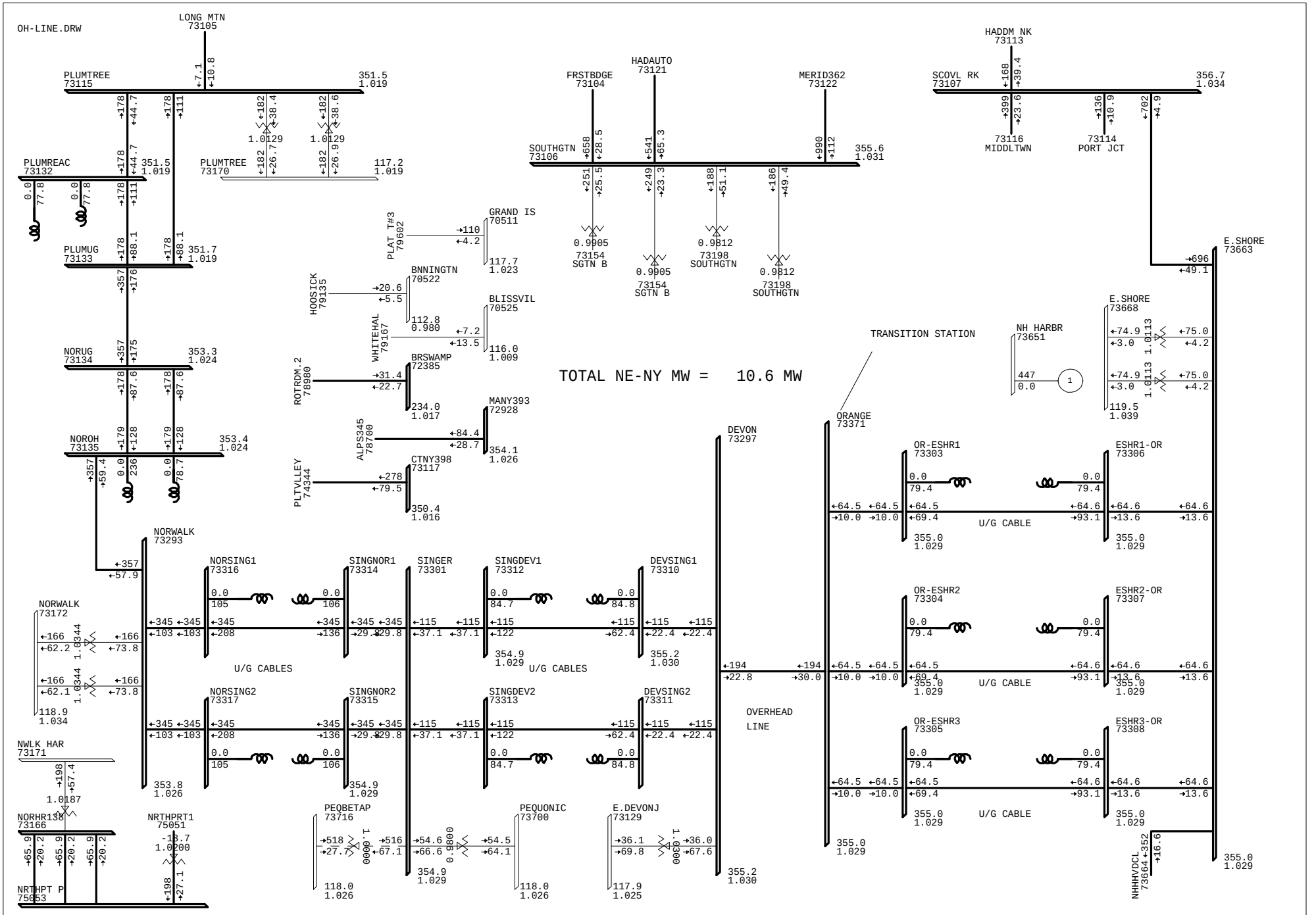


POWER TECHNOLOGIES INC.©

EN277-3C, 27.7 GW,DISP 3, E.SHR-NRWK U/G+O/H, RECONDUCT 387
PH1-XP, PH2 HPFF DEV-SING-NOR & ORG-ESHR, O/H ORANG-E.DEV
BASE CASE FRI, JAN 16 2004 13:27

100% RATEA
0.950 UV 1.050 OV
KV: ≤115

BUS - VOLTAGE(KV/PU)
BRANCH - MW/MVAR
EQUIPMENT - MW/MVAR

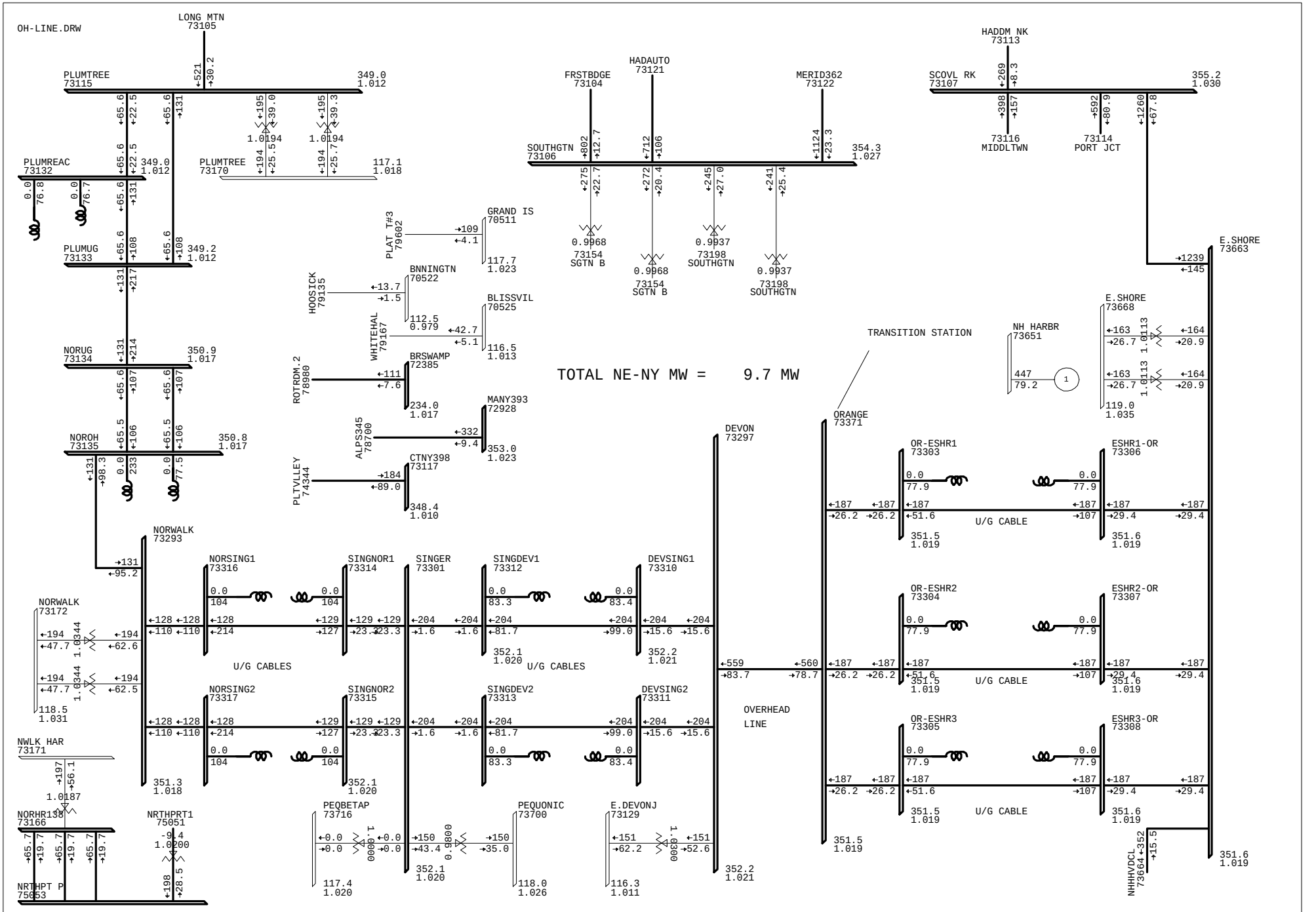


POWER TECHNOLOGIES INC.©

EN277-4C, 27.7 GW,DISP 4, E.SHR-NRWK U/G+O/H, RECONDUCT 387
PH1-XP, PH2 HPFF DEV-SING-NOR & ORG-ESHR, O/H ORANG-E.DEV
BASE CASE FRI, JAN 16 2004 13:27

100% RATEA
0.950 UV 1.050 OV
KV: ≤115

BUS - VOLTAGE(KV/PU)
BRANCH - MW/MVAR
EQUIPMENT - MW/MVAR



POWER TECHNOLOGIES INC.©

EN277-5C, 27.7 GW,DISP 5, E.SHR-NRWK U/G+O/H, RECONDUCT 387
PH1-XP, PH2 HPFF DEV-SING-NOR & ORG-ESHR, O/H ORANG-E.DEV
BASE CASE FRI, JAN 16 2004 13:27

100% RATEA
0.950 UV 1.050 OV
KV: ≤115

BUS - VOLTAGE(KV/PU)
BRANCH - MW/MVAR
EQUIPMENT - MW/MVAR

Appendix C

Contingency File

```
CONTINGENCY 100LINE
OPEN LINE FROM BUS 73344 TO BUS 73343 CKT 1
END

CONTINGENCY 100+400LINES
OPEN LINE FROM BUS 73344 TO BUS 73343 CKT 1
OPEN LINE FROM BUS 73343 TO BUS 73345 CKT 1
OPEN LINE FROM BUS 73345 TO BUS 73615 CKT 1
OPEN LINE FROM BUS 73345 TO BUS 73617 CKT 1
END

CONTINGENCY 400LINE
OPEN LINE FROM BUS 73343 TO BUS 73345 CKT 1
OPEN LINE FROM BUS 73345 TO BUS 73615 CKT 1
OPEN LINE FROM BUS 73345 TO BUS 73617 CKT 1
END

CONTINGENCY 500LINE
OPEN LINE FROM BUS 73617 TO BUS 73616 CKT 1
END

CONTINGENCY 667-690LINE                    /Fallsvillage-Salisbury
OPEN LINE FROM BUS 73336 TO BUS 73337 CKT 1
END

CONTINGENCY 689LINE
OPEN LINE FROM BUS 73346 TO BUS 73336 CKT 1
END

CONTINGENCY 693LINE
OPEN LINE FROM BUS 73346 TO BUS 73336 CKT 2
END

CONTINGENCY 694LINE
OPEN LINE FROM BUS 73336 TO BUS 73335 CKT 1
END

CONTINGENCY 1000LINE
OPEN LINE FROM BUS 73210 TO BUS 73611 CKT 1
OPEN LINE FROM BUS 73612 TO BUS 73611 CKT 1
END

CONTINGENCY 1050LINE
OPEN LINE FROM BUS 73241 TO BUS 73269 CKT 1
END

CONTINGENCY 1050+1766LNS
OPEN LINE FROM BUS 73241 TO BUS 73269 CKT 1
OPEN LINE FROM BUS 73255 TO BUS 73269 CKT 1
END

CONTINGENCY 1060LINE
OPEN LINE FROM BUS 73170 TO BUS 73176 CKT 1
OPEN LINE FROM BUS 73176 TO BUS 73377 CKT 1
END

CONTINGENCY 1070LINE
```

```
OPEN LINE FROM BUS 73218 TO BUS 73291 CKT 1
END

CONTINGENCY 1070+1490LNS
OPEN LINE FROM BUS 73291 TO BUS 73218 CKT 1
OPEN LINE FROM BUS 73218 TO BUS 73215 CKT 1
END

CONTINGENCY 1080LINE
OPEN LINE FROM BUS 73214 TO BUS 73215 CKT 1
OPEN LINE FROM BUS 73214 TO BUS 73210 CKT 1
OPEN LINE FROM BUS 73214 TO BUS 73276 CKT 1
OPEN LINE FROM BUS 73276 TO BUS 73213 CKT 1
END

CONTINGENCY 1090LINE
OPEN LINE FROM BUS 73210 TO BUS 73291 CKT 1
END

CONTINGENCY 1100LINE
OPEN LINE FROM BUS 73219 TO BUS 73220 CKT 1
END

CONTINGENCY 1130LINE
OPEN LINE FROM BUS 73286 TO BUS 73700 CKT 1
END

CONTINGENCY 1130+1416LNS
OPEN LINE FROM BUS 73286 TO BUS 73700 CKT 1
OPEN LINE FROM BUS 73286 TO BUS 73300 CKT 1
OPEN LINE FROM BUS 73267 TO BUS 73300 CKT 1
END

CONTINGENCY 1163LINE
OPEN LINE FROM BUS 73204 TO BUS 73205 CKT 1
OPEN LINE FROM BUS 73205 TO BUS 73202 CKT 1
OPEN LINE FROM BUS 73205 TO BUS 73201 CKT 1
END

CONTINGENCY 1163+1910LNS
DISCONNECT BUS 73127
OPEN LINE FROM BUS 73204 TO BUS 73205 CKT 1
OPEN LINE FROM BUS 73205 TO BUS 73202 CKT 1
OPEN LINE FROM BUS 73205 TO BUS 73201 CKT 1
END

CONTINGENCY 1165LINE
OPEN LINE FROM BUS 73170 TO BUS 73176 CKT 2
OPEN LINE FROM BUS 73176 TO BUS 73383 CKT 1
END

CONTINGENCY 1191LINE
OPEN LINE FROM BUS 73202 TO BUS 73203 CKT 1
END

CONTINGENCY 1200LINE
OPEN LINE FROM BUS 73219 TO BUS 73222 CKT 1
```

```
END

CONTINGENCY 1206LINE
OPEN LINE FROM BUS 73230 TO BUS 73600 CKT 1
END

CONTINGENCY 1207LINE
OPEN LINE FROM BUS 73242 TO BUS 73250 CKT 1
END

CONTINGENCY 1208LINE
OPEN LINE FROM BUS 73198 TO BUS 73631 CKT 1
END

CONTINGENCY 1222LINE
OPEN LINE FROM BUS 73709 TO BUS 73711 CKT 1
OPEN LINE FROM BUS 73711 TO BUS 73710 CKT 2
END

CONTINGENCY 1235LINE
OPEN LINE FROM BUS 73210 TO BUS 73151 CKT 1
END

CONTINGENCY 1238LINE
OPEN LINE FROM BUS 73202 TO BUS 73180 CKT 1
END

CONTINGENCY 1238+1813LNS
OPEN LINE FROM BUS 73202 TO BUS 73180 CKT 1
OPEN LINE FROM BUS 73180 TO BUS 73190 CKT 1
END

CONTINGENCY 1250LINE
OPEN LINE FROM BUS 73210 TO BUS 73152 CKT 1
END

CONTINGENCY 1261LINE
OPEN LINE FROM BUS 73230 TO BUS 73231 CKT 1
END

CONTINGENCY 1270LINE
OPEN LINE FROM BUS 73170 TO BUS 73268 CKT 1
END

CONTINGENCY 1272LINE
OPEN LINE FROM BUS 73185 TO BUS 73183 CKT 1
END

CONTINGENCY 1272+1445LNS
OPEN LINE FROM BUS 73185 TO BUS 73183 CKT 1
OPEN LINE FROM BUS 73202 TO BUS 73183 CKT 1
END

CONTINGENCY 1280LINE
OPEN LINE FROM BUS 73216 TO BUS 73217 CKT 1
OPEN LINE FROM BUS 73216 TO BUS 73177 CKT 1
OPEN LINE FROM BUS 73216 TO BUS 73210 CKT 1
```

```
END

CONTINGENCY 1300LINE
OPEN LINE FROM BUS 73220 TO BUS 73222 CKT 1
OPEN LINE FROM BUS 73222 TO BUS 73539 CKT 1
END

CONTINGENCY 1310LINE
OPEN LINE FROM BUS 73283 TO BUS 73221 CKT 1
OPEN LINE FROM BUS 73242 TO BUS 73283 CKT 1
OPEN LINE FROM BUS 73283 TO BUS 73219 CKT 1
OPEN LINE FROM BUS 73221 TO BUS 73458 CKT 1
END

CONTINGENCY 1337LINE
OPEN LINE FROM BUS 73176 TO BUS 73268 CKT 1
OPEN LINE FROM BUS 73176 TO BUS 73377 CKT 2
END

CONTINGENCY 1342LINE
OPEN LINE FROM BUS 73231 TO BUS 73265 CKT 1
END

CONTINGENCY 1355LINE
OPEN LINE FROM BUS 73184 TO BUS 73634 CKT 1
OPEN LINE FROM BUS 73184 TO BUS 73182 CKT 1
OPEN LINE FROM BUS 73184 TO BUS 73198 CKT 1
END

CONTINGENCY ONE1385
OPEN LINE FROM BUS 73166 TO BUS 75053 CKT 1
END

CONTINGENCY 1385LN+AUTO
OPEN LINE FROM BUS 75051 TO BUS 75053 CKT 1
OPEN LINE FROM BUS 75053 TO BUS 73166 CKT 1
OPEN LINE FROM BUS 75053 TO BUS 73166 CKT 2
OPEN LINE FROM BUS 75053 TO BUS 73166 CKT 3
OPEN LINE FROM BUS 73166 TO BUS 73171 CKT 1
END

CONTINGENCY 1389LINE
OPEN LINE FROM BUS 73207 TO BUS 73172 CKT 1
END

CONTINGENCY 1394LINE
OPEN LINE FROM BUS 73266 TO BUS 72978 CKT 1
END

CONTINGENCY 1410LINE
OPEN LINE FROM BUS 73210 TO BUS 73613 CKT 1
END

CONTINGENCY 1416LINE
OPEN LINE FROM BUS 73267 TO BUS 73300 CKT 1
OPEN LINE FROM BUS 73300 TO BUS 73286 CKT 1
END
```

```
CONTINGENCY 1430LINE
DISCONNECT BUS 73714
END

CONTINGENCY 1440LINE
OPEN LINE FROM BUS 73168 TO BUS 73162 CKT 1
END

CONTINGENCY 1443LINE
OPEN LINE FROM BUS 73241 TO BUS 73264 CKT 1
END

CONTINGENCY 1443+1759LNS
OPEN LINE FROM BUS 73241 TO BUS 73264 CKT 1
OPEN LINE FROM BUS 73259 TO BUS 73264 CKT 1
END

CONTINGENCY 1445LINE
OPEN LINE FROM BUS 73202 TO BUS 73183 CKT 1
END

CONTINGENCY 1450LINE
OPEN LINE FROM BUS 73168 TO BUS 73167 CKT 1
END

CONTINGENCY 1460LINE
OPEN LINE FROM BUS 73287 TO BUS 73668 CKT 1
END

CONTINGENCY 1466LINE
OPEN LINE FROM BUS 73227 TO BUS 73633 CKT 1
END

CONTINGENCY 1470LINE
OPEN LINE FROM BUS 73172 TO BUS 73174 CKT 1
OPEN LINE FROM BUS 73174 TO BUS 73143 CKT 1
OPEN LINE FROM BUS 73372 TO BUS 73143 CKT 1
END

CONTINGENCY 1490LINE
OPEN LINE FROM BUS 73215 TO BUS 73218 CKT 1
END

CONTINGENCY 1500LINE
OPEN LINE FROM BUS 73156 TO BUS 73150 CKT 1
OPEN LINE FROM BUS 73156 TO BUS 73149 CKT 1
OPEN LINE FROM BUS 73156 TO BUS 73210 CKT 1
END

CONTINGENCY 1505LINE
OPEN LINE FROM BUS 73213 TO BUS 73223 CKT 1
OPEN LINE FROM BUS 73223 TO BUS 73236 CKT 1
OPEN LINE FROM BUS 73236 TO BUS 73443 CKT 1
OPEN LINE FROM BUS 73223 TO BUS 73270 CKT 1
OPEN LINE FROM BUS 73476 TO BUS 73270 CKT 1
OPEN LINE FROM BUS 73270 TO BUS 73444 CKT 1
```

```
OPEN LINE FROM BUS 73475 TO BUS 73476 CKT 1
END

CONTINGENCY 1508LINE
OPEN LINE FROM BUS 73153 TO BUS 73265 CKT 1
END

CONTINGENCY 1515LINE
OPEN LINE FROM BUS 72972 TO BUS 73266 CKT 1
END

CONTINGENCY 1537LINE
OPEN LINE FROM BUS 73287 TO BUS 73153 CKT 1
END

CONTINGENCY 1545LINE
OPEN LINE FROM BUS 73126 TO BUS 73704 CKT 1
END

CONTINGENCY 1545+SPS
OPEN LINE FROM BUS 73126 TO BUS 73704 CKT 1
OPEN LINE FROM BUS 73705 TO BUS 73706 CKT 1
END

CONTINGENCY 1550LINE
OPEN LINE FROM BUS 73211 TO BUS 73200 CKT 1
OPEN LINE FROM BUS 73200 TO BUS 73181 CKT 1
OPEN LINE FROM BUS 73200 TO BUS 73202 CKT 1
END

CONTINGENCY 1550+1950LNS
DISCONNECT BUS 73128
OPEN LINE FROM BUS 73211 TO BUS 73200 CKT 1
OPEN LINE FROM BUS 73200 TO BUS 73181 CKT 1
OPEN LINE FROM BUS 73200 TO BUS 73202 CKT 1
END

CONTINGENCY 1560LINE
OPEN LINE FROM BUS 73704 TO BUS 73191 CKT 1
OPEN LINE FROM BUS 73187 TO BUS 73191 CKT 1
OPEN LINE FROM BUS 73706 TO BUS 73191 CKT 1
END

CONTINGENCY 1565LINE
DISCONNECT BUS 73155
OPEN LINE FROM BUS 73372 TO BUS 73146 CKT 1
END

CONTINGENCY 1570LINE
OPEN LINE FROM BUS 73126 TO BUS 73192 CKT 1
OPEN LINE FROM BUS 73192 TO BUS 73188 CKT 1
OPEN LINE FROM BUS 73192 TO BUS 73705 CKT 1
END

CONTINGENCY 1572LINE
OPEN LINE FROM BUS 73241 TO BUS 73249 CKT 1
END
```

```
CONTINGENCY 1572+1772LNS
OPEN LINE FROM BUS 73241 TO BUS 73249 CKT 1
OPEN LINE FROM BUS 73600 TO BUS 73249 CKT 1
END

CONTINGENCY 1575LINE
DISCONNECT BUS 73228
END

CONTINGENCY 1580LINE
OPEN LINE FROM BUS 73126 TO BUS 73199 CKT 1
END

CONTINGENCY 1585LINE
OPEN LINE FROM BUS 73185 TO BUS 73199 CKT 1
END

CONTINGENCY 1588LINE
OPEN LINE FROM BUS 73633 TO BUS 73634 CKT 1
END

CONTINGENCY 1594LINE
OPEN LINE FROM BUS 73705 TO BUS 73706 CKT 1
END

CONTINGENCY 1605LINE
OPEN LINE FROM BUS 73157 TO BUS 73238 CKT 1
OPEN LINE FROM BUS 73157 TO BUS 73239 CKT 1
OPEN LINE FROM BUS 73157 TO BUS 73210 CKT 1
END

CONTINGENCY 1607LINE
OPEN LINE FROM BUS 73213 TO BUS 73226 CKT 1
OPEN LINE FROM BUS 73226 TO BUS 73229 CKT 1
OPEN LINE FROM BUS 73226 TO BUS 73281 CKT 1
OPEN LINE FROM BUS 73212 TO BUS 73281 CKT 1
OPEN LINE FROM BUS 73229 TO BUS 73443 CKT 1
OPEN LINE FROM BUS 73212 TO BUS 73442 CKT 1
END

CONTINGENCY 1610LINE
OPEN LINE FROM BUS 73196 TO BUS 73707 CKT 1
OPEN LINE FROM BUS 73196 TO BUS 73675 CKT 1
OPEN LINE FROM BUS 73196 TO BUS 73198 CKT 1
END

CONTINGENCY 1618LINE
OPEN LINE FROM BUS 73190 TO BUS 73179 CKT 1
END

CONTINGENCY 1620SLINE
OPEN LINE FROM BUS 73231 TO BUS 73230 CKT 2
END

CONTINGENCY 1620NLINE
OPEN LINE FROM BUS 73230 TO BUS 73241 CKT 1
```

```
END

CONTINGENCY 1622LINE
OPEN LINE FROM BUS 73178 TO BUS 73159 CKT 1
OPEN LINE FROM BUS 73178 TO BUS 73341 CKT 1
END

CONTINGENCY 1625LINE
OPEN LINE FROM BUS 73219 TO BUS 73161 CKT 1
END

CONTINGENCY 1630LINE
OPEN LINE FROM BUS 73631 TO BUS 73632 CKT 1
OPEN LINE FROM BUS 73632 TO BUS 73671 CKT 1
END

CONTINGENCY 1637LINE
OPEN LINE FROM BUS 73292 TO BUS 73158 CKT 1
OPEN LINE FROM BUS 73292 TO BUS 73172 CKT 2
END

CONTINGENCY 1640LINE
OPEN LINE FROM BUS 73195 TO BUS 73631 CKT 1
END

CONTINGENCY 1655LINE
OPEN LINE FROM BUS 73153 TO BUS 73671 CKT 1
END

CONTINGENCY 1668LINE
OPEN LINE FROM BUS 73185 TO BUS 73189 CKT 1
END

CONTINGENCY 1670LINE
OPEN LINE FROM BUS 73206 TO BUS 73198 CKT 1
OPEN LINE FROM BUS 73206 TO BUS 73243 CKT 1
OPEN LINE FROM BUS 73206 TO BUS 73273 CKT 1
END

CONTINGENCY 1675LINE
OPEN LINE FROM BUS 73612 TO BUS 73213 CKT 1
END

CONTINGENCY 1685LINE
OPEN LINE FROM BUS 73195 TO BUS 73707 CKT 1
END

CONTINGENCY 1690LINE
OPEN LINE FROM BUS 73154 TO BUS 73193 CKT 1
OPEN LINE FROM BUS 73193 TO BUS 73197 CKT 1
END

CONTINGENCY 1704LINE
OPEN LINE FROM BUS 73246 TO BUS 73248 CKT 1
END

CONTINGENCY 1710LINE
```

```
OPEN LINE FROM BUS 73126 TO BUS 73225 CKT 1
OPEN LINE FROM BUS 73225 TO BUS 73700 CKT 2
OPEN LINE FROM BUS 73225 TO BUS 73709 CKT 1
END

CONTINGENCY 1720LINE
OPEN LINE FROM BUS 73172 TO BUS 73710 CKT 1
END

CONTINGENCY 1721LINE
OPEN LINE FROM BUS 73202 TO BUS 73189 CKT 1
END

CONTINGENCY 1722LINE
OPEN LINE FROM BUS 73248 TO BUS 73279 CKT 1
OPEN LINE FROM BUS 73261 TO BUS 73279 CKT 1
END

CONTINGENCY 1726LINE
OPEN LINE FROM BUS 73244 TO BUS 73247 CKT 1
END

CONTINGENCY 1730ALINE
OPEN LINE FROM BUS 73224 TO BUS 73158 CKT 1
END

CONTINGENCY 1730BLINE
OPEN LINE FROM BUS 73126 TO BUS 73224 CKT 1
END

CONTINGENCY 1730CLINE
OPEN LINE FROM BUS 73224 TO BUS 73700 CKT 1
END

CONTINGENCY 1732LINE
OPEN LINE FROM BUS 73263 TO BUS 73262 CKT 1
OPEN LINE FROM BUS 73263 TO BUS 73260 CKT 1
OPEN LINE FROM BUS 73263 TO BUS 73203 CKT 1
END

CONTINGENCY 1740LINE
OPEN LINE FROM BUS 73162 TO BUS 73163 CKT 1
END

CONTINGENCY 1750LINE
OPEN LINE FROM BUS 73167 TO BUS 73144 CKT 1
OPEN LINE FROM BUS 73144 TO BUS 73163 CKT 1
END

CONTINGENCY 1751LINE
OPEN LINE FROM BUS 73251 TO BUS 73244 CKT 1
OPEN LINE FROM BUS 73251 TO BUS 73261 CKT 1
OPEN LINE FROM BUS 73251 TO BUS 73242 CKT 1
END

CONTINGENCY 1752LINE
OPEN LINE FROM BUS 73243 TO BUS 73257 CKT 1
```

```
END

CONTINGENCY 1753LINE
OPEN LINE FROM BUS 73168 TO BUS 73145 CKT 1
END

CONTINGENCY 1756LINE
OPEN LINE FROM BUS 73258 TO BUS 73261 CKT 1
END

CONTINGENCY 1759LINE
OPEN LINE FROM BUS 73259 TO BUS 73264 CKT 1
END

CONTINGENCY 1760LINE                          /Newtown-Plumtree
OPEN LINE FROM BUS 73194 TO BUS 73170 CKT 1
END

CONTINGENCY 1760+1876LNS                   /Stevenson-SandyHook-Newtown-
Plumtree
OPEN LINE FROM BUS 73187 TO BUS 73282 CKT 1
OPEN LINE FROM BUS 73282 TO BUS 73194 CKT 1
OPEN LINE FROM BUS 73194 TO BUS 73170 CKT 1
END

CONTINGENCY 1763LINE
OPEN LINE FROM BUS 73242 TO BUS 73284 CKT 1
OPEN LINE FROM BUS 73284 TO BUS 73219 CKT 1
OPEN LINE FROM BUS 73284 TO BUS 73131 CKT 1
OPEN LINE FROM BUS 73131 TO BUS 73458 CKT 1
END

CONTINGENCY 1765LINE
OPEN LINE FROM BUS 73243 TO BUS 73255 CKT 1
END

CONTINGENCY 1766LINE
OPEN LINE FROM BUS 73255 TO BUS 73269 CKT 1
END

CONTINGENCY 1767LINE
OPEN LINE FROM BUS 73242 TO BUS 73259 CKT 1
END

CONTINGENCY 1769LINE
OPEN LINE FROM BUS 73243 TO BUS 73256 CKT 1
END

CONTINGENCY 1770LINE
OPEN LINE FROM BUS 73170 TO BUS 73165 CKT 1
OPEN LINE FROM BUS 73165 TO BUS 73159 CKT 1
END

CONTINGENCY 1771LINE
OPEN LINE FROM BUS 73198 TO BUS 73243 CKT 1
END
```

```
CONTINGENCY 1772LINE
OPEN LINE FROM BUS 73600 TO BUS 73249 CKT 1
END

CONTINGENCY 1773LINE
OPEN LINE FROM BUS 73246 TO BUS 73257 CKT 1
END

CONTINGENCY 1775LINE
OPEN LINE FROM BUS 73253 TO BUS 73246 CKT 1
OPEN LINE FROM BUS 73253 TO BUS 73274 CKT 1
OPEN LINE FROM BUS 73253 TO BUS 73242 CKT 1
OPEN LINE FROM BUS 73274 TO BUS 73537 CKT 1
END

CONTINGENCY 1777LINE
OPEN LINE FROM BUS 73244 TO BUS 73258 CKT 1
END

CONTINGENCY 1779LINE
OPEN LINE FROM BUS 73246 TO BUS 73258 CKT 1
END

CONTINGENCY 1780LINE
OPEN LINE FROM BUS 73195 TO BUS 73690 CKT 1
END

CONTINGENCY 1783LINE
OPEN LINE FROM BUS 73254 TO BUS 73247 CKT 1
OPEN LINE FROM BUS 73254 TO BUS 73256 CKT 1
END

CONTINGENCY 1784LINE
OPEN LINE FROM BUS 73244 TO BUS 73288 CKT 1
OPEN LINE FROM BUS 73288 TO BUS 73262 CKT 1
END

CONTINGENCY 1785LINE
OPEN LINE FROM BUS 73243 TO BUS 73254 CKT 1
END

CONTINGENCY 1786LINE
OPEN LINE FROM BUS 73252 TO BUS 73246 CKT 1
OPEN LINE FROM BUS 73252 TO BUS 73275 CKT 1
OPEN LINE FROM BUS 73252 TO BUS 73250 CKT 1
END

CONTINGENCY 1788LINE
OPEN LINE FROM BUS 73245 TO BUS 73260 CKT 1
END

CONTINGENCY 1790LINE
OPEN LINE FROM BUS 73195 TO BUS 73691 CKT 1
END

CONTINGENCY 1792LINE
OPEN LINE FROM BUS 73168 TO BUS 73145 CKT 2
```

```
END

CONTINGENCY 1800-1860LNS
OPEN LINE FROM BUS 73208 TO BUS 73154 CKT 1
OPEN LINE FROM BUS 73208 TO BUS 73148 CKT 1
OPEN LINE FROM BUS 73208 TO BUS 73232 CKT 1
END

CONTINGENCY 1810LINE
OPEN LINE FROM BUS 73234 TO BUS 73233 CKT 1
OPEN LINE FROM BUS 73234 TO BUS 73235 CKT 1
OPEN LINE FROM BUS 73234 TO BUS 73154 CKT 1
END

CONTINGENCY 1813LINE
OPEN LINE FROM BUS 73180 TO BUS 73190 CKT 1
END

CONTINGENCY 1820LINE
OPEN LINE FROM BUS 73175 TO BUS 73154 CKT 1
END

CONTINGENCY 1821LINE
OPEN LINE FROM BUS 73244 TO BUS 72991 CKT 1
END

CONTINGENCY 1825LINE
OPEN LINE FROM BUS 73232 TO BUS 73233 CKT 1
END

CONTINGENCY 1830LINE
OPEN LINE FROM BUS 73272 TO BUS 73198 CKT 1
END

CONTINGENCY 1835LINE
OPEN LINE FROM BUS 73235 TO BUS 73240 CKT 1
END

CONTINGENCY 1836LINE
OPEN LINE FROM BUS 73244 TO BUS 72992 CKT 1
END

CONTINGENCY 1867LINE
OPEN LINE FROM BUS 73171 TO BUS 73271 CKT 1
OPEN LINE FROM BUS 73168 TO BUS 73271 CKT 1
OPEN LINE FROM BUS 73207 TO BUS 73271 CKT 1
END

CONTINGENCY 1870LINE
OPEN LINE FROM BUS 73177 TO BUS 73285 CKT 1
OPEN LINE FROM BUS 73285 TO BUS 72581 CKT 1
END

CONTINGENCY 1876LINE                        /Stevenson-SandyHook-Newtown
OPEN LINE FROM BUS 73187 TO BUS 73282 CKT 1
OPEN LINE FROM BUS 73282 TO BUS 73194 CKT 1
END
```

```
CONTINGENCY 1880LINE
OPEN LINE FROM BUS 73172 TO BUS 73169 CKT 1
OPEN LINE FROM BUS 73168 TO BUS 73169 CKT 1
OPEN LINE FROM BUS 73171 TO BUS 73169 CKT 1
END

CONTINGENCY 1887LINE
OPEN LINE FROM BUS 73179 TO BUS 73165 CKT 1
OPEN LINE FROM BUS 73165 TO BUS 73178 CKT 1
END

CONTINGENCY 1890LINE
OPEN LINE FROM BUS 73171 TO BUS 73237 CKT 1
OPEN LINE FROM BUS 73237 TO BUS 73168 CKT 1
OPEN LINE FROM BUS 73237 TO BUS 73173 CKT 1
END

CONTINGENCY 1900LINE
OPEN LINE FROM BUS 73203 TO BUS 73245 CKT 1
END

CONTINGENCY 1910LINE
DISCONNECT BUS 73127
END

CONTINGENCY 1921LINE
OPEN LINE FROM BUS 73203 TO BUS 73240 CKT 1
END

CONTINGENCY 1950LINE
DISCONNECT BUS 73128
END

CONTINGENCY 1975LINE
OPEN LINE FROM BUS 73230 TO BUS 73227 CKT 1
END

CONTINGENCY 1977LINENEW
OPEN LINE FROM BUS 73294 TO BUS 73267 CKT 1
OPEN LINE FROM BUS 73294 TO BUS 73167 CKT 1
OPEN LINE FROM BUS 73294 TO BUS 73168 CKT 1
END

CONTINGENCY 1990LINE
DISCONNECT BUS 73164
END

CONTINGENCY 8100LINE
OPEN LINE FROM BUS 73669 TO BUS 73679 CKT 1
OPEN LINE FROM BUS 73679 TO BUS 73668 CKT 1
END

CONTINGENCY 8200LINE
OPEN LINE FROM BUS 73668 TO BUS 73669 CKT 2
END
```

```
CONTINGENCY 8300LINE
OPEN LINE FROM BUS 73670 TO BUS 73676 CKT 1
END

CONTINGENCY 8400LINE
OPEN LINE FROM BUS 73669 TO BUS 73672 CKT 1
END

CONTINGENCY 8500LINE
OPEN LINE FROM BUS 73680 TO BUS 73669 CKT 1
END

CONTINGENCY 8600LINE
OPEN LINE FROM BUS 73670 TO BUS 73671 CKT 1
END

CONTINGENCY 8700LINE
OPEN LINE FROM BUS 73681 TO BUS 73680 CKT 1
END

CONTINGENCY 8804ALINE
OPEN LINE FROM BUS 73686 TO BUS 73684 CKT 1
END

CONTINGENCY 8809ALINE-1
OPEN LINE FROM BUS 73700 TO BUS 73696 CKT 1
END

CONTINGENCY 8809ALINE-2
OPEN LINE FROM BUS 73694 TO BUS 73712 CKT 1
END

CONTINGENCY 8904BLINE
OPEN LINE FROM BUS 73687 TO BUS 73685 CKT 1
END

CONTINGENCY 8909BLINE-1
OPEN LINE FROM BUS 73700 TO BUS 73697 CKT 1
END

CONTINGENCY 8909BLINE-2
OPEN LINE FROM BUS 73695 TO BUS 73713 CKT 1
END

CONTINGENCY 9500LINE
OPEN LINE FROM BUS 73678 TO BUS 73680 CKT 1
END

CONTINGENCY 9502LINE
OPEN LINE FROM BUS 73678 TO BUS 73676 CKT 1
END

CONTINGENCY 84004LINE
OPEN LINE FROM BUS 73672 TO BUS 73673 CKT 1
OPEN LINE FROM BUS 73673 TO BUS 73675 CKT 1
END
```

```
CONTINGENCY 88003ALINE
OPEN LINE FROM BUS 73681 TO BUS 73669 CKT 1
OPEN LINE FROM BUS 73682 TO BUS 73681 CKT 1
OPEN LINE FROM BUS 73682 TO BUS 73684 CKT 1
OPEN LINE FROM BUS 73682 TO BUS 73742 CKT 1
END

CONTINGENCY 88003ALINE-1
OPEN LINE FROM BUS 73681 TO BUS 73669 CKT 1
END

CONTINGENCY 88003ALINE-2
OPEN LINE FROM BUS 73682 TO BUS 73681 CKT 1
END

CONTINGENCY 88003ALINE-3
OPEN LINE FROM BUS 73682 TO BUS 73684 CKT 1
END

CONTINGENCY 88005ALINE
OPEN LINE FROM BUS 73195 TO BUS 73690 CKT 1
OPEN LINE FROM BUS 73690 TO BUS 73688 CKT 1
OPEN LINE FROM BUS 73688 TO BUS 73686 CKT 1
OPEN LINE FROM BUS 73688 TO BUS 73748 CKT 1
END

CONTINGENCY 88005ALINE-1
OPEN LINE FROM BUS 73688 TO BUS 73686 CKT 1
END

CONTINGENCY 88005ALINE-2
OPEN LINE FROM BUS 73690 TO BUS 73688 CKT 1
END

CONTINGENCY 88006ALINE
OPEN LINE FROM BUS 73690 TO BUS 73692 CKT 1
OPEN LINE FROM BUS 73692 TO BUS 73694 CKT 1
OPEN LINE FROM BUS 73694 TO BUS 73754 CKT 1
OPEN LINE FROM BUS 73692 TO BUS 73752 CKT 1
END

CONTINGENCY 89003BLINE
OPEN LINE FROM BUS 73669 TO BUS 73681 CKT 2
OPEN LINE FROM BUS 73681 TO BUS 73683 CKT 1
OPEN LINE FROM BUS 73683 TO BUS 73685 CKT 1
OPEN LINE FROM BUS 73683 TO BUS 73742 CKT 1
END

CONTINGENCY 89003BLINE-1
OPEN LINE FROM BUS 73669 TO BUS 73681 CKT 2
END

CONTINGENCY 89003BLINE-2
OPEN LINE FROM BUS 73681 TO BUS 73683 CKT 1
END

CONTINGENCY 89003BLINE-3
```

```
OPEN LINE FROM BUS 73683 TO BUS 73685 CKT 1
END

CONTINGENCY 89005BLINE
OPEN LINE FROM BUS 73691 TO BUS 73689 CKT 1
OPEN LINE FROM BUS 73689 TO BUS 73687 CKT 1
OPEN LINE FROM BUS 73689 TO BUS 73748 CKT 1
END

CONTINGENCY 89005BLINE-1
OPEN LINE FROM BUS 73689 TO BUS 73687 CKT 1
END

CONTINGENCY 89005BLINE-2
OPEN LINE FROM BUS 73691 TO BUS 73689 CKT 1
END

CONTINGENCY 89006BLINE
OPEN LINE FROM BUS 73691 TO BUS 73693 CKT 1
OPEN LINE FROM BUS 73693 TO BUS 73695 CKT 1
OPEN LINE FROM BUS 73195 TO BUS 73691 CKT 1
OPEN LINE FROM BUS 73693 TO BUS 73752 CKT 1
OPEN LINE FROM BUS 73695 TO BUS 73754 CKT 1
END

CONTINGENCY 89006BLINE-1
OPEN LINE FROM BUS 73691 TO BUS 73693 CKT 1
OPEN LINE FROM BUS 73693 TO BUS 73695 CKT 1
OPEN LINE FROM BUS 73693 TO BUS 73752 CKT 1
OPEN LINE FROM BUS 73695 TO BUS 73754 CKT 1
END

CONTINGENCY 91001LINE
OPEN LINE FROM BUS 73701 TO BUS 73702 CKT 1
OPEN LINE FROM BUS 73700 TO BUS 73701 CKT 1
OPEN LINE FROM BUS 73703 TO BUS 73701 CKT 1
END

CONTINGENCY 301-302LNS
OPEN LINE FROM BUS 72925 TO BUS 72929 CKT 1
OPEN LINE FROM BUS 72929 TO BUS 71796 CKT 1
OPEN LINE FROM BUS 71796 TO BUS 71797 CKT 1
OPEN LINE FROM BUS 72925 TO BUS 72972 CKT 1
END

CONTINGENCY 310LINE
OPEN LINE FROM BUS 73110 TO BUS 73112 CKT 1
END

CONTINGENCY 312LINE
OPEN LINE FROM BUS 72928 TO BUS 72924 CKT 1
OPEN LINE FROM BUS 72924 TO BUS 72952 CKT 1
OPEN LINE FROM BUS 72924 TO BUS 72926 CKT 1
END

CONTINGENCY 312+393LNS
OPEN LINE FROM BUS 72928 TO BUS 72924 CKT 1
```

```
OPEN LINE FROM BUS 72924 TO BUS 72952 CKT 1
OPEN LINE FROM BUS 72924 TO BUS 72926 CKT 1
END

CONTINGENCY 312+393REAC
OPEN LINE FROM BUS 72926 TO BUS 72924 CKT 1
OPEN LINE FROM BUS 72924 TO BUS 72928 CKT 1
OPEN LINE FROM BUS 72928 TO BUS 78700 CKT 1
OPEN LINE FROM BUS 72924 TO BUS 72952 CKT 1
OPEN LINE FROM BUS 70508 TO BUS 70509 CKT 2
END

CONTINGENCY 318LINE
OPEN LINE FROM BUS 73106 TO BUS 73122 CKT 1
END

CONTINGENCY 321LINE
OPEN LINE FROM BUS 73105 TO BUS 73115 CKT 1
END

CONTINGENCY 329LINE
OPEN LINE FROM BUS 73106 TO BUS 73104 CKT 1
END

CONTINGENCY 330LINE
OPEN LINE FROM BUS 73108 TO BUS 73119 CKT 1
END

CONTINGENCY 330+LAKE
OPEN LINE FROM BUS 73108 TO BUS 73119 CKT 1
OPEN LINE FROM BUS 73119 TO BUS 73565 CKT 1
OPEN LINE FROM BUS 73119 TO BUS 73566 CKT 1
OPEN LINE FROM BUS 73119 TO BUS 73567 CKT 1
END

CONTINGENCY 347LINE
OPEN LINE FROM BUS 73119 TO BUS 73118 CKT 1
OPEN LINE FROM BUS 73118 TO BUS 71336 CKT 1
END

CONTINGENCY 347LREAC
OPEN LINE FROM BUS 73119 TO BUS 73118 CKT 1
OPEN LINE FROM BUS 73118 TO BUS 71336 CKT 1
OPEN LINE FROM BUS 70508 TO BUS 70509 CKT 2
END

CONTINGENCY 347+LAKE
OPEN LINE FROM BUS 73119 TO BUS 73118 CKT 1
OPEN LINE FROM BUS 73118 TO BUS 71336 CKT 1
OPEN LINE FROM BUS 73119 TO BUS 73565 CKT 1
OPEN LINE FROM BUS 73119 TO BUS 73566 CKT 1
OPEN LINE FROM BUS 73119 TO BUS 73567 CKT 1
END

/CONTINGENCY 348LINE ** revised
/OPEN LINE FROM BUS 73110 TO BUS 73106 CKT 1
/END
```

```
CONTINGENCY 348LINE
DISCONNECT BUS 73121
END

/CONTINGENCY 348+AUTO * revised
/OPEN LINE FROM BUS 73110 TO BUS 73106 CKT 1
/OPEN LINE FROM BUS 73106 TO BUS 73198 CKT 4
/END

CONTINGENCY 348+AUTO /* added for Phase 2
disconnect bus 73121
OPEN LINE FROM BUS 73106 TO BUS 73198 CKT 4
END

CONTINGENCY 352LINE
OPEN LINE FROM BUS 73104 TO BUS 73105 CKT 1
END

CONTINGENCY 352+AUTO
OPEN LINE FROM BUS 73104 TO BUS 73105 CKT 1
OPEN LINE FROM BUS 73104 TO BUS 73202 CKT 1
END

CONTINGENCY 353LINE
OPEN LINE FROM BUS 73112 TO BUS 73114 CKT 1
OPEN LINE FROM BUS 73114 TO BUS 73107 CKT 1
END

CONTINGENCY 353+AUTO
OPEN LINE FROM BUS 73112 TO BUS 73114 CKT 1
OPEN LINE FROM BUS 73114 TO BUS 73107 CKT 1
OPEN LINE FROM BUS 73112 TO BUS 73242 CKT 1
END

CONTINGENCY 354LINE
OPEN LINE FROM BUS 72926 TO BUS 72925 CKT 1
END

CONTINGENCY 362LINE
OPEN LINE FROM BUS 73113 TO BUS 73122 CKT 1
END

CONTINGENCY 364+AUTO
OPEN LINE FROM BUS 73109 TO BUS 73210 CKT 1
OPEN LINE FROM BUS 73109 TO BUS 73113 CKT 1
END

CONTINGENCY 368LINE
OPEN LINE FROM BUS 73108 TO BUS 73112 CKT 1
END

CONTINGENCY 371LINE
OPEN LINE FROM BUS 73109 TO BUS 73110 CKT 1
END

CONTINGENCY 371+AUTO
```

```
OPEN LINE FROM BUS 73109 TO BUS 73110 CKT 1
OPEN LINE FROM BUS 73109 TO BUS 73210 CKT 1
END

CONTINGENCY 376LINE
OPEN LINE FROM BUS 73113 TO BUS 73107 CKT 1
END

CONTINGENCY 381LINE
OPEN LINE FROM BUS 72926 TO BUS 72927 CKT 1
OPEN LINE FROM BUS 72927 TO BUS 70486 CKT 1
END

CONTINGENCY 381LREAC
OPEN LINE FROM BUS 72926 TO BUS 72927 CKT 1
OPEN LINE FROM BUS 72927 TO BUS 70486 CKT 1
OPEN LINE FROM BUS 70508 TO BUS 70509 CKT 2
END

CONTINGENCY 383LINE
OPEN LINE FROM BUS 73110 TO BUS 73108 CKT 1
END

CONTINGENCY 384LINE
DISCONNECT BUS 73116
DISCONNECT BUS 73557
END

/CONTINGENCY 387LINE ** removed
/OPEN LINE FROM BUS 73107 TO BUS 73663 CKT 1
/OPEN LINE FROM BUS 73663 TO BUS 73664 CKT 1
/END

CONTINGENCY 387LINE /* revised for Phase 2
OPEN LINE FROM BUS 73107 TO BUS 73663 CKT 1
DISCONNECT BUS 73664
DISCONNECT BUS 73665
DISCONNECT BUS 75073
END

/CONTINGENCY 387+AUTO ** removed for Phase 2
/OPEN LINE FROM BUS 73107 TO BUS 73663 CKT 1
/OPEN LINE FROM BUS 73663 TO BUS 73668 CKT 1
/OPEN LINE FROM BUS 73663 TO BUS 73668 CKT 2
/OPEN LINE FROM BUS 73663 TO BUS 73664 CKT 1
/END

CONTINGENCY 393LINE
OPEN LINE FROM BUS 72928 TO BUS 78700 CKT 1
END

CONTINGENCY 395LINE
OPEN LINE FROM BUS 73112 TO BUS 73103 CKT 1
OPEN LINE FROM BUS 73103 TO BUS 73111 CKT 1
OPEN LINE FROM BUS 73111 TO BUS 73244 CKT 1
OPEN LINE FROM BUS 73103 TO BUS 72925 CKT 1
END
```

```
CONTINGENCY 395+AUTO
OPEN LINE FROM BUS 73112 TO BUS 73103 CKT 1
OPEN LINE FROM BUS 73103 TO BUS 72925 CKT 1
OPEN LINE FROM BUS 72925 TO BUS 72972 CKT 1
OPEN LINE FROM BUS 73111 TO BUS 73244 CKT 1
OPEN LINE FROM BUS 73103 TO BUS 73111 CKT 1
END

CONTINGENCY 398LINE
OPEN LINE FROM BUS 73105 TO BUS 73117 CKT 1
OPEN LINE FROM BUS 73117 TO BUS 74344 CKT 1
END

CONTINGENCY 398LREAC
OPEN LINE FROM BUS 73105 TO BUS 73117 CKT 1
OPEN LINE FROM BUS 70508 TO BUS 70509 CKT 2
OPEN LINE FROM BUS 73117 TO BUS 74344 CKT 1
END

CONTINGENCY PLUMNOR
DISCONNECT BUS 73132
DISCONNECT BUS 73133
DISCONNECT BUS 73134
DISCONNECT BUS 73135
END

CONTINGENCY PLUMNOR+AUTO
DISCONNECT BUS 73132
DISCONNECT BUS 73133
DISCONNECT BUS 73134
DISCONNECT BUS 73135
OPEN LINE FROM BUS 73293 TO BUS 73172 CKT 1
END

CONTINGENCY NORAUTO
OPEN LINE FROM BUS 73293 TO BUS 73172 CKT 1
END

CONTINGENCY 1000-1090DCT
OPEN LINE FROM BUS 73210 TO BUS 73611 CKT 1
OPEN LINE FROM BUS 73611 TO BUS 73612 CKT 1
OPEN LINE FROM BUS 73210 TO BUS 73291 CKT 1
END

CONTINGENCY 1060-1165DCT
OPEN LINE FROM BUS 73170 TO BUS 73176 CKT 1
OPEN LINE FROM BUS 73170 TO BUS 73176 CKT 2
END

CONTINGENCY 1060-1270DCT
OPEN LINE FROM BUS 73170 TO BUS 73176 CKT 1
OPEN LINE FROM BUS 73170 TO BUS 73268 CKT 1
END

CONTINGENCY 1070-1080DCT
OPEN LINE FROM BUS 73214 TO BUS 73215 CKT 1
```

```
OPEN LINE FROM BUS 73214 TO BUS 73210 CKT 1
OPEN LINE FROM BUS 73214 TO BUS 73276 CKT 1
OPEN LINE FROM BUS 73276 TO BUS 73213 CKT 1
OPEN LINE FROM BUS 73291 TO BUS 73218 CKT 1
OPEN LINE FROM BUS 73215 TO BUS 73218 CKT 1
END

CONTINGENCY 1080-1280DCT
OPEN LINE FROM BUS 73214 TO BUS 73215 CKT 1
OPEN LINE FROM BUS 73214 TO BUS 73210 CKT 1
OPEN LINE FROM BUS 73214 TO BUS 73276 CKT 1
OPEN LINE FROM BUS 73276 TO BUS 73213 CKT 1
OPEN LINE FROM BUS 73216 TO BUS 73217 CKT 1
OPEN LINE FROM BUS 73216 TO BUS 73177 CKT 1
OPEN LINE FROM BUS 73216 TO BUS 73210 CKT 1
END

CONTINGENCY 1080-1490DCT
OPEN LINE FROM BUS 73214 TO BUS 73215 CKT 1
OPEN LINE FROM BUS 73210 TO BUS 73214 CKT 1
OPEN LINE FROM BUS 73215 TO BUS 73218 CKT 1
OPEN LINE FROM BUS 73214 TO BUS 73276 CKT 1
OPEN LINE FROM BUS 73276 TO BUS 73213 CKT 1
END

CONTINGENCY 1100-1200DCT
OPEN LINE FROM BUS 73219 TO BUS 73220 CKT 1
OPEN LINE FROM BUS 73219 TO BUS 73222 CKT 1
END

CONTINGENCY 1100-1300DCT
OPEN LINE FROM BUS 73219 TO BUS 73220 CKT 1
OPEN LINE FROM BUS 73220 TO BUS 73222 CKT 1
OPEN LINE FROM BUS 73222 TO BUS 73539 CKT 1
END

CONTINGENCY 1130-1430DCT
OPEN LINE FROM BUS 73286 TO BUS 73700 CKT 1
OPEN LINE FROM BUS 73267 TO BUS 73300 CKT 1
OPEN LINE FROM BUS 73300 TO BUS 73286 CKT 1
DISCONNECT BUS 73714
END

CONTINGENCY 113091001DCT
OPEN LINE FROM BUS 73701 TO BUS 73702 CKT 1
OPEN LINE FROM BUS 73700 TO BUS 73701 CKT 1
OPEN LINE FROM BUS 73703 TO BUS 73701 CKT 1
OPEN LINE FROM BUS 73286 TO BUS 73700 CKT 1
OPEN LINE FROM BUS 73267 TO BUS 73300 CKT 1
OPEN LINE FROM BUS 73300 TO BUS 73286 CKT 1
END

CONTINGENCY 1163-1550D-2
DISCONNECT BUS 73127
OPEN LINE FROM BUS 73204 TO BUS 73205 CKT 1
OPEN LINE FROM BUS 73205 TO BUS 73201 CKT 1
OPEN LINE FROM BUS 73205 TO BUS 73202 CKT 1
```

```
DISCONNECT BUS 73128
OPEN LINE FROM BUS 73211 TO BUS 73200 CKT 1
OPEN LINE FROM BUS 73200 TO BUS 73181 CKT 1
OPEN LINE FROM BUS 73200 TO BUS 73202 CKT 1
END

CONTINGENCY 1207-1775DCT
OPEN LINE FROM BUS 73242 TO BUS 73250 CKT 1
OPEN LINE FROM BUS 73242 TO BUS 73253 CKT 1
OPEN LINE FROM BUS 73253 TO BUS 73246 CKT 1
OPEN LINE FROM BUS 73253 TO BUS 73274 CKT 1
OPEN LINE FROM BUS 73274 TO BUS 73537 CKT 1
END

CONTINGENCY 1208-1640DCT
OPEN LINE FROM BUS 73198 TO BUS 73631 CKT 1
OPEN LINE FROM BUS 73195 TO BUS 73631 CKT 1
END

CONTINGENCY 1222-1730ADC
OPEN LINE FROM BUS 73709 TO BUS 73711 CKT 1
OPEN LINE FROM BUS 73711 TO BUS 73710 CKT 2
OPEN LINE FROM BUS 73224 TO BUS 73158 CKT 1
END

CONTINGENCY 1261-1620DCT
OPEN LINE FROM BUS 73231 TO BUS 73230 CKT 1
OPEN LINE FROM BUS 73231 TO BUS 73230 CKT 2
END

CONTINGENCY 1272-1721DCT
OPEN LINE FROM BUS 73185 TO BUS 73183 CKT 1
OPEN LINE FROM BUS 73202 TO BUS 73183 CKT 1
OPEN LINE FROM BUS 73202 TO BUS 73189 CKT 1
END

CONTINGENCY 1280-1870DCT
OPEN LINE FROM BUS 73216 TO BUS 73177 CKT 1
OPEN LINE FROM BUS 73216 TO BUS 73210 CKT 1
OPEN LINE FROM BUS 73177 TO BUS 73285 CKT 1
OPEN LINE FROM BUS 73216 TO BUS 73217 CKT 1
OPEN LINE FROM BUS 73285 TO BUS 72581 CKT 1
END

CONTINGENCY 1310-1763DCT
OPEN LINE FROM BUS 73242 TO BUS 73284 CKT 1
OPEN LINE FROM BUS 73284 TO BUS 73219 CKT 1
OPEN LINE FROM BUS 73284 TO BUS 73131 CKT 1
OPEN LINE FROM BUS 73131 TO BUS 73458 CKT 1
OPEN LINE FROM BUS 73283 TO BUS 73221 CKT 1
OPEN LINE FROM BUS 73242 TO BUS 73283 CKT 1
OPEN LINE FROM BUS 73283 TO BUS 73219 CKT 1
OPEN LINE FROM BUS 73221 TO BUS 73458 CKT 1
END

CONTINGENCY 1355-1610DCT
OPEN LINE FROM BUS 73184 TO BUS 73634 CKT 1
```

```
OPEN LINE FROM BUS 73184 TO BUS 73182 CKT 1
OPEN LINE FROM BUS 73184 TO BUS 73198 CKT 1
OPEN LINE FROM BUS 73196 TO BUS 73707 CKT 1
OPEN LINE FROM BUS 73196 TO BUS 73675 CKT 1
OPEN LINE FROM BUS 73196 TO BUS 73198 CKT 1
END

CONTINGENCY 1389-1880DCT
OPEN LINE FROM BUS 73172 TO BUS 73207 CKT 1
OPEN LINE FROM BUS 73172 TO BUS 73169 CKT 1
OPEN LINE FROM BUS 73168 TO BUS 73169 CKT 1
OPEN LINE FROM BUS 73171 TO BUS 73169 CKT 1
END

CONTINGENCY 1394-1515DCT
OPEN LINE FROM BUS 72978 TO BUS 73266 CKT 1
OPEN LINE FROM BUS 73266 TO BUS 72972 CKT 1
END

CONTINGENCY 1416-1867DCT
OPEN LINE FROM BUS 73271 TO BUS 73207 CKT 1
OPEN LINE FROM BUS 73271 TO BUS 73168 CKT 1
OPEN LINE FROM BUS 73271 TO BUS 73171 CKT 1
OPEN LINE FROM BUS 73286 TO BUS 73700 CKT 1
OPEN LINE FROM BUS 73267 TO BUS 73300 CKT 1
OPEN LINE FROM BUS 73300 TO BUS 73286 CKT 1
END

CONTINGENCY 1416-1880DCT
OPEN LINE FROM BUS 73169 TO BUS 73172 CKT 1
OPEN LINE FROM BUS 73169 TO BUS 73168 CKT 1
OPEN LINE FROM BUS 73169 TO BUS 73171 CKT 1
OPEN LINE FROM BUS 73286 TO BUS 73700 CKT 1
OPEN LINE FROM BUS 73267 TO BUS 73300 CKT 1
OPEN LINE FROM BUS 73300 TO BUS 73286 CKT 1
END

CONTINGENCY 1416-1890DCT
OPEN LINE FROM BUS 73237 TO BUS 73173 CKT 1
OPEN LINE FROM BUS 73237 TO BUS 73168 CKT 1
OPEN LINE FROM BUS 73237 TO BUS 73171 CKT 1
OPEN LINE FROM BUS 73286 TO BUS 73700 CKT 1
OPEN LINE FROM BUS 73267 TO BUS 73300 CKT 1
OPEN LINE FROM BUS 73300 TO BUS 73286 CKT 1
END

CONTINGENCY 1440-1450DCT
OPEN LINE FROM BUS 73168 TO BUS 73162 CKT 1
OPEN LINE FROM BUS 73168 TO BUS 73167 CKT 1
END

CONTINGENCY 1470-1565DCT
OPEN LINE FROM BUS 73172 TO BUS 73174 CKT 1
OPEN LINE FROM BUS 73174 TO BUS 73143 CKT 1
OPEN LINE FROM BUS 73372 TO BUS 73143 CKT 1
OPEN LINE FROM BUS 73174 TO BUS 73155 CKT 1
OPEN LINE FROM BUS 73155 TO BUS 73170 CKT 1
```

```
OPEN LINE FROM BUS 73155 TO BUS 73146 CKT 1
OPEN LINE FROM BUS 73372 TO BUS 73146 CKT 1
END

CONTINGENCY 1470-1637DCT
OPEN LINE FROM BUS 73172 TO BUS 73174 CKT 1
OPEN LINE FROM BUS 73174 TO BUS 73143 CKT 1
OPEN LINE FROM BUS 73372 TO BUS 73143 CKT 1
OPEN LINE FROM BUS 73292 TO BUS 73158 CKT 1
OPEN LINE FROM BUS 73292 TO BUS 73172 CKT 2
END

CONTINGENCY 1470-1720DCT
OPEN LINE FROM BUS 73172 TO BUS 73174 CKT 1
OPEN LINE FROM BUS 73174 TO BUS 73143 CKT 1
OPEN LINE FROM BUS 73372 TO BUS 73143 CKT 1
OPEN LINE FROM BUS 73710 TO BUS 73172 CKT 1
END

CONTINGENCY 1505-1607DCT
OPEN LINE FROM BUS 73213 TO BUS 73223 CKT 1
OPEN LINE FROM BUS 73223 TO BUS 73236 CKT 1
OPEN LINE FROM BUS 73236 TO BUS 73443 CKT 1
OPEN LINE FROM BUS 73223 TO BUS 73270 CKT 1
OPEN LINE FROM BUS 73476 TO BUS 73270 CKT 1
OPEN LINE FROM BUS 73270 TO BUS 73444 CKT 1
OPEN LINE FROM BUS 73475 TO BUS 73476 CKT 1
OPEN LINE FROM BUS 73213 TO BUS 73226 CKT 1
OPEN LINE FROM BUS 73226 TO BUS 73229 CKT 1
OPEN LINE FROM BUS 73226 TO BUS 73281 CKT 1
OPEN LINE FROM BUS 73212 TO BUS 73281 CKT 1
OPEN LINE FROM BUS 73229 TO BUS 73443 CKT 1
OPEN LINE FROM BUS 73212 TO BUS 73442 CKT 1
END

CONTINGENCY 1545-1570DCT
OPEN LINE FROM BUS 73126 TO BUS 73192 CKT 1
OPEN LINE FROM BUS 73192 TO BUS 73188 CKT 1
OPEN LINE FROM BUS 73192 TO BUS 73705 CKT 1
OPEN LINE FROM BUS 73126 TO BUS 73704 CKT 1
END

CONTINGENCY 1560-1570DCT
OPEN LINE FROM BUS 73704 TO BUS 73191 CKT 1
OPEN LINE FROM BUS 73187 TO BUS 73191 CKT 1
OPEN LINE FROM BUS 73706 TO BUS 73191 CKT 1
OPEN LINE FROM BUS 73126 TO BUS 73192 CKT 1
OPEN LINE FROM BUS 73192 TO BUS 73188 CKT 1
OPEN LINE FROM BUS 73192 TO BUS 73705 CKT 1
END

CONTINGENCY 1570-1575DCT
OPEN LINE FROM BUS 73126 TO BUS 73192 CKT 1
OPEN LINE FROM BUS 73192 TO BUS 73188 CKT 1
OPEN LINE FROM BUS 73192 TO BUS 73705 CKT 1
DISCONNECT BUS 73228
END
```

```
CONTINGENCY 1570-1580DCT
OPEN LINE FROM BUS 73126 TO BUS 73192 CKT 1
OPEN LINE FROM BUS 73192 TO BUS 73188 CKT 1
OPEN LINE FROM BUS 73192 TO BUS 73705 CKT 1
OPEN LINE FROM BUS 73126 TO BUS 73199 CKT 1
END

CONTINGENCY 1575-1585DCT
DISCONNECT BUS 73228
OPEN LINE FROM BUS 73185 TO BUS 73199 CKT 1
OPEN LINE FROM BUS 73160 TO BUS 73382 CKT 1
END

CONTINGENCY 1575-1990DCT
DISCONNECT BUS 73164
OPEN LINE FROM BUS 73186 TO BUS 73386 CKT 1
DISCONNECT BUS 73228
OPEN LINE FROM BUS 73160 TO BUS 73382 CKT 1
END

CONTINGENCY 1580-1585DCT
DISCONNECT BUS 73199
END

CONTINGENCY 1580-1730BDC
OPEN LINE FROM BUS 73126 TO BUS 73199 CKT 1
OPEN LINE FROM BUS 73126 TO BUS 73224 CKT 1
END

CONTINGENCY 1620-1975DCT
OPEN LINE FROM BUS 73241 TO BUS 73230 CKT 1
OPEN LINE FROM BUS 73227 TO BUS 73230 CKT 1
END

CONTINGENCY 1975-348DCT /* added
OPEN LINE FROM BUS 73230 TO BUS 73227 CKT 1
DISCONNECT BUS 73121
END

CONTINGENCY 1622-1887DCT
OPEN LINE FROM BUS 73165 TO BUS 73178 CKT 1
OPEN LINE FROM BUS 73165 TO BUS 73179 CKT 1
OPEN LINE FROM BUS 73178 TO BUS 73159 CKT 1
OPEN LINE FROM BUS 73178 TO BUS 73341 CKT 1
END

CONTINGENCY 1637-1720DCT
OPEN LINE FROM BUS 73292 TO BUS 73158 CKT 1
OPEN LINE FROM BUS 73292 TO BUS 73172 CKT 2
OPEN LINE FROM BUS 73710 TO BUS 73172 CKT 1
END

CONTINGENCY 1668-1721DCT
OPEN LINE FROM BUS 73185 TO BUS 73189 CKT 1
OPEN LINE FROM BUS 73202 TO BUS 73189 CKT 1
END
```

```
CONTINGENCY 1670-1771DCT
OPEN LINE FROM BUS 73206 TO BUS 73198 CKT 1
OPEN LINE FROM BUS 73206 TO BUS 73243 CKT 1
OPEN LINE FROM BUS 73206 TO BUS 73273 CKT 1
OPEN LINE FROM BUS 73198 TO BUS 73243 CKT 1
END

CONTINGENCY 1670-1830DCT
OPEN LINE FROM BUS 73206 TO BUS 73198 CKT 1
OPEN LINE FROM BUS 73206 TO BUS 73243 CKT 1
OPEN LINE FROM BUS 73206 TO BUS 73273 CKT 1
OPEN LINE FROM BUS 73272 TO BUS 73198 CKT 1
END

CONTINGENCY 1710-1730ADC
DISCONNECT BUS 73225
OPEN LINE FROM BUS 73224 TO BUS 73158 CKT 1
END

CONTINGENCY 1710-1730BDC
DISCONNECT BUS 73225
OPEN LINE FROM BUS 73126 TO BUS 73224 CKT 1
END

CONTINGENCY 1710-1730CDC
DISCONNECT BUS 73225
OPEN LINE FROM BUS 73224 TO BUS 73700 CKT 1
END

CONTINGENCY 1720-1730ADC
OPEN LINE FROM BUS 73710 TO BUS 73172 CKT 1
OPEN LINE FROM BUS 73224 TO BUS 73158 CKT 1
END

CONTINGENCY 1732-1788DCT
OPEN LINE FROM BUS 73263 TO BUS 73262 CKT 1
OPEN LINE FROM BUS 73263 TO BUS 73260 CKT 1
OPEN LINE FROM BUS 73263 TO BUS 73203 CKT 1
OPEN LINE FROM BUS 73245 TO BUS 73260 CKT 1
END

CONTINGENCY 1751-1777DCT
OPEN LINE FROM BUS 73251 TO BUS 73244 CKT 1
OPEN LINE FROM BUS 73251 TO BUS 73261 CKT 1
OPEN LINE FROM BUS 73251 TO BUS 73242 CKT 1
OPEN LINE FROM BUS 73244 TO BUS 73258 CKT 1
END

CONTINGENCY 1770-1887DCT
OPEN LINE FROM BUS 73165 TO BUS 73178 CKT 1
OPEN LINE FROM BUS 73165 TO BUS 73179 CKT 1
OPEN LINE FROM BUS 73170 TO BUS 73165 CKT 1
OPEN LINE FROM BUS 73165 TO BUS 73159 CKT 1
END

CONTINGENCY 1777-1779DCT
```

```
OPEN LINE FROM BUS 73244 TO BUS 73258 CKT 1
OPEN LINE FROM BUS 73258 TO BUS 73246 CKT 1
END

CONTINGENCY 1800-1810DCT
OPEN LINE FROM BUS 73208 TO BUS 73154 CKT 1
OPEN LINE FROM BUS 73208 TO BUS 73148 CKT 1
OPEN LINE FROM BUS 73208 TO BUS 73232 CKT 1
OPEN LINE FROM BUS 73234 TO BUS 73233 CKT 1
OPEN LINE FROM BUS 73234 TO BUS 73235 CKT 1
OPEN LINE FROM BUS 73234 TO BUS 73154 CKT 1
END

CONTINGENCY 1800-1825DCT
OPEN LINE FROM BUS 73208 TO BUS 73154 CKT 1
OPEN LINE FROM BUS 73208 TO BUS 73148 CKT 1
OPEN LINE FROM BUS 73208 TO BUS 73232 CKT 1
OPEN LINE FROM BUS 73232 TO BUS 73233 CKT 1
END

CONTINGENCY 1810-1825DCT
OPEN LINE FROM BUS 73154 TO BUS 73234 CKT 1
OPEN LINE FROM BUS 73234 TO BUS 73233 CKT 1
OPEN LINE FROM BUS 73234 TO BUS 73235 CKT 1
OPEN LINE FROM BUS 73232 TO BUS 73233 CKT 1
END

CONTINGENCY 1867-1880DCT
DISCONNECT BUS 73271
DISCONNECT BUS 73169
DISCONNECT BUS 73552
END

CONTINGENCY 1867-1890DCT
DISCONNECT BUS 73237
DISCONNECT BUS 73271
DISCONNECT BUS 73551
END

CONTINGENCY 1867-1977DCT
OPEN LINE FROM BUS 73294 TO BUS 73168 CKT 1
OPEN LINE FROM BUS 73294 TO BUS 73167 CKT 1
OPEN LINE FROM BUS 73294 TO BUS 73267 CKT 1
OPEN LINE FROM BUS 73271 TO BUS 73207 CKT 1
OPEN LINE FROM BUS 73271 TO BUS 73168 CKT 1
OPEN LINE FROM BUS 73271 TO BUS 73171 CKT 1
END

CONTINGENCY 1880-1890DCT
DISCONNECT BUS 73169
DISCONNECT BUS 73237
OPEN LINE FROM BUS 75051 TO BUS 75053 CKT 1
OPEN LINE FROM BUS 75053 TO BUS 73166 CKT 1
OPEN LINE FROM BUS 73166 TO BUS 73171 CKT 1
END

CONTINGENCY 1880-1977DCT
```

```
OPEN LINE FROM BUS 73294 TO BUS 73168 CKT 1
OPEN LINE FROM BUS 73294 TO BUS 73167 CKT 1
OPEN LINE FROM BUS 73294 TO BUS 73267 CKT 1
OPEN LINE FROM BUS 73169 TO BUS 73172 CKT 1
OPEN LINE FROM BUS 73169 TO BUS 73168 CKT 1
OPEN LINE FROM BUS 73169 TO BUS 73171 CKT 1
END

CONTINGENCY 1890-1977DCT
OPEN LINE FROM BUS 73294 TO BUS 73168 CKT 1
OPEN LINE FROM BUS 73294 TO BUS 73167 CKT 1
OPEN LINE FROM BUS 73294 TO BUS 73267 CKT 1
OPEN LINE FROM BUS 73237 TO BUS 73173 CKT 1
OPEN LINE FROM BUS 73237 TO BUS 73168 CKT 1
OPEN LINE FROM BUS 73237 TO BUS 73171 CKT 1
END

CONTINGENCY 8100-8200DCT
OPEN LINE FROM BUS 73669 TO BUS 73679 CKT 1
OPEN LINE FROM BUS 73679 TO BUS 73668 CKT 1
OPEN LINE FROM BUS 73668 TO BUS 73669 CKT 2
END

/CONTINGENCY 1460-387DCT ** removed
/OPEN LINE FROM BUS 73107 TO BUS 73663 CKT 1
/OPEN LINE FROM BUS 73663 TO BUS 73668 CKT 1
/OPEN LINE FROM BUS 73663 TO BUS 73668 CKT 2
/OPEN LINE FROM BUS 73287 TO BUS 73668 CKT 1
/OPEN LINE FROM BUS 73663 TO BUS 73664 CKT 1
/END

CONTINGENCY 1460-387DCT /* revised for Phase 2
OPEN LINE FROM BUS 73107 TO BUS 73663 CKT 1
OPEN LINE FROM BUS 73287 TO BUS 73668 CKT 1
DISCONNECT BUS 73664
DISCONNECT BUS 73665
DISCONNECT BUS 75073
END

CONTINGENCY 1565-PLNRDCT
DISCONNECT BUS 73155
OPEN LINE FROM BUS 73372 TO BUS 73146 CKT 1
DISCONNECT BUS 73132
DISCONNECT BUS 73133
DISCONNECT BUS 73134
DISCONNECT BUS 73135
END

CONTINGENCY 1618-321DCT
OPEN LINE FROM BUS 73190 TO BUS 73179 CKT 1
OPEN LINE FROM BUS 73105 TO BUS 73115 CKT 1
END

CONTINGENCY 1751-395DCT
OPEN LINE FROM BUS 73103 TO BUS 73112 CKT 1
OPEN LINE FROM BUS 73103 TO BUS 72925 CKT 1
OPEN LINE FROM BUS 73103 TO BUS 73111 CKT 1
```

```
OPEN LINE FROM BUS 73111 TO BUS 73244 CKT 1
OPEN LINE FROM BUS 73251 TO BUS 73244 CKT 1
OPEN LINE FROM BUS 73251 TO BUS 73261 CKT 1
OPEN LINE FROM BUS 73251 TO BUS 73242 CKT 1
OPEN LINE FROM BUS 72925 TO BUS 72972 CKT 1
END

CONTINGENCY 1759-353DCT
OPEN LINE FROM BUS 73241 TO BUS 73264 CKT 1
OPEN LINE FROM BUS 73259 TO BUS 73264 CKT 1
OPEN LINE FROM BUS 73112 TO BUS 73114 CKT 1
OPEN LINE FROM BUS 73114 TO BUS 73107 CKT 1
OPEN LINE FROM BUS 73112 TO BUS 73242 CKT 1
END

CONTINGENCY 1767-353DCT
OPEN LINE FROM BUS 73242 TO BUS 73259 CKT 1
OPEN LINE FROM BUS 73112 TO BUS 73114 CKT 1
OPEN LINE FROM BUS 73114 TO BUS 73107 CKT 1
OPEN LINE FROM BUS 73112 TO BUS 73242 CKT 1
END

CONTINGENCY 1770-321DCT
OPEN LINE FROM BUS 73170 TO BUS 73165 CKT 1
OPEN LINE FROM BUS 73165 TO BUS 73159 CKT 1
OPEN LINE FROM BUS 73105 TO BUS 73115 CKT 1
END

CONTINGENCY 1779-395DCT
OPEN LINE FROM BUS 73103 TO BUS 73112 CKT 1
OPEN LINE FROM BUS 73103 TO BUS 72925 CKT 1
OPEN LINE FROM BUS 73103 TO BUS 73111 CKT 1
OPEN LINE FROM BUS 73111 TO BUS 73244 CKT 1
OPEN LINE FROM BUS 73258 TO BUS 73246 CKT 1
END

CONTINGENCY 1887-321DCT
OPEN LINE FROM BUS 73105 TO BUS 73115 CKT 1
OPEN LINE FROM BUS 73165 TO BUS 73178 CKT 1
OPEN LINE FROM BUS 73165 TO BUS 73179 CKT 1
END

/CONTINGENCY 310-348DCT *revised
/OPEN LINE FROM BUS 73110 TO BUS 73112 CKT 1
/OPEN LINE FROM BUS 73110 TO BUS 73106 CKT 1
/OPEN LINE FROM BUS 73106 TO BUS 73198 CKT 4
/END

CONTINGENCY 310-348DCT
OPEN LINE FROM BUS 73110 TO BUS 73112 CKT 1
disconnect bus 73121
OPEN LINE FROM BUS 73106 TO BUS 73198 CKT 4
END

CONTINGENCY 310-368DCT
OPEN LINE FROM BUS 73110 TO BUS 73112 CKT 1
OPEN LINE FROM BUS 73108 TO BUS 73112 CKT 1
```

```
END

CONTINGENCY 310-383DCT
OPEN LINE FROM BUS 73110 TO BUS 73108 CKT 1
OPEN LINE FROM BUS 73110 TO BUS 73112 CKT 1
END

CONTINGENCY 329-352DCT
OPEN LINE FROM BUS 73105 TO BUS 73104 CKT 1
OPEN LINE FROM BUS 73104 TO BUS 73106 CKT 1
OPEN LINE FROM BUS 73104 TO BUS 73202 CKT 1
END

CONTINGENCY 362-376DCT
OPEN LINE FROM BUS 73113 TO BUS 73122 CKT 1
OPEN LINE FROM BUS 73113 TO BUS 73107 CKT 1
END

CONTINGENCY 371-383DCT
OPEN LINE FROM BUS 73110 TO BUS 73108 CKT 1
OPEN LINE FROM BUS 73110 TO BUS 73109 CKT 1
END

CONTINGENCY MANCHAUTO1
OPEN LINE FROM BUS 73112 TO BUS 73242 CKT 1
END

CONTINGENCY PLUMAUT
OPEN LINE FROM BUS 73115 TO BUS 73170 CKT 1
END

CONTINGENCY SOUTH1XAUTO
OPEN LINE FROM BUS 73106 TO BUS 73198 CKT 1
END

CONTINGENCY SOUTH2XAUTO
OPEN LINE FROM BUS 73106 TO BUS 73154 CKT 2
END

/CONTINGENCY LOBPTENGF *removed for Phase 2
/OPEN LINE FROM BUS 73716 TO BUS 73700 CKT 1
/END

CONTINGENCY LOSSBPT3
OPEN LINE FROM BUS 73648 TO BUS 73700 CKT 1
END

CONTINGENCY LOSSDEV7
OPEN LINE FROM BUS 73553 TO BUS 73195 CKT 1
END

CONTINGENCY LOLAKERD
OPEN LINE FROM BUS 73119 TO BUS 73565 CKT 1
END

CONTINGENCY LOSSMID4
OPEN LINE FROM BUS 73557 TO BUS 73116 CKT 1
```

```
END

CONTINGENCY LOSSMP2
OPEN LINE FROM BUS 73562 TO BUS 73110 CKT 1
END

CONTINGENCY LOSSMP3
OPEN LINE FROM BUS 73563 TO BUS 73110 CKT 1
END

CONTINGENCY LOSSMON6
OPEN LINE FROM BUS 73559 TO BUS 73210 CKT 1
END

CONTINGENCY LOSSNHAV
OPEN LINE FROM BUS 73651 TO BUS 73668 CKT 1
END

CONTINGENCY LOSSNOR1
OPEN LINE FROM BUS 73551 TO BUS 73171 CKT 1
END

CONTINGENCY LOSSNOR2
OPEN LINE FROM BUS 73552 TO BUS 73171 CKT 1
END

CONTINGENCY ALLINGS1TSTK
OPEN LINE FROM BUS 73681 TO BUS 73669 CKT 1
OPEN LINE FROM BUS 73682 TO BUS 73681 CKT 1
OPEN LINE FROM BUS 73682 TO BUS 73742 CKT 1
OPEN LINE FROM BUS 73684 TO BUS 73682 CKT 1
OPEN LINE FROM BUS 73686 TO BUS 73684 CKT 1
OPEN LINE FROM BUS 73684 TO BUS 73744 CKT 1
END

CONTINGENCY ALLINGS2TSTK
OPEN LINE FROM BUS 73669 TO BUS 73681 CKT 2
OPEN LINE FROM BUS 73681 TO BUS 73683 CKT 1
OPEN LINE FROM BUS 73683 TO BUS 73685 CKT 1
OPEN LINE FROM BUS 73683 TO BUS 73742 CKT 1
OPEN LINE FROM BUS 73687 TO BUS 73685 CKT 1
OPEN LINE FROM BUS 73685 TO BUS 73744 CKT 1
END

CONTINGENCY ASHCREEKBKR
DISCONNECT BUS 73703
DISCONNECT BUS 73714
END

CONTINGENCY BAIRDASTK
OPEN LINE FROM BUS 73700 TO BUS 73696 CKT 1
OPEN LINE FROM BUS 73696 TO BUS 73712 CKT 1
OPEN LINE FROM BUS 73712 TO BUS 73694 CKT 1
OPEN LINE FROM BUS 73690 TO BUS 73692 CKT 1
OPEN LINE FROM BUS 73692 TO BUS 73694 CKT 1
OPEN LINE FROM BUS 73712 TO BUS 73755 CKT 1
END
```

```
CONTINGENCY BAIRDBSTK
OPEN LINE FROM BUS 73691 TO BUS 73693 CKT 1
OPEN LINE FROM BUS 73693 TO BUS 73695 CKT 1
OPEN LINE FROM BUS 73195 TO BUS 73691 CKT 1
OPEN LINE FROM BUS 73700 TO BUS 73697 CKT 1
OPEN LINE FROM BUS 73697 TO BUS 73713 CKT 1
OPEN LINE FROM BUS 73713 TO BUS 73695 CKT 1
OPEN LINE FROM BUS 73713 TO BUS 73755 CKT 1
END

CONTINGENCY BATESROCK1T
OPEN LINE FROM BUS 73178 TO BUS 73159 CKT 1
OPEN LINE FROM BUS 73178 TO BUS 73341 CKT 1
OPEN LINE FROM BUS 73170 TO BUS 73165 CKT 1
OPEN LINE FROM BUS 73165 TO BUS 73159 CKT 1
END

CONTINGENCY BECONFLSTK
DISCONNECT BUS 73188
END

CONTINGENCY BOKUM1T
OPEN LINE FROM BUS 73230 TO BUS 73231 CKT 1
OPEN LINE FROM BUS 73231 TO BUS 73230 CKT 2
END

CONTINGENCY BOKUM2T
OPEN LINE FROM BUS 73231 TO BUS 73230 CKT 2
OPEN LINE FROM BUS 73231 TO BUS 73265 CKT 1
END

CONTINGENCY BOKUM3T
OPEN LINE FROM BUS 73231 TO BUS 73265 CKT 1
OPEN LINE FROM BUS 73230 TO BUS 73231 CKT 1
END

CONTINGENCY BRANFORD1T
OPEN LINE FROM BUS 73153 TO BUS 73265 CKT 1
OPEN LINE FROM BUS 73153 TO BUS 73671 CKT 1
END

CONTINGENCY BRANFORD2T
OPEN LINE FROM BUS 73153 TO BUS 73671 CKT 1
OPEN LINE FROM BUS 73287 TO BUS 73153 CKT 1
END

CONTINGENCY BRANFORD4T
OPEN LINE FROM BUS 73287 TO BUS 73153 CKT 1
OPEN LINE FROM BUS 73153 TO BUS 73265 CKT 1
END

CONTINGENCY BRANFRDRR1T
OPEN LINE FROM BUS 73287 TO BUS 73153 CKT 1
OPEN LINE FROM BUS 73287 TO BUS 73668 CKT 1
END
```

```
CONTINGENCY BROADWYST1
OPEN LINE FROM BUS 73678 TO BUS 73676 CKT 1
OPEN LINE FROM BUS 73678 TO BUS 73680 CKT 1
END

CONTINGENCY BUNKERH1T
DISCONNECT BUS 73228
OPEN LINE FROM BUS 73160 TO BUS 73382 CKT 1
OPEN LINE FROM BUS 73185 TO BUS 73189 CKT 1
END

CONTINGENCY BUNKERH2T
OPEN LINE FROM BUS 73185 TO BUS 73189 CKT 1
OPEN LINE FROM BUS 73185 TO BUS 73183 CKT 1
OPEN LINE FROM BUS 73202 TO BUS 73183 CKT 1
END

CONTINGENCY BUNKERH3T
OPEN LINE FROM BUS 73185 TO BUS 73199 CKT 1
OPEN LINE FROM BUS 73185 TO BUS 73183 CKT 1
OPEN LINE FROM BUS 73202 TO BUS 73183 CKT 1
END

CONTINGENCY COLONY1T
OPEN LINE FROM BUS 73184 TO BUS 73634 CKT 1
OPEN LINE FROM BUS 73184 TO BUS 73182 CKT 1
OPEN LINE FROM BUS 73184 TO BUS 73198 CKT 1
OPEN LINE FROM BUS 73633 TO BUS 73634 CKT 1
END

CONTINGENCY DARIEN1T
OPEN LINE FROM BUS 73294 TO BUS 73267 CKT 1
OPEN LINE FROM BUS 73294 TO BUS 73167 CKT 1
OPEN LINE FROM BUS 73294 TO BUS 73168 CKT 1
OPEN LINE FROM BUS 73300 TO BUS 73267 CKT 1
OPEN LINE FROM BUS 73300 TO BUS 73286 CKT 1
OPEN LINE FROM BUS 73286 TO BUS 73700 CKT 1
END

CONTINGENCY DEVON1TSTK
OPEN LINE FROM BUS 73126 TO BUS 73199 CKT 1
DISCONNECT BUS 73225
END

CONTINGENCY DEVON2TSTK
DISCONNECT BUS 73225
OPEN LINE FROM BUS 73126 TO BUS 73129 CKT 1
END

CONTINGENCY DEVON3TSTK
DISCONNECT BUS 73125
OPEN LINE FROM BUS 73126 TO BUS 73570 CKT 1
END

CONTINGENCY DEVON4TSTK
OPEN LINE FROM BUS 73126 TO BUS 73572 CKT 1
END
```

```
CONTINGENCY DEVON5TSTK
OPEN LINE FROM BUS 73126 TO BUS 73704 CKT 1
END

CONTINGENCY DEVON6TSTK
OPEN LINE FROM BUS 73126 TO BUS 73704 CKT 1
OPEN LINE FROM BUS 73126 TO BUS 73192 CKT 1
OPEN LINE FROM BUS 73192 TO BUS 73188 CKT 1
OPEN LINE FROM BUS 73192 TO BUS 73705 CKT 1
END

CONTINGENCY DEVON7TSTK
OPEN LINE FROM BUS 73126 TO BUS 73192 CKT 1
OPEN LINE FROM BUS 73192 TO BUS 73188 CKT 1
OPEN LINE FROM BUS 73192 TO BUS 73705 CKT 1
OPEN LINE FROM BUS 73126 TO BUS 73573 CKT 1
END

CONTINGENCY DEVON8TSTK
OPEN LINE FROM BUS 73126 TO BUS 73573 CKT 1
OPEN LINE FROM BUS 73126 TO BUS 73224 CKT 1
END

CONTINGENCY DEVON10TSTK
OPEN LINE FROM BUS 73126 TO BUS 73224 CKT 1
OPEN LINE FROM BUS 73126 TO BUS 73571 CKT 1
END

CONTINGENCY DEVON11TSTK
OPEN LINE FROM BUS 73126 TO BUS 73571 CKT 1
OPEN LINE FROM BUS 73126 TO BUS 73199 CKT 1
END

CONTINGENCY DEVON12TSTK
OPEN LINE FROM BUS 73126 TO BUS 73570 CKT 1
OPEN LINE FROM BUS 73126 TO BUS 73572 CKT 1
END

CONTINGENCY DEVON22TSTK
OPEN LINE FROM BUS 73195 TO BUS 73553 CKT 1
END

CONTINGENCY DEVON23TSTK
OPEN LINE FROM BUS 73195 TO BUS 73691 CKT 1
OPEN LINE FROM BUS 73195 TO BUS 73553 CKT 1
END

CONTINGENCY DEVON24TSTK
OPEN LINE FROM BUS 73195 TO BUS 73690 CKT 1
OPEN LINE FROM BUS 73195 TO BUS 73691 CKT 1
END

CONTINGENCY DEVON25TSTK
OPEN LINE FROM BUS 73195 TO BUS 73554 CKT 1
OPEN LINE FROM BUS 73195 TO BUS 73690 CKT 1
END
```

```
CONTINGENCY DEVON26TSTK
OPEN LINE FROM BUS 73195 TO BUS 73554 CKT 1
OPEN LINE FROM BUS 73195 TO BUS 73707 CKT 1
END

CONTINGENCY DEVON27TSTK
OPEN LINE FROM BUS 73195 TO BUS 73707 CKT 1
OPEN LINE FROM BUS 73195 TO BUS 73631 CKT 1
END

CONTINGENCY DEVSWST1TSTK
OPEN LINE FROM BUS 73690 TO BUS 73692 CKT 1
OPEN LINE FROM BUS 73692 TO BUS 73694 CKT 1
OPEN LINE FROM BUS 73195 TO BUS 73690 CKT 1
OPEN LINE FROM BUS 73690 TO BUS 73688 CKT 1
OPEN LINE FROM BUS 73688 TO BUS 73686 CKT 1
OPEN LINE FROM BUS 73688 TO BUS 73748 CKT 1
END

CONTINGENCY DEVSWST2TSTK
OPEN LINE FROM BUS 73691 TO BUS 73693 CKT 1
OPEN LINE FROM BUS 73693 TO BUS 73695 CKT 1
OPEN LINE FROM BUS 73195 TO BUS 73691 CKT 1
END

CONTINGENCY DEVSWST3TSTK
OPEN LINE FROM BUS 73691 TO BUS 73689 CKT 1
OPEN LINE FROM BUS 73689 TO BUS 73687 CKT 1
OPEN LINE FROM BUS 73691 TO BUS 73693 CKT 1
OPEN LINE FROM BUS 73693 TO BUS 73695 CKT 1
OPEN LINE FROM BUS 73195 TO BUS 73691 CKT 1
OPEN LINE FROM BUS 73689 TO BUS 73748 CKT 1
END

CONTINGENCY DEVSWST4TSTK
OPEN LINE FROM BUS 73195 TO BUS 73690 CKT 1
OPEN LINE FROM BUS 73690 TO BUS 73688 CKT 1
OPEN LINE FROM BUS 73688 TO BUS 73686 CKT 1
OPEN LINE FROM BUS 73688 TO BUS 73748 CKT 1
END

CONTINGENCY EMERIDEN1T
OPEN LINE FROM BUS 73227 TO BUS 73633 CKT 1
OPEN LINE FROM BUS 73230 TO BUS 73227 CKT 1
END

CONTINGENCY ESHORE12TSTK
OPEN LINE FROM BUS 73669 TO BUS 73679 CKT 1
OPEN LINE FROM BUS 73679 TO BUS 73668 CKT 1
OPEN LINE FROM BUS 73668 TO BUS 73651 CKT 1
END

CONTINGENCY FLAXHILL2T
OPEN LINE FROM BUS 73207 TO BUS 73172 CKT 1
OPEN LINE FROM BUS 73171 TO BUS 73271 CKT 1
OPEN LINE FROM BUS 73168 TO BUS 73271 CKT 1
```

```
OPEN LINE FROM BUS 73207 TO BUS 73271 CKT 1
END

CONTINGENCY FROSTBR15T
OPEN LINE FROM BUS 73202 TO BUS 73203 CKT 1
DISCONNECT BUS 73127
OPEN LINE FROM BUS 73204 TO BUS 73205 CKT 1
OPEN LINE FROM BUS 73205 TO BUS 73202 CKT 1
OPEN LINE FROM BUS 73205 TO BUS 73201 CKT 1
END

CONTINGENCY FROSTBR21T
OPEN LINE FROM BUS 73202 TO BUS 73180 CKT 1
OPEN LINE FROM BUS 73180 TO BUS 73190 CKT 1
DISCONNECT BUS 73128
OPEN LINE FROM BUS 73211 TO BUS 73200 CKT 1
OPEN LINE FROM BUS 73200 TO BUS 73181 CKT 1
OPEN LINE FROM BUS 73200 TO BUS 73202 CKT 1
END

CONTINGENCY FROSTBR27T
OPEN LINE FROM BUS 73202 TO BUS 73189 CKT 1
DISCONNECT BUS 73164
OPEN LINE FROM BUS 73186 TO BUS 73386 CKT 1
END

CONTINGENCY GLENBROOK3T
OPEN LINE FROM BUS 73168 TO BUS 73162 CKT 1
OPEN LINE FROM BUS 73172 TO BUS 73169 CKT 1
OPEN LINE FROM BUS 73168 TO BUS 73169 CKT 1
OPEN LINE FROM BUS 73171 TO BUS 73169 CKT 1
END

CONTINGENCY GLENBROOK8T
OPEN LINE FROM BUS 73168 TO BUS 73167 CKT 1
OPEN LINE FROM BUS 73171 TO BUS 73237 CKT 1
OPEN LINE FROM BUS 73237 TO BUS 73168 CKT 1
OPEN LINE FROM BUS 73237 TO BUS 73173 CKT 1
END

CONTINGENCY GRNDAV1TSTK
OPEN LINE FROM BUS 73669 TO BUS 73679 CKT 1
OPEN LINE FROM BUS 73679 TO BUS 73668 CKT 1
OPEN LINE FROM BUS 73680 TO BUS 73669 CKT 1
END

CONTINGENCY GRNDAV2TSTK
OPEN LINE FROM BUS 73680 TO BUS 73669 CKT 1
OPEN LINE FROM BUS 73669 TO BUS 73676 CKT 1
END

CONTINGENCY GRNDAV3TSTK
OPEN LINE FROM BUS 73669 TO BUS 73676 CKT 1
OPEN LINE FROM BUS 73668 TO BUS 73669 CKT 2
END

CONTINGENCY GRNDAV4TSTK
```

```
OPEN LINE FROM BUS 73668 TO BUS 73669 CKT 2
OPEN LINE FROM BUS 73669 TO BUS 73681 CKT 2
OPEN LINE FROM BUS 73681 TO BUS 73683 CKT 1
OPEN LINE FROM BUS 73683 TO BUS 73685 CKT 1
END

CONTINGENCY GRNDAV5TSTK
OPEN LINE FROM BUS 73669 TO BUS 73681 CKT 2
OPEN LINE FROM BUS 73681 TO BUS 73683 CKT 1
OPEN LINE FROM BUS 73683 TO BUS 73685 CKT 1
OPEN LINE FROM BUS 73669 TO BUS 73672 CKT 1
END

CONTINGENCY GRNDAV6TSTK
OPEN LINE FROM BUS 73669 TO BUS 73672 CKT 1
OPEN LINE FROM BUS 73681 TO BUS 73669 CKT 1
OPEN LINE FROM BUS 73682 TO BUS 73681 CKT 1
OPEN LINE FROM BUS 73684 TO BUS 73682 CKT 1
END

CONTINGENCY GRNDAV7TSTK
OPEN LINE FROM BUS 73681 TO BUS 73669 CKT 1
OPEN LINE FROM BUS 73682 TO BUS 73681 CKT 1
OPEN LINE FROM BUS 73684 TO BUS 73682 CKT 1
OPEN LINE FROM BUS 73669 TO BUS 73679 CKT 1
OPEN LINE FROM BUS 73679 TO BUS 73668 CKT 1
END

CONTINGENCY GREENHLL2T
OPEN LINE FROM BUS 73231 TO BUS 73265 CKT 1
OPEN LINE FROM BUS 73153 TO BUS 73265 CKT 1
END

CONTINGENCY HADDAMAT
OPEN LINE FROM BUS 73230 TO BUS 73227 CKT 1
OPEN LINE FROM BUS 73230 TO BUS 73241 CKT 1
END

CONTINGENCY HADDAMBT
OPEN LINE FROM BUS 73230 TO BUS 73231 CKT 1
OPEN LINE FROM BUS 73230 TO BUS 73231 CKT 2
END

CONTINGENCY HAWTHORNST
OPEN LINE FROM BUS 73172 TO BUS 73710 CKT 1
OPEN LINE FROM BUS 73710 TO BUS 73711 CKT 2
OPEN LINE FROM BUS 73711 TO BUS 73709 CKT 1
END

CONTINGENCY JUNEST1
OPEN LINE FROM BUS 73196 TO BUS 73707 CKT 1
OPEN LINE FROM BUS 73196 TO BUS 73675 CKT 1
OPEN LINE FROM BUS 73196 TO BUS 73198 CKT 1
OPEN LINE FROM BUS 73195 TO BUS 73707 CKT 1
END

CONTINGENCY MLLRVR1TSTK
```

```
OPEN LINE FROM BUS 73678 TO BUS 73676 CKT 1
OPEN LINE FROM BUS 73669 TO BUS 73676 CKT 1
OPEN LINE FROM BUS 73737 TO BUS 73676 CKT 1
OPEN LINE FROM BUS 73737 TO BUS 73676 CKT 2
END

CONTINGENCY MLLRVR2TSTK
OPEN LINE FROM BUS 73678 TO BUS 73676 CKT 1
OPEN LINE FROM BUS 73670 TO BUS 73676 CKT 1
OPEN LINE FROM BUS 73736 TO BUS 73676 CKT 1
OPEN LINE FROM BUS 73736 TO BUS 73676 CKT 2
END

CONTINGENCY MIXAVE1
OPEN LINE FROM BUS 73196 TO BUS 73707 CKT 1
OPEN LINE FROM BUS 73196 TO BUS 73675 CKT 1
OPEN LINE FROM BUS 73196 TO BUS 73198 CKT 1
OPEN LINE FROM BUS 73672 TO BUS 73673 CKT 1
OPEN LINE FROM BUS 73673 TO BUS 73675 CKT 1
END

CONTINGENCY NOHAVN1TSTK
DISCONNECT BUS 73671
END

CONTINGENCY NOHAVN2TSTK
OPEN LINE FROM BUS 73153 TO BUS 73671 CKT 1
OPEN LINE FROM BUS 73631 TO BUS 73632 CKT 1
OPEN LINE FROM BUS 73632 TO BUS 73671 CKT 1
OPEN LINE FROM BUS 73671 TO BUS 73731 CKT 1
END

CONTINGENCY NWALLING1T
OPEN LINE FROM BUS 73633 TO BUS 73634 CKT 1
OPEN LINE FROM BUS 73227 TO BUS 73633 CKT 1
END

CONTINGENCY NORWALKST1
OPEN LINE FROM BUS 73172 TO BUS 73710 CKT 1
OPEN LINE FROM BUS 73172 TO BUS 73174 CKT 1
OPEN LINE FROM BUS 73143 TO BUS 73174 CKT 1
END

CONTINGENCY NORWALKST2
DISCONNECT BUS 73169
OPEN LINE FROM BUS 73172 TO BUS 73292 CKT 2
OPEN LINE FROM BUS 73292 TO BUS 73158 CKT 1
END

CONTINGENCY NORWLKHAR1T
DISCONNECT BUS 73237
DISCONNECT BUS 73551
END

CONTINGENCY NORWLKHAR2T
DISCONNECT BUS 73237
OPEN LINE FROM BUS 75051 TO BUS 75053 CKT 1
```

```
OPEN LINE FROM BUS 75053 TO BUS 73166 CKT 1
OPEN LINE FROM BUS 73166 TO BUS 73171 CKT 1
END

CONTINGENCY NORWLKHAR3T
DISCONNECT BUS 73169
OPEN LINE FROM BUS 75051 TO BUS 75053 CKT 1
OPEN LINE FROM BUS 75053 TO BUS 73166 CKT 1
OPEN LINE FROM BUS 73166 TO BUS 73171 CKT 1
END

CONTINGENCY NORWLKHAR4T
DISCONNECT BUS 73169
DISCONNECT BUS 73552
END

CONTINGENCY NORWLKHAR7T
DISCONNECT BUS 73271
DISCONNECT BUS 73551
END

CONTINGENCY OLDTOWNST
OPEN LINE FROM BUS 73710 TO BUS 73711 CKT 2
OPEN LINE FROM BUS 73711 TO BUS 73709 CKT 1
OPEN LINE FROM BUS 73709 TO BUS 73225 CKT 1
OPEN LINE FROM BUS 73225 TO BUS 73700 CKT 2
OPEN LINE FROM BUS 73225 TO BUS 73126 CKT 1
END

CONTINGENCY PEACEABLE1T
OPEN LINE FROM BUS 73172 TO BUS 73174 CKT 1
OPEN LINE FROM BUS 73174 TO BUS 73155 CKT 1
OPEN LINE FROM BUS 73155 TO BUS 73170 CKT 1
OPEN LINE FROM BUS 73155 TO BUS 73146 CKT 1
OPEN LINE FROM BUS 73174 TO BUS 73143 CKT 1
END

/CONTINGENCY PEQUON12TSTK
/OPEN LINE FROM BUS 73286 TO BUS 73700 CKT 1
/OPEN LINE FROM BUS 73267 TO BUS 73300 CKT 1
/OPEN LINE FROM BUS 73300 TO BUS 73286 CKT 1
/OPEN LINE FROM BUS 73700 TO BUS 73716 CKT 1
/END

CONTINGENCY PEQUON12TSTK
OPEN LINE FROM BUS 73286 TO BUS 73700 CKT 1
OPEN LINE FROM BUS 73267 TO BUS 73300 CKT 1
OPEN LINE FROM BUS 73300 TO BUS 73286 CKT 1
OPEN LINE FROM BUS 73700 TO BUS 73301 CKT 1
END

CONTINGENCY PEQUON22TSTK
OPEN LINE FROM BUS 73126 TO BUS 73225 CKT 1
OPEN LINE FROM BUS 73225 TO BUS 73700 CKT 2
OPEN LINE FROM BUS 73225 TO BUS 73709 CKT 1
OPEN LINE FROM BUS 73700 TO BUS 73696 CKT 1
OPEN LINE FROM BUS 73696 TO BUS 73712 CKT 1
```

```
OPEN LINE FROM BUS 73712 TO BUS 73694 CKT 1
END

CONTINGENCY PEQUON32TSTK
OPEN LINE FROM BUS 73224 TO BUS 73700 CKT 1
OPEN LINE FROM BUS 73700 TO BUS 73647 CKT 1
END

CONTINGENCY PEQUON42TSTK
OPEN LINE FROM BUS 73700 TO BUS 73697 CKT 1
OPEN LINE FROM BUS 73697 TO BUS 73713 CKT 1
OPEN LINE FROM BUS 73713 TO BUS 73695 CKT 1
OPEN LINE FROM BUS 73700 TO BUS 73648 CKT 1
END

CONTINGENCY PLUMTREE25T
OPEN LINE FROM BUS 73170 TO BUS 73268 CKT 1
OPEN LINE FROM BUS 73170 TO BUS 73165 CKT 1
OPEN LINE FROM BUS 73165 TO BUS 73159 CKT 1
END

CONTINGENCY PLUMTREE28T
OPEN LINE FROM BUS 73170 TO BUS 73176 CKT 1
OPEN LINE FROM BUS 73187 TO BUS 73282 CKT 1
OPEN LINE FROM BUS 73282 TO BUS 73194 CKT 1
OPEN LINE FROM BUS 73194 TO BUS 73170 CKT 1
END

CONTINGENCY PLUMTREE31T
OPEN LINE FROM BUS 73170 TO BUS 73176 CKT 2
DISCONNECT BUS 73155
END

CONTINGENCY QUINIPACST1
OPEN LINE FROM BUS 73670 TO BUS 73676 CKT 1
OPEN LINE FROM BUS 73670 TO BUS 73671 CKT 1
END

CONTINGENCY ROCKRIVER1T
OPEN LINE FROM BUS 73190 TO BUS 73179 CKT 1
OPEN LINE FROM BUS 73190 TO BUS 73147 CKT 1
END

CONTINGENCY SACKETST1
OPEN LINE FROM BUS 73669 TO BUS 73672 CKT 1
OPEN LINE FROM BUS 73672 TO BUS 73673 CKT 1
OPEN LINE FROM BUS 73673 TO BUS 73675 CKT 1
END

CONTINGENCY SASCOCR1T
DISCONNECT BUS 73714
OPEN LINE FROM BUS 73171 TO BUS 73237 CKT 1
OPEN LINE FROM BUS 73237 TO BUS 73168 CKT 1
OPEN LINE FROM BUS 73237 TO BUS 73173 CKT 1
END

CONTINGENCY SHEPAUG13A
```

```
OPEN LINE FROM BUS 73178 TO BUS 73159 CKT 1
OPEN LINE FROM BUS 73178 TO BUS 73341 CKT 1
OPEN LINE FROM BUS 73179 TO BUS 73165 CKT 1
OPEN LINE FROM BUS 73165 TO BUS 73178 CKT 1
END

CONTINGENCY SOUTHEND5T
OPEN LINE FROM BUS 73167 TO BUS 73144 CKT 1
OPEN LINE FROM BUS 73144 TO BUS 73163 CKT 1
OPEN LINE FROM BUS 73294 TO BUS 73168 CKT 1
OPEN LINE FROM BUS 73294 TO BUS 73167 CKT 1
OPEN LINE FROM BUS 73294 TO BUS 73267 CKT 1
END

CONTINGENCY SOUTHEND6T
OPEN LINE FROM BUS 73294 TO BUS 73168 CKT 1
OPEN LINE FROM BUS 73294 TO BUS 73167 CKT 1
OPEN LINE FROM BUS 73294 TO BUS 73267 CKT 1
OPEN LINE FROM BUS 73168 TO BUS 73167 CKT 1
END

CONTINGENCY SNAUGA1T
DISCONNECT BUS 73199
END

CONTINGENCY SOTHNGTN12T
OPEN LINE FROM BUS 73196 TO BUS 73707 CKT 1
OPEN LINE FROM BUS 73196 TO BUS 73675 CKT 1
OPEN LINE FROM BUS 73196 TO BUS 73198 CKT 1
OPEN LINE FROM BUS 73198 TO BUS 73631 CKT 1
END

CONTINGENCY SOTHNGTN13T
OPEN LINE FROM BUS 73184 TO BUS 73634 CKT 1
OPEN LINE FROM BUS 73184 TO BUS 73182 CKT 1
OPEN LINE FROM BUS 73184 TO BUS 73198 CKT 1
OPEN LINE FROM BUS 73196 TO BUS 73707 CKT 1
OPEN LINE FROM BUS 73196 TO BUS 73675 CKT 1
OPEN LINE FROM BUS 73196 TO BUS 73198 CKT 1
END

CONTINGENCY SOTHNGTN14T
OPEN LINE FROM BUS 73198 TO BUS 73243 CKT 1
OPEN LINE FROM BUS 73106 TO BUS 73198 CKT 4
END

CONTINGENCY SOTHNGTN15T
OPEN LINE FROM BUS 73206 TO BUS 73198 CKT 1
OPEN LINE FROM BUS 73206 TO BUS 73243 CKT 1
OPEN LINE FROM BUS 73206 TO BUS 73273 CKT 1
OPEN LINE FROM BUS 73198 TO BUS 73243 CKT 1
END

CONTINGENCY SOTHNGTN16T
OPEN LINE FROM BUS 73206 TO BUS 73198 CKT 1
OPEN LINE FROM BUS 73206 TO BUS 73243 CKT 1
OPEN LINE FROM BUS 73206 TO BUS 73273 CKT 1
```

```
OPEN LINE FROM BUS 73272 TO BUS 73198 CKT 1
END

CONTINGENCY SOTHNGTN20T
OPEN LINE FROM BUS 73184 TO BUS 73634 CKT 1
OPEN LINE FROM BUS 73184 TO BUS 73182 CKT 1
OPEN LINE FROM BUS 73184 TO BUS 73198 CKT 1
OPEN LINE FROM BUS 73106 TO BUS 73198 CKT 4
END

CONTINGENCY SOTHNGTN22T
OPEN LINE FROM BUS 73175 TO BUS 73154 CKT 1
OPEN LINE FROM BUS 73106 TO BUS 73154 CKT 2
END

CONTINGENCY SOTHNGTN23T
OPEN LINE FROM BUS 73208 TO BUS 73154 CKT 1
OPEN LINE FROM BUS 73208 TO BUS 73148 CKT 1
OPEN LINE FROM BUS 73208 TO BUS 73232 CKT 1
OPEN LINE FROM BUS 73175 TO BUS 73154 CKT 1
END

CONTINGENCY SOTHNGTN24T
OPEN LINE FROM BUS 73208 TO BUS 73154 CKT 1
OPEN LINE FROM BUS 73208 TO BUS 73148 CKT 1
OPEN LINE FROM BUS 73208 TO BUS 73232 CKT 1
OPEN LINE FROM BUS 73234 TO BUS 73233 CKT 1
OPEN LINE FROM BUS 73234 TO BUS 73235 CKT 1
OPEN LINE FROM BUS 73234 TO BUS 73154 CKT 1
END

CONTINGENCY SOTHNGTN25T
OPEN LINE FROM BUS 73106 TO BUS 73154 CKT 3
OPEN LINE FROM BUS 73234 TO BUS 73233 CKT 1
OPEN LINE FROM BUS 73234 TO BUS 73235 CKT 1
OPEN LINE FROM BUS 73234 TO BUS 73154 CKT 1
END

CONTINGENCY SOTHNGTN26T
DISCONNECT BUS 73127
OPEN LINE FROM BUS 73204 TO BUS 73205 CKT 1
OPEN LINE FROM BUS 73205 TO BUS 73202 CKT 1
OPEN LINE FROM BUS 73205 TO BUS 73201 CKT 1
END

CONTINGENCY SOTHNGTN28T
DISCONNECT BUS 73127
OPEN LINE FROM BUS 73204 TO BUS 73205 CKT 1
OPEN LINE FROM BUS 73205 TO BUS 73201 CKT 1
OPEN LINE FROM BUS 73205 TO BUS 73202 CKT 1
DISCONNECT BUS 73128
OPEN LINE FROM BUS 73211 TO BUS 73200 CKT 1
OPEN LINE FROM BUS 73200 TO BUS 73181 CKT 1
OPEN LINE FROM BUS 73200 TO BUS 73202 CKT 1
END

CONTINGENCY STEVENSNSTK
```

```
OPEN LINE FROM BUS 73187 TO BUS 73282 CKT 1
OPEN LINE FROM BUS 73282 TO BUS 73194 CKT 1
OPEN LINE FROM BUS 73194 TO BUS 73170 CKT 1
DISCONNECT BUS 73164
DISCONNECT BUS 73191
END

CONTINGENCY STONYHILL1T
OPEN LINE FROM BUS 73170 TO BUS 73165 CKT 1
OPEN LINE FROM BUS 73165 TO BUS 73159 CKT 1
OPEN LINE FROM BUS 73179 TO BUS 73165 CKT 1
OPEN LINE FROM BUS 73165 TO BUS 73178 CKT 1
END

CONTINGENCY TRPFALLST1
OPEN LINE FROM BUS 73126 TO BUS 73704 CKT 1
OPEN LINE FROM BUS 73704 TO BUS 73191 CKT 1
OPEN LINE FROM BUS 73187 TO BUS 73191 CKT 1
OPEN LINE FROM BUS 73706 TO BUS 73191 CKT 1
END

CONTINGENCY TRIANGLE2T
OPEN LINE FROM BUS 73170 TO BUS 73176 CKT 1
OPEN LINE FROM BUS 73176 TO BUS 73383 CKT 1
OPEN LINE FROM BUS 73170 TO BUS 73176 CKT 2
OPEN LINE FROM BUS 73176 TO BUS 73377 CKT 1
END

CONTINGENCY TRIANGLE3T
OPEN LINE FROM BUS 73170 TO BUS 73176 CKT 2
OPEN LINE FROM BUS 73176 TO BUS 73383 CKT 1
OPEN LINE FROM BUS 73176 TO BUS 73268 CKT 1
OPEN LINE FROM BUS 73176 TO BUS 73377 CKT 2
END

CONTINGENCY TRIANGLE4T
OPEN LINE FROM BUS 73170 TO BUS 73176 CKT 1
OPEN LINE FROM BUS 73176 TO BUS 73377 CKT 1
OPEN LINE FROM BUS 73176 TO BUS 73268 CKT 1
OPEN LINE FROM BUS 73176 TO BUS 73377 CKT 2
OPEN LINE FROM BUS 73377 TO BUS 73383 CKT 1
END

CONTINGENCY WALLING1TSTK
OPEN LINE FROM BUS 73631 TO BUS 73632 CKT 1
OPEN LINE FROM BUS 73632 TO BUS 73671 CKT 1
OPEN LINE FROM BUS 73631 TO BUS 73594 CKT 1
END

CONTINGENCY WALLING2TSTK
OPEN LINE FROM BUS 73631 TO BUS 73632 CKT 1
OPEN LINE FROM BUS 73632 TO BUS 73671 CKT 1
OPEN LINE FROM BUS 73631 TO BUS 73195 CKT 1
END

CONTINGENCY WALLING3TSTK
OPEN LINE FROM BUS 73631 TO BUS 73195 CKT 1
```

```
OPEN LINE FROM BUS 73631 TO BUS 73595 CKT 1
OPEN LINE FROM BUS 73631 TO BUS 73596 CKT 1
END

CONTINGENCY WALLING4TSTK
OPEN LINE FROM BUS 73631 TO BUS 73595 CKT 1
OPEN LINE FROM BUS 73631 TO BUS 73596 CKT 1
OPEN LINE FROM BUS 73631 TO BUS 73198 CKT 1
END

CONTINGENCY WALLING5TSTK
OPEN LINE FROM BUS 73631 TO BUS 73594 CKT 1
OPEN LINE FROM BUS 73631 TO BUS 73198 CKT 1
END

CONTINGENCY WATERST1TSTK
OPEN LINE FROM BUS 73680 TO BUS 73669 CKT 1
OPEN LINE FROM BUS 73681 TO BUS 73680 CKT 1
END

CONTINGENCY WATERST2TSTK
OPEN LINE FROM BUS 73681 TO BUS 73680 CKT 1
OPEN LINE FROM BUS 73678 TO BUS 73680 CKT 1
END

CONTINGENCY WATERSIDE2T
OPEN LINE FROM BUS 73168 TO BUS 73162 CKT 1
OPEN LINE FROM BUS 73162 TO BUS 73163 CKT 1
END

CONTINGENCY WBROOKFLD1T
OPEN LINE FROM BUS 73190 TO BUS 73179 CKT 1
OPEN LINE FROM BUS 73179 TO BUS 73165 CKT 1
OPEN LINE FROM BUS 73165 TO BUS 73178 CKT 1
END

CONTINGENCY WRIVER1TSTK
OPEN LINE FROM BUS 73681 TO BUS 73680 CKT 1
OPEN LINE FROM BUS 73681 TO BUS 73669 CKT 1
OPEN LINE FROM BUS 73682 TO BUS 73681 CKT 1
OPEN LINE FROM BUS 73684 TO BUS 73682 CKT 1
END

CONTINGENCY WRIVER2TSTK
OPEN LINE FROM BUS 73681 TO BUS 73680 CKT 1
OPEN LINE FROM BUS 73669 TO BUS 73681 CKT 2
OPEN LINE FROM BUS 73681 TO BUS 73683 CKT 1
OPEN LINE FROM BUS 73683 TO BUS 73685 CKT 1
END

CONTINGENCY WESTON1T
OPEN LINE FROM BUS 73172 TO BUS 73292 CKT 2
OPEN LINE FROM BUS 73292 TO BUS 73158 CKT 1
OPEN LINE FROM BUS 73158 TO BUS 73224 CKT 1
END

CONTINGENCY WOODMNT1TSTK
```

```
OPEN LINE FROM BUS 73686 TO BUS 73684 CKT 1
OPEN LINE FROM BUS 73684 TO BUS 73744 CKT 1
OPEN LINE FROM BUS 73686 TO BUS 73746 CKT 1
OPEN LINE FROM BUS 73195 TO BUS 73690 CKT 1
OPEN LINE FROM BUS 73690 TO BUS 73688 CKT 1
OPEN LINE FROM BUS 73688 TO BUS 73686 CKT 1
OPEN LINE FROM BUS 73688 TO BUS 73748 CKT 1
END

CONTINGENCY WOODMNT2TSTK
OPEN LINE FROM BUS 73687 TO BUS 73685 CKT 1
OPEN LINE FROM BUS 73687 TO BUS 73746 CKT 1
OPEN LINE FROM BUS 73685 TO BUS 73744 CKT 1
OPEN LINE FROM BUS 73691 TO BUS 73689 CKT 1
OPEN LINE FROM BUS 73689 TO BUS 73687 CKT 1
OPEN LINE FROM BUS 73689 TO BUS 73748 CKT 1
END

CONTINGENCY 318-362STKBR
DISCONNECT BUS 73122
END

CONTINGENCY CARD1TSTK
OPEN LINE FROM BUS 73108 TO BUS 73112 CKT 1
OPEN LINE FROM BUS 73108 TO BUS 73119 CKT 1
OPEN LINE FROM BUS 73108 TO BUS 73215 CKT 1
END

CONTINGENCY CARD1T+LAKE
OPEN LINE FROM BUS 73108 TO BUS 73112 CKT 1
OPEN LINE FROM BUS 73108 TO BUS 73119 CKT 1
OPEN LINE FROM BUS 73108 TO BUS 73215 CKT 1
DISCONNECT BUS 73565
DISCONNECT BUS 73566
DISCONNECT BUS 73567
END

CONTINGENCY CARD2TSTK
OPEN LINE FROM BUS 73108 TO BUS 73112 CKT 1
OPEN LINE FROM BUS 73108 TO BUS 73110 CKT 1
END

CONTINGENCY CARD3TSTK
OPEN LINE FROM BUS 73108 TO BUS 73110 CKT 1
OPEN LINE FROM BUS 73108 TO BUS 73119 CKT 1
OPEN LINE FROM BUS 73108 TO BUS 73215 CKT 1
END

CONTINGENCY CARD3T+LAKE
OPEN LINE FROM BUS 73108 TO BUS 73110 CKT 1
OPEN LINE FROM BUS 73108 TO BUS 73119 CKT 1
OPEN LINE FROM BUS 73108 TO BUS 73215 CKT 1
DISCONNECT BUS 73565
DISCONNECT BUS 73566
DISCONNECT BUS 73567
END
```

```
CONTINGENCY LONGMT5TSTK
OPEN LINE FROM BUS 73105 TO BUS 73117 CKT 1
OPEN LINE FROM BUS 73117 TO BUS 74344 CKT 1
OPEN LINE FROM BUS 73105 TO BUS 73115 CKT 1
END

CONTINGENCY LUDLOWSTBKR
OPEN LINE FROM BUS 72925 TO BUS 73103 CKT 1
OPEN LINE FROM BUS 73103 TO BUS 73111 CKT 1
OPEN LINE FROM BUS 73103 TO BUS 73112 CKT 1
OPEN LINE FROM BUS 72925 TO BUS 72929 CKT 1
OPEN LINE FROM BUS 72925 TO BUS 72972 CKT 1
OPEN LINE FROM BUS 72929 TO BUS 71796 CKT 1
OPEN LINE FROM BUS 71797 TO BUS 71796 CKT 1
END

CONTINGENCY MANCH21TSTK
OPEN LINE FROM BUS 73112 TO BUS 73110 CKT 1
OPEN LINE FROM BUS 73112 TO BUS 73103 CKT 1
OPEN LINE FROM BUS 73103 TO BUS 72925 CKT 1
OPEN LINE FROM BUS 73103 TO BUS 73111 CKT 1
END

CONTINGENCY MONTVSTBKR
OPEN LINE FROM BUS 73109 TO BUS 73110 CKT 1
OPEN LINE FROM BUS 73109 TO BUS 73113 CKT 1
OPEN LINE FROM BUS 73109 TO BUS 73210 CKT 1
OPEN LINE FROM BUS 73109 TO BUS 73210 CKT 2
END

CONTINGENCY NOMNTSTBKR
OPEN LINE FROM BUS 72926 TO BUS 72924 CKT 1
OPEN LINE FROM BUS 72924 TO BUS 72952 CKT 1
OPEN LINE FROM BUS 72924 TO BUS 72928 CKT 1
OPEN LINE FROM BUS 72928 TO BUS 78700 CKT 1
OPEN LINE FROM BUS 72926 TO BUS 72927 CKT 1
OPEN LINE FROM BUS 72927 TO BUS 70486 CKT 1
END

CONTINGENCY NMSTBKREAC
OPEN LINE FROM BUS 72926 TO BUS 72924 CKT 1
OPEN LINE FROM BUS 72924 TO BUS 72952 CKT 1
OPEN LINE FROM BUS 72924 TO BUS 72928 CKT 1
OPEN LINE FROM BUS 72928 TO BUS 78700 CKT 1
OPEN LINE FROM BUS 72926 TO BUS 72927 CKT 1
OPEN LINE FROM BUS 72927 TO BUS 70486 CKT 1
OPEN LINE FROM BUS 70508 TO BUS 70509 CKT 2
END

CONTINGENCY SCOVRK4TSTK
OPEN LINE FROM BUS 73112 TO BUS 73114 CKT 1
OPEN LINE FROM BUS 73114 TO BUS 73107 CKT 1
DISCONNECT BUS 73116
DISCONNECT BUS 73557
END

/CONTINGENCY SCOVRK5TSTK ** removed
```

```
/OPEN LINE FROM BUS 73107 TO BUS 73663 CKT 1
/OPEN LINE FROM BUS 73663 TO BUS 73668 CKT 1
/OPEN LINE FROM BUS 73663 TO BUS 73668 CKT 2
/OPEN LINE FROM BUS 73663 TO BUS 73664 CKT 1
/DISCONNECT BUS 73116
/DISCONNECT BUS 73557
/END

CONTINGENCY SCOVRK5TSTK /* revised for Phase 2
OPEN LINE FROM BUS 73107 TO BUS 73663 CKT 1
DISCONNECT BUS 73664
DISCONNECT BUS 73665
DISCONNECT BUS 75073
DISCONNECT BUS 73116
DISCONNECT BUS 73557
END

CONTINGENCY SCOVRK7TSTK
OPEN LINE FROM BUS 73112 TO BUS 73114 CKT 1
OPEN LINE FROM BUS 73114 TO BUS 73107 CKT 1
OPEN LINE FROM BUS 73113 TO BUS 73107 CKT 1
END

/CONTINGENCY SCOVRK8TSTK
/OPEN LINE FROM BUS 73107 TO BUS 73113 CKT 1
/OPEN LINE FROM BUS 73107 TO BUS 73663 CKT 1
/OPEN LINE FROM BUS 73663 TO BUS 73668 CKT 1
/OPEN LINE FROM BUS 73663 TO BUS 73668 CKT 2
/OPEN LINE FROM BUS 73663 TO BUS 73664 CKT 1
/END

CONTINGENCY SCOVRK8TSTK /* revised for Phase 2
OPEN LINE FROM BUS 73107 TO BUS 73113 CKT 1
OPEN LINE FROM BUS 73107 TO BUS 73663 CKT 1
DISCONNECT BUS 73664
DISCONNECT BUS 73665
DISCONNECT BUS 75073
END

/CONTINGENCY SGTN1TSTK
/OPEN LINE FROM BUS 73106 TO BUS 73110 CKT 1
/OPEN LINE FROM BUS 73106 TO BUS 73198 CKT 4
/OPEN LINE FROM BUS 73106 TO BUS 73154 CKT 2
/END

CONTINGENCY SGTN1TSTK /* revised for Phase 2
disconnect bus 73121
OPEN LINE FROM BUS 73106 TO BUS 73198 CKT 4
OPEN LINE FROM BUS 73106 TO BUS 73154 CKT 2
END

CONTINGENCY SGTN3TSTK
OPEN LINE FROM BUS 73106 TO BUS 73122 CKT 1
OPEN LINE FROM BUS 73106 TO BUS 73154 CKT 2
END

CONTINGENCY SGTN4TSTK
```

```
OPEN LINE FROM BUS 73106 TO BUS 73122 CKT 1
OPEN LINE FROM BUS 73106 TO BUS 73104 CKT 1
END

CONTINGENCY SGTN5TSTK
OPEN LINE FROM BUS 73106 TO BUS 73104 CKT 1
OPEN LINE FROM BUS 73106 TO BUS 73154 CKT 3
END

CONTINGENCY SGTN6TSTK
OPEN LINE FROM BUS 73106 TO BUS 73198 CKT 1
OPEN LINE FROM BUS 73106 TO BUS 73154 CKT 3
END

/CONTINGENCY SGTN7TSTK
/OPEN LINE FROM BUS 73106 TO BUS 73110 CKT 1
/OPEN LINE FROM BUS 73106 TO BUS 73198 CKT 1
/OPEN LINE FROM BUS 73106 TO BUS 73198 CKT 4
/END

CONTINGENCY SGTN7TSTK /* revised for Phase 2
disconnect bus 73121
OPEN LINE FROM BUS 73106 TO BUS 73198 CKT 1
OPEN LINE FROM BUS 73106 TO BUS 73198 CKT 4
END

CONTINGENCY NORSING1 /* added for Phase 2
DISCONNECT BUS 73314
DISCONNECT BUS 73316
END

CONTINGENCY SINGDEV1 /* added for Phase 2
DISCONNECT BUS 73310
DISCONNECT BUS 73312
END

CONTINGENCY SINGERSTK /* added for Phase 2
DISCONNECT BUS 73310
DISCONNECT BUS 73312
DISCONNECT BUS 73314
DISCONNECT BUS 73316
END

contingency orang-eshr /* added for Phase 2
disconnect bus 73303
disconnect bus 73306
end

contingency orang-dev /* added for Phase 2
disconnect bus 73371
disconnect bus 73303
disconnect bus 73304
disconnect bus 73305
disconnect bus 73306
disconnect bus 73307
disconnect bus 73308
end
```

```
CONTINGENCY SNG-PEQTAP /* added for Phase 2
OPEN LINE FROM BUS 73301 TO BUS 73716 CKT 1
END

CONTINGENCY SNGPEQ-XFR /* added for Phase 2
OPEN LINE FROM BUS 73301 TO BUS 73700 CKT 1
END

CONTINGENCY DEV-XFR /* added for Phase 2
OPEN LINE FROM BUS 73297 TO BUS 73129 CKT 1
END

CONTINGENCY ESHR-XFR
OPEN LINE FROM BUS 73663 TO BUS 73668 CKT 1
END

CONTINGENCY NEWDEV1
OPEN LINE FROM BUS 73126 TO BUS 73129 CKT 1
END

CONTINGENCY NEWDEV2
OPEN LINE FROM BUS 73195 TO BUS 73129 CKT 1
END

END
```

Appendix D

Generation Dispatches

Note: For generation dispatch 2, all on-line generation in New England is shown. For dispatches 3, 4, and 5, only differences with dispatch 2 are shown.

New England Generation for Dispatch 2C												
Number	Name	BasVlt	Mc On	Mc Off	Typ	MW	MVAR	Qmax	Qmin	Vsched	Vactual	Remote Bus
72689	ABENAKI	4.16	4	0	-2	5.4	-0.5	-0.5	-0.5	1	1.0115	
70377	AEC G1	13.8	1	0	2	52.5	8	37	-26.5	1.04	1.04	
70378	AEC G2	13.8	1	0	2	52.5	8	37	-26.5	1.04	1.04	
70379	AEC G3	13.8	1	0	2	52.5	7.9	37	-26.5	1.04	1.04	
70370	AEI GEN	13.8	1	0	-2	36	3	3	3	1.03	1.0243	
73538	AESTH PF	20	1	0	2	180	42.1	80	0	1.035	1.035	73109
72962	AGAWM PF	115	1	0	-2	1.6	0	0	0	1	1.0213	
73072	ALT12 PF	13.8	2	0	2	65	19.1	26	0	1.035	1.035	72983
73073	ALT34 PF	13.8	2	0	2	80.5	19.1	33	0	1.035	1.035	72983
71095	ANPBLCK1	21	1	0	2	290	117.9	150	-100	1.038	1.038	70785
71096	ANPBLCK2	21	1	0	2	290	117.9	150	-100	1.038	1.038	70785
72688	ANSON HY	4.16	3	2	-2	4.8	0	0	0	1	1.0088	
72840	AYERS	34.5	1	0	-2	3	0	0	0	1.03	1.0262	
73351	BATES DA	0.48	1	0	2	0	-3.1	8	-8	1.03	1.03	73378
70628	BAY 34.5	34.5	1	0	-2	2.5	0	0	0	1.014	0.9982	
70414	BC BUS 1	11.5	1	0	-2	6	0	0	0	1	1.0133	
70415	BC BUS 2	11.5	1	0	-2	6	0	0	0	1	1.0146	
70425	BC COGEN	13.8	1	0	-2	110	46	46	46	1	1.0141	
70413	BC U.H.1	11.5	1	0	-2	6	0	0	0	1	1.0165	
70412	BC U.H.2	11.5	1	1	-2	6	0	0	0	1	1.0218	
73188	BCNFL PF	115	3	0	-2	3.4	0	0	0	1	1	
70689	BELDENS	46	1	0	-2	8.7	0	0	0	1	1.0354	
71854	BELWS G1	6.9	1	0	-2	10.6	5.8	5.8	-5.8	1	0.9962	71832
71855	BELWS G2	6.9	1	0	-2	10.6	5.8	5.8	-5.8	1	0.9962	71832
71856	BELWS G3	6.9	1	0	-2	10.6	5.8	5.8	-5.8	1	0.9962	71832
72986	BERKPWR	13.8	1	0	2	305	43.6	150	-40	1.02	1.02	72977
70691	BOLTONFL	34.5	1	0	-2	2	0	2	0	1	1.0182	
72064	BOOTMIL	13.8	1	0	-2	7.2	0	10	0	1	1.0434	
72372	BP #1 GN	18	2	0	2	238	78.3	120	-37	1.0261	1.0261	72252
72375	BP #2 GN	18	2	0	2	241	78.3	117	-32	1.0261	1.0261	72252
72370	BP #3 GN	20	1	0	2	605	53.7	265	-225	1.0377	1.0377	71801
73648	BPTHBR#3	22	1	0	2	375	38.9	260	-160	1.026	1.026	73700
70577	BRDFRD T	46	1	0	-2	0.4	0	0.1	0	0.9567	1.0162	
72830	BRDGA PF	34.5	1	0	-2	15	0	0	0	1.03	1.0222	

New England Generation for Dispatch 2C												
Number	Name	BasVlt	Mc On	Mc Off	Typ	MW	MVAR	Qmax	Qmin	Vsched	Vactual	Remote Bus
70451	BRIAR PH	34.5	1	0	-2	0.9	0	0	0	1	1.0072	
72512	BRSWP G1	13.8	1	0	2	294	49.5	145	-75	1.0174	1.0174	72385
72513	BRSWP G2	13.8	1	0	2	294	49.5	145	-75	1.0174	1.0174	72385
70389	BUCKS G4	18	1	0	2	191	72.4	120	-100	1.04	1.04	
73381	BULLS BR	27.6	1	0	-2	5	1	1	1	1	0.9949	
73078	CABOT A	6.9	1	0	-2	22.5	6	6	6	1	1.0334	
73079	CABOT B	6.9	1	0	-2	22.5	6	6	6	1	1.0334	
71065	CABOTCMB	16	1	0	2	260	-26.4	127	-127	1.043	1.043	70760
71066	CABOTSTM	13.8	1	0	2	120	-26.4	60	-60	1.043	1.043	70760
73203	CAMPV PH	115	2	0	-2	6	0	0	0	1	1.0154	
71251	CANAL G1	18	1	0	-2	566	239	239	0	1.04	1.0351	71193
71252	CANAL G2	18	1	0	-2	576	120	120	-50	1.04	1.0351	71193
73545	CAP D PF	13.8	2	0	-2	50	34	34	-8	1.009	0.9995	73279
70597	CAVDH 46	46	1	0	-2	0.4	0.2	0.2	-0.1	0.965	0.9609	
70350	CHAMP EF	7.2	6	0	-2	-19.2	-6	-6	-6	1	0.9972	
70426	CHAMP G2	13.8	1	0	-2	15	6	6	6	1	0.9753	
70424	CHAMP G3	13.8	1	0	-2	65	32	32	32	1	1.0448	
70017	CHESTER	115	3	0	-2	2.6	0	0	0	1.03	0.8805	
73006	COBLEMTN	69	1	0	-2	17	4	4	4	1	1.0167	
72665	COLFAX	13.8	2	0	2	63.8	-8.5	30	-19	1.01	1.01	
71857	COMRF G1	13.8	1	0	2	37.4	-5.3	13.7	-10	1.0435	1.0435	71817
71858	COMRF G2	13.8	1	0	2	37.4	-5.3	13.7	-10	1.0435	1.0435	71817
71859	COMRF G3	13.8	1	0	2	29	-5.3	13.7	-10	1.0435	1.0435	71817
71860	COMRF G4	13.8	1	0	2	29	-5.3	13.7	-10	1.0435	1.0435	71817
72065	CPCLOWEL	23	1	0	-2	23.8	0	13	0	1	1.0269	
73547	CRRA PF	11.5	1	0	-2	32	0	34	0	1	1.0425	
73548	CRRA PF	11.5	1	0	-2	32	0	34	0	1	1.0425	
73650	CRRRA PF	13.8	1	0	-2	57	30	30	-36	1	0.9762	
73074	CUMBRLND	13.8	1	0	-2	3	1	1	1	1.043	1.0469	
70692	DECKGEN	13.8	1	0	-2	20	2	2	0	1	0.9932	
73765	DERBY PH	13.8	1	0	2	7	1.4	2	0	1.03	1.03	
73553	DEVON#7	13.8	1	0	2	106	26.8	47	-19	1.026	1.026	73195
73554	DEVON#8	13.8	1	0	2	106	26.8	47	-20	1.026	1.026	73195
73539	DEXTR PF	13.8	2	0	2	38	7.5	33	-13	1	1	

New England Generation for Dispatch 2C												
Number	Name	BasVlt	Mc On	Mc Off	Typ	MW	MVAR	Qmax	Qmin	Vsched	Vactual	Remote Bus
72957	DOREEN	115	1	0	-2	17	2	2	2	1	1.0312	
71316	DPA PF	13.8	2	0	-2	62.8	25	25	-10	1.025	1.0114	71279
72514	DRFLD 2G	2.4	3	0	2	1.6	2.6	3	-3	1	1	72435
72515	DRFLD 3G	2.4	3	0	2	1.6	1.6	3	-3	1	1	72436
72517	DRFLD 5G	13.8	2	0	-2	5	-1	4	-1	1	1.023	72411
72833	EASTMAN	34.5	2	0	-2	2	0	0	0	1.03	1.0131	
70738	EAVE	13.8	1	0	-2	4.5	0	0	0	0.9979	1.0011	
72808	EDDY B	34.5	1	0	-2	14.5	0	0	0	1.03	1.0196	
70019	ELLSWRTH	115	2	0	-2	0.4	0	0	0	1.03	0.9853	
71394	EMI_GEN	22	1	0	2	185	14.7	80	0	1.02	1.02	71380
72846	ERROL PH	34.5	1	0	-2	2.7	0	0	0	1.03	1.0009	
70736	ESSEX	34.5	1	0	-2	1	0.3	0.3	0	1.02	1.0106	
70712	ESSEX 19	34.5	1	0	-2	3.5	0	0.5	0	1	1.0107	
70693	ESX-STAT	3.2	1	0	2	0	14.9	75	-75	1.01	1.01	70512
73281	EXETR PF	115	1	0	-2	26	24	24	-8	1	0.9876	
70629	FAIR FLS	34.5	1	0	-2	1.9	0	0.6	0	1.025	1.0283	
73542	FALLS V	6.9	1	0	-2	7	2	2	2	0.96	0.9716	73336
72834	FKLIN PH	34.5	1	0	-2	0.7	0	0	0	1.03	1.0118	
73536	FORST PF	13.8	1	0	2	13	1.8	4	0	1.03	1.03	
72666	FRSQ SC1	11.5	1	0	-2	42.6	-5	27	-5	0.9913	0.9914	
72667	FRSQ SC2	11.5	1	0	-2	42.6	-5	27	-5	0.9913	0.9915	
72668	FRSQ SC3	11.5	1	0	2	42.3	-3.5	27	-5	0.9913	0.9913	
72807	GARVINS	34.5	1	1	-2	6	0	0	0	1.03	1.0258	
70561	GLN.HY T	46	1	0	-2	1.2	-0.1	0.2	-0.1	0.9961	0.997	
73168	GLNBROOK	115	1	0	2	0	-62.4	150	-150	1.035	1.035	
70371	GORBELL	13.8	1	0	-2	16	4	4	0	1.05	1.0225	70123
70713	GORGE GN	34.5	1	0	-2	2.5	0.5	0.5	0	1.02	0.986	
72805	GREGG PH	34.5	1	0	-2	0.3	0	0	0	1.0315	1.026	
70157	GUILF GN	115	1	0	-2	20.4	0	0	0	1	1.019	
70118	GULF ISL	115	1	0	-2	21.4	0	0	0	1.03	1.041	
70672	HARDWICK	34.5	1	0	-2	1.6	0	0	0	1	1.0034	
72518	HARR G1	6.9	1	0	2	14	4.5	6	0	1.0174	1.0174	72397
72510	HARR G2	6.9	1	0	2	14	4.5	6	0	1.0174	1.0174	72397
72511	HARR G3	6.9	1	0	2	14	4.5	6	0	1.0174	1.0174	72397

New England Generation for Dispatch 2C												
Number	Name	BasVlt	Mc On	Mc Off	Typ	MW	MVAR	Qmax	Qmin	Vsched	Vactual	Remote Bus
70356	HARRIS#1	13.8	1	0	2	16	2.7	7.2	0	1.04	1.04	70111
70358	HARRIS#3	13.8	1	0	2	28	5.3	14.5	0	1.04	1.04	70111
72821	HEMPH PF	34.5	1	0	-2	14	0	0	0	1.02	1.0367	
70639	HGATE VL	46	1	0	-2	1.2	0	0.5	0	1.02	1.0554	
70547	HIGHGATE	115	1	0	2	0	126.2	140	-140	1.0045	1.0045	
71768	HOLYOKE	115	1	1	-2	2	1	1	1	1	1.0162	
71692	HUDSONDG	4.16	6	0	2	17	5.8	9.8	-9.8	1	1	
70548	HYDEVLLE	46	1	0	-2	1.3	-0.2	0.3	-0.2	0.9915	0.9961	
70410	HYDRO KN	4.16	1	1	-2	5	0	0	0	1	1.0364	
72528	INDCK PF	13.8	1	0	-2	17.4	12.4	12.4	-12.4	1.02	1.0159	72398
70359	IP RILEY	2.4	1	0	-2	11	-0.8	-0.8	-0.8	1	1.0231	
70420	J/MILL A	13.8	1	0	-2	30	20	20	20	1	1.0108	
70421	J/MILL B	13.8	5	0	-2	16.6	26.8	26.8	26.8	1	1.0121	
70432	J/MILL C	13.8	3	0	-2	26.8	16.4	16.4	16.4	1	1.0041	
72812	JACKMAN	34.5	1	0	-2	2.5	0	0	0	1.029	1.0391	
70373	JAY/LIVR	13.8	2	0	-2	6	0	0	0	1	0.9903	
71123	KENDALL	13.8	3	0	2	63	5.8	32.3	0	1.025	1.025	
70484	KENTCHPF	13.8	1	0	-2	17	9	9	-9	1.03	0.9984	70470
71124	KND JETS	13.8	2	0	2	36.4	0.5	5.2	0	1.025	1.025	
72918	L NATION	34.5	1	0	-2	13	0	0	0	1.03	1.0183	
73565	LAKERD#1	21	1	0	2	280	52.9	174	-90	1.035	1.035	73119
73566	LAKERD#2	21	1	0	2	280	52.9	174	-90	1.035	1.035	73119
73567	LAKERD#3	21	1	0	2	280	52.9	174	-90	1.035	1.035	73119
70147	LAKEWOOD	115	1	0	-2	6.8	3.6	3.6	0	1.022	1.0102	
72664	LANDFILL	4.16	1	0	2	12	1.3	6	0	1.031	1.031	
72061	LAWHYD 4	23	1	0	-2	7.4	0	7	0	1	1.0136	
72059	LENERG1	13.8	1	0	-2	50	5.8	5.8	0	1.02	1.0196	71972
72060	LENERG2	13.8	1	0	-2	20	0	0	0	1.02	1.0196	71972
70104	LEW LWR	115	1	0	-2	13.8	-3	3	-3	1.025	1.0369	
73276	LISBN PF	115	1	0	-2	13.5	3	3	0	1	0.988	
70129	LOUDEN	115	1	0	-2	6.9	0	0	0	1.025	1.0323	
70443	LOWFL PH	34.5	1	0	-2	0.9	0	0	0	1	1.0089	
70177	LWSTN GN	115	1	0	-2	1.7	0	0	0	1.025	1.0368	
72685	MADSN G1	13.2	1	0	-2	-6.1	3	3	3	1	1.0324	

New England Generation for Dispatch 2C												
Number	Name	BasVlt	Mc On	Mc Off	Typ	MW	MVAR	Qmax	Qmin	Vsched	Vactual	Remote Bus
72686	MADSN G2	13.2	1	0	-2	-6.4	3	3	3	1	1.0319	
72687	MADSN G3	13.2	1	0	-2	-3.3	1	1	1	1	1.0114	
72683	MADSN UP	13.8	1	0	-2	1.6	0.3	0.3	0.3	1	1.0066	
72661	MANCH09A	13.8	1	0	-2	119	35	35	-32	1.035	1.0299	72569
72662	MANCH10A	13.8	1	0	-2	119	35	35	-32	1.035	1.0299	72569
72663	MANCH11A	13.8	1	0	-2	119	35	35	-32	1.035	1.0299	72569
73069	MAPR1 PF	13.8	1	0	-2	56	47	47	-32	1.035	1.0304	72980
70685	MARSHFLD	34.5	1	0	-2	3.5	0	0.2	0	1	1.0077	
70706	MCNEIL G	13.8	1	0	-2	51	9	9	-5	1.015	1.005	
70556	MENDN TP	46	1	0	-2	2.6	0	0.6	0	0.9919	0.9939	
70179	MERC GN	115	1	0	-2	17.5	5	5	0	1.05	1.0434	
73588	MERIDEN1	21	1	0	2	195	49.4	130	-30	1.03	1.03	73122
73589	MERIDEN2	21	1	0	2	195	49.4	130	-30	1.03	1.03	73122
73590	MERIDEN3	21	1	0	2	196	49.4	130	-30	1.03	1.03	73122
72866	MERMK G1	14.4	1	0	2	112.5	25.1	53	-10	1.035	1.035	72734
72867	MERMK G2	24	1	0	2	320	71.4	150	-30	1.035	1.035	72734
73564	MIDD#10J	13.2	1	0	-2	17	2	2	2	1	0.9766	
70565	MIDDB HY	46	1	0	-2	3.2	0.3	0.3	0	0.999	0.9751	
73555	MIDDTN#2	13.8	1	0	2	117	37.5	54	-20	1.026	1.026	73241
73556	MIDDTN#3	22	1	0	2	233	37.5	87	-37	1.026	1.026	73241
73557	MIDDTN#4	22	1	0	-2	400	200	200	-90	1.034	1.029	73107
70677	MIDSX 34	34.5	1	0	-2	1.4	0	0.8	0	1.02	1.0275	
73574	MILFD#1	13.8	1	0	-2	280	150	150	-40	1.026	1.025	73125
73562	MILL#2	24	1	0	2	860	124.5	420	0	1.035	1.035	73110
73563	MILL#3	24	1	0	2	1140	124.5	520	0	1.035	1.035	73110
72243	MILLENCT	16	1	0	2	273	45	125	-90	1.0174	1.0174	72117
72244	MILLENST	13.8	1	0	2	117	20.2	62	-44	1.0174	1.0174	72117
70616	MILTON	34.5	1	0	-2	10	0	0	0	1	0.9913	
72801	MINEF PH	34.5	1	0	-2	1	0	0	0	1.035	1.0263	
72865	MK CT	13.2	2	0	-2	30	0	0	0	1	0.9882	
73075	MONTAGUE	13.8	1	0	-2	4	1	1	1	1.044	1.043	
73558	MONTV#5	13.8	1	0	2	81	18.7	27	0	1.035	1.035	73109
73559	MONTV#6	22	1	0	2	402	95.1	200	-60	1.035	1.035	73109
71861	MOORE G1	13.8	1	0	2	40	-3	16	-10	1.0435	1.0435	71823

New England Generation for Dispatch 2C												
Number	Name	BasVlt	Mc On	Mc Off	Typ	MW	MVAR	Qmax	Qmin	Vsched	Vactual	Remote Bus
71862	MOORE G2	13.8	1	0	2	33	-3	16	-10	1.0435	1.0435	71823
71863	MOORE G3	13.8	1	0	2	33	13.3	16	-10	1.0435	1.0435	71824
71864	MOORE G4	13.8	1	0	2	33	13.3	16	-10	1.0435	1.0435	71824
70686	MORRSVL3	34.5	1	0	-2	1.8	0.3	0.3	0	1.0419	1.0059	
72373	MPLP 1PF	13.8	1	0	-2	80	53	53	-36	1.02	0.9986	72250
72374	MPLP 2PF	13.8	1	0	-2	44	27	27	-21	1.02	0.9986	72250
71067	MYS8 GTS	16	2	0	2	554	151.6	512	-180	1.043	1.043	70759
71061	MYST 5G	18	1	0	2	128.6	97.1	108	-75	1.035	1.035	70818
71060	MYST G4	18	1	0	2	133.4	97.1	108	-75	1.035	1.035	70818
71062	MYST G6	18	1	0	2	135.9	97.1	104	-75	1.035	1.035	70818
71063	MYST G7	22	1	0	2	565	151.6	335	-150	1.043	1.043	70759
71074	N.BOST 2	22	1	0	-2	380	230	230	-50	1.035	1.0341	70837
71084	NEA GTPF	13.8	1	0	-2	84.7	40	40	0	1.038	1.0365	70774
71085	NEA GTPF	13.8	1	0	-2	84.7	40	40	0	1.038	1.0365	70774
71086	NEA STPF	13.8	1	0	-2	80	55	55	0	1.038	1.0365	70774
70010	NEW_G1	18	1	0	2	169	24.3	105	0	1.035	1.035	72692
70011	NEW_G2	18	1	0	2	169	24.3	105	0	1.035	1.035	72692
70012	NEW_G3	18	1	0	2	195	24.3	120	0	1.035	1.035	72692
73651	NH HARBR	22	1	0	2	447	65.3	175	0	1.035	1.035	73668
73665	NHHHVDCL	192	1	0	-2	-351.5	72	72	-72	1.03	1.0178	73664
73083	NRTHFD12	13.8	2	0	2	540	154.5	160	-80	1.041	1.041	72926
73084	NRTHFD34	13.8	2	0	2	540	154.5	160	-80	1.041	1.041	72926
72868	NWNGT G1	24	1	0	2	422	24.3	180	-45	1.035	1.035	72692
71253	OBGEN	23	1	0	2	7.5	1.1	1.5	0	1	1	
72068	OG MARTN	23	1	0	-2	30	0	20	0	1	1.0217	
70694	OMYA	46	1	0	2	7.7	1.3	3	0	1	1	
73077	ORCHARD	13.8	1	0	-2	4	2	2	2	1.009	1.0092	
71531	OSP1 PF	13.8	1	0	-2	77	0	37.6	0	1.0289	1.0326	71338
71532	OSP2 PF	13.8	1	0	-2	77	0	37.6	0	1.0289	1.0326	71338
71533	OSP3 PF	13.8	1	0	-2	107.5	0	51.8	0	1.0289	1.0326	71338
71534	OSP4 PF	13.8	1	0	-2	77	0	37.6	0	1.0289	1.0326	71338
70431	OTIS GEN	4.16	2	0	-2	8	1	1	1	1	1.0336	
72847	PINET PF	34.5	1	0	-2	15	0	0	0	1.03	0.9927	
71094	PLGRM G1	22.8	1	0	2	670	206.2	340	-100	1.038	1.038	70783

New England Generation for Dispatch 2C												
Number	Name	BasVlt	Mc On	Mc Off	Typ	MW	MVAR	Qmax	Qmin	Vsched	Vactual	Remote Bus
72760	POTOK PH	115	1	0	-2	7.8	0	0	0	1.03	1.0232	
71719	POTTER	115	2	0	-2	89	42	42	-10	1.017	1.0148	
70690	PROCTP	46	1	0	-2	3	0.1	0.1	0	1.0002	0.9981	
73076	PROSPECT	13.8	1	0	-2	26	7	7	7	1.043	1.0474	
71125	PUTNAM	13.8	1	2	-2	13.5	0	2	0	1	1.029	
70594	QUECHE T	46	1	0	-2	1.5	0	0.7	0	0.9838	0.9893	
71945	RESCO	13.8	1	0	-2	29.9	20	20	-10	1.026	1.0218	71889
72063	RES-NAND	23	1	0	2	31.8	-4.7	15	-15	1.01	1.01	
73280	RKRIV PF	115	1	0	-2	2.6	0	0	0	0.974	1.0201	
73541	ROCK RIV	13.8	1	0	-2	25	0	10	0	0.974	1.0201	73190
70101	RUMFRDGN	115	1	0	-2	6	-0.5	0.5	-0.5	1	1.0187	
70627	RYGTE 34	34.5	1	0	-2	3.5	0.3	0.3	0	1.0364	1.0208	
71946	SALEM G1	14.4	1	0	2	79	9.7	32	-23	1.035	1.035	71891
71947	SALEM G2	14.4	1	0	2	78	9.7	29	-8	1.035	1.035	71891
71948	SALEM G3	14.4	1	0	2	143	19.4	50	-37	1.035	1.035	71891
71949	SALEM G4	22	1	0	2	400	58.1	275	-160	1.035	1.035	71891
70563	SALISBRY	46	1	0	-2	0.2	0.3	0.3	0	0.989	0.9833	
73352	SANDH DB	0.48	1	0	2	0	2.7	8	-8	1.043	1.043	73375
73353	SANDH DC	0.48	1	0	2	0	2.7	8	-8	1.043	1.043	73375
70162	SANFORD	115	1	0	-2	0.9	0.8	0.8	0	1.013	0.991	
72869	SBRK G1	25	1	0	2	1150	268.4	550	-90	1.035	1.035	72694
72870	SCHILLER	13.8	1	0	-2	47.5	25	25	-2	1.035	1.0157	72745
72871	SCHILLER	13.8	1	0	-2	49.6	25	25	-2	1.035	1.0157	72745
72872	SCHILLER	13.8	1	0	-2	48	25	25	-2	1.035	1.0157	72745
73616	SCRRA PF	69	1	0	-2	13.2	0	4	0	1	1.0062	
70417	SDW #8GN	11	2	0	-2	7	0	0	0	1	0.9912	
70418	SDW #9GN	13.8	1	0	-2	45	10	10	10	1	1.0113	
70419	SDW#10GN	13.8	1	0	-2	14	4	4	4	1	1.0124	
70372	SEA STRN	13.8	1	0	2	48	0.6	25	-22	1.03	1.03	70169
72519	SEARSBUR	2.4	1	0	-2	5	0	2	0	1	1.0179	72413
71189	SEM2PF	13.8	1	0	2	22.5	2.8	10	-2	1.0285	1.0285	
71188	SEMASSPF	13.8	1	0	-2	47.7	15	15	-5	1.0285	1.0154	71154
70445	SES PF	34.5	1	0	-2	12.2	0	0	0	1	1.0086	
73341	SHEPAUG	69	1	0	-2	32	8	8	8	1	1.0193	

New England Generation for Dispatch 2C												
Number	Name	BasVlt	Mc On	Mc Off	Typ	MW	MVAR	Qmax	Qmin	Vsched	Vactual	Remote Bus
72520	SHERMAN1	2.4	1	0	-2	5	-1	2	-1	1	1.0173	72401
71681	SHRWS DG	13.8	1	0	2	10	6.4	6.9	-6.9	1	1	
70564	SILVERLK	46	1	0	-2	1.5	0.8	0.8	0	1	0.9963	
70638	SJOHN 34	34.5	1	0	-2	1.1	0	0.1	0	1	1.0019	
73546	SMEAD PF	23	2	0	-2	13	0	4	0	1.03	1.0307	
72758	SMITH HY	115	1	0	-2	9	0	0	0	1.03	1.0189	
71522	SOM G6	14	1	0	-2	70	0	86	0	1.0087	1.0117	71377
73082	SPGFD PF	13.8	1	0	-2	6	0	2	0	1	1.0191	
70127	SPRNG GN	115	1	0	-2	11	0	0	0	1.035	1.0486	
72933	STNYBK 1	13.8	1	0	2	87	12.2	30	-8	1.043	1.043	
72930	STNYBK1A	13.8	1	0	2	65	11.1	30	-8	1.043	1.043	
72931	STNYBK1B	13.8	1	0	2	65	11.1	30	-8	1.043	1.043	
72932	STNYBK1C	13.8	1	0	2	65	11.1	30	-8	1.043	1.043	
72934	STNYBK2A	13.8	1	0	2	65	11.1	30	-8	1.043	1.043	
72935	STNYBK2B	13.8	1	0	2	65	11.1	30	-8	1.043	1.043	
72810	SUNCK PH	34.5	1	0	-2	1	0	0	0	1	1.0092	
70588	TAFTS 46	46	1	0	-2	0.2	0	0.2	0	0.973	0.9823	
72756	TAMW PF	115	1	0	-2	20	0	0	0	1.03	0.9959	
71743	TAU 9A,8	13.8	1	1	-2	25	16	16	0	1.0261	1.0189	71739
71744	TAUNT G9	13.8	1	0	-2	85	52	52	0	1.0261	1.0189	71739
72842	TILTN PH	34.5	1	0	-2	0.9	0	0	0	1.03	1.0021	
72669	TIVER G1	18	1	0	2	189	30.5	125	-60	1.02	1.02	72590
72670	TIVER G2	13.8	1	0	2	92	15.9	48	-40	1.02	1.02	72590
70222	TOPSHAM	34.5	1	0	2	3.3	0.5	2.5	-2.5	1.04	1.04	
70223	TOPSHMGN	34.5	2	0	-2	13	0	0	0	1.04	1.0399	
73617	TUNNEL	69	1	0	-2	17	0	3	0	1	1.0009	
72822	TURKY PF	34.5	1	0	-2	2	0	0	0	1	1.0209	
70448	UPFLS PH	34.5	1	0	-2	0.7	0	0	0	1	1.0066	
70728	VERGE 34	34.5	1	0	-2	1	0	0.3	0	1	1.0165	
72521	VERNON G	2.4	4	0	2	8	3.3	6	-6	1	1	72420
72525	VERNON22	2.4	2	0	2	5	1.6	3	-3	1	1	72420
72522	VERNONT1	13.8	1	0	2	4	1.4	2.5	-2.5	1	1	72420
72523	VERNONT2	13.8	1	0	2	4	1.4	2.5	-2.5	1	1	72420
70705	VTYAK G	22	1	0	2	563	72.2	150	-100	1.043	1.043	70486

New England Generation for Dispatch 2C												
Number	Name	BasVlt	Mc On	Mc Off	Typ	MW	MVAR	Qmax	Qmin	Vsched	Vactual	Remote Bus
70160	W.BUXTON	115	1	0	-2	2.3	0	0	0	1.025	1.0255	
73081	W.SPRING	13.8	1	0	-2	15	0	0	0	1.017	1.022	72961
70422	WARRN G1	13.8	1	0	-2	50.5	15	15	15	1	1.0362	
70423	WARRN G2	13.8	1	0	-2	45	11	11	11	1	1.0393	
71613	WATRS RV	13.8	1	0	-2	45.9	0	17	0	1	1.0024	
70386	WBK G1	18	1	0	2	184	28.8	46.6	-50	1.04	1.04	
70387	WBK G2	18	1	0	2	184	28.8	46.6	-50	1.04	1.04	
70388	WBK G3	18	1	0	2	195	30.9	50	-50	1.04	1.04	
70575	WELLSRVR	46	1	0	-2	0.3	0.1	0.1	0	1.0003	0.9714	
70365	WF WY #1	13.8	1	0	2	57	5.6	14	-14	1.05	1.05	70128
70366	WF WY #2	13.8	1	0	2	57	5.6	14	-14	1.05	1.05	70128
70367	WF WY #3	14.4	1	0	2	125	11.2	55	-44	1.05	1.05	70128
70368	WF WY #4	22	1	0	2	108.2	23.4	242	-209	1.05	1.05	70088
72843	WHFDA PF	34.5	1	0	-2	13.8	0	0	0	1.03	1.0179	
72242	WHLBRATR	13.8	1	0	-2	39.4	27.5	27.5	0	1	0.9873	72098
72813	WHOPK PF	34.5	1	0	-2	9	0	0	0	1	1.0075	
71866	WILDER	13.8	3	0	-2	36	13	13	-13	1	0.9964	71834
70363	WILLM #1	6.9	1	0	2	4	1.3	1.9	1	1.03	1.03	
70364	WILLM #2	6.9	1	0	-2	3	1	1.3	1	1.03	1.0301	
70330	WINSLOW	34.5	1	3	-2	6.8	0	0	0	1.03	1.034	
72873	WL JET	13.8	1	0	-2	18	0	0	0	1.025	1.0016	
73631	WLNGF PF	115	1	0	-2	6.4	0	3	0	1	1.0286	
73459	WNDSRLK	27.6	1	0	-2	8	2	2	2	1	1.0355	
72956	WOODLAND	115	1	0	-2	17	2	2	2	1	1.0168	
73080	WSPFLD 3	13.8	1	0	2	107	15.5	52	-37	1.022	1.022	72961
70361	WYMAN #2	13.8	1	0	-2	21	0	11.6	0	1.02	1.0203	70113
70362	WYMAN #3	13.8	1	0	-2	20	0	11.6	0	1.02	1.0203	70113

NE Generation Changes from Dispatch 2C to Dispatch 3C										
			Dispatch 2C		Dispatch 3C		Change			
Number	Name	BasVlt	MW	MVAR	MW	MVAR	MW	%	MVAR	%
70010	NEW_G1	18	169	24.3	0	0	-169	100	-24.3	100
70011	NEW_G2	18	169	24.3	0	0	-169	100	-24.3	100
70012	NEW_G3	18	195	24.3	0	0	-195	100	-24.3	100
70368	WF WY #4	22	108.2	23.4	102.5	28.2	-5.8	5.3	4.8	20.6
71095	ANPBLCK1	21	290	117.9	0	0	-290	100	-117.9	100
72513	BRSWP G2	13.8	294	49.5	0	0	-294	100	-49.5	100
73575	MILFD#2	13.8	0	0	280	85.5	280	999.9	85.5	999.9
73594	WALL LV1	13.8	0	0	102	11.9	102	999.9	11.9	999.9
73595	WALL LV2	13.8	0	0	102	11.9	102	999.9	11.9	999.9
73596	WALL LV3	13.8	0	0	51	8.6	51	999.9	8.6	999.9
73652	BE 11	16	0	0	170	43	170	999.9	43	999.9
73653	BE 12	16	0	0	170	43	170	999.9	43	999.9
73654	BE 10 ST	16	0	0	180	43	180	999.9	43	999.9

NE Generation Changes from Dispatch 2C to Dispatch 4C										
			Dispatch 2C		Dispatch 4C		Change			
Number	Name	BasVlt	MW	MVAR	MW	MVAR	MW	%	MVAR	%
70010	NEW_G1	18	169	24.3	0	0	-169	100	-24.3	100
70011	NEW_G2	18	169	24.3	0	0	-169	100	-24.3	100
70012	NEW_G3	18	195	24.3	0	0	-195	100	-24.3	100
70368	WF WY #4	22	108.2	23.4	76.8	36.6	-31.4	29	13.2	56.4
71095	ANPBLCK1	21	290	117.9	0	0	-290	100	-117.9	100
72513	BRSWP G2	13.8	294	49.5	0	0	-294	100	-49.5	100
72867	MERMK G2	24	320	71.4	0	0	-320	100	-71.4	100
73551	NORHAR#1	18	0	0	161	-30.5	161	999.9	-30.5	999.9
73552	NORHAR#2	20	0	0	168	-30.5	168	999.9	-30.5	999.9
73575	MILFD#2	13.8	0	0	280	81	280	999.9	81	999.9
73594	WALL LV1	13.8	0	0	102	11.3	102	999.9	11.3	999.9
73595	WALL LV2	13.8	0	0	102	11.3	102	999.9	11.3	999.9
73596	WALL LV3	13.8	0	0	51	8.1	51	999.9	8.1	999.9
73652	BE 11	16	0	0	170	38.6	170	999.9	38.6	999.9
73653	BE 12	16	0	0	170	38.6	170	999.9	38.6	999.9
73654	BE 10 ST	16	0	0	180	38.6	180	999.9	38.6	999.9

NE Generation Changes from Dispatch 2C to Dispatch 5C										
			Dispatch 2C		Dispatch 5C		Change			
Number	Name	BasVlt	MW	MVAR	MW	MVAR	MW	%	MVAR	%
70368	WF WY #4	22	108.2	23.4	258	30.9	149.7	138.3	7.5	32.1
73551	NORHAR#1	18	0	0	161	-22.2	161	999.9	-22.2	999.9
73552	NORHAR#2	20	0	0	168	-22.2	168	999.9	-22.2	999.9
73553	DEVON#7	13.8	106	26.8	0	0	-106	100	-26.8	100
73554	DEVON#8	13.8	106	26.8	0	0	-106	100	-26.8	100
73574	MILFD#1	13.8	280	150	0	0	-280	100	-150	100

Appendix E

Summary of Overloads

- Table of Frequency of Overloads and Worst Overload
- Table of All Overloads
- Table of Contingency Index and Contingency Name

Total No. of Overloads and Highest Overload: 27.7 GW NE Load, Dispatches 2C, 3C, 4C and 5C

OverLoad >= 30%
10% < Over Load < 30%
5% < Over Load < 10%
OverLoad < 5%

Worst Overload for Each Branch
Sorted by branch and then by overload

From bus	To bus	CKT	Typ	Nviol	Worst Viol %	Ncon	Cont Name	Dispatch	Controls
73106 SOUTHGTN 345	73154 SGTN B 115	2	TR	1	19.4	460	SGTN5TSTK	5C	FIX
73106 SOUTHGTN 345	73154 SGTN B 115	2	TR	1	17.8	460	SGTN5TSTK	2C	FIX
73106 SOUTHGTN 345	73154 SGTN B 115	2	TR	1	9.6	460	SGTN5TSTK	3C	FIX
73106 SOUTHGTN 345	73154 SGTN B 115	2	TR	1	5.7	460	SGTN5TSTK	4C	FIX
73162 WATERSDE 115	73163 COS COB 115	1	LN	1	24.8	407	SOUTHEND6T	2C	FIX
73162 WATERSDE 115	73163 COS COB 115	1	LN	1	24.8	407	SOUTHEND6T	3C	FIX
73162 WATERSDE 115	73163 COS COB 115	1	LN	1	24.8	407	SOUTHEND6T	4C	FIX
73162 WATERSDE 115	73163 COS COB 115	1	LN	1	24.8	407	SOUTHEND6T	5C	FIX
73162 WATERSDE 115	73168 GLNBROOK 115	1	LN	1	2.5	407	SOUTHEND6T	2C	FIX
73162 WATERSDE 115	73168 GLNBROOK 115	1	LN	1	2.5	407	SOUTHEND6T	3C	FIX
73162 WATERSDE 115	73168 GLNBROOK 115	1	LN	1	2.5	407	SOUTHEND6T	4C	FIX
73162 WATERSDE 115	73168 GLNBROOK 115	1	LN	1	2.5	407	SOUTHEND6T	5C	FIX
73167 SO.END 115	73294 GLNBRK J 115	1	LN	1	23.2	253	1440-1450DCT	2C	FIX
73167 SO.END 115	73294 GLNBRK J 115	1	LN	1	23.2	253	1440-1450DCT	3C	FIX
73167 SO.END 115	73294 GLNBRK J 115	1	LN	1	23.2	253	1440-1450DCT	4C	FIX
73167 SO.END 115	73294 GLNBRK J 115	1	LN	1	23.2	253	1440-1450DCT	5C	FIX
73168 GLNBROOK 115	73169 RYTN J A 115	1	LN	1	1.6	285	1867-1890DCT	5C	FIX
73168 GLNBROOK 115	73237 ELYAVE 115	1	LN	2	53.5	284	1867-1880DCT	5C	FIX
73168 GLNBROOK 115	73237 ELYAVE 115	1	LN	3	50.8	284	1867-1880DCT	4C	FIX
73168 GLNBROOK 115	73271 RYTN J B 115	1	LN	1	46.5	287	1880-1890DCT	5C	FIX
73168 GLNBROOK 115	73271 RYTN J B 115	1	LN	1	38.1	287	1880-1890DCT	4C	FIX
73168 GLNBROOK 115	73271 RYTN J B 115	1	LN	3	19.2	287	1880-1890DCT	2C	FIX
73168 GLNBROOK 115	73271 RYTN J B 115	1	LN	3	15.8	287	1880-1890DCT	3C	FIX
73169 RYTN J A 115	73171 NWLK HAR 115	1	LN	1	43.8	285	1867-1890DCT	4C	FIX
73169 RYTN J A 115	73171 NWLK HAR 115	1	LN	1	43.1	285	1867-1890DCT	5C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	27	81.8	250	1416-1867DCT	2C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	27	75.8	250	1416-1867DCT	3C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	3	77.2	425	TRIANGLE3T	2C	FIX

Total No. of Overloads and Highest Overload: 27.7 GW NE Load, Dispatches 2C, 3C, 4C and 5C

OverLoad >= 30%
10% < Over Load < 30%
5% < Over Load < 10%
OverLoad < 5%

Worst Overload for Each Branch
Sorted by branch and then by overload

From bus	To bus	CKT	Typ	Nviol	Worst Viol %	Ncon	Cont Name	Dispatch	Controls
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	3	75.3	425	TRIANGLE3T	5C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	3	74.9	425	TRIANGLE3T	3C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	3	72.8	425	TRIANGLE3T	4C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	2	LN	1	35.1	231	1060-1270DCT	2C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	2	LN	1	34.9	231	1060-1270DCT	3C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	2	LN	1	34.8	231	1060-1270DCT	5C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	2	LN	1	34.7	231	1060-1270DCT	4C	FIX
73170 PLUMTREE 115	73268 MIDDLRIV 115	1	LN	2	184.2	424	TRIANGLE2T	2C	FIX
73170 PLUMTREE 115	73268 MIDDLRIV 115	1	LN	2	183.5	424	TRIANGLE2T	3C	FIX
73170 PLUMTREE 115	73268 MIDDLRIV 115	1	LN	2	183.5	424	TRIANGLE2T	5C	FIX
73170 PLUMTREE 115	73268 MIDDLRIV 115	1	LN	2	183.0	424	TRIANGLE2T	4C	FIX
73171 NWLK HAR 115	73237 ELYAVE 115	1	LN	3	57.4	284	1867-1880DCT	5C	FIX
73171 NWLK HAR 115	73237 ELYAVE 115	1	LN	2	49.6	284	1867-1880DCT	4C	FIX
73171 NWLK HAR 115	73271 RYTN J B 115	1	LN	1	4.3	287	1880-1890DCT	4C	FIX
73171 NWLK HAR 115	73271 RYTN J B 115	1	LN	1	4.3	287	1880-1890DCT	5C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	382	96.2	251	1416-1880DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	35	90.3	251	1416-1880DCT	3C	FIX
73183 SHAWSHIL 115	73185 BUNKER H 115	1	LN	1	3.1	364	FROSTBR27T	5C	FIX
73183 SHAWSHIL 115	73185 BUNKER H 115	1	LN	1	2.9	364	FROSTBR27T	2C	FIX
73188 BCNFL PF 115	73192 DRBY J B 115	1	LN	2	32.0	244	1272-1721DCT	5C	FIX
73188 BCNFL PF 115	73192 DRBY J B 115	1	LN	2	29.8	244	1272-1721DCT	2C	FIX
73188 BCNFL PF 115	73192 DRBY J B 115	1	LN	2	27.5	244	1272-1721DCT	3C	FIX
73188 BCNFL PF 115	73192 DRBY J B 115	1	LN	2	26.5	244	1272-1721DCT	4C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	23	78.8	251	1416-1880DCT	2C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	16	72.8	251	1416-1880DCT	3C	FIX
73224 TRMB J A 115	73700 PEQUONIC 115	1	LN	1	2.3	341	DEVON2TSTK	4C	FIX
73230 HADDAM 115	73231 BOKUM 115	1	LN	1	7.7	82	1620SLINE	2C	FIX
73230 HADDAM 115	73231 BOKUM 115	1	LN	1	7.6	82	1620SLINE	5C	FIX

Total No. of Overloads and Highest Overload: 27.7 GW NE Load, Dispatches 2C, 3C, 4C and 5C

OverLoad >= 30%
10% < Over Load < 30%
5% < Over Load < 10%
OverLoad < 5%

Worst Overload for Each Branch
Sorted by branch and then by overload

From bus	To bus	CKT	Typ	Nviol	Worst Viol %	Ncon	Cont Name	Dispatch	Controls
73268 MIDDLRIV 115	73176 TRIANGLE 115	1	LN	2	123.1	424	TRIANGLE2T	2C	FIX
73268 MIDDLRIV 115	73176 TRIANGLE 115	1	LN	2	122.6	424	TRIANGLE2T	3C	FIX
73268 MIDDLRIV 115	73176 TRIANGLE 115	1	LN	2	122.6	424	TRIANGLE2T	5C	FIX
73268 MIDDLRIV 115	73176 TRIANGLE 115	1	LN	2	122.1	424	TRIANGLE2T	4C	FIX
73669 GRAND AV 115	73681 WEST RIV 115	1	LN	1	2.7	368	GRNDAV2TSTK	5C	FIX
73669 GRAND AV 115	73681 WEST RIV 115	2	LN	1	2.7	368	GRNDAV2TSTK	5C	FIX
73701 CRRA JCT 115	73703 ASHCREEK 115	1	LN	1	0.6	248	1389-1880DCT	3C	FIX
73701 CRRA JCT 115	73703 ASHCREEK 115	1	LN	1	0.3	248	1389-1880DCT	2C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 2C, 3C, 4C and 5C

Loading >= 130%
110% < Loading < 130%
105% < Loading < 110%
100% < Loading < 105%

Highest Overload Shaded
Sorted by branch and then by overload

From bus	To bus	CKT	Tp	Cont MVA	Base Flow	Rating	Loading %	Ncon	Contingency	Dispatch	Controls
73106 SOUTHGTN 345	73154 SGTN B 115	2	TR	698.3	277.8	585.0	119.4	460	SGTN5TSTK	5C	FIX
73106 SOUTHGTN 345	73154 SGTN B 115	2	TR	689.4	278.4	585.0	117.8	460	SGTN5TSTK	2C	FIX
73106 SOUTHGTN 345	73154 SGTN B 115	2	TR	641.0	264.5	585.0	109.6	460	SGTN5TSTK	3C	FIX
73106 SOUTHGTN 345	73154 SGTN B 115	2	TR	618.3	254.1	585.0	105.7	460	SGTN5TSTK	4C	FIX
73162 WATERSDE 115	73163 COS COB 115	1	LN	298.4	69.5	239.0	124.8	407	SOUTHEND6T	2C	FIX
73162 WATERSDE 115	73163 COS COB 115	1	LN	298.4	69.5	239.0	124.8	407	SOUTHEND6T	3C	FIX
73162 WATERSDE 115	73163 COS COB 115	1	LN	298.4	69.9	239.0	124.8	407	SOUTHEND6T	4C	FIX
73162 WATERSDE 115	73163 COS COB 115	1	LN	298.4	70.0	239.0	124.8	407	SOUTHEND6T	5C	FIX
73162 WATERSDE 115	73168 GLNBROOK 115	1	LN	360.7	132.4	352.0	102.5	407	SOUTHEND6T	2C	FIX
73162 WATERSDE 115	73168 GLNBROOK 115	1	LN	360.7	132.4	352.0	102.5	407	SOUTHEND6T	3C	FIX
73162 WATERSDE 115	73168 GLNBROOK 115	1	LN	360.7	132.9	352.0	102.5	407	SOUTHEND6T	4C	FIX
73162 WATERSDE 115	73168 GLNBROOK 115	1	LN	360.7	133.0	352.0	102.5	407	SOUTHEND6T	5C	FIX
73167 SO.END 115	73294 GLNBRK J 115	1	LN	356.0	112.8	289.0	123.2	253	1440-1450DCT	2C	FIX
73167 SO.END 115	73294 GLNBRK J 115	1	LN	356.0	113.0	289.0	123.2	253	1440-1450DCT	3C	FIX
73167 SO.END 115	73294 GLNBRK J 115	1	LN	356.0	109.6	289.0	123.2	253	1440-1450DCT	4C	FIX
73167 SO.END 115	73294 GLNBRK J 115	1	LN	356.0	108.8	289.0	123.2	253	1440-1450DCT	5C	FIX
73168 GLNBROOK 115	73169 RYTN J A 115	1	LN	446.0	176.1	439.0	101.6	285	1867-1890DCT	5C	FIX
73168 GLNBROOK 115	73237 ELYAVE 115	1	LN	428.3	171.6	279.0	153.5	284	1867-1880DCT	5C	FIX
73168 GLNBROOK 115	73237 ELYAVE 115	1	LN	420.6	170.5	279.0	150.8	284	1867-1880DCT	4C	FIX
73168 GLNBROOK 115	73237 ELYAVE 115	1	LN	288.3	170.5	279.0	103.3	251	1416-1880DCT	4C	FIX
73168 GLNBROOK 115	73237 ELYAVE 115	1	LN	283.0	171.6	279.0	101.4	251	1416-1880DCT	5C	FIX
73168 GLNBROOK 115	73237 ELYAVE 115	1	LN	281.0	170.5	279.0	100.7	250	1416-1867DCT	4C	FIX
73168 GLNBROOK 115	73271 RYTN J B 115	1	LN	423.4	162.0	289.0	146.5	287	1880-1890DCT	5C	FIX
73168 GLNBROOK 115	73271 RYTN J B 115	1	LN	399.0	151.8	289.0	138.1	287	1880-1890DCT	4C	FIX
73168 GLNBROOK 115	73271 RYTN J B 115	1	LN	344.4	146.5	289.0	119.2	287	1880-1890DCT	2C	FIX
73168 GLNBROOK 115	73271 RYTN J B 115	1	LN	334.6	142.3	289.0	115.8	287	1880-1890DCT	3C	FIX
73168 GLNBROOK 115	73271 RYTN J B 115	1	LN	333.2	146.5	289.0	115.3	251	1416-1880DCT	2C	FIX
73168 GLNBROOK 115	73271 RYTN J B 115	1	LN	330.0	142.3	289.0	114.2	251	1416-1880DCT	3C	FIX
73168 GLNBROOK 115	73271 RYTN J B 115	1	LN	305.2	146.5	289.0	105.6	288	1880-1977DCT	2C	FIX
73168 GLNBROOK 115	73271 RYTN J B 115	1	LN	302.0	142.3	289.0	104.5	288	1880-1977DCT	3C	FIX
73169 RYTN J A 115	73171 NWLK HAR 115	1	LN	393.9	175.5	274.0	143.8	285	1867-1890DCT	4C	FIX
73169 RYTN J A 115	73171 NWLK HAR 115	1	LN	392.2	160.3	274.0	143.1	285	1867-1890DCT	5C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 2C, 3C, 4C and 5C

Loading >= 130%
110% < Loading < 130%
105% < Loading < 110%
100% < Loading < 105%

Highest Overload Shaded
Sorted by branch and then by overload

From bus	To bus	CKT	Tp	Cont MVA	Base Flow	Rating	Loading %	Ncon	Contingency	Dispatch	Controls
73169 RYTN J A 115	73172 NORWALK 115	1	LN	465.3	241.4	256.0	181.8	250	1416-1867DCT	2C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	453.4	241.4	256.0	177.1	285	1867-1890DCT	2C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	450.1	230.4	256.0	175.8	250	1416-1867DCT	3C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	440.5	230.4	256.0	172.1	285	1867-1890DCT	3C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	438.1	241.4	256.0	171.2	286	1867-1977DCT	2C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	423.0	230.4	256.0	165.2	286	1867-1977DCT	3C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	406.1	241.4	256.0	158.6	238	113091001DCT	2C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	400.3	241.4	256.0	156.3	45	1389LINE	2C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	399.8	230.4	256.0	156.2	238	113091001DCT	3C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	383.7	241.4	256.0	149.9	361	FLAXHILL2T	2C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	383.4	230.4	256.0	149.8	45	1389LINE	3C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	373.0	241.4	256.0	145.7	237	1130-1430DCT	2C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	370.8	241.4	256.0	144.8	252	1416-1890DCT	2C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	369.3	241.4	256.0	144.2	143	1867LINE	2C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	369.3	241.4	256.0	144.2	391	NORWLKHAR7T	2C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	367.2	230.4	256.0	143.5	361	FLAXHILL2T	3C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	367.1	230.4	256.0	143.4	237	1130-1430DCT	3C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	365.0	230.4	256.0	142.6	252	1416-1890DCT	3C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	352.7	230.4	256.0	137.8	143	1867LINE	3C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	352.7	230.4	256.0	137.8	391	NORWLKHAR7T	3C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	346.9	241.4	256.0	135.5	289	1890-1977DCT	2C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	341.3	230.4	256.0	133.3	289	1890-1977DCT	3C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	317.9	241.4	256.0	124.2	189	91001LINE	2C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	309.0	230.4	256.0	120.7	189	91001LINE	3C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	297.5	241.4	256.0	116.2	18	1130LINE	2C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	297.3	241.4	256.0	116.2	322	ASHCREEKBKR	2C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	293.9	241.4	256.0	114.8	394	PEQUON12TSTK	2C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	292.0	241.4	256.0	114.1	49	1430LINE	2C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	241.4	241.4	214.0	112.8		** Base Case	2C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	288.7	230.4	256.0	112.8	322	ASHCREEKBKR	3C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	288.2	230.4	256.0	112.6	18	1130LINE	3C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	288.1	241.4	256.0	112.5	19	1130+1416LNS	2C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 2C, 3C, 4C and 5C

Loading >= 130%
110% < Loading < 130%
105% < Loading < 110%
100% < Loading < 105%

Highest Overload Shaded
Sorted by branch and then by overload

From bus	To bus	CKT	Tp	Cont MVA	Base Flow	Rating	Loading %	Ncon	Contingency	Dispatch	Controls
73169 RYTN J A 115	73172 NORWALK 115	1	LN	287.2	241.4	256.0	112.2	404	SASCOCR1T	2C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	287.0	241.4	256.0	112.1	366	GLENBROOK8T	2C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	286.5	241.4	256.0	111.9	148	1890LINE	2C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	286.5	241.4	256.0	111.9	387	NORWLKHAR1T	2C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	285.7	241.4	256.0	111.6	48	1416LINE	2C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	283.5	230.4	256.0	110.8	49	1430LINE	3C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	283.3	230.4	256.0	110.7	394	PEQUON12TSTK	3C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	278.8	230.4	256.0	108.9	19	1130+1416LNS	3C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	278.8	230.4	256.0	108.9	404	SASCOCR1T	3C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	278.4	230.4	256.0	108.8	366	GLENBROOK8T	3C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	278.1	230.4	256.0	108.6	148	1890LINE	3C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	278.1	230.4	256.0	108.6	387	NORWLKHAR1T	3C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	276.6	230.4	256.0	108.0	48	1416LINE	3C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	276.0	241.4	256.0	107.8	339	DARIEN1T	2C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	230.4	230.4	214.0	107.7		** Base Case	3C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	272.8	241.4	256.0	106.5	407	SOUTHEND6T	2C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	272.1	241.4	256.0	106.3	154	1977LINENEW	2C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	266.8	230.4	256.0	104.2	339	DARIEN1T	3C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	263.6	230.4	256.0	103.0	407	SOUTHEND6T	3C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	263.1	241.4	256.0	102.8	406	SOUTHEND5T	2C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	262.9	230.4	256.0	102.7	154	1977LINENEW	3C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	260.0	241.4	256.0	101.6	290	8100-8200DCT	2C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	256.5	230.4	256.0	100.2	220	387LINE	3C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	256.2	230.4	256.0	100.1	291	1460-387DCT	3C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	244.6	79.7	138.0	177.2	425	TRIANGLE3T	2C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	241.9	79.5	138.0	175.3	425	TRIANGLE3T	5C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	241.3	79.5	138.0	174.9	425	TRIANGLE3T	3C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	238.5	79.4	138.0	172.8	425	TRIANGLE3T	4C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	144.5	79.7	138.0	104.7	22	1165LINE	2C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	144.3	79.5	138.0	104.6	22	1165LINE	3C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	144.2	79.5	138.0	104.5	22	1165LINE	5C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	144.0	79.4	138.0	104.4	22	1165LINE	4C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 2C, 3C, 4C and 5C

Loading >= 130%
110% < Loading < 130%
105% < Loading < 110%
100% < Loading < 105%

Highest Overload Shaded
Sorted by branch and then by overload

From bus	To bus	CKT	Tp	Cont MVA	Base Flow	Rating	Loading %	Ncon	Contingency	Dispatch	Controls
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	138.9	79.7	138.0	100.6	400	PLUMTREE31T	2C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	138.8	79.5	138.0	100.5	400	PLUMTREE31T	3C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	138.5	79.4	138.0	100.4	400	PLUMTREE31T	4C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	138.6	79.5	138.0	100.4	400	PLUMTREE31T	5C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	2	LN	224.3	84.2	166.0	135.1	231	1060-1270DCT	2C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	2	LN	224.0	84.1	166.0	134.9	231	1060-1270DCT	3C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	2	LN	223.8	84.0	166.0	134.8	231	1060-1270DCT	5C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	2	LN	223.6	84.0	166.0	134.7	231	1060-1270DCT	4C	FIX
73170 PLUMTREE 115	73268 MIDDLRIV 115	1	LN	358.0	58.1	126.0	284.2	424	TRIANGLE2T	2C	FIX
73170 PLUMTREE 115	73268 MIDDLRIV 115	1	LN	357.2	58.0	126.0	283.5	424	TRIANGLE2T	3C	FIX
73170 PLUMTREE 115	73268 MIDDLRIV 115	1	LN	357.2	58.0	126.0	283.5	424	TRIANGLE2T	5C	FIX
73170 PLUMTREE 115	73268 MIDDLRIV 115	1	LN	356.5	57.9	126.0	283.0	424	TRIANGLE2T	4C	FIX
73170 PLUMTREE 115	73268 MIDDLRIV 115	1	LN	228.1	58.1	126.0	181.0	230	1060-1165DCT	2C	FIX
73170 PLUMTREE 115	73268 MIDDLRIV 115	1	LN	227.8	58.0	126.0	180.8	230	1060-1165DCT	3C	FIX
73170 PLUMTREE 115	73268 MIDDLRIV 115	1	LN	227.6	58.0	126.0	180.7	230	1060-1165DCT	5C	FIX
73170 PLUMTREE 115	73268 MIDDLRIV 115	1	LN	227.4	57.9	126.0	180.5	230	1060-1165DCT	4C	FIX
73171 NWLK HAR 115	73237 ELYAVE 115	1	LN	414.0	173.2	263.0	157.4	284	1867-1880DCT	5C	FIX
73171 NWLK HAR 115	73237 ELYAVE 115	1	LN	393.5	144.4	263.0	149.6	284	1867-1880DCT	4C	FIX
73171 NWLK HAR 115	73237 ELYAVE 115	1	LN	285.0	144.4	263.0	108.3	238	113091001DCT	4C	FIX
73171 NWLK HAR 115	73237 ELYAVE 115	1	LN	283.9	173.2	263.0	107.9	238	113091001DCT	5C	FIX
73171 NWLK HAR 115	73237 ELYAVE 115	1	LN	266.1	173.2	263.0	101.2	189	91001LINE	5C	FIX
73171 NWLK HAR 115	73271 RYTN J B 115	1	LN	317.0	188.7	304.0	104.3	287	1880-1890DCT	4C	FIX
73171 NWLK HAR 115	73271 RYTN J B 115	1	LN	317.0	173.5	304.0	104.3	287	1880-1890DCT	5C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	502.4	259.3	256.0	196.2	251	1416-1880DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	487.2	248.6	256.0	190.3	251	1416-1880DCT	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	475.1	259.3	256.0	185.6	288	1880-1977DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	460.1	248.6	256.0	179.7	288	1880-1977DCT	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	422.9	259.3	256.0	165.2	238	113091001DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	416.8	248.6	256.0	162.8	238	113091001DCT	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	407.1	259.3	256.0	159.0	365	GLENBROOK3T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	404.8	259.3	256.0	158.1	146	1880LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	404.8	259.3	256.0	158.1	390	NORWLKHAR4T	2C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 2C, 3C, 4C and 5C

Loading >= 130%
110% < Loading < 130%
105% < Loading < 110%
100% < Loading < 105%

Highest Overload Shaded
Sorted by branch and then by overload

From bus	To bus	CKT	Tp	Cont MVA	Base Flow	Rating	Loading %	Ncon	Contingency	Dispatch	Controls
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	403.5	259.3	256.0	157.6	386	NORWALKST2	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	390.7	259.3	256.0	152.6	287	1880-1890DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	390.0	259.3	256.0	152.3	237	1130-1430DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	389.7	248.6	256.0	152.2	365	GLENBROOK3T	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	388.5	248.6	256.0	151.8	146	1880LINE	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	388.5	248.6	256.0	151.8	390	NORWLKHAR4T	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	387.3	259.3	256.0	151.3	252	1416-1890DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	385.6	248.6	256.0	150.6	386	NORWALKST2	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	384.2	248.6	256.0	150.1	237	1130-1430DCT	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	381.6	248.6	256.0	149.1	252	1416-1890DCT	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	381.1	248.6	256.0	148.9	287	1880-1890DCT	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	363.8	259.3	256.0	142.1	289	1890-1977DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	358.2	248.6	256.0	139.9	289	1890-1977DCT	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	335.6	259.3	256.0	131.1	189	91001LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	326.9	248.6	256.0	127.7	189	91001LINE	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	315.1	259.3	256.0	123.1	322	ASHCREEKBKR	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	314.7	259.3	256.0	122.9	18	1130LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	311.3	259.3	256.0	121.6	394	PEQUON12TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	214.0	121.2		** Base Case	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	309.6	259.3	256.0	121.0	49	1430LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	308.8	259.3	256.0	120.6	389	NORWLKHAR3T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	306.6	248.6	256.0	119.8	322	ASHCREEKBKR	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	305.6	248.6	256.0	119.4	18	1130LINE	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	305.4	259.3	256.0	119.3	19	1130+1416LNS	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	304.7	259.3	256.0	119.0	404	SASCOCR1T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	304.5	259.3	256.0	118.9	366	GLENBROOK8T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	303.9	259.3	256.0	118.7	148	1890LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	303.9	259.3	256.0	118.7	387	NORWLKHAR1T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	303.0	259.3	256.0	118.4	48	1416LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	301.4	248.6	256.0	117.7	49	1430LINE	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	300.9	248.6	256.0	117.6	394	PEQUON12TSTK	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	248.6	248.6	214.0	116.2		** Base Case	3C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 2C, 3C, 4C and 5C

Loading >= 130%
110% < Loading < 130%
105% < Loading < 110%
100% < Loading < 105%

Highest Overload Shaded
Sorted by branch and then by overload

From bus	To bus	CKT	Tp	Cont MVA	Base Flow	Rating	Loading %	Ncon	Contingency	Dispatch	Controls
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	296.4	248.6	256.0	115.8	19	1130+1416LNS	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	296.5	248.6	256.0	115.8	404	SASCOCR1T	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	296.1	248.6	256.0	115.7	366	GLENBROOK8T	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	295.7	248.6	256.0	115.5	148	1890LINE	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	295.7	248.6	256.0	115.5	387	NORWLKHAR1T	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	294.1	248.6	256.0	114.9	48	1416LINE	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	293.5	259.3	256.0	114.7	339	DARIEN1T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	293.0	248.6	256.0	114.5	389	NORWLKHAR3T	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	290.3	259.3	256.0	113.4	407	SOUTHEND6T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	289.6	259.3	256.0	113.1	154	1977LINENEW	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	284.6	248.6	256.0	111.2	339	DARIEN1T	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	281.3	248.6	256.0	109.9	407	SOUTHEND6T	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	280.8	259.3	256.0	109.7	406	SOUTHEND5T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	280.6	248.6	256.0	109.6	154	1977LINENEW	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	277.6	259.3	256.0	108.4	290	8100-8200DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	274.5	248.6	256.0	107.2	220	387LINE	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	274.2	248.6	256.0	107.1	291	1460-387DCT	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	272.1	248.6	256.0	106.3	456	SCOVRK8TSTK	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	272.0	259.3	256.0	106.2	469	SNGPEQ-XFR	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	271.9	248.6	256.0	106.2	406	SOUTHEND5T	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	271.7	259.3	256.0	106.1	220	387LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	270.9	259.3	256.0	105.8	291	1460-387DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	269.3	259.3	256.0	105.2	451	NOMNTSTBKR	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	269.3	259.3	256.0	105.2	452	NMSTBKREAC	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	269.2	259.3	256.0	105.1	192	312LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	269.2	259.3	256.0	105.1	193	312+393LNS	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	269.2	259.3	256.0	105.1	194	312+393REAC	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	268.3	259.3	256.0	104.8	246	1310-1763DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	268.0	259.3	256.0	104.7	351	DEVON24TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.9	259.3	256.0	104.7	456	SCOVRK8TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.3	259.3	256.0	104.4	221	393LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.4	259.3	256.0	103.7	259	1560-1570DCT	2C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 2C, 3C, 4C and 5C

Loading >= 130%
110% < Loading < 130%
105% < Loading < 110%
100% < Loading < 105%

Highest Overload Shaded
Sorted by branch and then by overload

From bus	To bus	CKT	Tp	Cont MVA	Base Flow	Rating	Loading %	Ncon	Contingency	Dispatch	Controls
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.4	259.3	256.0	103.7	279	1770-1887DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.4	259.3	256.0	103.7	422	STONYHILL1T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	259.3	256.0	103.6	281	1800-1810DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	259.3	256.0	103.6	381	MIXAVE1	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	259.3	256.0	103.6	417	SOTHNGTN24T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	259.3	256.0	103.6	421	STEVENSNSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	259.3	256.0	103.6	426	TRIANGLE4T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.1	259.3	256.0	103.5	239	1163-1550D-2	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.1	259.3	256.0	103.5	420	SOTHNGTN28T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.6	259.3	256.0	103.4	257	1505-1607DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	263.8	259.3	256.0	103.1	423	TRPFALLST1	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	263.6	248.6	256.0	103.0	290	8100-8200DCT	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	263.4	259.3	256.0	102.9	325	BATESROCK1T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	263.3	259.3	256.0	102.9	338	COLONY1T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	263.4	259.3	256.0	102.9	401	QUINIPACST1	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	263.2	259.3	256.0	102.8	260	1570-1575DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	263.1	259.3	256.0	102.8	282	1800-1825DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	263.2	259.3	256.0	102.8	425	TRIANGLE3T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	263.1	259.3	256.0	102.8	439	WOODMNT1TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.9	259.3	256.0	102.7	403	SACKETST1	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.7	259.3	256.0	102.6	176	88005ALINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.6	259.3	256.0	102.6	245	1280-1870DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.7	259.3	256.0	102.6	358	DEVSWST4TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.6	259.3	256.0	102.6	371	GRNDAV5TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.6	259.3	256.0	102.6	372	GRNDAV6TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.7	259.3	256.0	102.6	374	GREENHLL2T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.4	259.3	256.0	102.5	59	1500LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.3	259.3	256.0	102.5	60	1505LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.4	259.3	256.0	102.5	78	1605LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.4	259.3	256.0	102.5	235	1100-1200DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.5	259.3	256.0	102.5	247	1355-1610DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.5	259.3	256.0	102.5	380	MLLRVR2TSTK	2C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 2C, 3C, 4C and 5C

Loading >= 130%
110% < Loading < 130%
105% < Loading < 110%
100% < Loading < 105%

Highest Overload Shaded
Sorted by branch and then by overload

From bus	To bus	CKT	Tp	Cont MVA	Base Flow	Rating	Loading %	Ncon	Contingency	Dispatch	Controls
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.5	259.3	256.0	102.5	410	SOTHNGTN13T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.3	259.3	256.0	102.5	470	DEV-XFR	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.2	259.3	256.0	102.4	326	BECONFLSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.2	259.3	256.0	102.4	355	DEVSWST1TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.2	259.3	256.0	102.4	357	DEVSWST3TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.2	259.3	256.0	102.4	379	MLLRVR1TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.1	259.3	256.0	102.4	414	SOTHNGTN20T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.8	259.3	256.0	102.3	42	1355LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.8	259.3	256.0	102.3	94	1690LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.9	259.3	256.0	102.3	113	1760+1876LNS	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.0	259.3	256.0	102.3	244	1272-1721DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.0	259.3	256.0	102.3	249	1394-1515DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.9	259.3	256.0	102.3	336	BUNKERH2T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.8	259.3	256.0	102.3	356	DEVSWST2TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.8	259.3	256.0	102.3	370	GRNDAV4TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.8	259.3	256.0	102.3	373	GRNDAV7TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.8	259.3	256.0	102.3	378	JUNEST1	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.8	259.3	256.0	102.3	399	PLUMTREE28T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.8	259.3	256.0	102.3	473	NEWDEV2	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.7	259.3	256.0	102.2	119	1770LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.7	259.3	256.0	102.2	179	88006ALINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.7	259.3	256.0	102.2	188	89006BLINE-1	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.8	259.3	256.0	102.2	272	1670-1830DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.6	259.3	256.0	102.2	323	BAIRDASTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.7	259.3	256.0	102.2	334	BROADWYST1	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.6	259.3	256.0	102.2	359	EMERIDEN1T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.7	259.3	256.0	102.2	398	PLUMTREE25T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.8	259.3	256.0	102.2	413	SOTHNGTN16T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.7	259.3	256.0	102.2	435	WBROOKFLD1T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.3	259.3	256.0	102.1	137	1820LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.5	259.3	256.0	102.1	174	88003ALINE-2	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.5	259.3	256.0	102.1	182	89003BLINE-2	2C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 2C, 3C, 4C and 5C

Loading >= 130%
110% < Loading < 130%
105% < Loading < 110%
100% < Loading < 105%

Highest Overload Shaded
Sorted by branch and then by overload

From bus	To bus	CKT	Tp	Cont MVA	Base Flow	Rating	Loading %	Ncon	Contingency	Dispatch	Controls
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.3	259.3	256.0	102.1	187	89006BLINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.5	259.3	256.0	102.1	262	1575-1585DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.3	259.3	256.0	102.1	264	1580-1585DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.3	259.3	256.0	102.1	283	1810-1825DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.4	259.3	256.0	102.1	337	BUNKERH3T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.3	259.3	256.0	102.1	408	SNAUGA1T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.3	259.3	256.0	102.1	416	SOTHNGTN23T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.2	259.3	256.0	102.0	36	1272+1445LNS	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.2	259.3	256.0	102.0	52	1443+1759LNS	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.0	259.3	256.0	102.0	73	1575LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.0	259.3	256.0	102.0	126	1780LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.0	259.3	256.0	102.0	132	1790LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.1	259.3	256.0	102.0	165	8809ALINE-2	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.1	259.3	256.0	102.0	168	8909BLINE-2	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.2	259.3	256.0	102.0	254	1470-1565DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.0	259.3	256.0	102.0	270	1668-1721DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.1	259.3	256.0	102.0	277	1732-1788DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.1	259.3	256.0	102.0	324	BAIRDBSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.0	259.3	256.0	102.0	335	BUNKERH1T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.1	259.3	256.0	102.0	377	HAWTHORNST	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.2	259.3	256.0	102.0	382	NOHAVN1TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.2	259.3	256.0	102.0	393	PEACEABLE1T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.1	259.3	256.0	102.0	415	SOTHNGTN22T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.1	259.3	256.0	102.0	436	WRIVER1TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.1	259.3	256.0	102.0	437	WRIVER2TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.1	259.3	256.0	102.0	471	ESHR-XFR	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.9	259.3	256.0	101.9	2	100+400LINES	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.8	259.3	256.0	101.9	11	1050+1766LNS	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.8	259.3	256.0	101.9	21	1163+1910LNS	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.0	259.3	256.0	101.9	172	88003ALINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.9	259.3	256.0	101.9	175	88003ALINE-3	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.0	259.3	256.0	101.9	180	89003BLINE	2C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 2C, 3C, 4C and 5C

Loading >= 130%
110% < Loading < 130%
105% < Loading < 110%
100% < Loading < 105%

Highest Overload Shaded
Sorted by branch and then by overload

From bus	To bus	CKT	Tp	Cont MVA	Base Flow	Rating	Loading %	Ncon	Contingency	Dispatch	Controls
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.9	259.3	256.0	101.9	183	89003BLINE-3	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.9	259.3	256.0	101.9	195	318LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.9	259.3	256.0	101.9	205	352LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.8	259.3	256.0	101.9	236	1100-1300DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.9	259.3	256.0	101.9	263	1575-1990DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.9	259.3	256.0	101.9	362	FROSTBR15T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.8	259.3	256.0	101.9	419	SOTHNGTN26T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.6	259.3	256.0	101.8	14	1070+1490LNS	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.6	259.3	256.0	101.8	29	1235LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.5	259.3	256.0	101.8	320	ALLINGS1TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.5	259.3	256.0	101.8	321	ALLINGS2TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.6	259.3	256.0	101.8	384	NWALLING1T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.6	259.3	256.0	101.8	458	SGTN3TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.3	259.3	256.0	101.7	9	1000LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.5	259.3	256.0	101.7	67	1550+1950LNS	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.5	259.3	256.0	101.7	68	1560LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.4	259.3	256.0	101.7	156	8100LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.4	259.3	256.0	101.7	157	8200LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.4	259.3	256.0	101.7	159	8400LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.3	259.3	256.0	101.7	163	8804ALINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.3	259.3	256.0	101.7	166	8904BLINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.5	259.3	256.0	101.7	210	362LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.4	259.3	256.0	101.7	229	1000-1090DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.4	259.3	256.0	101.7	367	GRNDAV1TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.5	259.3	256.0	101.7	369	GRNDAV3TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.5	259.3	256.0	101.7	459	SGTN4TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.1	259.3	256.0	101.6	3	400LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.2	259.3	256.0	101.6	8	694LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.1	259.3	256.0	101.6	32	1250LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.0	259.3	256.0	101.6	80	1610LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.1	259.3	256.0	101.6	302	310-383DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.8	259.3	256.0	101.5	5	667-690LINE	2C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 2C, 3C, 4C and 5C

Loading >= 130%
110% < Loading < 130%
105% < Loading < 110%
100% < Loading < 105%

Highest Overload Shaded
Sorted by branch and then by overload

From bus	To bus	CKT	Tp	Cont MVA	Base Flow	Rating	Loading %	Ncon	Contingency	Dispatch	Controls
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.9	259.3	256.0	101.5	37	1280LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.7	259.3	256.0	101.5	72	1572+1772LNS	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.7	259.3	256.0	101.5	79	1607LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.8	259.3	256.0	101.5	164	8809ALINE-1	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.8	259.3	256.0	101.5	167	8909BLINE-1	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.8	259.3	256.0	101.5	171	84004LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.8	259.3	256.0	101.5	232	1070-1080DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.7	259.3	256.0	101.5	333	BRANFRDRR1T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.7	259.3	256.0	101.5	354	DEVON27TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.7	259.3	256.0	101.5	409	SOTHNGTN12T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.8	259.3	256.0	101.5	440	WOODMNT2TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.5	259.3	256.0	101.4	35	1272LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.5	259.3	256.0	101.4	53	1445LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.5	259.3	256.0	101.4	55	1460LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.5	259.3	256.0	101.4	63	1537LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.6	259.3	256.0	101.4	75	1585LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.6	259.3	256.0	101.4	88	1640LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.7	259.3	256.0	101.4	102	1730BLINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.5	259.3	256.0	101.4	112	1760LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.5	259.3	256.0	101.4	144	1870LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.5	259.3	256.0	101.4	147	1887LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.6	259.3	256.0	101.4	158	8300LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.5	259.3	256.0	101.4	177	88005ALINE-1	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.5	259.3	256.0	101.4	185	89005BLINE-1	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.6	259.3	256.0	101.4	191	310LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.5	259.3	256.0	101.4	216	381LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.5	259.3	256.0	101.4	217	381LREAC	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.7	259.3	256.0	101.4	265	1580-1730BDC	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.5	259.3	256.0	101.4	308	SOUTH1XAUTO	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.7	259.3	256.0	101.4	346	DEVON8TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.7	259.3	256.0	101.4	347	DEVON10TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.7	259.3	256.0	101.4	368	GRNDAV2TSTK	2C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 2C, 3C, 4C and 5C

Loading >= 130%
110% < Loading < 130%
105% < Loading < 110%
100% < Loading < 105%

Highest Overload Shaded
Sorted by branch and then by overload

From bus	To bus	CKT	Tp	Cont MVA	Base Flow	Rating	Loading %	Ncon	Contingency	Dispatch	Controls
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.5	259.3	256.0	101.4	411	SOTHNGTN14T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.6	259.3	256.0	101.4	429	WALLING3TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.5	248.6	256.0	101.4	351	DEVON24TSTK	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.2	259.3	256.0	101.3	1	100LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.2	259.3	256.0	101.3	6	689LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.2	259.3	256.0	101.3	7	693LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	12	1060LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	13	1070LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	16	1090LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	17	1100LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.2	259.3	256.0	101.3	22	1165LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	23	1191LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	24	1200LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	27	1208LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	34	1270LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	40	1337LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.2	259.3	256.0	101.3	46	1394LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	47	1410LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.4	259.3	256.0	101.3	50	1440LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	51	1443LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	56	1466LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	58	1490LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	74	1580LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	76	1588LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	77	1594LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	89	1655LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	90	1668LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	91	1670LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	92	1675LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.4	259.3	256.0	101.3	93	1685LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	95	1704LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	98	1721LINE	2C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 2C, 3C, 4C and 5C

Loading >= 130%
110% < Loading < 130%
105% < Loading < 110%
100% < Loading < 105%

Highest Overload Shaded
Sorted by branch and then by overload

From bus	To bus	CKT	Tp	Cont MVA	Base Flow	Rating	Loading %	Ncon	Contingency	Dispatch	Controls
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.3	259.3	256.0	101.3	105	1740LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.2	259.3	256.0	101.3	107	1751LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.3	259.3	256.0	101.3	109	1753LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.3	259.3	256.0	101.3	110	1756LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.3	259.3	256.0	101.3	111	1759LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.2	259.3	256.0	101.3	114	1763LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.3	259.3	256.0	101.3	115	1765LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.2	259.3	256.0	101.3	117	1767LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.3	259.3	256.0	101.3	118	1769LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.3	259.3	256.0	101.3	120	1771LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.2	259.3	256.0	101.3	123	1775LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.3	259.3	256.0	101.3	125	1779LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.3	259.3	256.0	101.3	129	1785LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.2	259.3	256.0	101.3	130	1786LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.3	259.3	256.0	101.3	131	1788LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.3	259.3	256.0	101.3	133	1792LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.3	259.3	256.0	101.3	139	1825LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.3	259.3	256.0	101.3	140	1830LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.2	259.3	256.0	101.3	141	1835LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.3	259.3	256.0	101.3	149	1900LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.3	259.3	256.0	101.3	151	1921LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.3	259.3	256.0	101.3	155	1990LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.3	259.3	256.0	101.3	160	8500LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.3	259.3	256.0	101.3	162	8700LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.3	259.3	256.0	101.3	169	9500LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.3	259.3	256.0	101.3	170	9502LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.4	259.3	256.0	101.3	173	88003ALINE-1	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.4	259.3	256.0	101.3	181	89003BLINE-1	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.4	259.3	256.0	101.3	184	89005BLINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.3	259.3	256.0	101.3	231	1060-1270DCT	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.3	259.3	256.0	101.3	253	1440-1450DCT	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.4	259.3	256.0	101.3	271	1670-1771DCT	2C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 2C, 3C, 4C and 5C

Loading >= 130%
110% < Loading < 130%
105% < Loading < 110%
100% < Loading < 105%

Highest Overload Shaded
Sorted by branch and then by overload

From bus	To bus	CKT	Tp	Cont MVA	Base Flow	Rating	Loading %	Ncon	Contingency	Dispatch	Controls
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.2	259.3	256.0	101.3	306	MANCHAUTO1	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	318	LOSSNOR1	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	319	LOSSNOR2	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.4	259.3	256.0	101.3	331	BRANFORD2T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	332	BRANFORD4T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	343	DEVON4TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	348	DEVON11TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	349	DEVON12TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.4	259.3	256.0	101.3	364	FROSTBR27T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.4	259.3	256.0	101.3	412	SOTHNGTN15T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.2	259.3	256.0	101.3	424	TRIANGLE2T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	430	WALLING4TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	431	WALLING5TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	432	WATERST1TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	433	WATERST2TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	461	SGTN6TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	468	SNG-PEQTAP	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	259.3	256.0	101.3	472	NEWDEV1	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.3	248.6	256.0	101.3	469	SNGPEQ-XFR	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.0	259.3	256.0	101.2	10	1050LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.1	259.3	256.0	101.2	20	1163LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.2	259.3	256.0	101.2	25	1206LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.2	259.3	256.0	101.2	26	1207LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.1	259.3	256.0	101.2	33	1261LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.2	259.3	256.0	101.2	39	1310LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.2	259.3	256.0	101.2	54	1450LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.0	259.3	256.0	101.2	61	1508LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.0	259.3	256.0	101.2	62	1515LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.1	259.3	256.0	101.2	66	1550LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.2	259.3	256.0	101.2	71	1572LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.1	259.3	256.0	101.2	82	1620SLINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.2	259.3	256.0	101.2	83	1620NLINE	2C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 2C, 3C, 4C and 5C

Loading >= 130%
110% < Loading < 130%
105% < Loading < 110%
100% < Loading < 105%

Highest Overload Shaded
Sorted by branch and then by overload

From bus	To bus	CKT	Tp	Cont MVA	Base Flow	Rating	Loading %	Ncon	Contingency	Dispatch	Controls
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.1	259.3	256.0	101.2	85	1625LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.0	259.3	256.0	101.2	97	1720LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.1	259.3	256.0	101.2	108	1752LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.2	259.3	256.0	101.2	116	1766LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.2	259.3	256.0	101.2	121	1772LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.0	259.3	256.0	101.2	122	1773LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.1	259.3	256.0	101.2	124	1777LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.0	259.3	256.0	101.2	127	1783LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.0	259.3	256.0	101.2	128	1784LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.2	259.3	256.0	101.2	134	1800-1860LNS	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.1	259.3	256.0	101.2	135	1810LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.0	259.3	256.0	101.2	150	1910LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.0	259.3	256.0	101.2	152	1950LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.2	259.3	256.0	101.2	153	1975LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.2	259.3	256.0	101.2	161	8600LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.1	259.3	256.0	101.2	200	347LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.1	259.3	256.0	101.2	201	347LREAC	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.0	259.3	256.0	101.2	218	383LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.1	259.3	256.0	101.2	230	1060-1165DCT	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.0	259.3	256.0	101.2	233	1080-1280DCT	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.0	259.3	256.0	101.2	241	1208-1640DCT	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.1	259.3	256.0	101.2	266	1620-1975DCT	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.1	259.3	256.0	101.2	280	1777-1779DCT	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.0	259.3	256.0	101.2	309	SOUTH2XAUTO	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.1	259.3	256.0	101.2	375	HADDAMAT	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.2	259.3	256.0	101.2	428	WALLING2TSTK	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	259.0	259.3	256.0	101.2	466	orang-eshr	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	258.7	259.3	256.0	101.1	70	1570LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	258.7	259.3	256.0	101.1	104	1732LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	258.7	259.3	256.0	101.1	138	1821LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	258.7	259.3	256.0	101.1	142	1836LINE	2C	FIX
73172 NORWALK	115 73207 FLAX HIL	115 1	LN	258.8	259.3	256.0	101.1	178	88005ALINE-2	2C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 2C, 3C, 4C and 5C

Loading >= 130%
110% < Loading < 130%
105% < Loading < 110%
100% < Loading < 105%

Highest Overload Shaded
Sorted by branch and then by overload

From bus	To bus	CKT	Tp	Cont MVA	Base Flow	Rating	Loading %	Ncon	Contingency	Dispatch	Controls
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.8	259.3	256.0	101.1	186	89005BLINE-2	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.9	259.3	256.0	101.1	190	301-302LNS	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.9	259.3	256.0	101.1	197	329LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.8	259.3	256.0	101.1	240	1207-1775DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.7	259.3	256.0	101.1	261	1570-1580DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.8	259.3	256.0	101.1	278	1751-1777DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.9	259.3	256.0	101.1	330	BRANFORD1T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.7	259.3	256.0	101.1	345	DEVON7TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.8	259.3	256.0	101.1	363	FROSTBR21T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.8	259.3	256.0	101.1	402	ROCKRIVER1T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.9	259.3	256.0	101.1	418	SOTHNGTN25T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.7	248.6	256.0	101.1	454	SCOVRK5TSTK	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.7	259.3	256.0	101.0	4	500LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.6	259.3	256.0	101.0	41	1342LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.7	259.3	256.0	101.0	86	1630LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.5	259.3	256.0	101.0	100	1726LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.5	259.3	256.0	101.0	145	1876LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.6	259.3	256.0	101.0	328	BOKUM2T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.6	259.3	256.0	101.0	329	BOKUM3T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.6	259.3	256.0	101.0	383	NOHAVN2TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.7	259.3	256.0	101.0	427	WALLING1TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.5	259.3	256.0	101.0	460	SGTN5TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.4	259.3	256.0	100.9	15	1080LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.2	259.3	256.0	100.9	64	1545LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.3	259.3	256.0	100.9	81	1618LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.4	259.3	256.0	100.9	234	1080-1490DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.3	259.3	256.0	100.9	464	SINGDEV1	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.1	259.3	256.0	100.8	438	WESTON1T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.1	259.3	256.0	100.8	463	NORSING1	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.8	259.3	256.0	100.7	212	368LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.8	259.3	256.0	100.7	243	1261-1620DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.8	259.3	256.0	100.7	301	310-368DCT	2C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 2C, 3C, 4C and 5C

Loading >= 130%
110% < Loading < 130%
105% < Loading < 110%
100% < Loading < 105%

Highest Overload Shaded
Sorted by branch and then by overload

From bus	To bus	CKT	Tp	Cont MVA	Base Flow	Rating	Loading %	Ncon	Contingency	Dispatch	Controls
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.8	259.3	256.0	100.7	327	BOKUM1T	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.8	259.3	256.0	100.7	376	HADDAMBT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.7	248.6	256.0	100.7	246	1310-1763DCT	3C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.6	259.3	256.0	100.6	31	1238+1813LNS	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.5	259.3	256.0	100.6	38	1300LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.6	259.3	256.0	100.6	43	ONE1385	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.5	259.3	256.0	100.6	65	1545+SPS	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.6	259.3	256.0	100.6	206	352+AUTO	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.6	259.3	256.0	100.6	303	329-352DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.2	259.3	256.0	100.5	215	376LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.3	259.3	256.0	100.5	465	SINGERSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.0	259.3	256.0	100.4	99	1722LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.0	259.3	256.0	100.4	103	1730CLINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.0	259.3	256.0	100.4	268	1622-1887DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.0	259.3	256.0	100.4	396	PEQUON32TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.0	259.3	256.0	100.4	405	SHEPAUG13A	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.8	259.3	256.0	100.3	84	1622LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.9	259.3	256.0	100.3	136	1813LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.8	259.3	256.0	100.3	350	DEVON23TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.8	259.3	256.0	100.3	352	DEVON25TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.7	259.3	256.0	100.3	462	SGTN7TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.4	259.3	256.0	100.2	30	1238LINE	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.5	259.3	256.0	100.2	305	371-383DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.2	259.3	256.0	100.1	300	310-348DCT	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.3	259.3	256.0	100.1	397	PEQUON42TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.3	259.3	256.0	100.1	454	SCOVRK5TSTK	2C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.0	259.3	256.0	100.0	204	348+AUTO	2C	FIX
73183 SHAWSHIL 115	73185 BUNKER H 115	1	LN	260.8	154.4	253.0	103.1	364	FROSTBR27T	5C	FIX
73183 SHAWSHIL 115	73185 BUNKER H 115	1	LN	260.4	153.1	253.0	102.9	364	FROSTBR27T	2C	FIX
73188 BCNFL PF 115	73192 DRBY J B 115	1	LN	147.9	14.4	112.0	132.0	244	1272-1721DCT	5C	FIX
73188 BCNFL PF 115	73192 DRBY J B 115	1	LN	145.4	16.7	112.0	129.8	244	1272-1721DCT	2C	FIX
73188 BCNFL PF 115	73192 DRBY J B 115	1	LN	142.8	14.5	112.0	127.5	244	1272-1721DCT	3C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 2C, 3C, 4C and 5C

Loading >= 130%
110% < Loading < 130%
105% < Loading < 110%
100% < Loading < 105%

Highest Overload Shaded
Sorted by branch and then by overload

From bus	To bus	CKT	Tp	Cont MVA	Base Flow	Rating	Loading %	Ncon	Contingency	Dispatch	Controls
73188 BCNFL PF 115	73192 DRBY J B 115	1	LN	141.6	31.7	112.0	126.5	244	1272-1721DCT	4C	FIX
73188 BCNFL PF 115	73192 DRBY J B 115	1	LN	121.5	14.4	112.0	108.5	336	BUNKERH2T	5C	FIX
73188 BCNFL PF 115	73192 DRBY J B 115	1	LN	117.7	16.7	112.0	105.1	336	BUNKERH2T	2C	FIX
73188 BCNFL PF 115	73192 DRBY J B 115	1	LN	116.6	14.5	112.0	104.1	336	BUNKERH2T	3C	FIX
73188 BCNFL PF 115	73192 DRBY J B 115	1	LN	115.4	31.7	112.0	103.0	336	BUNKERH2T	4C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	457.8	215.2	256.0	178.8	251	1416-1880DCT	2C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	442.4	204.0	256.0	172.8	251	1416-1880DCT	3C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	430.7	215.2	256.0	168.2	288	1880-1977DCT	2C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	415.3	204.0	256.0	162.2	288	1880-1977DCT	3C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	378.9	215.2	256.0	148.0	238	113091001DCT	2C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	372.5	204.0	256.0	145.5	238	113091001DCT	3C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	362.7	215.2	256.0	141.7	365	GLENBROOK3T	2C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	360.9	215.2	256.0	141.0	146	1880LINE	2C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	360.9	215.2	256.0	141.0	390	NORWLKHAR4T	2C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	358.7	215.2	256.0	140.1	386	NORWALKST2	2C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	346.1	215.2	256.0	135.2	237	1130-1430DCT	2C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	345.5	215.2	256.0	135.0	287	1880-1890DCT	2C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	344.9	204.0	256.0	134.7	365	GLENBROOK3T	3C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	343.7	204.0	256.0	134.3	146	1880LINE	3C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	343.7	204.0	256.0	134.3	390	NORWLKHAR4T	3C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	343.3	215.2	256.0	134.1	252	1416-1890DCT	2C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	340.0	204.0	256.0	132.8	237	1130-1430DCT	3C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	339.8	204.0	256.0	132.7	386	NORWALKST2	3C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	337.4	204.0	256.0	131.8	252	1416-1890DCT	3C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	335.7	204.0	256.0	131.1	287	1880-1890DCT	3C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	319.6	215.2	256.0	124.9	289	1890-1977DCT	2C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	313.8	204.0	256.0	122.6	289	1890-1977DCT	3C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	291.5	215.2	256.0	113.9	189	91001LINE	2C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	282.5	204.0	256.0	110.3	189	91001LINE	3C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	271.1	215.2	256.0	105.9	322	ASHCREEKBKR	2C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	270.6	215.2	256.0	105.7	18	1130LINE	2C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	267.0	215.2	256.0	104.3	394	PEQUON12TSTK	2C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 2C, 3C, 4C and 5C

Loading >= 130%
110% < Loading < 130%
105% < Loading < 110%
100% < Loading < 105%

Highest Overload Shaded
Sorted by branch and then by overload

From bus	To bus	CKT	Tp	Cont MVA	Base Flow	Rating	Loading %	Ncon	Contingency	Dispatch	Controls
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	266.1	215.2	256.0	103.9	49	1430LINE	2C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	263.9	215.2	256.0	103.1	389	NORWLKHAR3T	2C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	262.3	204.0	256.0	102.5	322	ASHCREEKBKR	3C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	261.3	215.2	256.0	102.1	19	1130+1416LNS	2C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	261.0	204.0	256.0	102.0	18	1130LINE	3C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	260.9	215.2	256.0	101.9	404	SASCOCR1T	2C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	260.5	215.2	256.0	101.7	366	GLENBROOK8T	2C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	260.2	215.2	256.0	101.6	148	1890LINE	2C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	260.2	215.2	256.0	101.6	387	NORWLKHAR1T	2C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	259.1	215.2	256.0	101.2	48	1416LINE	2C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	215.2	215.2	214.0	100.6		** Base Case	2C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	257.3	204.0	256.0	100.5	49	1430LINE	3C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	256.2	204.0	256.0	100.1	394	PEQUON12TSTK	3C	FIX
73224 TRMB J A 115	73700 PEQUONIC 115	1	LN	236.3	59.3	231.0	102.3	341	DEVON2TSTK	4C	FIX
73230 HADDAM 115	73231 BOKUM 115	1	LN	177.7	100.3	165.0	107.7	82	1620SLINE	2C	FIX
73230 HADDAM 115	73231 BOKUM 115	1	LN	177.5	100.2	165.0	107.6	82	1620SLINE	5C	FIX
73268 MIDDLRIV 115	73176 TRIANGLE 115	1	LN	298.9	22.5	134.0	223.1	424	TRIANGLE2T	2C	FIX
73268 MIDDLRIV 115	73176 TRIANGLE 115	1	LN	298.2	22.4	134.0	222.6	424	TRIANGLE2T	3C	FIX
73268 MIDDLRIV 115	73176 TRIANGLE 115	1	LN	298.3	22.4	134.0	222.6	424	TRIANGLE2T	5C	FIX
73268 MIDDLRIV 115	73176 TRIANGLE 115	1	LN	297.6	22.4	134.0	222.1	424	TRIANGLE2T	4C	FIX
73268 MIDDLRIV 115	73176 TRIANGLE 115	1	LN	149.2	22.5	134.0	111.3	230	1060-1165DCT	2C	FIX
73268 MIDDLRIV 115	73176 TRIANGLE 115	1	LN	149.0	22.4	134.0	111.2	230	1060-1165DCT	3C	FIX
73268 MIDDLRIV 115	73176 TRIANGLE 115	1	LN	148.8	22.4	134.0	111.1	230	1060-1165DCT	5C	FIX
73268 MIDDLRIV 115	73176 TRIANGLE 115	1	LN	148.7	22.4	134.0	111.0	230	1060-1165DCT	4C	FIX
73669 GRAND AV 115	73681 WEST RIV 115	1	LN	265.0	114.7	258.0	102.7	368	GRNDAV2TSTK	5C	FIX
73669 GRAND AV 115	73681 WEST RIV 115	2	LN	265.0	114.7	258.0	102.7	368	GRNDAV2TSTK	5C	FIX
73701 CRRA JCT 115	73703 ASHCREEK 115	1	LN	441.4	281.7	439.0	100.6	248	1389-1880DCT	3C	FIX
73701 CRRA JCT 115	73703 ASHCREEK 115	1	LN	440.5	272.5	439.0	100.3	248	1389-1880DCT	2C	FIX

Contingency List

Contingency Index	Contingency
1	100LINE
2	100+400LINES
3	400LINE
4	500LINE
5	667-690LINE
6	689LINE
7	693LINE
8	694LINE
9	1000LINE
10	1050LINE
11	1050+1766LNS
12	1060LINE
13	1070LINE
14	1070+1490LNS
15	1080LINE
16	1090LINE
17	1100LINE
18	1130LINE
19	1130+1416LNS
20	1163LINE
21	1163+1910LNS
22	1165LINE
23	1191LINE
24	1200LINE
25	1206LINE
26	1207LINE
27	1208LINE
28	1222LINE
29	1235LINE
30	1238LINE
31	1238+1813LNS
32	1250LINE
33	1261LINE
34	1270LINE
35	1272LINE
36	1272+1445LNS
37	1280LINE
38	1300LINE
39	1310LINE
40	1337LINE
41	1342LINE
42	1355LINE
43	ONE1385
44	1385LN+AUTO
45	1389LINE

Contingency List

Contingency Index	Contingency
46	1394LINE
47	1410LINE
48	1416LINE
49	1430LINE
50	1440LINE
51	1443LINE
52	1443+1759LNS
53	1445LINE
54	1450LINE
55	1460LINE
56	1466LINE
57	1470LINE
58	1490LINE
59	1500LINE
60	1505LINE
61	1508LINE
62	1515LINE
63	1537LINE
64	1545LINE
65	1545+SPS
66	1550LINE
67	1550+1950LNS
68	1560LINE
69	1565LINE
70	1570LINE
71	1572LINE
72	1572+1772LNS
73	1575LINE
74	1580LINE
75	1585LINE
76	1588LINE
77	1594LINE
78	1605LINE
79	1607LINE
80	1610LINE
81	1618LINE
82	1620SLINE
83	1620NLINE
84	1622LINE
85	1625LINE
86	1630LINE
87	1637LINE
88	1640LINE
89	1655LINE
90	1668LINE

Contingency List

Contingency Index	Contingency
91	1670LINE
92	1675LINE
93	1685LINE
94	1690LINE
95	1704LINE
96	1710LINE
97	1720LINE
98	1721LINE
99	1722LINE
100	1726LINE
101	1730ALINE
102	1730BLINE
103	1730CLINE
104	1732LINE
105	1740LINE
106	1750LINE
107	1751LINE
108	1752LINE
109	1753LINE
110	1756LINE
111	1759LINE
112	1760LINE
113	1760+1876LNS
114	1763LINE
115	1765LINE
116	1766LINE
117	1767LINE
118	1769LINE
119	1770LINE
120	1771LINE
121	1772LINE
122	1773LINE
123	1775LINE
124	1777LINE
125	1779LINE
126	1780LINE
127	1783LINE
128	1784LINE
129	1785LINE
130	1786LINE
131	1788LINE
132	1790LINE
133	1792LINE
134	1800-1860LNS
135	1810LINE

Contingency List

Contingency Index	Contingency
136	1813LINE
137	1820LINE
138	1821LINE
139	1825LINE
140	1830LINE
141	1835LINE
142	1836LINE
143	1867LINE
144	1870LINE
145	1876LINE
146	1880LINE
147	1887LINE
148	1890LINE
149	1900LINE
150	1910LINE
151	1921LINE
152	1950LINE
153	1975LINE
154	1977LINENEW
155	1990LINE
156	8100LINE
157	8200LINE
158	8300LINE
159	8400LINE
160	8500LINE
161	8600LINE
162	8700LINE
163	8804ALINE
164	8809ALINE-1
165	8809ALINE-2
166	8904BLINE
167	8909BLINE-1
168	8909BLINE-2
169	9500LINE
170	9502LINE
171	84004LINE
172	88003ALINE
173	88003ALINE-1
174	88003ALINE-2
175	88003ALINE-3
176	88005ALINE
177	88005ALINE-1
178	88005ALINE-2
179	88006ALINE
180	89003BLINE

Contingency List

Contingency Index	Contingency
181	89003BLINE-1
182	89003BLINE-2
183	89003BLINE-3
184	89005BLINE
185	89005BLINE-1
186	89005BLINE-2
187	89006BLINE
188	89006BLINE-1
189	91001LINE
190	301-302LNS
191	310LINE
192	312LINE
193	312+393LNS
194	312+393REAC
195	318LINE
196	321LINE
197	329LINE
198	330LINE
199	330+LAKE
200	347LINE
201	347LREAC
202	347+LAKE
203	348LINE
204	348+AUTO
205	352LINE
206	352+AUTO
207	353LINE
208	353+AUTO
209	354LINE
210	362LINE
211	364+AUTO
212	368LINE
213	371LINE
214	371+AUTO
215	376LINE
216	381LINE
217	381LREAC
218	383LINE
219	384LINE
220	387LINE
221	393LINE
222	395LINE
223	395+AUTO
224	398LINE
225	398LREAC

Contingency List

Contingency Index	Contingency
226	PLUMNOR
227	PLUMNOR+AUTO
228	NORAUTO
229	1000-1090DCT
230	1060-1165DCT
231	1060-1270DCT
232	1070-1080DCT
233	1080-1280DCT
234	1080-1490DCT
235	1100-1200DCT
236	1100-1300DCT
237	1130-1430DCT
238	113091001DCT
239	1163-1550D-2
240	1207-1775DCT
241	1208-1640DCT
242	1222-1730ADC
243	1261-1620DCT
244	1272-1721DCT
245	1280-1870DCT
246	1310-1763DCT
247	1355-1610DCT
248	1389-1880DCT
249	1394-1515DCT
250	1416-1867DCT
251	1416-1880DCT
252	1416-1890DCT
253	1440-1450DCT
254	1470-1565DCT
255	1470-1637DCT
256	1470-1720DCT
257	1505-1607DCT
258	1545-1570DCT
259	1560-1570DCT
260	1570-1575DCT
261	1570-1580DCT
262	1575-1585DCT
263	1575-1990DCT
264	1580-1585DCT
265	1580-1730BDC
266	1620-1975DCT
267	1975-348DCT
268	1622-1887DCT
269	1637-1720DCT
270	1668-1721DCT

Contingency List

Contingency Index	Contingency
271	1670-1771DCT
272	1670-1830DCT
273	1710-1730ADC
274	1710-1730BDC
275	1710-1730CDC
276	1720-1730ADC
277	1732-1788DCT
278	1751-1777DCT
279	1770-1887DCT
280	1777-1779DCT
281	1800-1810DCT
282	1800-1825DCT
283	1810-1825DCT
284	1867-1880DCT
285	1867-1890DCT
286	1867-1977DCT
287	1880-1890DCT
288	1880-1977DCT
289	1890-1977DCT
290	8100-8200DCT
291	1460-387DCT
292	1565-PLNRDCT
293	1618-321DCT
294	1751-395DCT
295	1759-353DCT
296	1767-353DCT
297	1770-321DCT
298	1779-395DCT
299	1887-321DCT
300	310-348DCT
301	310-368DCT
302	310-383DCT
303	329-352DCT
304	362-376DCT
305	371-383DCT
306	MANCHAUTO1
307	PLUMAUT
308	SOUTH1XAUTO
309	SOUTH2XAUTO
310	LOSSBPT3
311	LOSSDEV7
312	LOLAKERD
313	LOSSMID4
314	LOSSMP2
315	LOSSMP3

Contingency List

Contingency Index	Contingency
316	LOSSMON6
317	LOSSNHAV
318	LOSSNOR1
319	LOSSNOR2
320	ALLINGS1TSTK
321	ALLINGS2TSTK
322	ASHCREEKBKR
323	BAIRDASTK
324	BAIRDBSTK
325	BATESROCK1T
326	BECONFLSTK
327	BOKUM1T
328	BOKUM2T
329	BOKUM3T
330	BRANFORD1T
331	BRANFORD2T
332	BRANFORD4T
333	BRANFRDRR1T
334	BROADWYST1
335	BUNKERH1T
336	BUNKERH2T
337	BUNKERH3T
338	COLONY1T
339	DARIEN1T
340	DEVON1TSTK
341	DEVON2TSTK
342	DEVON3TSTK
343	DEVON4TSTK
344	DEVON6TSTK
345	DEVON7TSTK
346	DEVON8TSTK
347	DEVON10TSTK
348	DEVON11TSTK
349	DEVON12TSTK
350	DEVON23TSTK
351	DEVON24TSTK
352	DEVON25TSTK
353	DEVON26TSTK
354	DEVON27TSTK
355	DEVSWST1TSTK
356	DEVSWST2TSTK
357	DEVSWST3TSTK
358	DEVSWST4TSTK
359	EMERIDEN1T
360	ESHORE12TSTK

Contingency List

Contingency Index	Contingency
361	FLAXHILL2T
362	FROSTBR15T
363	FROSTBR21T
364	FROSTBR27T
365	GLENBROOK3T
366	GLENBROOK8T
367	GRNDAV1TSTK
368	GRNDAV2TSTK
369	GRNDAV3TSTK
370	GRNDAV4TSTK
371	GRNDAV5TSTK
372	GRNDAV6TSTK
373	GRNDAV7TSTK
374	GREENHLL2T
375	HADDAMAT
376	HADDAMBT
377	HAWTHORNST
378	JUNEST1
379	MLLRVR1TSTK
380	MLLRVR2TSTK
381	MIXAVE1
382	NOHAVN1TSTK
383	NOHAVN2TSTK
384	NWALLING1T
385	NORWALKST1
386	NORWALKST2
387	NORWLKHAR1T
388	NORWLKHAR2T
389	NORWLKHAR3T
390	NORWLKHAR4T
391	NORWLKHAR7T
392	OLDTOWNST
393	PEACEABLE1T
394	PEQUON12TSTK
395	PEQUON22TSTK
396	PEQUON32TSTK
397	PEQUON42TSTK
398	PLUMTREE25T
399	PLUMTREE28T
400	PLUMTREE31T
401	QUINIPACST1
402	ROCKRIVER1T
403	SACKETST1
404	SASCOCR1T
405	SHEPAUG13A

Contingency List

Contingency Index	Contingency
406	SOUTHEND5T
407	SOUTHEND6T
408	SNAUGA1T
409	SOTHNGTN12T
410	SOTHNGTN13T
411	SOTHNGTN14T
412	SOTHNGTN15T
413	SOTHNGTN16T
414	SOTHNGTN20T
415	SOTHNGTN22T
416	SOTHNGTN23T
417	SOTHNGTN24T
418	SOTHNGTN25T
419	SOTHNGTN26T
420	SOTHNGTN28T
421	STEVENSNSTK
422	STONYHILL1T
423	TRPFALLST1
424	TRIANGLE2T
425	TRIANGLE3T
426	TRIANGLE4T
427	WALLING1TSTK
428	WALLING2TSTK
429	WALLING3TSTK
430	WALLING4TSTK
431	WALLING5TSTK
432	WATERST1TSTK
433	WATERST2TSTK
434	WATERSIDE2T
435	WBROOKFLD1T
436	WRIVER1TSTK
437	WRIVER2TSTK
438	WESTON1T
439	WOODMNT1TSTK
440	WOODMNT2TSTK
441	318-362STKBR
442	CARD1TSTK
443	CARD1T+LAKE
444	CARD2TSTK
445	CARD3TSTK
446	CARD3T+LAKE
447	LONGMT5TSTK
448	LUDLOWSTBKR
449	MANCH21TSTK
450	MONTVSTBKR

Contingency List

Contingency Index	Contingency
451	NOMNTSTBKR
452	NMSTBKREAC
453	SCOVRK4TSTK
454	SCOVRK5TSTK
455	SCOVRK7TSTK
456	SCOVRK8TSTK
457	SGTN1TSTK
458	SGTN3TSTK
459	SGTN4TSTK
460	SGTN5TSTK
461	SGTN6TSTK
462	SGTN7TSTK
463	NORSING1
464	SINGDEV1
465	SINGERSTK
466	orang-eshr
467	orang-dev
468	SNG-PEQTAP
469	SNGPEQ-XFR
470	DEV-XFR
471	ESHR-XFR
472	NEWDEV1
473	NEWDEV2

Appendix F

Summary of Voltage Violations

- Keys to Tables
- Table: Voltage Violations - Worst and Total
- Table: List of Voltage Violations
- Table: Contingency Index and Contingency Name

Several columns the **"Voltage Violations, Worst and Total" table** warrant explanation:

# Viols	The total number of violations for this bus and dispatch. If **"# Viols**" equals one, then the indicated contingency is the only one causing a violation for the indicated dispatch. If "**# Viols**" exceeds one, then it is the total number of contingencies causing a voltage violation, but none are more severe than the indicated contingency. To see all contingencies that cause voltage violations refer to the "**List of Voltage Violations**" table in this Appendix.
Worst Lo Vio	The value in the "**Worst Lo Vio**" column indicates the amount, in per-unit, that the bus voltage is below the low voltage criteria.
Worst Hi Vio	The value in the "**Worst Hi Vio**" column indicates the amount, in per-unit, that the bus voltage is above the high voltage criteria.
Dispatch	The ID used to identify the generation dispatch, as explained in the report.
Controls	Indicates that tap-changing and phase-shifting transformers are held fixed from the base case to the post-contingency case.

Several columns the **"List of Voltage Violations" table** warrant explanation:

Contingency Volt	The per-unit value of the bus voltage after the contingency.
Base Volt	The per-unit value of the bus voltage in the base case.
Low Limit	The per-unit value of the low voltage criteria.
Upp Limit	The per-unit value of the high voltage criteria.
Volt Drop	The per-unit criteria for a violation of voltage drop. Not used for this study.
Volt Rise	The per-unit criteria for a violation of voltage rise. Not used for this study.
Viol Type	L = **Contingency Volt** is < low voltage limit (value in "**Low Limit**") D = **Contingency Volt** is < voltage drop limit (value in "**Volt Drop**") H = **Contingency Volt** is > high voltage limit (value in "**Low Limit**") R = **Contingency Volt** is > voltage rise limit (value in "**Volt Rise**") Since voltage rise and voltage drop are not used as criteria in this study, the only possible values are "L" and "H".
Dispatch	The ID used to identify the generation dispatch, as explained in the report.
Controls	Indicates that tap-changing and phase-shifting transformers are held fixed from the base case to the post-contingency case.

Voltage Violations, Worst & Total: 27.7 GW NE Load, Dispatches 2C, 3C, 4C and 5C

Lo Violation > 3%
1% < Lo Violation < 3%
0.5%< Lo Violation < 1%
Lo Violation < 0.5%

Sorted by bus, then low violation, then high violation

Bus #	Bus Name	KV	Area	Zone	# Viols	WorstLo Vio	Ncon Lo	Cont Name Worst Lo	WorstHi Vio	Ncon Hi	Cont Name Worst Hi	Dispatch	Controls
73160	BALDWINB	115.0	701	171	2	0.035	244	1272-1721DCT	-	-		5C	FIX
73160	BALDWINB	115.0	701	171	1	0.023	244	1272-1721DCT	-	-		2C	FIX
73160	BALDWINB	115.0	701	171	1	0.016	244	1272-1721DCT	-	-		4C	FIX
73160	BALDWINB	115.0	701	171	1	0.015	244	1272-1721DCT	-	-		3C	FIX
73188	BCNFL PF	115.0	701	171	1	0.006	244	1272-1721DCT	-	-		5C	FIX
73153	BRANFORD	115.0	701	171	1	-	-		0.004	332	BRANFORD4T	4C	FIX
73153	BRANFORD	115.0	701	171	1	-	-		0.003	332	BRANFORD4T	3C	FIX
73185	BUNKER H	115.0	701	171	2	0.035	244	1272-1721DCT	-	-		5C	FIX
73185	BUNKER H	115.0	701	171	1	0.023	244	1272-1721DCT	-	-		2C	FIX
73185	BUNKER H	115.0	701	171	1	0.015	244	1272-1721DCT	-	-		3C	FIX
73185	BUNKER H	115.0	701	171	1	0.015	244	1272-1721DCT	-	-		4C	FIX
73682	ELMWST A	115.0	701	185	1	0.004	372	GRNDAV6TSTK	-	-		2C	FIX
73682	ELMWST A	115.0	701	185	2	0.004	373	GRNDAV7TSTK	-	-		5C	FIX
73683	ELMWST B	115.0	701	185	3	0.006	370	GRNDAV4TSTK	-	-		5C	FIX
73683	ELMWST B	115.0	701	185	1	0.006	371	GRNDAV5TSTK	-	-		2C	FIX
73189	FREIGHT	115.0	701	171	1	0.036	244	1272-1721DCT	-	-		5C	FIX
73189	FREIGHT	115.0	701	171	1	0.024	244	1272-1721DCT	-	-		2C	FIX
73189	FREIGHT	115.0	701	171	1	0.017	244	1272-1721DCT	-	-		3C	FIX
73189	FREIGHT	115.0	701	171	1	0.017	244	1272-1721DCT	-	-		4C	FIX
73671	NO.HAVEN	115.0	701	185	1	-	-		0.003	383	NOHAVN2TSTK	4C	FIX
73671	NO.HAVEN	115.0	701	185	1	-	-		0.000	383	NOHAVN2TSTK	3C	FIX
73199	SO.NAUG	115.0	701	171	1	0.005	244	1272-1721DCT	-	-		5C	FIX

List of Voltage Violations: 27.7 GW NE Load, Dispatches 2C, 3C, 4C and 5C

Lowest occurrence for bus shaded

H = High
L = Low
D = Drop
R = Rise

Sorted by bus name, then contingency voltage

Bus #	Bus Name	KV	Area	Zone	Contingency Volt	Base Volt	Low Limit	Upp Limit	Volt Drop	Volt Rise	Viol Type	Ncon	Contin. Description	Dispatch	Controls
73160	BALDWINB	115.0	701	171	0.8650	1.0071	0.9000	1.0500	-	-	L	244	1272-1721DCT	5C	FIX
73160	BALDWINB	115.0	701	171	0.8770	1.0082	0.9000	1.0500	-	-	L	244	1272-1721DCT	2C	FIX
73160	BALDWINB	115.0	701	171	0.8845	1.0068	0.9000	1.0500	-	-	L	244	1272-1721DCT	4C	FIX
73160	BALDWINB	115.0	701	171	0.8846	1.0094	0.9000	1.0500	-	-	L	244	1272-1721DCT	3C	FIX
73160	BALDWINB	115.0	701	171	0.8962	1.0071	0.9000	1.0500	-	-	L	336	BUNKERH2T	5C	FIX
73188	BCNFL PF	115.0	701	171	0.8945	0.9971	0.9000	1.0500	-	-	L	244	1272-1721DCT	5C	FIX
73153	BRANFORD	115.0	701	171	1.0525	1.0312	0.9000	1.0500	-	-	H	332	BRANFORD4T	3C	FIX
73153	BRANFORD	115.0	701	171	1.0536	1.0337	0.9000	1.0500	-	-	H	332	BRANFORD4T	4C	FIX
73185	BUNKER H	115.0	701	171	0.8653	1.0174	0.9000	1.0500	-	-	L	244	1272-1721DCT	5C	FIX
73185	BUNKER H	115.0	701	171	0.8773	1.0179	0.9000	1.0500	-	-	L	244	1272-1721DCT	2C	FIX
73185	BUNKER H	115.0	701	171	0.8846	1.0159	0.9000	1.0500	-	-	L	244	1272-1721DCT	4C	FIX
73185	BUNKER H	115.0	701	171	0.8848	1.0187	0.9000	1.0500	-	-	L	244	1272-1721DCT	3C	FIX
73185	BUNKER H	115.0	701	171	0.8982	1.0174	0.9000	1.0500	-	-	L	336	BUNKERH2T	5C	FIX
73682	ELMWST A	115.0	701	185	0.8960	1.0298	0.9000	1.0500	-	-	L	372	GRNDAV6TSTK	2C	FIX
73682	ELMWST A	115.0	701	185	0.8962	1.0278	0.9000	1.0500	-	-	L	373	GRNDAV7TSTK	5C	FIX
73682	ELMWST A	115.0	701	185	0.8975	1.0278	0.9000	1.0500	-	-	L	436	WRIVER1TSTK	5C	FIX
73683	ELMWST B	115.0	701	185	0.8936	1.0298	0.9000	1.0500	-	-	L	371	GRNDAV5TSTK	2C	FIX
73683	ELMWST B	115.0	701	185	0.8943	1.0278	0.9000	1.0500	-	-	L	370	GRNDAV4TSTK	5C	FIX
73683	ELMWST B	115.0	701	185	0.8956	1.0278	0.9000	1.0500	-	-	L	437	WRIVER2TSTK	5C	FIX
73683	ELMWST B	115.0	701	185	0.8992	1.0278	0.9000	1.0500	-	-	L	371	GRNDAV5TSTK	5C	FIX
73189	FREIGHT	115.0	701	171	0.8637	1.0192	0.9000	1.0500	-	-	L	244	1272-1721DCT	5C	FIX
73189	FREIGHT	115.0	701	171	0.8758	1.0195	0.9000	1.0500	-	-	L	244	1272-1721DCT	2C	FIX
73189	FREIGHT	115.0	701	171	0.8831	1.0176	0.9000	1.0500	-	-	L	244	1272-1721DCT	4C	FIX
73189	FREIGHT	115.0	701	171	0.8833	1.0204	0.9000	1.0500	-	-	L	244	1272-1721DCT	3C	FIX
73671	NO.HAVEN	115.0	701	185	1.0502	1.0412	0.9000	1.0500	-	-	H	383	NOHAVN2TSTK	3C	FIX
73671	NO.HAVEN	115.0	701	185	1.0532	1.0426	0.9000	1.0500	-	-	H	383	NOHAVN2TSTK	4C	FIX
73199	SO.NAUG	115.0	701	171	0.8951	1.0075	0.9000	1.0500	-	-	L	244	1272-1721DCT	5C	FIX