Attachment 4

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

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 Off-Line,
NE-NY 0 MW

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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%.

Power flow analysis was conducted for a 27.7 GW New England load level for four southwest Connecticut generation dispatches with the 447 MW New Haven Harbor Station (NHHS) off-line. (An earlier report, Reference 1, summarizes analysis of this option for several generation dispatches with NHHS on). The NHHS generation is made up by the Kleen Energy generation project, which is expected to be connected to the Scovill Rock to Manchester 345 kV line very near the Scovill Rock Substation. Loading and voltage performance of the Connecticut system was monitored for the 115 kV and 345 kV transmission systems.

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

[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.

post-contingency overloads. The East Shore to Scovill Rock 345 kV line was also overloaded in the base case (all lines in) for one generation dispatch, and very nearly overloaded for another generation dispatch. Three of the overloaded 115 kV lines were also overloaded in the base case for some generation dispatches.

Voltage analysis indicated violations of voltage criteria for nine 115 kV substations. In addition, one contingency, a stuck breaker at Scovill Rock, caused widespread voltage violations at several 345 kV and 115 kV substations. A companion study (Reference 1) does not indicate these voltage violations when the New Haven Harbor station is on-line.

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%.

Power flow analysis was conducted for a 27.7 GW New England load level for four southwest Connecticut generation dispatches with the 447 MW New Haven Harbor Station (NHHS) off-line. (An earlier report, Reference 1, summarizes analysis of this option for several generation dispatches with NHHS on). The NHHS generation is made up by the Kleen Energy generation project, which is expected to be connected to the Scovill Rock to Manchester 345 kV line very near the Scovill Rock substation. Loading and voltage performance of the Connecticut system was monitored for the 115 kV and 345 kV transmission systems. References 1 thru 3 are companion reports for other system conditions studied.

The objective of this study is to analyze and document the performance of this transmission configuration for steady-state base case and post-contingency

[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.

transmission power flows and voltages. In all cases, the New Haven Harbor station (447 MW), which has a significant impact on the flows on the 387 line, was out of service.

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**
Appendix C	**Contingency File**
Appendix D	**Generation Dispatches**
Appendix E	**Summary of Overloads**
Appendix F	**Summary of Voltage Violations**

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 6C, 7C, 8C, and 9C. These dispatches were preserved for the base cases. Appendix D contains a list of the on-line generation for dispatch 6C, and the differences in dispatches 7C, 8C, and 9C as compared for dispatch 6C. 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 line 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.

- 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.

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 shown in Table 1, there are three 345 kV transmission lines that experience post-contingency overloads. The East Shore to Scovill Rock 345 kV line (387 line), which experiences post-contingency overloads for dispatches 6C and 9C, is also overloaded in the base case for one generation dispatch, and is almost overloaded for a second dispatch, as shown in the table below. More detail is given in Appendix E.

Generation Dispatch ID	387 Line Base Case Loading (% of normal rating)
6C	101%
7C	76%
8C	62%
9C	99%

A 345/115 kV autotransformer at Southington has post-contingency overloads ranging from 10% to 25%. The contingency causing the overload is a stuck breaker contingency at Southington (contingency SGTN5TSTK).

Finally, there are twenty-five 115 kV line post-contingency overloads that vary widely from slight overloads to severe overloads. Some overloads are sensitive to generation dispatch, while others are not. Three 115 kV branches are overloaded in the base case, as indicated by the shaded branch names. The base case overloads range from a few percent to about 25%. More detail is given in Appendix E.

Table 1

Highest Overload: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

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

	Generation Dispatch ID			
From bus To bus CKT	6C	7C	8C	9C
73104 FRSTBDGE 345 73106 SOUTHGTN 345 1	4.2			6.1
73106 SOUTHGTN 345 73122 MERID362 345 1	4.7			5.5
73106 SOUTHGTN 345 73154 SGTN B 115 2	22.9	14.4	10.5	24.8
73107 SCOVL RK 345 73663 E.SHORE 345 1	6.9			6.2
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
73164 BALDWNJA 115 73202 FROST BR 115 1	6.4			2.2
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				2.8
73168 GLNBROOK 115 73237 ELYAVE 115 1			51.1	54.3
73168 GLNBROOK 115 73271 RYTN J B 115 1	21.0	17.4	39.5	48.2
73169 RYTN J A 115 73171 NWLK HAR 115 1			43.4	43.8
73169 RYTN J A 115 73172 NORWALK 115 1	85.0	79.1		
73170 PLUMTREE 115 73176 TRIANGLE 115 1	88.4	76.5	73.7	85.2
73170 PLUMTREE 115 73176 TRIANGLE 115 2	35.2	35.2	34.9	35.0
73170 PLUMTREE 115 73268 MIDDLRIV 115 1	187.7	184.1	183.2	187.2
73171 NWLK HAR 115 73237 ELYAVE 115 1			50.7	59.6
73171 NWLK HAR 115 73271 RYTN J B 115 1			4.3	4.5
73172 NORWALK 115 73207 FLAX HIL 115 1	99.4	93.5		
73183 SHAWSHIL 115 73185 BUNKER H 115 1	10.2			10.3
73188 BCNFL PF 115 73192 DRBY J B 115 1	31.2	28.0	26.9	33.4
73196 GLEN JCT 115 73198 SOUTHGTN 115 1	20.9			19.9
73198 SOUTHGTN 115 73631 WLNGF PF 115 1	4.5			1.2
73207 FLAX HIL 115 73271 RYTN J B 115 1	82.1	76.1		
73228 BALDWNJB 115 73185 BUNKER H 115 1	1.4			
73230 HADDAM 115 73231 BOKUM 115 1	21.5			21.4
73230 HADDAM 115 73231 BOKUM 115 2	5.6			5.5
73268 MIDDLRIV 115 73176 TRIANGLE 115 1	126.3	123.0	122.3	125.9
73701 CRRA JCT 115 73703 ASHCREEK 115 1	0.1	0.6		

Indicates branch overloaded in base case

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.)

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*.

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

- There are no voltage violations for 345 kV buses reported (except for one contingency not shown in the table and discussed in more detail following Table 2).
- Nine 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 9C.

Table 2

Worst Low & Total Voltage Violations

27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

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

Sorted by bus, then low 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	0.043	248	1272-1721DCT	9C	FIX
73160	BALDWINB	115.0	701	171	2	0.029	248	1272-1721DCT	6C	FIX
73160	BALDWINB	115.0	701	171	1	0.016	248	1272-1721DCT	7C	FIX
73160	BALDWINB	115.0	701	171	1	0.016	248	1272-1721DCT	8C	FIX
73188	BCNFL PF	115.0	701	171	1	0.013	248	1272-1721DCT	9C	FIX
73231	BOKUM	115.0	701	171	3	0.002	247	1261-1620DCT	9C	FIX
73185	BUNKER H	115.0	701	171	2	0.043	248	1272-1721DCT	9C	FIX
73185	BUNKER H	115.0	701	171	1	0.028	248	1272-1721DCT	6C	FIX
73185	BUNKER H	115.0	701	171	1	0.016	248	1272-1721DCT	7C	FIX
73185	BUNKER H	115.0	701	171	1	0.016	248	1272-1721DCT	8C	FIX
73697	CONGRESS	115.0	701	185	1	0.021	401	PEQUON42TSTK	9C	FIX
73682	ELMWST A	115.0	701	185	3	0.029	377	GRNDAV7TSTK	9C	FIX
73682	ELMWST A	115.0	701	185	4	0.023	377	GRNDAV7TSTK	6C	FIX
73683	ELMWST B	115.0	701	185	3	0.031	374	GRNDAV4TSTK	9C	FIX
73683	ELMWST B	115.0	701	185	4	0.025	374	GRNDAV4TSTK	6C	FIX
73683	ELMWST B	115.0	701	185	2	0.001	441	WRIVER2TSTK	7C	FIX
73189	FREIGHT	115.0	701	171	1	0.044	248	1272-1721DCT	9C	FIX
73189	FREIGHT	115.0	701	171	1	0.030	248	1272-1721DCT	6C	FIX
73189	FREIGHT	115.0	701	171	1	0.017	248	1272-1721DCT	7C	FIX
73189	FREIGHT	115.0	701	171	1	0.017	248	1272-1721DCT	8C	FIX
73199	SO.NAUG	115.0	701	171	1	0.012	248	1272-1721DCT	9C	FIX

Note: Does not include low voltages for contingency SCOVRK8TSTK

As the note at the bottom of Table 2 indicates, low voltages for contingency SCOVRK8TSTK are not included in this table (though they are shown in Appendix F). This contingency, which trips Scovill Rock to Haddam Neck 345 kV and Scovill Rock to East Shore 345 kV, including the Cross-Sound Cable, did not converge to normal tolerance for dispatch 6C using the normal solution options.

Additional analysis using other solution options, and the non-divergent load flow, was used to obtain a convergent case. The post-contingency voltages are shown in Table 2A.

TABLE 2A

Post-Contingency Voltage for Contingency SCOVRK8TSTK, Dispatch 6C

Loss of Scovill-Haddam 345, Scovill-EastShore 345, and Cross Sound Cable

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Dispatch
73297	DEVON	345.0	701	171	0.9394	1.0130	0.9500	6C
73663	E.SHORE	345.0	701	185	0.9317	1.0097	0.9500	6C
73104	FRSTBDGE	345.0	701	171	0.9498	1.0208	0.9500	6C
73105	LONG MTN	345.0	701	171	0.9461	1.0072	0.9500	6C
73293	NORWALK	345.0	701	171	0.9399	1.0092	0.9500	6C
73371	ORANGE	345.0	701	185	0.9327	1.0098	0.9500	6C
73115	PLUMTREE	345.0	701	171	0.9349	1.0032	0.9500	6C
73301	SINGER	345.0	701	186	0.9402	1.0122	0.9500	6C
73196	GLEN JCT	115.0	701	171	0.8928	1.0114	0.9000	6C
73265	GREEN HL	115.0	701	171	0.8833	0.9941	0.9000	6C
73707	JUNE ST	115.0	701	185	0.8982	1.0123	0.9000	6C
73675	MIX AVE	115.0	701	185	0.8887	1.0114	0.9000	6C
73673	SACKPHS	115.0	701	185	0.8906	1.0131	0.9000	6C

As shown in the table, this contingency results in widespread low voltages in the SWCT 345 kV system, as well as several low voltages in the 115 kV system. This contingency is unusually severe with respect to voltage impact, as it was the only one tested that resulted in 345 kV voltage violations, and they are spread out over relatively large geographic area, affecting 345 kV buses as distant from each other as Long Mountain and East Shore.

4.3. Comparison of Results with New Haven Harbor Station On-Line

4.3.1. Loading Violations

Table 3 compares the worst overloads for the four SWCT generation dispatches with New Haven Harbor on-line and off-line (displaced by Kleen Energy).

Table 3

Highest Overload: 27.7 GW NE Load, Dispatches 2C - 9C

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

			Generation Dispatch ID							
			New Haven Harbor On				New Haven Harbor Off			
From bus	To bus	CKT	2C	3C	4C	5C	6C	7C	8C	9C
73104 FRSTBDGE 345	73106 SOUTHGTN 345	1					4.2			6.1
73106 SOUTHGTN 345	73122 MERID362 345	1					4.7			5.5
73106 SOUTHGTN 345	73154 SGTN B 115	2	17.8	9.6	5.7	19.4	22.9	14.4	10.5	24.8
73107 SCOVL RK 345	73663 E.SHORE 345	1					6.9			6.2
73162 WATERSDE 115	73163 COS COB 115	1	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8
73162 WATERSDE 115	73168 GLNBROOK 115	1	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
73164 BALDWNJA 115	73202 FROST BR 115	1					6.4			2.2
73167 SO.END 115	73294 GLNBRK J 115	1	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2
73168 GLNBROOK 115	73169 RYTN J A 115	1				1.6				2.8
73168 GLNBROOK 115	73237 ELYAVE 115	1			50.8	53.5			51.1	54.3
73168 GLNBROOK 115	73271 RYTN J B 115	1	19.2	15.8	38.1	46.5	21.0	17.4	39.5	48.2
73169 RYTN J A 115	73171 NWLK HAR 115	1			43.8	43.1			43.4	43.8
73169 RYTN J A 115	73172 NORWALK 115	1	81.8	75.8			85.0	79.1		
73170 PLUMTREE 115	73176 TRIANGLE 115	1	77.2	74.9	72.8	75.3	88.4	76.5	73.7	85.2
73170 PLUMTREE 115	73176 TRIANGLE 115	2	35.1	34.9	34.7	34.8	35.2	35.2	34.9	35.0
73170 PLUMTREE 115	73268 MIDDLRIV 115	1	184.2	183.5	183.0	183.5	187.7	184.1	183.2	187.2
73171 NWLK HAR 115	73237 ELYAVE 115	1			49.6	57.4			50.7	59.6
73171 NWLK HAR 115	73271 RYTN J B 115	1			4.3	4.3			4.3	4.5
73172 NORWALK 115	73207 FLAX HIL 115	1	96.2	90.3			99.4	93.5		
73183 SHAWSHIL 115	73185 BUNKER H 115	1	2.9			3.1	10.2			10.3
73188 BCNFL PF 115	73192 DRBY J B 115	1	29.8	27.5	26.5	32.0	31.2	28.0	26.9	33.4
73196 GLEN JCT 115	73198 SOUTHGTN 115	1					20.9			19.9
73198 SOUTHGTN 115	73631 WLNGF PF 115	1					4.5			1.2
73207 FLAX HIL 115	73271 RYTN J B 115	1	78.8	72.8			82.1	76.1		
73224 TRMB J A 115	73700 PEQUONIC 115	1			2.3					
73228 BALDWNJB 115	73185 BUNKER H 115	1					1.4			
73230 HADDAM 115	73231 BOKUM 115	1	7.7			7.6	21.5			21.4
73230 HADDAM 115	73231 BOKUM 115	2					5.6			5.5
73268 MIDDLRIV 115	73176 TRIANGLE 115	1	123.1	122.6	122.1	122.6	126.3	123.0	122.3	125.9
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			0.1	0.6		

The main points regarding a comparison of the effect of the dispatch of New Haven Harbor are:

- Three additional overloads of 345 kV transmission occur for the SWCT dispatches 6C and 9C that are not overloaded in the cases with New Haven Harbor on-line. The new overloads are Frost Bridge to Southington 345 kV line, Southington to Meriden 345 kV line, and East Shore to Scovill 345 kV line, which as noted in Section 4.1, is slightly overloaded for dispatch 6C (101%) and is almost overloaded for dispatch 9C (99%). Though not indicated in the table, these

overloads occur following loss of the East Shore to Scovill Rock 345 kV line (see Appendix E).

- Five additional overloads of 115kV transmission occur for the SWCT generation dispatches 6C or 9C that do not occur in the cases with New Haven Harbor on-line.

- Some overloads are essentially unaffected by generation at New Haven Harbor, while for others the overloads are greater.

4.3.2. Voltage Violations

A primary effect of the generation at New Haven Harbor Station being off-line was to cause widespread voltage violations in the study area for the SCOVRK8TSTK contingency for the 6C generation dispatch. This contingency, which trips the Scovill Rock - Haddam 345 kV, and Scovill Rock – East Shore 345 kV, including the Cross Sound Cable, did not cause voltage violations when New Haven Harbor Station was on-line. As discussed in Section 4.2, there are fairly widespread voltage violations in the study area for this contingency and dispatch condition. This could be an indication of voltage instability for this contingency, dispatch, and loading condition.

In addition, having the 447 MW New Haven Harbor Station generation off-line generally worsened voltage violations that also occurred when it was on-line.

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. 387 Line Re-conductored, New Haven Harbor Station On-Line, NY-NE 0 MW, PowerGEM Report 10021.001-3 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, New Haven Harbor Station On-Line, NE-NY 0 MW, PowerGEM Report 10021.001-1 Revised, dated January 28, 2004.

Appendix A

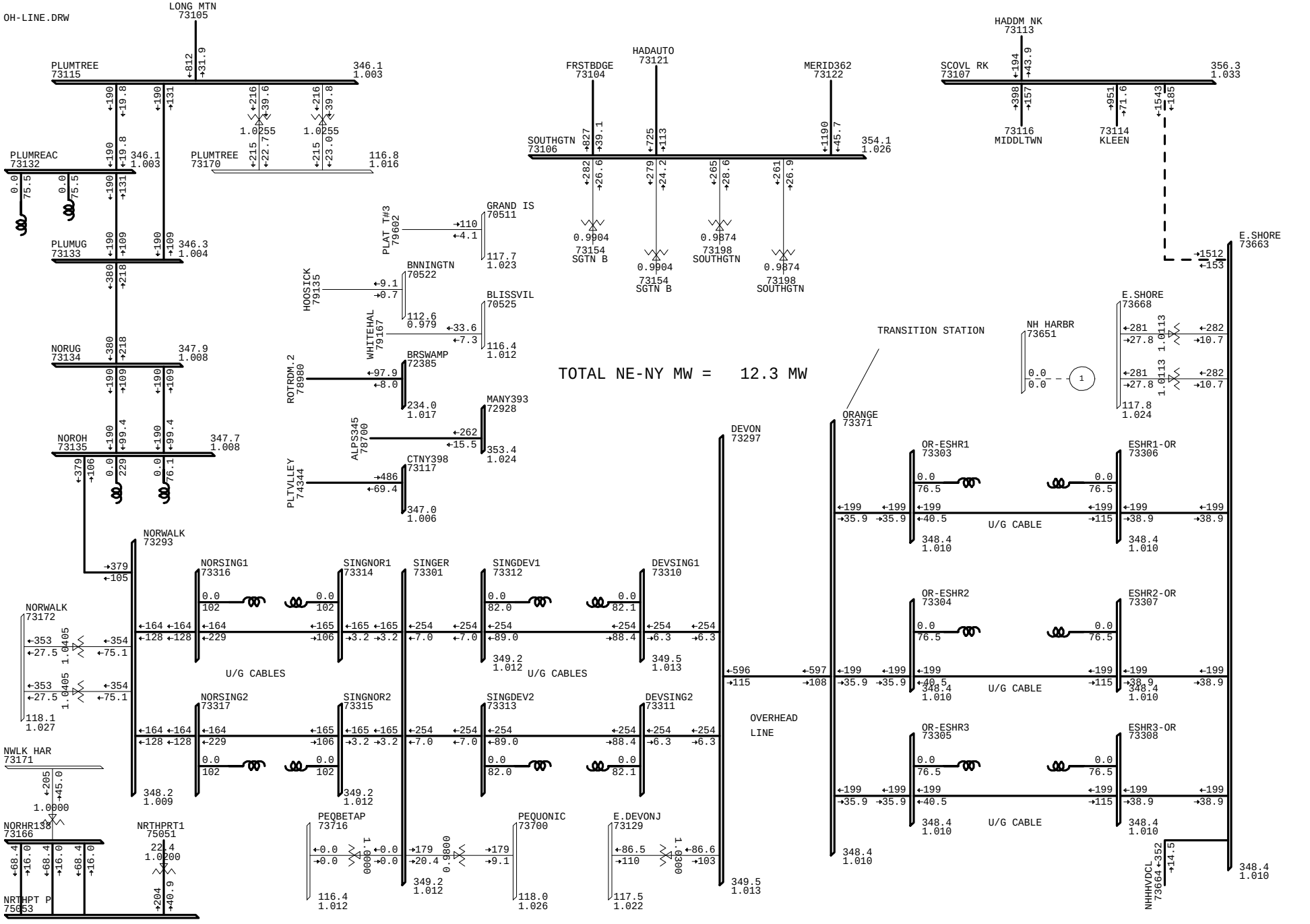
East Shore 27-OH/G
Transmission Modeling Data

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

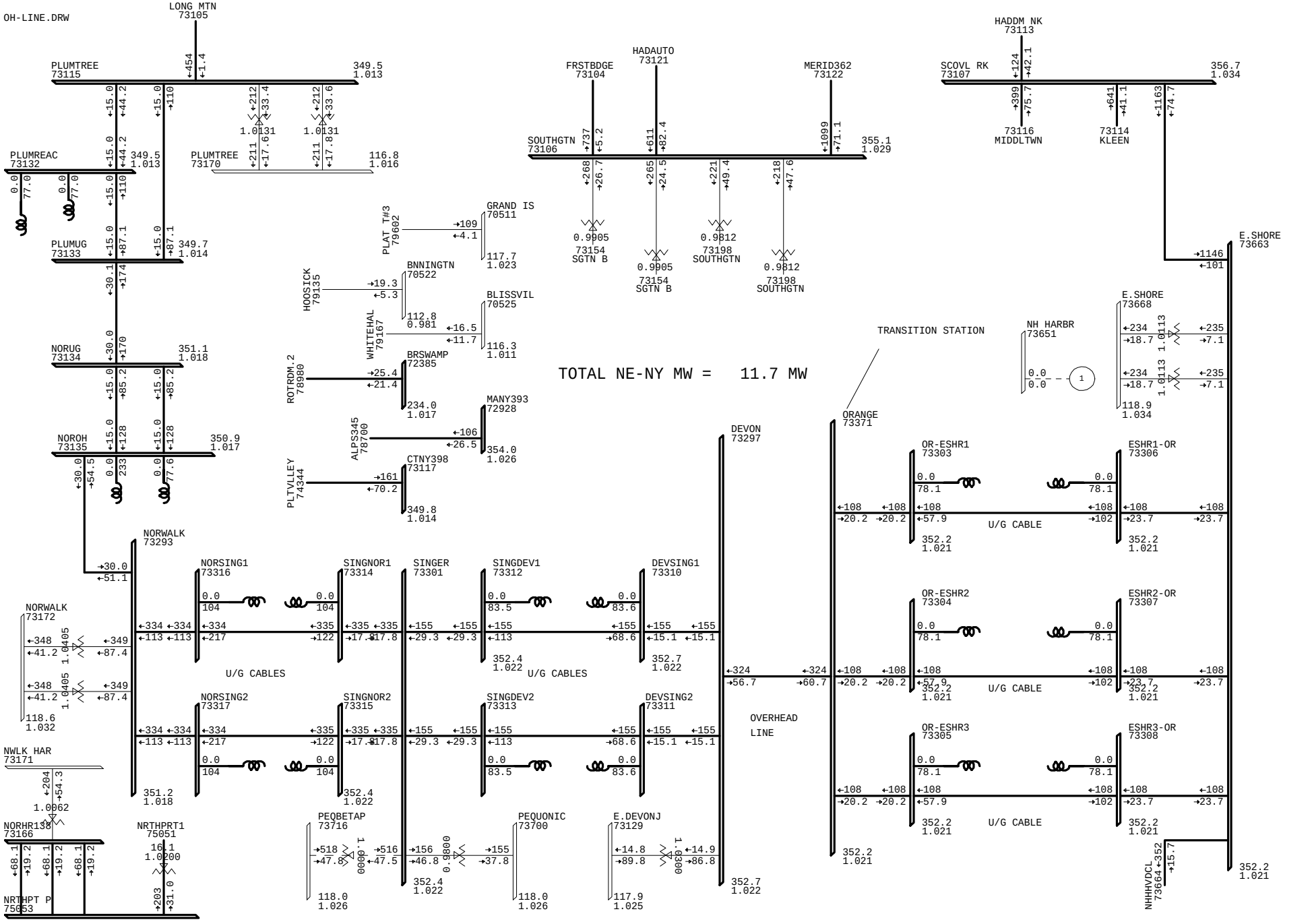
Appendix B

Power Flow Base Case
One-Line Diagrams

Base Cases 6C, 7C, 8C, and 9C



POWER TECHNOLOGIES INC.	EN277-6C, 27.7 GW,DISP 6,E.SHR-NRWK UG+OH,NHHS OFF,RECON 387 PH1-XP, PH2 HPFF DEV-SING-NOR & ORG-ESHR, OH 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

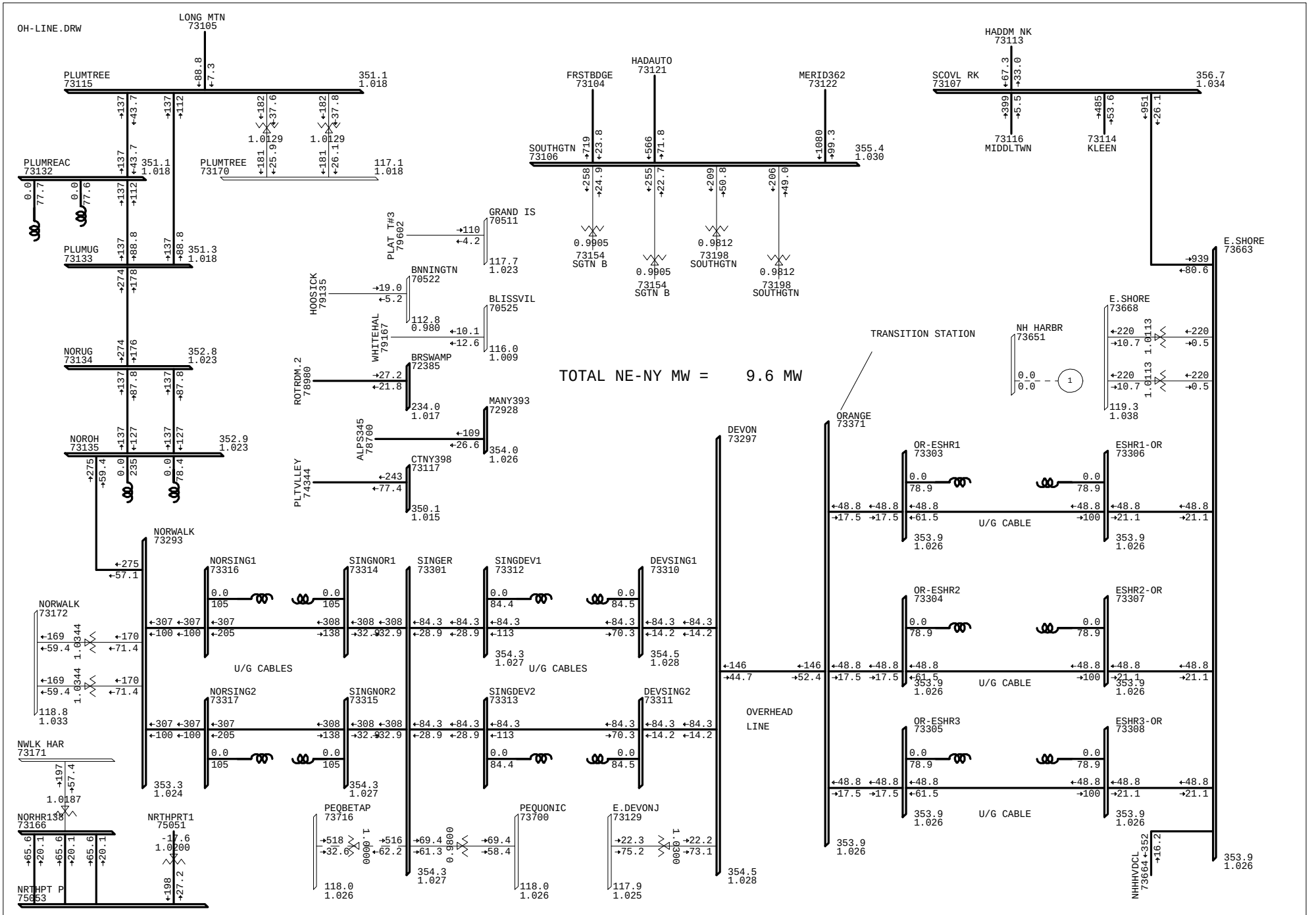


POWER TECHNOLOGIES INC.©

EN277-7C, 27.7 GW,DISP 6,E.SHR-NRWK UG+OH,NHHS OFF,RECON 387
PH1-XP, PH2 HPFF DEV-SING-NOR & ORG-ESHR, OH 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

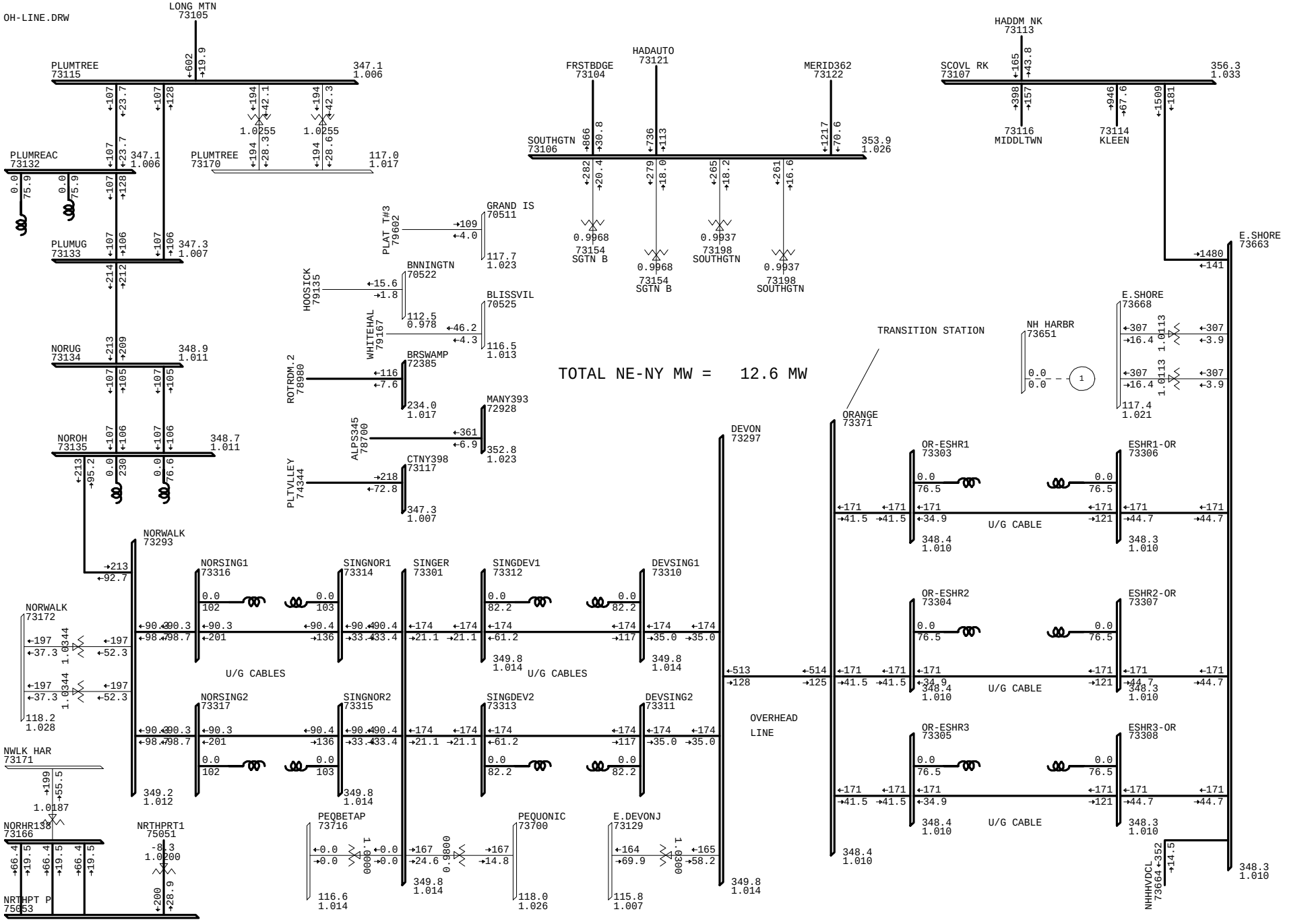


POWER TECHNOLOGIES INC.©

EN277-8C, 27.7 GW,DISP 6,E.SHR-NRWK UG+OH,NHHS OFF,RECON 387
PH1-XP, PH2 HPFF DEV-SING-NOR & ORG-ESHR, OH ORANG-E.DEV
BASE CASE FRI, JAN 16 2004 13:28

100% RATEA
0.950 UV 1.050 OV
KV: ≤115

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


OH-LINE.DRW
LONG MTN 73105
PLUMTREE 73115
347.1 1.006
PLUMREAC 73132
PLUMTREE 73170
117.0 1.017
PLUMUG 73133
347.3 1.007
NORUG 73134
348.9 1.011
NOROH 73135
348.7 1.011
FRSTBDGE 73104
HADAUTO 73121
MERID362 73122
SOUTHGTN 73106
353.9 1.026
HADDM NK 73113
SCOVL RK 73107
356.3 1.033
73116 MIDDLTWN
73114 KLEEN
PLAT T#3 79602
GRAND IS 70511
117.7 1.023
HOOSICK 79135
BNNINGTN 70522
WHITEHAL 79167
BLISSVIL 70525
116.5 1.013
ROTRDM 2 78980
BRSWAMP 72385
234.0 1.017
ALPS345 78700
MANY393 72928
352.8 1.023
PLTVLLEY 74344
CTNY398 73117
347.3 1.007
0.9968 73154 SGTN B
0.9968 73154 SGTN B
0.9937 73198 SOUTHGTN
0.9937 73198 SOUTHGTN
TOTAL NE-NY MW = 12.6 MW
TRANSITION STATION
NH HARBR 73651
E.SHORE 73668
117.4 1.021
E.SHORE 73663
348.3 1.010
ORANGE 73371
348.4 1.010
DEVON 73297
349.8 1.014
OVERHEAD LINE
NORWALK 73293
349.2 1.012
NORWALK 73172
118.2 1.028
NWLK HAR 73171
NORHR138 73166
NRTHPRT1 75051
NRTHPT P 75053
NORSING1 73316
SINGNOR1 73314
SINGER 73301
SINGDEV1 73312
DEVSING1 73310
NORSING2 73317
SINGNOR2 73315
SINGDEV2 73313
DEVSING2 73311
U/G CABLES
U/G CABLES
PEQBETAP 73716
PEQUONIC 73700
E.DEVONJ 73129
116.6 1.014
118.0 1.026
115.8 1.007
OR-ESHR1 73303
ESHR1-OR 73306
OR-ESHR2 73304
ESHR2-OR 73307
OR-ESHR3 73305
ESHR3-OR 73308
U/G CABLE
U/G CABLE
U/G CABLE
NHHHVDCL 73664
POWER TECHNOLOGIES INC.©
EN277-9C, 27.7 GW,DISP 6,E.SHR-NRWK UG+OH,NHHS OFF,RECON 387
PH1-XP, PH2 HPFF DEV-SING-NOR & ORG-ESHR, OH ORANG-E.DEV
BASE CASE FRI, JAN 16 2004 13:28
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 * modified for Kleen Energy
/OPEN LINE FROM BUS 73112 TO BUS 73114 CKT 1
/OPEN LINE FROM BUS 73114 TO BUS 73107 CKT 1
/END

CONTINGENCY 353NLINE / * added for Kleen Energy
OPEN LINE FROM BUS 73112 TO BUS 73114 CKT 1
END

CONTINGENCY 353SLINE / * added for Kleen Energy
OPEN LINE FROM BUS 73107 TO BUS 73114 CKT 1
END

CONTINGENCY KLEENSTK1 / * added for Kleen Energy
OPEN LINE FROM BUS 73112 TO BUS 73114 CKT 1
REMOVE MACHINE 1 FROM BUS 73597
```

```
END

CONTINGENCY KLEENSTK2 / * added for Kleen Energy
OPEN LINE FROM BUS 73107 TO BUS 73114 CKT 1
REMOVE MACHINE 1 FROM BUS 73598
END

CONTINGENCY KLEENSTK3 / * added for Kleen Energy
OPEN LINE FROM BUS 73107 TO BUS 73114 CKT 1
REMOVE MACHINE 1 FROM BUS 73599
END

/CONTINGENCY 353+AUTO * modified for Kleen Energy
/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 353N+AUTO / * added for Kleen Energy
OPEN LINE FROM BUS 73112 TO BUS 73114 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 * modified for Kleen Energy
/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 1759-353NDCT / * added for Kleen Energy
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 73112 TO BUS 73242 CKT 1
END

/CONTINGENCY 1767-353DCT * modified for Kleen Energy
/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 1767-353NDCT / * added for Kleen Energy
OPEN LINE FROM BUS 73242 TO BUS 73259 CKT 1
OPEN LINE FROM BUS 73112 TO BUS 73114 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
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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 * modified for Kleen Energy
/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 SCOVRK4TSTK / * added for Kleen Energy
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 * removed for Kleen Energy
/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 SCOVRK7TSTK / * modified for Kleen Energy
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 6, all on-line generation in New England is shown. For dispatches 7, 8, and 9, only differences with dispatch 6 are shown.

New England Generation for Dispatch 6C												
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	1.0114	
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	8	37	-26.5	1.04	1.04	
70370	AEI GEN	13.8	1	0	-2	36	3	3	3	1.03	1.0242	
73538	AESTH PF	20	1	0	2	180	33.8	80	0	1.035	1.035	73109
72962	AGAWM PF	115	1	0	-2	1.6	0	0	0	1	1.0214	
73072	ALT12 PF	13.8	2	0	2	65	19.3	26	0	1.035	1.035	72983
73073	ALT34 PF	13.8	2	0	2	80.5	19.3	33	0	1.035	1.035	72983
71095	ANPBLCK1	21	1	0	2	290	117.7	150	-100	1.038	1.038	70785
71096	ANPBLCK2	21	1	0	2	290	117.7	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	1.026	
73351	BATES DA	0.48	1	0	2	0	-2.8	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	1.014	
70413	BC U.H.1	11.5	1	0	-2	6	0	0	0	1	1.0164	
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	0.9973	
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	0.9964	71832
71855	BELWS G2	6.9	1	0	-2	10.6	5.8	5.8	-5.8	1	0.9964	71832
71856	BELWS G3	6.9	1	0	-2	10.6	5.8	5.8	-5.8	1	0.9964	71832
72986	BERKPWR	13.8	1	0	2	305	42.4	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	78.4	120	-37	1.0261	1.0261	72252
72375	BP #2 GN	18	2	0	2	241	78.4	117	-32	1.0261	1.0261	72252
72370	BP #3 GN	20	1	0	2	605	53.9	265	-225	1.0377	1.0377	71801
73648	BPTHBR#3	22	1	0	2	375	73.7	260	-160	1.026	1.026	73700
70577	BRDFRD T	46	1	0	-2	0.4	0	0.1	0	0.9567	1.0163	
72830	BRDGA PF	34.5	1	0	-2	15	0	0	0	1.03	1.0221	

New England Generation for Dispatch 6C												
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	1.0071	
72512	BRSWP G1	13.8	1	0	2	294	49.1	145	-75	1.0174	1.0174	72385
72513	BRSWP G2	13.8	1	0	2	294	49.1	145	-75	1.0174	1.0174	72385
70389	BUCKS G4	18	1	0	2	191	72.5	120	-100	1.04	1.04	
73381	BULLS BR	27.6	1	0	-2	5	1	1	1	1	0.9998	
73078	CABOT A	6.9	1	0	-2	22.5	6	6	6	1	1.0335	
73079	CABOT B	6.9	1	0	-2	22.5	6	6	6	1	1.0335	
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	1.0138	
71251	CANAL G1	18	1	0	-2	566	239	239	0	1.04	1.0352	71193
71252	CANAL G2	18	1	0	-2	576	120	120	-50	1.04	1.0352	71193
73545	CAP D PF	13.8	2	0	-2	50	34	34	-8	1.009	1.0004	73279
70597	CAVDH 46	46	1	0	-2	0.4	0.2	0.2	-0.1	0.965	0.961	
70350	CHAMP EF	7.2	6	0	-2	-19.2	-6	-6	-6	1	0.9971	
70426	CHAMP G2	13.8	1	0	-2	15	6	6	6	1	0.9752	
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	0.8804	
73006	COBLEMTN	69	1	0	-2	17	4	4	4	1	1.0168	
72665	COLFAX	13.8	2	0	2	63.8	-8.4	30	-19	1.01	1.01	
71857	COMRF G1	13.8	1	0	2	37.4	-5.2	13.7	-10	1.0435	1.0435	71817
71858	COMRF G2	13.8	1	0	2	37.4	-5.2	13.7	-10	1.0435	1.0435	71817
71859	COMRF G3	13.8	1	0	2	29	-5.2	13.7	-10	1.0435	1.0435	71817
71860	COMRF G4	13.8	1	0	2	29	-5.2	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	1.0434	
73548	CRRA PF	11.5	1	0	-2	32	0	34	0	1	1.0435	
73650	CRRRA PF	13.8	1	0	-2	57	30	30	-36	1	0.9761	
73074	CUMBRLND	13.8	1	0	-2	3	1	1	1	1.043	1.047	
70692	DECKGEN	13.8	1	0	-2	20	2	2	0	1	0.9932	
73765	DERBY PH	13.8	1	0	-2	7	2	2	0	1.03	1.0296	
73553	DEVON#7	13.8	1	0	-2	106	47	47	-19	1.026	1.0249	73195
73554	DEVON#8	13.8	1	0	-2	106	47	47	-20	1.026	1.0249	73195
73539	DEXTR PF	13.8	2	0	2	38	6.9	33	-13	1	1	

New England Generation for Dispatch 6C												
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	2.5	3	-3	1	1	72435
72515	DRFLD 3G	2.4	3	0	2	1.6	1.5	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	1.013	
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	1.0195	
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	0.9856	
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	0.97	73336
72834	FKLIN PH	34.5	1	0	-2	0.7	0	0	0	1.03	1.0116	
73536	FORST PF	13.8	1	0	2	13	2.9	4	0	1.03	1.03	
72666	FRSQ SC1	11.5	1	0	2	42.6	-5	27	-5	0.9913	0.9913	
72667	FRSQ SC2	11.5	1	0	-2	42.6	-5	27	-5	0.9913	0.9914	
72668	FRSQ SC3	11.5	1	0	2	42.3	-3.4	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	0.9971	
73168	GLNBROOK	115	1	0	2	0	-41	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	1.0259	
70157	GUILF GN	115	1	0	-2	20.4	0	0	0	1	1.0189	
70118	GULF ISL	115	1	0	-2	21.4	0	0	0	1.03	1.0409	
70672	HARDWICK	34.5	1	0	-2	1.6	0	0	0	1	1.0034	
72518	HARR G1	6.9	1	0	2	14	4.4	6	0	1.0174	1.0174	72397
72510	HARR G2	6.9	1	0	2	14	4.4	6	0	1.0174	1.0174	72397
72511	HARR G3	6.9	1	0	2	14	4.4	6	0	1.0174	1.0174	72397

New England Generation for Dispatch 6C												
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	1.0164	
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	0.996	
70410	HYDRO KN	4.16	1	1	-2	5	0	0	0	1	1.0363	
72528	INDCK PF	13.8	1	0	-2	17.4	12.4	12.4	-12.4	1.02	1.0161	72398
70359	IP RILEY	2.4	1	0	-2	11	-0.8	-0.8	-0.8	1	1.023	
70420	J/MILL A	13.8	1	0	-2	30	20	20	20	1	1.0107	
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	1.004	
72812	JACKMAN	34.5	1	0	-2	2.5	0	0	0	1.029	1.0392	
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	0.9986	70470
73597	KLEENCT1	18	1	0	2	157.7	82.9	132.2	-87.4	1.036	1.036	73114
73598	KLEENCT2	18	1	0	2	157.7	82.9	132.2	-87.4	1.036	1.036	73114
73599	KLEENSTG	20	1	0	2	133	82.9	157.1	-157.1	1.036	1.036	73114
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	1.0182	
73565	LAKERD#1	21	1	0	2	280	51	174	-90	1.035	1.035	73119
73566	LAKERD#2	21	1	0	2	280	51	174	-90	1.035	1.035	73119
73567	LAKERD#3	21	1	0	2	280	51	174	-90	1.035	1.035	73119
70147	LAKEWOOD	115	1	0	-2	6.8	3.6	3.6	0	1.022	1.0101	
72664	LANDFILL	4.16	1	0	2	12	1.4	6	0	1.031	1.031	
72061	LAWHYD 4	23	1	0	-2	7.4	0	7	0	1	1.0135	
72059	LENERG1	13.8	1	0	-2	50	5.8	5.8	0	1.02	1.0195	71972
72060	LENERG2	13.8	1	0	-2	20	0	0	0	1.02	1.0195	71972
70104	LEW LWR	115	1	0	-2	13.8	-3	3	-3	1.025	1.0367	
73276	LISBN PF	115	1	0	-2	13.5	3	3	0	1	0.9861	
70129	LOUDEN	115	1	0	-2	6.9	0	0	0	1.025	1.0321	

New England Generation for Dispatch 6C												
Number	Name	BasVlt	Mc On	Mc Off	Typ	MW	MVAR	Qmax	Qmin	Vsched	Vactual	Remote Bus
70443	LOWFL PH	34.5	1	0	-2	0.9	0	0	0	1	1.0088	
70177	LWSTN GN	115	1	0	-2	1.7	0	0	0	1.025	1.0367	
72685	MADSN G1	13.2	1	0	-2	-6.1	3	3	3	1	1.0324	
72686	MADSN G2	13.2	1	0	-2	-6.4	3	3	3	1	1.0318	
72687	MADSN G3	13.2	1	0	-2	-3.3	1	1	1	1	1.0113	
72683	MADSN UP	13.8	1	0	-2	1.6	0.3	0.3	0.3	1	1.0065	
72661	MANCH09A	13.8	1	0	-2	119	35	35	-32	1.035	1.0298	72569
72662	MANCH10A	13.8	1	0	-2	119	35	35	-32	1.035	1.0298	72569
72663	MANCH11A	13.8	1	0	-2	119	35	35	-32	1.035	1.0298	72569
73069	MAPR1 PF	13.8	1	0	-2	56	47	47	-32	1.035	1.0307	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	0.994	
70179	MERC GN	115	1	0	-2	17.5	5	5	0	1.05	1.0432	
73588	MERIDEN1	21	1	0	2	195	62.1	130	-30	1.03	1.03	73122
73589	MERIDEN2	21	1	0	2	195	62.1	130	-30	1.03	1.03	73122
73590	MERIDEN3	21	1	0	2	196	62.1	130	-30	1.03	1.03	73122
72866	MERMK G1	14.4	1	0	2	112.5	25.3	53	-10	1.035	1.035	72734
72867	MERMK G2	24	1	0	2	320	72	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	0.9752	
73555	MIDDTN#2	13.8	1	0	2	117	38	54	-20	1.026	1.026	73241
73556	MIDDTN#3	22	1	0	2	233	38	87	-37	1.026	1.026	73241
73557	MIDDTN#4	22	1	0	-2	400	200	200	-90	1.034	1.0327	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	1.0228	73125
73562	MILL#2	24	1	0	2	860	124.7	420	0	1.035	1.035	73110
73563	MILL#3	24	1	0	2	1140	124.7	520	0	1.035	1.035	73110
72243	MILLENCT	16	1	0	2	273	44.3	125	-90	1.0174	1.0174	72117
72244	MILLENST	13.8	1	0	2	117	19.9	62	-44	1.0174	1.0174	72117
70616	MILTON	34.5	1	0	-2	10	0	0	0	1	0.9912	
72801	MINEF PH	34.5	1	0	-2	1	0	0	0	1.035	1.0261	
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	1.0431	

New England Generation for Dispatch 6C												
Number	Name	BasVlt	Mc On	Mc Off	Typ	MW	MVAR	Qmax	Qmin	Vsched	Vactual	Remote Bus
73558	MONTV#5	13.8	1	0	2	81	15	27	0	1.035	1.035	73109
73559	MONTV#6	22	1	0	2	402	76.5	200	-60	1.035	1.035	73109
71861	MOORE G1	13.8	1	0	2	40	-3	16	-10	1.0435	1.0435	71823
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	0.9987	72250
72374	MPLP 2PF	13.8	1	0	-2	44	27	27	-21	1.02	0.9987	72250
71067	MYS8 GTS	16	2	0	2	554	152.2	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	152.2	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	24.5	105	0	1.035	1.035	72692
70011	NEW_G2	18	1	0	2	169	24.5	105	0	1.035	1.035	72692
70012	NEW_G3	18	1	0	2	195	24.5	120	0	1.035	1.035	72692
73665	NHHHVDCL	192	1	0	-2	-351.5	72	72	-72	1.03	1.0098	73664
73083	NRTHFD12	13.8	2	0	2	540	152.8	160	-80	1.041	1.041	72926
73084	NRTHFD34	13.8	2	0	2	540	152.8	160	-80	1.041	1.041	72926
72868	NWNGT G1	24	1	0	2	422	24.5	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	1.0096	
71531	OSP1 PF	13.8	1	0	-2	77	0	37.6	0	1.0289	1.0325	71338
71532	OSP2 PF	13.8	1	0	-2	77	0	37.6	0	1.0289	1.0325	71338
71533	OSP3 PF	13.8	1	0	-2	107.5	0	51.8	0	1.0289	1.0325	71338
71534	OSP4 PF	13.8	1	0	-2	77	0	37.6	0	1.0289	1.0325	71338
70431	OTIS GEN	4.16	2	0	-2	8	1	1	1	1	1.0335	

New England Generation for Dispatch 6C												
Number	Name	BasVlt	Mc On	Mc Off	Typ	MW	MVAR	Qmax	Qmin	Vsched	Vactual	Remote Bus
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	205.9	340	-100	1.038	1.038	70783
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	1.0477	
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	0.9894	
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	1.0184	
73541	ROCK RIV	13.8	1	0	-2	25	0	10	0	0.974	1.0184	73190
70101	RUMFRDGN	115	1	0	-2	6	-0.5	0.5	-0.5	1	1.0186	
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	0.9835	
73352	SANDH DB	0.48	1	0	2	0	3	8	-8	1.043	1.043	73375
73353	SANDH DC	0.48	1	0	2	0	3	8	-8	1.043	1.043	73375
70162	SANFORD	115	1	0	-2	0.9	0.8	0.8	0	1.013	0.9908	
72869	SBRK G1	25	1	0	2	1150	270.9	550	-90	1.035	1.035	72694
72870	SCHILLER	13.8	1	0	-2	47.5	25	25	-2	1.035	1.0155	72745
72871	SCHILLER	13.8	1	0	-2	49.6	25	25	-2	1.035	1.0155	72745
72872	SCHILLER	13.8	1	0	-2	48	25	25	-2	1.035	1.0155	72745
73616	SCRRA PF	69	1	0	-2	13.2	0	4	0	1	1.0053	
70417	SDW #8GN	11	2	0	-2	7	0	0	0	1	0.9911	
70418	SDW #9GN	13.8	1	0	-2	45	10	10	10	1	1.0112	
70419	SDW#10GN	13.8	1	0	-2	14	4	4	4	1	1.0122	
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

New England Generation for Dispatch 6C												
Number	Name	BasVlt	Mc On	Mc Off	Typ	MW	MVAR	Qmax	Qmin	Vsched	Vactual	Remote Bus
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	1.0187	
72520	SHERMAN1	2.4	1	0	-2	5	-1	2	-1	1	1.0173	72401
71681	SHRWS DG	13.8	1	0	2	10	6.3	6.9	-6.9	1	1	
70564	SILVERLK	46	1	0	-2	1.5	0.8	0.8	0	1	0.9964	
70638	SJOHN 34	34.5	1	0	-2	1.1	0	0.1	0	1	1.0018	
73546	SMEAD PF	23	2	0	-2	13	0	4	0	1.03	1.0317	
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	1.0485	
72933	STNYBK 1	13.8	1	0	2	87	11.9	30	-8	1.043	1.043	
72930	STNYBK1A	13.8	1	0	2	65	10.8	30	-8	1.043	1.043	
72931	STNYBK1B	13.8	1	0	2	65	10.8	30	-8	1.043	1.043	
72932	STNYBK1C	13.8	1	0	2	65	10.8	30	-8	1.043	1.043	
72934	STNYBK2A	13.8	1	0	2	65	10.8	30	-8	1.043	1.043	
72935	STNYBK2B	13.8	1	0	2	65	10.8	30	-8	1.043	1.043	
72810	SUNCK PH	34.5	1	0	-2	1	0	0	0	1	1.0091	
70588	TAFTS 46	46	1	0	-2	0.2	0	0.2	0	0.973	0.9824	
72756	TAMW PF	115	1	0	-2	20	0	0	0	1.03	0.9958	
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	1.002	
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	2.5	3	0	1	1	
72822	TURKY PF	34.5	1	0	-2	2	0	0	0	1	1.0207	
70448	UPFLS PH	34.5	1	0	-2	0.7	0	0	0	1	1.0065	
70728	VERGE 34	34.5	1	0	-2	1	0	0.3	0	1	1.0166	
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

New England Generation for Dispatch 6C												
Number	Name	BasVlt	Mc On	Mc Off	Typ	MW	MVAR	Qmax	Qmin	Vsched	Vactual	Remote Bus
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	73.3	150	-100	1.043	1.043	70486
70160	W.BUXTON	115	1	0	-2	2.3	0	0	0	1.025	1.0253	
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	1.0361	
70423	WARRN G2	13.8	1	0	-2	45	11	11	11	1	1.0392	
71613	WATRS RV	13.8	1	0	-2	45.9	0	17	0	1	1.0024	
70386	WBK G1	18	1	0	2	184	28.9	46.6	-50	1.04	1.04	
70387	WBK G2	18	1	0	2	184	28.9	46.6	-50	1.04	1.04	
70388	WBK G3	18	1	0	2	195	31	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	5.7	14	-14	1.05	1.05	70128
70366	WF WY #2	13.8	1	0	2	57	5.7	14	-14	1.05	1.05	70128
70367	WF WY #3	14.4	1	0	2	125	11.3	55	-44	1.05	1.05	70128
70368	WF WY #4	22	1	0	2	139.7	23.8	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	0.9874	72098
72813	WHOPK PF	34.5	1	0	-2	9	0	0	0	1	1.0076	
71866	WILDER	13.8	3	0	-2	36	13	13	-13	1	0.9965	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	1.03	
70330	WINSLOW	34.5	1	3	-2	6.8	0	0	0	1.03	1.0339	
72873	WL JET	13.8	1	0	-2	18	0	0	0	1.025	1.0015	
73631	WLNGF PF	115	1	0	-2	6.4	0	3	0	1	1.0207	
73459	WNDSRLK	27.6	1	0	-2	8	2	2	2	1	1.0372	
72956	WOODLAND	115	1	0	-2	17	2	2	2	1	1.0169	
73080	WSPFLD 3	13.8	1	0	2	107	14.2	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 6C to Dispatch 7C										
			Dispatch 6C		Dispatch 7C		Change			
Number	Name	BasVlt	MW	MVAR	MW	MVAR	MW	%	MVAR	%
70010	NEW_G1	18	169	24.5	0	0	-169	100	-24.5	100
70011	NEW_G2	18	169	24.5	0	0	-169	100	-24.5	100
70012	NEW_G3	18	195	24.5	0	0	-195	100	-24.5	100
70368	WF WY #4	22	139.7	23.8	128.3	28.3	-11.4	8.2	4.5	19
71095	ANPBLCK1	21	290	117.7	0	0	-290	100	-117.7	100
72513	BRSWP G2	13.8	294	49.1	0	0	-294	100	-49.1	100
73575	MILFD#2	13.8	0	0	280	90.4	280	999.9	90.4	999.9
73594	WALL LV1	13.8	0	0	102	13.4	102	999.9	13.4	999.9
73595	WALL LV2	13.8	0	0	102	13.4	102	999.9	13.4	999.9
73596	WALL LV3	13.8	0	0	51	10.1	51	999.9	10.1	999.9
73652	BE 11	16	0	0	170	45.5	170	999.9	45.5	999.9
73653	BE 12	16	0	0	170	45.5	170	999.9	45.5	999.9
73654	BE 10 ST	16	0	0	180	45.5	180	999.9	45.5	999.9

NE Generation Changes from Dispatch 6C to Dispatch 8C										
			Dispatch 6C		Dispatch 8C		Change			
Number	Name	BasVlt	MW	MVAR	MW	MVAR	MW	%	MVAR	%
70010	NEW_G1	18	169	24.5	0	0	-169	100	-24.5	100
70011	NEW_G2	18	169	24.5	0	0	-169	100	-24.5	100
70012	NEW_G3	18	195	24.5	0	0	-195	100	-24.5	100
70368	WF WY #4	22	139.7	23.8	96.5	36.3	-43.2	30.9	12.5	52.7
71095	ANPBLCK1	21	290	117.7	0	0	-290	100	-117.7	100
72513	BRSWP G2	13.8	294	49.1	0	0	-294	100	-49.1	100
72867	MERMK G2	24	320	72	0	0	-320	100	-72	100
73551	NORHAR#1	18	0	0	161	-29	161	999.9	-29	999.9
73552	NORHAR#2	20	0	0	168	-29	168	999.9	-29	999.9
73575	MILFD#2	13.8	0	0	280	84.1	280	999.9	84.1	999.9
73594	WALL LV1	13.8	0	0	102	12.3	102	999.9	12.3	999.9
73595	WALL LV2	13.8	0	0	102	12.3	102	999.9	12.3	999.9
73596	WALL LV3	13.8	0	0	51	9.1	51	999.9	9.1	999.9
73652	BE 11	16	0	0	170	40.3	170	999.9	40.3	999.9
73653	BE 12	16	0	0	170	40.3	170	999.9	40.3	999.9
73654	BE 10 ST	16	0	0	180	40.3	180	999.9	40.3	999.9

NE Generation Changes from Dispatch 6C to Dispatch 9C										
			Dispatch 6C		Dispatch 9C		Change			
Number	Name	BasVlt	MW	MVAR	MW	MVAR	MW	%	MVAR	%
70368	WF WY #4	22	139.7	23.8	294.1	34.9	154.4	110.6	11.1	46.8
73551	NORHAR#1	18	0	0	161	-15.7	161	999.9	-15.7	999.9
73552	NORHAR#2	20	0	0	168	-15.7	168	999.9	-15.7	999.9
73553	DEVON#7	13.8	106	47	0	0	-106	100	-47	100
73554	DEVON#8	13.8	106	47	0	0	-106	100	-47	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 6C, 7C, 8C and 9C

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
73104 FRSTBDGE 345	73106 SOUTHGTN 345	1	LN	2	6.1	295	1460-387DCT	9C	FIX
73104 FRSTBDGE 345	73106 SOUTHGTN 345	1	LN	2	4.2	295	1460-387DCT	6C	FIX
73106 SOUTHGTN 345	73122 MERID362 345	1	LN	2	5.5	295	1460-387DCT	9C	FIX
73106 SOUTHGTN 345	73122 MERID362 345	1	LN	2	4.7	295	1460-387DCT	6C	FIX
73106 SOUTHGTN 345	73154 SGTN B 115	2	TR	1	24.8	464	SGTN5TSTK	9C	FIX
73106 SOUTHGTN 345	73154 SGTN B 115	2	TR	1	22.9	464	SGTN5TSTK	6C	FIX
73106 SOUTHGTN 345	73154 SGTN B 115	2	TR	1	14.4	464	SGTN5TSTK	7C	FIX
73106 SOUTHGTN 345	73154 SGTN B 115	2	TR	1	10.5	464	SGTN5TSTK	8C	FIX
73107 SCOVL RK 345	73663 E.SHORE 345	1	LN	3	6.9	463	SGTN4TSTK	6C	FIX
73107 SCOVL RK 345	73663 E.SHORE 345	1	LN	2	6.2	463	SGTN4TSTK	9C	FIX
73162 WATERSDE 115	73163 COS COB 115	1	LN	1	24.8	411	SOUTHEND6T	6C	FIX
73162 WATERSDE 115	73163 COS COB 115	1	LN	1	24.8	411	SOUTHEND6T	7C	FIX
73162 WATERSDE 115	73163 COS COB 115	1	LN	1	24.8	411	SOUTHEND6T	8C	FIX
73162 WATERSDE 115	73163 COS COB 115	1	LN	1	24.8	411	SOUTHEND6T	9C	FIX
73162 WATERSDE 115	73168 GLNBROOK 115	1	LN	1	2.5	411	SOUTHEND6T	6C	FIX
73162 WATERSDE 115	73168 GLNBROOK 115	1	LN	1	2.5	411	SOUTHEND6T	7C	FIX
73162 WATERSDE 115	73168 GLNBROOK 115	1	LN	1	2.5	411	SOUTHEND6T	8C	FIX
73162 WATERSDE 115	73168 GLNBROOK 115	1	LN	1	2.5	411	SOUTHEND6T	9C	FIX
73164 BALDWNJA 115	73202 FROST BR 115	1	LN	4	6.4	460	SCOVRK8TSTK	6C	FIX
73164 BALDWNJA 115	73202 FROST BR 115	1	LN	2	2.2	295	1460-387DCT	9C	FIX
73167 SO.END 115	73294 GLNBRK J 115	1	LN	1	23.2	257	1440-1450DCT	6C	FIX
73167 SO.END 115	73294 GLNBRK J 115	1	LN	1	23.2	257	1440-1450DCT	7C	FIX
73167 SO.END 115	73294 GLNBRK J 115	1	LN	1	23.2	257	1440-1450DCT	8C	FIX
73167 SO.END 115	73294 GLNBRK J 115	1	LN	1	23.2	257	1440-1450DCT	9C	FIX
73168 GLNBROOK 115	73169 RYTN J A 115	1	LN	1	2.8	289	1867-1890DCT	9C	FIX
73168 GLNBROOK 115	73237 ELYAVE 115	1	LN	2	54.3	288	1867-1880DCT	9C	FIX
73168 GLNBROOK 115	73237 ELYAVE 115	1	LN	3	51.1	288	1867-1880DCT	8C	FIX
73168 GLNBROOK 115	73271 RYTN J B 115	1	LN	1	48.2	291	1880-1890DCT	9C	FIX

Total No. of Overloads and Highest Overload: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

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
73168 GLNBROOK 115	73271 RYTN J B 115	1	LN	1	39.5	291	1880-1890DCT	8C	FIX
73168 GLNBROOK 115	73271 RYTN J B 115	1	LN	3	21.0	291	1880-1890DCT	6C	FIX
73168 GLNBROOK 115	73271 RYTN J B 115	1	LN	3	17.4	291	1880-1890DCT	7C	FIX
73169 RYTN J A 115	73171 NWLK HAR 115	1	LN	1	43.8	289	1867-1890DCT	9C	FIX
73169 RYTN J A 115	73171 NWLK HAR 115	1	LN	1	43.4	289	1867-1890DCT	8C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	39	85.0	254	1416-1867DCT	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	26	79.1	254	1416-1867DCT	7C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	3	88.4	429	TRIANGLE3T	6C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	3	85.2	429	TRIANGLE3T	9C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	3	76.5	429	TRIANGLE3T	7C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	3	73.7	429	TRIANGLE3T	8C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	2	LN	1	35.2	235	1060-1270DCT	6C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	2	LN	1	35.2	235	1060-1270DCT	7C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	2	LN	1	35.0	235	1060-1270DCT	9C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	2	LN	1	34.9	235	1060-1270DCT	8C	FIX
73170 PLUMTREE 115	73268 MIDDLRIV 115	1	LN	2	187.7	428	TRIANGLE2T	6C	FIX
73170 PLUMTREE 115	73268 MIDDLRIV 115	1	LN	2	187.2	428	TRIANGLE2T	9C	FIX
73170 PLUMTREE 115	73268 MIDDLRIV 115	1	LN	2	184.1	428	TRIANGLE2T	7C	FIX
73170 PLUMTREE 115	73268 MIDDLRIV 115	1	LN	2	183.2	428	TRIANGLE2T	8C	FIX
73171 NWLK HAR 115	73237 ELYAVE 115	1	LN	10	59.6	288	1867-1880DCT	9C	FIX
73171 NWLK HAR 115	73237 ELYAVE 115	1	LN	2	50.7	288	1867-1880DCT	8C	FIX
73171 NWLK HAR 115	73271 RYTN J B 115	1	LN	1	4.5	291	1880-1890DCT	9C	FIX
73171 NWLK HAR 115	73271 RYTN J B 115	1	LN	1	4.3	291	1880-1890DCT	8C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	410	99.4	255	1416-1880DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	127	93.5	255	1416-1880DCT	7C	FIX
73183 SHAWSHIL 115	73185 BUNKER H 115	1	LN	1	10.3	368	FROSTBR27T	9C	FIX
73183 SHAWSHIL 115	73185 BUNKER H 115	1	LN	1	10.2	368	FROSTBR27T	6C	FIX
73188 BCNFL PF 115	73192 DRBY J B 115	1	LN	2	33.4	248	1272-1721DCT	9C	FIX

Total No. of Overloads and Highest Overload: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

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
73188 BCNFL PF 115	73192 DRBY J B 115	1	LN	2	31.2	248	1272-1721DCT	6C	FIX
73188 BCNFL PF 115	73192 DRBY J B 115	1	LN	2	28.0	248	1272-1721DCT	7C	FIX
73188 BCNFL PF 115	73192 DRBY J B 115	1	LN	2	26.9	248	1272-1721DCT	8C	FIX
73196 GLEN JCT 115	73198 SOUTHGTN 115	1	LN	5	20.9	460	SCOVRK8TSTK	6C	FIX
73196 GLEN JCT 115	73198 SOUTHGTN 115	1	LN	5	19.9	295	1460-387DCT	9C	FIX
73198 SOUTHGTN 115	73631 WLNGF PF 115	1	LN	2	4.5	460	SCOVRK8TSTK	6C	FIX
73198 SOUTHGTN 115	73631 WLNGF PF 115	1	LN	2	1.2	224	387LINE	9C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	23	82.1	255	1416-1880DCT	6C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	21	76.1	255	1416-1880DCT	7C	FIX
73228 BALDWNJB 115	73185 BUNKER H 115	1	LN	1	1.4	460	SCOVRK8TSTK	6C	FIX
73230 HADDAM 115	73231 BOKUM 115	1	LN	3	21.5	82	1620SLINE	6C	FIX
73230 HADDAM 115	73231 BOKUM 115	1	LN	3	21.4	82	1620SLINE	9C	FIX
73230 HADDAM 115	73231 BOKUM 115	2	LN	1	5.6	33	1261LINE	6C	FIX
73230 HADDAM 115	73231 BOKUM 115	2	LN	1	5.5	33	1261LINE	9C	FIX
73268 MIDDLRIV 115	73176 TRIANGLE 115	1	LN	2	126.3	428	TRIANGLE2T	6C	FIX
73268 MIDDLRIV 115	73176 TRIANGLE 115	1	LN	2	125.9	428	TRIANGLE2T	9C	FIX
73268 MIDDLRIV 115	73176 TRIANGLE 115	1	LN	2	123.0	428	TRIANGLE2T	7C	FIX
73268 MIDDLRIV 115	73176 TRIANGLE 115	1	LN	2	122.3	428	TRIANGLE2T	8C	FIX
73701 CRRA JCT 115	73703 ASHCREEK 115	1	LN	1	0.6	252	1389-1880DCT	7C	FIX
73701 CRRA JCT 115	73703 ASHCREEK 115	1	LN	1	0.1	252	1389-1880DCT	6C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

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
73104 FRSTBDGE 345	73106 SOUTHGTN 345	1	LN	1534.2	845.5	1446.0	106.1	295	1460-387DCT	9C	FIX
73104 FRSTBDGE 345	73106 SOUTHGTN 345	1	LN	1510.7	845.5	1446.0	104.5	224	387LINE	9C	FIX
73104 FRSTBDGE 345	73106 SOUTHGTN 345	1	LN	1507.3	808.4	1446.0	104.2	295	1460-387DCT	6C	FIX
73104 FRSTBDGE 345	73106 SOUTHGTN 345	1	LN	1482.6	808.4	1446.0	102.5	224	387LINE	6C	FIX
73106 SOUTHGTN 345	73122 MERID362 345	1	LN	2017.8	1189.5	1912.0	105.5	295	1460-387DCT	9C	FIX
73106 SOUTHGTN 345	73122 MERID362 345	1	LN	2013.2	1189.5	1912.0	105.3	224	387LINE	9C	FIX
73106 SOUTHGTN 345	73122 MERID362 345	1	LN	2001.5	1160.9	1912.0	104.7	295	1460-387DCT	6C	FIX
73106 SOUTHGTN 345	73122 MERID362 345	1	LN	1996.9	1160.9	1912.0	104.4	224	387LINE	6C	FIX
73106 SOUTHGTN 345	73154 SGTN B 115	2	TR	730.3	284.8	585.0	124.8	464	SGTN5TSTK	9C	FIX
73106 SOUTHGTN 345	73154 SGTN B 115	2	TR	719.0	285.3	585.0	122.9	464	SGTN5TSTK	6C	FIX
73106 SOUTHGTN 345	73154 SGTN B 115	2	TR	669.3	271.3	585.0	114.4	464	SGTN5TSTK	7C	FIX
73106 SOUTHGTN 345	73154 SGTN B 115	2	TR	646.2	260.8	585.0	110.5	464	SGTN5TSTK	8C	FIX
73107 SCOVL RK 345	73663 E.SHORE 345	1	LN	2043.9	1503.7	1912.0	106.9	463	SGTN4TSTK	6C	FIX
73107 SCOVL RK 345	73663 E.SHORE 345	1	LN	2029.9	1471.3	1912.0	106.2	463	SGTN4TSTK	9C	FIX
73107 SCOVL RK 345	73663 E.SHORE 345	1	LN	1939.9	1503.7	1912.0	101.5	462	SGTN3TSTK	6C	FIX
73107 SCOVL RK 345	73663 E.SHORE 345	1	LN	1503.7	1503.7	1488.0	101.1		** Base Case *	6C	FIX
73107 SCOVL RK 345	73663 E.SHORE 345	1	LN	1933.3	1503.7	1912.0	101.1	195	318LINE	6C	FIX
73107 SCOVL RK 345	73663 E.SHORE 345	1	LN	1918.4	1471.3	1912.0	100.3	462	SGTN3TSTK	9C	FIX
73162 WATERSDE 115	73163 COS COB 115	1	LN	298.4	69.5	239.0	124.8	411	SOUTHEND6T	6C	FIX
73162 WATERSDE 115	73163 COS COB 115	1	LN	298.4	69.5	239.0	124.8	411	SOUTHEND6T	7C	FIX
73162 WATERSDE 115	73163 COS COB 115	1	LN	298.4	69.9	239.0	124.8	411	SOUTHEND6T	8C	FIX
73162 WATERSDE 115	73163 COS COB 115	1	LN	298.4	70.0	239.0	124.8	411	SOUTHEND6T	9C	FIX
73162 WATERSDE 115	73168 GLNBROOK 115	1	LN	360.7	132.4	352.0	102.5	411	SOUTHEND6T	6C	FIX
73162 WATERSDE 115	73168 GLNBROOK 115	1	LN	360.7	132.4	352.0	102.5	411	SOUTHEND6T	7C	FIX
73162 WATERSDE 115	73168 GLNBROOK 115	1	LN	360.7	132.9	352.0	102.5	411	SOUTHEND6T	8C	FIX
73162 WATERSDE 115	73168 GLNBROOK 115	1	LN	360.7	133.0	352.0	102.5	411	SOUTHEND6T	9C	FIX
73164 BALDWNJA 115	73202 FROST BR 115	1	LN	305.3	174.4	287.0	106.4	460	SCOVRK8TSTK	6C	FIX
73164 BALDWNJA 115	73202 FROST BR 115	1	LN	304.0	174.4	287.0	105.9	295	1460-387DCT	6C	FIX
73164 BALDWNJA 115	73202 FROST BR 115	1	LN	299.4	174.4	287.0	104.3	224	387LINE	6C	FIX
73164 BALDWNJA 115	73202 FROST BR 115	1	LN	297.8	174.4	287.0	103.8	297	1618-321DCT	6C	FIX
73164 BALDWNJA 115	73202 FROST BR 115	1	LN	293.3	167.1	287.0	102.2	295	1460-387DCT	9C	FIX
73164 BALDWNJA 115	73202 FROST BR 115	1	LN	289.1	167.1	287.0	100.7	224	387LINE	9C	FIX
73167 SO.END 115	73294 GLNBRK J 115	1	LN	356.0	112.6	289.0	123.2	257	1440-1450DCT	6C	FIX
73167 SO.END 115	73294 GLNBRK J 115	1	LN	356.0	112.9	289.0	123.2	257	1440-1450DCT	7C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

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
73167 SO.END 115	73294 GLNBRK J 115	1	LN	356.0	109.5	289.0	123.2	257	1440-1450DCT	8C	FIX
73167 SO.END 115	73294 GLNBRK J 115	1	LN	356.0	108.7	289.0	123.2	257	1440-1450DCT	9C	FIX
73168 GLNBROOK 115	73169 RYTN J A 115	1	LN	451.4	178.3	439.0	102.8	289	1867-1890DCT	9C	FIX
73168 GLNBROOK 115	73237 ELYAVE 115	1	LN	430.5	172.0	279.0	154.3	288	1867-1880DCT	9C	FIX
73168 GLNBROOK 115	73237 ELYAVE 115	1	LN	421.7	170.6	279.0	151.1	288	1867-1880DCT	8C	FIX
73168 GLNBROOK 115	73237 ELYAVE 115	1	LN	287.3	170.6	279.0	103.0	255	1416-1880DCT	8C	FIX
73168 GLNBROOK 115	73237 ELYAVE 115	1	LN	282.3	172.0	279.0	101.2	255	1416-1880DCT	9C	FIX
73168 GLNBROOK 115	73237 ELYAVE 115	1	LN	280.0	170.6	279.0	100.4	254	1416-1867DCT	8C	FIX
73168 GLNBROOK 115	73271 RYTN J B 115	1	LN	428.3	164.1	289.0	148.2	291	1880-1890DCT	9C	FIX
73168 GLNBROOK 115	73271 RYTN J B 115	1	LN	403.1	153.5	289.0	139.5	291	1880-1890DCT	8C	FIX
73168 GLNBROOK 115	73271 RYTN J B 115	1	LN	349.8	149.8	289.0	121.0	291	1880-1890DCT	6C	FIX
73168 GLNBROOK 115	73271 RYTN J B 115	1	LN	339.2	144.2	289.0	117.4	291	1880-1890DCT	7C	FIX
73168 GLNBROOK 115	73271 RYTN J B 115	1	LN	336.5	149.8	289.0	116.4	255	1416-1880DCT	6C	FIX
73168 GLNBROOK 115	73271 RYTN J B 115	1	LN	331.7	144.2	289.0	114.8	255	1416-1880DCT	7C	FIX
73168 GLNBROOK 115	73271 RYTN J B 115	1	LN	308.5	149.8	289.0	106.7	292	1880-1977DCT	6C	FIX
73168 GLNBROOK 115	73271 RYTN J B 115	1	LN	303.7	144.2	289.0	105.1	292	1880-1977DCT	7C	FIX
73169 RYTN J A 115	73171 NWLK HAR 115	1	LN	394.1	158.3	274.0	143.8	289	1867-1890DCT	9C	FIX
73169 RYTN J A 115	73171 NWLK HAR 115	1	LN	392.8	172.6	274.0	143.4	289	1867-1890DCT	8C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	473.6	247.6	256.0	185.0	254	1416-1867DCT	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	465.3	247.6	256.0	181.8	289	1867-1890DCT	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	458.4	236.3	256.0	179.1	254	1416-1867DCT	7C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	447.9	236.3	256.0	175.0	289	1867-1890DCT	7C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	446.4	247.6	256.0	174.4	290	1867-1977DCT	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	431.3	236.3	256.0	168.5	290	1867-1977DCT	7C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	409.9	247.6	256.0	160.1	242	113091001DCT	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	409.1	247.6	256.0	159.8	45	1389LINE	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	403.5	236.3	256.0	157.6	242	113091001DCT	7C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	392.5	236.3	256.0	153.3	45	1389LINE	7C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	392.2	247.6	256.0	153.2	365	FLAXHILL2T	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	377.9	247.6	256.0	147.6	143	1867LINE	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	377.9	247.6	256.0	147.6	395	NORWLKHAR7T	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	376.8	247.6	256.0	147.2	241	1130-1430DCT	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	376.1	236.3	256.0	146.9	365	FLAXHILL2T	7C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	374.4	247.6	256.0	146.3	256	1416-1890DCT	6C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

Loading >= 130%
110% < Loading < 130%
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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	370.7	236.3	256.0	144.8	241	1130-1430DCT	7C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	368.5	236.3	256.0	144.0	256	1416-1890DCT	7C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	361.6	236.3	256.0	141.3	143	1867LINE	7C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	361.6	236.3	256.0	141.3	395	NORWLKHAR7T	7C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	350.5	247.6	256.0	136.9	293	1890-1977DCT	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	344.8	236.3	256.0	134.7	293	1890-1977DCT	7C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	322.9	247.6	256.0	126.1	189	91001LINE	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	314.0	236.3	256.0	122.6	189	91001LINE	7C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	302.8	247.6	256.0	118.3	18	1130LINE	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	302.3	247.6	256.0	118.1	326	ASHCREEKBKR	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	300.0	247.6	256.0	117.2	398	PEQUON12TSTK	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	297.0	247.6	256.0	116.0	49	1430LINE	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	247.6	247.6	214.0	115.7		** Base Case *	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	293.5	236.3	256.0	114.7	326	ASHCREEKBKR	7C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	293.4	247.6	256.0	114.6	19	1130+1416LNS	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	293.3	236.3	256.0	114.6	18	1130LINE	7C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	292.0	247.6	256.0	114.1	408	SASCOCR1T	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	291.8	247.6	256.0	114.0	370	GLENBROOK8T	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	291.3	247.6	256.0	113.8	148	1890LINE	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	291.3	247.6	256.0	113.8	391	NORWLKHAR1T	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	290.9	247.6	256.0	113.6	48	1416LINE	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	289.3	236.3	256.0	113.0	398	PEQUON12TSTK	7C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	288.4	236.3	256.0	112.6	49	1430LINE	7C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	283.9	236.3	256.0	110.9	19	1130+1416LNS	7C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	283.6	236.3	256.0	110.8	408	SASCOCR1T	7C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	283.2	236.3	256.0	110.6	370	GLENBROOK8T	7C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	282.9	236.3	256.0	110.5	148	1890LINE	7C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	282.9	236.3	256.0	110.5	391	NORWLKHAR1T	7C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	236.3	236.3	214.0	110.4		** Base Case *	7C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	281.7	236.3	256.0	110.0	48	1416LINE	7C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	281.3	247.6	256.0	109.9	343	DARIEN1T	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	278.1	247.6	256.0	108.6	411	SOUTHEND6T	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	277.4	247.6	256.0	108.4	154	1977LINENEW	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	271.9	236.3	256.0	106.2	343	DARIEN1T	7C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

Loading >= 130%
110% < Loading < 130%
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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	268.7	236.3	256.0	105.0	411	SOUTHEND6T	7C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	268.5	247.6	256.0	104.9	460	SCOVRK8TSTK	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	268.4	247.6	256.0	104.8	410	SOUTHEND5T	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	268.0	236.3	256.0	104.7	154	1977LINENEW	7C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	262.5	247.6	256.0	102.5	294	8100-8200DCT	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	261.6	247.6	256.0	102.2	473	SNGPEQ-XFR	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	260.6	247.6	256.0	101.8	224	387LINE	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	259.1	236.3	256.0	101.2	410	SOUTHEND5T	7C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	258.5	247.6	256.0	101.0	192	312LINE	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	258.5	247.6	256.0	101.0	193	312+393LNS	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	258.5	247.6	256.0	101.0	194	312+393REAC	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	258.6	247.6	256.0	101.0	295	1460-387DCT	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	258.6	247.6	256.0	101.0	455	NOMNTSTBKR	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	258.6	247.6	256.0	101.0	456	NMSTBKREAC	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	257.6	247.6	256.0	100.6	355	DEVON24TSTK	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	256.6	247.6	256.0	100.2	225	393LINE	6C	FIX
73169 RYTN J A 115	73172 NORWALK 115	1	LN	256.6	247.6	256.0	100.2	250	1310-1763DCT	6C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	260.0	79.7	138.0	188.4	429	TRIANGLE3T	6C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	255.6	79.6	138.0	185.2	429	TRIANGLE3T	9C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	243.5	79.7	138.0	176.5	429	TRIANGLE3T	7C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	239.7	79.5	138.0	173.7	429	TRIANGLE3T	8C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	144.6	79.7	138.0	104.8	22	1165LINE	6C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	144.6	79.7	138.0	104.8	22	1165LINE	7C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	144.3	79.6	138.0	104.6	22	1165LINE	9C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	144.2	79.5	138.0	104.5	22	1165LINE	8C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	139.0	79.7	138.0	100.8	404	PLUMTREE31T	7C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	138.9	79.7	138.0	100.7	404	PLUMTREE31T	6C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	138.6	79.5	138.0	100.5	404	PLUMTREE31T	8C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	1	LN	138.7	79.6	138.0	100.5	404	PLUMTREE31T	9C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	2	LN	224.5	84.3	166.0	135.2	235	1060-1270DCT	6C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	2	LN	224.4	84.3	166.0	135.2	235	1060-1270DCT	7C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	2	LN	224.1	84.1	166.0	135.0	235	1060-1270DCT	9C	FIX
73170 PLUMTREE 115	73176 TRIANGLE 115	2	LN	223.9	84.1	166.0	134.9	235	1060-1270DCT	8C	FIX
73170 PLUMTREE 115	73268 MIDDLRIV 115	1	LN	362.5	58.1	126.0	287.7	428	TRIANGLE2T	6C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

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	73268 MIDDLRIV 115	1	LN	361.8	58.0	126.0	287.2	428	TRIANGLE2T	9C	FIX
73170 PLUMTREE 115	73268 MIDDLRIV 115	1	LN	357.9	58.1	126.0	284.1	428	TRIANGLE2T	7C	FIX
73170 PLUMTREE 115	73268 MIDDLRIV 115	1	LN	356.9	58.0	126.0	283.2	428	TRIANGLE2T	8C	FIX
73170 PLUMTREE 115	73268 MIDDLRIV 115	1	LN	228.3	58.1	126.0	181.2	234	1060-1165DCT	6C	FIX
73170 PLUMTREE 115	73268 MIDDLRIV 115	1	LN	228.3	58.1	126.0	181.2	234	1060-1165DCT	7C	FIX
73170 PLUMTREE 115	73268 MIDDLRIV 115	1	LN	227.9	58.0	126.0	180.8	234	1060-1165DCT	9C	FIX
73170 PLUMTREE 115	73268 MIDDLRIV 115	1	LN	227.6	58.0	126.0	180.7	234	1060-1165DCT	8C	FIX
73171 NWLK HAR 115	73237 ELYAVE 115	1	LN	419.7	179.0	263.0	159.6	288	1867-1880DCT	9C	FIX
73171 NWLK HAR 115	73237 ELYAVE 115	1	LN	396.3	149.0	263.0	150.7	288	1867-1880DCT	8C	FIX
73171 NWLK HAR 115	73237 ELYAVE 115	1	LN	284.7	149.0	263.0	108.3	242	113091001DCT	8C	FIX
73171 NWLK HAR 115	73237 ELYAVE 115	1	LN	283.9	179.0	263.0	107.9	242	113091001DCT	9C	FIX
73171 NWLK HAR 115	73237 ELYAVE 115	1	LN	267.5	179.0	263.0	101.7	189	91001LINE	9C	FIX
73171 NWLK HAR 115	73237 ELYAVE 115	1	LN	267.5	179.0	263.0	101.7	390	NORWALKST2	9C	FIX
73171 NWLK HAR 115	73237 ELYAVE 115	1	LN	266.4	179.0	263.0	101.3	255	1416-1880DCT	9C	FIX
73171 NWLK HAR 115	73237 ELYAVE 115	1	LN	266.2	179.0	263.0	101.2	292	1880-1977DCT	9C	FIX
73171 NWLK HAR 115	73237 ELYAVE 115	1	LN	263.9	179.0	263.0	100.4	146	1880LINE	9C	FIX
73171 NWLK HAR 115	73237 ELYAVE 115	1	LN	264.2	179.0	263.0	100.4	369	GLENBROOK3T	9C	FIX
73171 NWLK HAR 115	73237 ELYAVE 115	1	LN	263.9	179.0	263.0	100.3	290	1867-1977DCT	9C	FIX
73171 NWLK HAR 115	73237 ELYAVE 115	1	LN	263.6	179.0	263.0	100.2	254	1416-1867DCT	9C	FIX
73171 NWLK HAR 115	73271 RYTN J B 115	1	LN	317.6	171.8	304.0	104.5	291	1880-1890DCT	9C	FIX
73171 NWLK HAR 115	73271 RYTN J B 115	1	LN	316.9	185.9	304.0	104.3	291	1880-1890DCT	8C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	510.5	265.2	256.0	199.4	255	1416-1880DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	495.5	254.3	256.0	193.5	255	1416-1880DCT	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	483.3	265.2	256.0	188.8	292	1880-1977DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	468.3	254.3	256.0	182.9	292	1880-1977DCT	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	426.7	265.2	256.0	166.7	242	113091001DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	420.5	254.3	256.0	164.2	242	113091001DCT	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	416.3	265.2	256.0	162.6	369	GLENBROOK3T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	413.2	265.2	256.0	161.4	146	1880LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	413.2	265.2	256.0	161.4	394	NORWLKHAR4T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	412.3	265.2	256.0	161.1	390	NORWALKST2	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	399.0	254.3	256.0	155.9	369	GLENBROOK3T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	397.3	254.3	256.0	155.2	146	1880LINE	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	397.3	254.3	256.0	155.2	394	NORWLKHAR4T	7C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

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	396.0	265.2	256.0	154.7	291	1880-1890DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	394.8	254.3	256.0	154.2	390	NORWALKST2	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	393.6	265.2	256.0	153.7	241	1130-1430DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	390.8	265.2	256.0	152.7	256	1416-1890DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	387.7	254.3	256.0	151.5	241	1130-1430DCT	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	385.6	254.3	256.0	150.6	291	1880-1890DCT	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	385.2	254.3	256.0	150.5	256	1416-1890DCT	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	367.2	265.2	256.0	143.4	293	1890-1977DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	361.7	254.3	256.0	141.3	293	1890-1977DCT	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	340.4	265.2	256.0	133.0	189	91001LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	331.8	254.3	256.0	129.6	189	91001LINE	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	319.9	265.2	256.0	125.0	18	1130LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	319.9	265.2	256.0	125.0	326	ASHCREEKBKR	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	214.0	123.9		** Base Case *	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	317.2	265.2	256.0	123.9	398	PEQUON12TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	317.0	265.2	256.0	123.8	393	NORWLKHAR3T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	314.4	265.2	256.0	122.8	49	1430LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	311.4	254.3	256.0	121.6	326	ASHCREEKBKR	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	310.6	265.2	256.0	121.3	19	1130+1416LNS	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	310.6	254.3	256.0	121.3	18	1130LINE	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	309.2	265.2	256.0	120.8	370	GLENBROOK8T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	309.3	265.2	256.0	120.8	408	SASCOCR1T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	308.6	265.2	256.0	120.5	148	1890LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	308.6	265.2	256.0	120.5	391	NORWLKHAR1T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	308.1	265.2	256.0	120.3	48	1416LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	306.9	254.3	256.0	119.9	398	PEQUON12TSTK	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	306.1	254.3	256.0	119.6	49	1430LINE	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	254.3	254.3	214.0	118.8		** Base Case *	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	301.4	254.3	256.0	117.7	19	1130+1416LNS	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	301.2	254.3	256.0	117.6	408	SASCOCR1T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	300.9	254.3	256.0	117.5	370	GLENBROOK8T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	300.4	254.3	256.0	117.4	148	1890LINE	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	300.4	254.3	256.0	117.4	391	NORWLKHAR1T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	300.3	254.3	256.0	117.3	393	NORWLKHAR3T	7C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

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	299.1	254.3	256.0	116.8	48	1416LINE	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	298.7	265.2	256.0	116.7	343	DARIEN1T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	295.5	265.2	256.0	115.4	411	SOUTHEND6T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	294.8	265.2	256.0	115.2	154	1977LINENEW	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	289.6	254.3	256.0	113.1	343	DARIEN1T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	286.3	254.3	256.0	111.8	411	SOUTHEND6T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	285.9	265.2	256.0	111.7	410	SOUTHEND5T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	285.7	254.3	256.0	111.6	154	1977LINENEW	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	282.9	265.2	256.0	110.5	460	SCOVRK8TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	280.0	265.2	256.0	109.4	294	8100-8200DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	279.3	265.2	256.0	109.1	473	SNGPEQ-XFR	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	276.9	254.3	256.0	108.2	410	SOUTHEND5T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	276.1	265.2	256.0	107.9	192	312LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	276.1	265.2	256.0	107.9	193	312+393LNS	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	276.1	265.2	256.0	107.9	194	312+393REAC	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	276.3	265.2	256.0	107.9	224	387LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	276.3	265.2	256.0	107.9	455	NOMNTSTBKR	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	276.3	265.2	256.0	107.9	456	NMSTBKREAC	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	275.1	265.2	256.0	107.5	355	DEVON24TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	274.2	265.2	256.0	107.1	225	393LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	274.2	265.2	256.0	107.1	250	1310-1763DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	274.3	265.2	256.0	107.1	295	1460-387DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	271.8	265.2	256.0	106.2	263	1560-1570DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	271.8	254.3	256.0	106.2	224	387LINE	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	271.1	265.2	256.0	105.9	283	1770-1887DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	271.1	265.2	256.0	105.9	285	1800-1810DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	271.1	265.2	256.0	105.9	421	SOTHNGTN24T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	271.2	265.2	256.0	105.9	425	STEVENSNSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	271.1	265.2	256.0	105.9	426	STONYHILL1T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	271.1	265.2	256.0	105.9	430	TRIANGLE4T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	271.0	265.2	256.0	105.8	243	1163-1550D-2	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	270.9	265.2	256.0	105.8	385	MIXAVE1	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	271.0	265.2	256.0	105.8	424	SOTHNGTN28T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	270.7	254.3	256.0	105.8	295	1460-387DCT	7C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

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	270.6	265.2	256.0	105.7	261	1505-1607DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	270.5	265.2	256.0	105.7	443	WOODMNT1TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	270.1	265.2	256.0	105.5	427	TRPFALLST1	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	269.2	265.2	256.0	105.2	264	1570-1575DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	269.3	265.2	256.0	105.2	405	QUINIPACST1	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	269.0	265.2	256.0	105.1	286	1800-1825DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	269.2	265.2	256.0	105.1	329	BATESROCK1T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	269.2	265.2	256.0	105.1	342	COLONY1T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	269.1	265.2	256.0	105.1	474	DEV-XFR	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	269.1	265.2	256.0	105.1	475	ESHR-XFR	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	268.7	265.2	256.0	105.0	407	SACKETST1	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	268.8	265.2	256.0	105.0	477	NEWDEV2	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	268.4	265.2	256.0	104.9	59	1500LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	268.4	265.2	256.0	104.9	248	1272-1721DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	268.6	265.2	256.0	104.9	249	1280-1870DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	268.4	265.2	256.0	104.9	378	GREENHLL2T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	268.5	265.2	256.0	104.9	429	TRIANGLE3T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	268.3	265.2	256.0	104.8	60	1505LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	268.4	265.2	256.0	104.8	78	1605LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	268.3	265.2	256.0	104.8	239	1100-1200DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	268.4	265.2	256.0	104.8	251	1355-1610DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	268.2	265.2	256.0	104.8	330	BECONFLSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	268.3	265.2	256.0	104.8	340	BUNKERH2T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	268.2	265.2	256.0	104.8	384	MLLRVR2TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	268.4	265.2	256.0	104.8	414	SOTHNGTN13T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	268.0	265.2	256.0	104.7	195	318LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.9	265.2	256.0	104.7	253	1394-1515DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.9	265.2	256.0	104.7	383	MLLRVR1TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	268.0	265.2	256.0	104.7	418	SOTHNGTN20T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.8	265.2	256.0	104.6	42	1355LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.8	265.2	256.0	104.6	94	1690LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.8	265.2	256.0	104.6	113	1760+1876LNS	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.7	265.2	256.0	104.6	176	88005ALINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.7	265.2	256.0	104.6	276	1670-1830DCT	6C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

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	267.7	265.2	256.0	104.6	338	BROADWYST1	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.7	265.2	256.0	104.6	362	DEVSWST4TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.7	265.2	256.0	104.6	375	GRNDAV5TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.7	265.2	256.0	104.6	376	GRNDAV6TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.7	265.2	256.0	104.6	382	JUNEST1	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.7	265.2	256.0	104.6	403	PLUMTREE28T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.7	265.2	256.0	104.6	417	SOTHNGTN16T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.8	265.2	256.0	104.6	462	SGTN3TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.7	265.2	256.0	104.6	463	SGTN4TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.5	265.2	256.0	104.5	119	1770LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.5	265.2	256.0	104.5	266	1575-1585DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.4	265.2	256.0	104.5	341	BUNKERH3T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.6	265.2	256.0	104.5	363	EMERIDEN1T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.5	265.2	256.0	104.5	402	PLUMTREE25T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.4	265.2	256.0	104.5	439	WBROOKFLD1T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.5	254.3	256.0	104.5	460	SCOVRK8TSTK	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.2	265.2	256.0	104.4	36	1272+1445LNS	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.2	265.2	256.0	104.4	126	1780LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.2	265.2	256.0	104.4	132	1790LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.3	265.2	256.0	104.4	137	1820LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.3	265.2	256.0	104.4	179	88006ALINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.3	265.2	256.0	104.4	188	89006BLINE-1	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.3	265.2	256.0	104.4	205	352LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.3	265.2	256.0	104.4	268	1580-1585DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.2	265.2	256.0	104.4	287	1810-1825DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.2	265.2	256.0	104.4	327	BAIRDASTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.2	265.2	256.0	104.4	359	DEVSWST1TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.2	265.2	256.0	104.4	361	DEVSWST3TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.3	265.2	256.0	104.4	381	HAWTHORNST	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.3	265.2	256.0	104.4	412	SNAUGA1T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.2	265.2	256.0	104.4	420	SOTHNGTN23T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.3	265.2	256.0	104.4	444	WOODMNT2TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.1	265.2	256.0	104.3	52	1443+1759LNS	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.0	265.2	256.0	104.3	73	1575LINE	6C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

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	267.0	265.2	256.0	104.3	274	1668-1721DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.0	265.2	256.0	104.3	281	1732-1788DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.0	265.2	256.0	104.3	339	BUNKERH1T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.1	265.2	256.0	104.3	374	GRNDAV4TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.1	265.2	256.0	104.3	377	GRNDAV7TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	267.1	265.2	256.0	104.3	419	SOTHNGTN22T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.9	265.2	256.0	104.2	2	100+400LINES	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.8	265.2	256.0	104.2	11	1050+1766LNS	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.8	265.2	256.0	104.2	21	1163+1910LNS	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.8	265.2	256.0	104.2	68	1560LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.8	265.2	256.0	104.2	174	88003ALINE-2	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.8	265.2	256.0	104.2	182	89003BLINE-2	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.8	265.2	256.0	104.2	214	362LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.8	265.2	256.0	104.2	240	1100-1300DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.8	265.2	256.0	104.2	267	1575-1990DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.8	265.2	256.0	104.2	360	DEVSWST2TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.8	265.2	256.0	104.2	366	FROSTBR15T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.8	265.2	256.0	104.2	386	NOHAVN1TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.8	265.2	256.0	104.2	423	SOTHNGTN26T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.6	265.2	256.0	104.1	14	1070+1490LNS	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.6	265.2	256.0	104.1	29	1235LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.4	265.2	256.0	104.1	67	1550+1950LNS	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.6	265.2	256.0	104.1	165	8809ALINE-2	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.6	265.2	256.0	104.1	168	8909BLINE-2	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.4	265.2	256.0	104.1	172	88003ALINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.4	265.2	256.0	104.1	180	89003BLINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.4	265.2	256.0	104.1	233	1000-1090DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.5	265.2	256.0	104.1	388	NWALLING1T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.5	265.2	256.0	104.1	440	WRIVER1TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.5	265.2	256.0	104.1	441	WRIVER2TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.2	265.2	256.0	104.0	8	694LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.3	265.2	256.0	104.0	9	1000LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.1	265.2	256.0	104.0	156	8100LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.1	265.2	256.0	104.0	157	8200LINE	6C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

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	266.1	265.2	256.0	104.0	175	88003ALINE-3	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.1	265.2	256.0	104.0	183	89003BLINE-3	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.3	265.2	256.0	104.0	187	89006BLINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.1	265.2	256.0	104.0	258	1470-1565DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.2	265.2	256.0	104.0	328	BAIRDBSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.1	265.2	256.0	104.0	364	ESHORE12TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.2	265.2	256.0	104.0	371	GRNDAV1TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.2	265.2	256.0	104.0	373	GRNDAV3TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.1	265.2	256.0	104.0	397	PEACEABLE1T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.3	254.3	256.0	104.0	355	DEVON24TSTK	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.4	254.3	256.0	104.0	473	SNGPEQ-XFR	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.0	265.2	256.0	103.9	3	400LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.0	265.2	256.0	103.9	32	1250LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.9	265.2	256.0	103.9	80	1610LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.1	265.2	256.0	103.9	159	8400LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.0	265.2	256.0	103.9	306	310-383DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.0	265.2	256.0	103.9	324	ALLINGS1TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	266.0	265.2	256.0	103.9	325	ALLINGS2TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.9	254.3	256.0	103.9	294	8100-8200DCT	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.7	265.2	256.0	103.8	5	667-690LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.8	265.2	256.0	103.8	37	1280LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.7	265.2	256.0	103.8	72	1572+1772LNS	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.6	265.2	256.0	103.8	75	1585LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.7	265.2	256.0	103.8	79	1607LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.7	265.2	256.0	103.8	102	1730BLINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.6	265.2	256.0	103.8	191	310LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.7	265.2	256.0	103.8	236	1070-1080DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.7	265.2	256.0	103.8	269	1580-1730BDC	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.7	265.2	256.0	103.8	350	DEVON8TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.7	265.2	256.0	103.8	351	DEVON10TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.7	265.2	256.0	103.8	358	DEVON27TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.7	265.2	256.0	103.8	372	GRNDAV2TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.8	265.2	256.0	103.8	413	SOTHNGTN12T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.5	265.2	256.0	103.7	35	1272LINE	6C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

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	265.2	256.0	103.7	50	1440LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.6	265.2	256.0	103.7	53	1445LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.6	265.2	256.0	103.7	88	1640LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.4	265.2	256.0	103.7	93	1685LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.4	265.2	256.0	103.7	112	1760LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.5	265.2	256.0	103.7	144	1870LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.4	265.2	256.0	103.7	158	8300LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.5	265.2	256.0	103.7	163	8804ALINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.4	265.2	256.0	103.7	164	8809ALINE-1	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.5	265.2	256.0	103.7	166	8904BLINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.7	167	8909BLINE-1	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.5	265.2	256.0	103.7	171	84004LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.4	265.2	256.0	103.7	173	88003ALINE-1	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.4	265.2	256.0	103.7	181	89003BLINE-1	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.5	265.2	256.0	103.7	220	381LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.5	265.2	256.0	103.7	221	381LREAC	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.5	265.2	256.0	103.7	312	SOUTH1XAUTO	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.5	265.2	256.0	103.7	337	BRANFRDRR1T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.5	265.2	256.0	103.7	415	SOTHNGTN14T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.4	265.2	256.0	103.7	428	TRIANGLE2T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.6	265.2	256.0	103.7	433	WALLING3TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	1	100LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	6	689LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	7	693LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.6	12	1060LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.6	13	1070LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.6	16	1090LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	17	1100LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.1	265.2	256.0	103.6	20	1163LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.6	22	1165LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.6	23	1191LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	24	1200LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.1	265.2	256.0	103.6	25	1206LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.1	265.2	256.0	103.6	26	1207LINE	6C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

Loading >= 130%
110% < Loading < 130%
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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	265.3	265.2	256.0	103.6	34	1270LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	39	1310LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.6	40	1337LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	46	1394LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	47	1410LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.6	51	1443LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	54	1450LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	55	1460LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	56	1466LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	58	1490LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	63	1537LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.1	265.2	256.0	103.6	71	1572LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.6	74	1580LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	76	1588LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.6	77	1594LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.1	265.2	256.0	103.6	83	1620NLINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.1	265.2	256.0	103.6	85	1625LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	89	1655LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.6	90	1668LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	91	1670LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	92	1675LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	95	1704LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.6	97	1720LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.6	98	1721LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.6	105	1740LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	107	1751LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.6	109	1753LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	110	1756LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.6	111	1759LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	114	1763LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.6	115	1765LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	116	1766LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	117	1767LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	118	1769LINE	6C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

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	265.3	265.2	256.0	103.6	120	1771LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.1	265.2	256.0	103.6	121	1772LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	123	1775LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	125	1779LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	129	1785LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	130	1786LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	131	1788LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.6	133	1792LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.1	265.2	256.0	103.6	134	1800-1860LNS	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.1	265.2	256.0	103.6	135	1810LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	139	1825LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	140	1830LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	141	1835LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.6	147	1887LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	149	1900LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	151	1921LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.1	265.2	256.0	103.6	153	1975LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	155	1990LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.6	160	8500LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.6	162	8700LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	169	9500LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.6	170	9502LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	197	329LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.6	235	1060-1270DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	257	1440-1450DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.6	275	1670-1771DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	310	MANCHAUTO1	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	321	LOSSNHAV	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	322	LOSSNOR1	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	323	LOSSNOR2	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.1	265.2	256.0	103.6	335	BRANFORD2T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	347	DEVON4TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.6	352	DEVON11TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	353	DEVON12TSTK	6C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

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	265.2	265.2	256.0	103.6	368	FROSTBR27T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	401	PEQUON42TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.6	416	SOTHNGTN15T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.6	436	WATERST1TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.6	437	WATERST2TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.3	265.2	256.0	103.6	465	SGTN6TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	472	SNG-PEQTAP	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.2	265.2	256.0	103.6	476	NEWDEV1	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.0	265.2	256.0	103.5	10	1050LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.1	265.2	256.0	103.5	27	1208LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.1	265.2	256.0	103.5	33	1261LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.0	265.2	256.0	103.5	62	1515LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.1	265.2	256.0	103.5	66	1550LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.1	265.2	256.0	103.5	82	1620SLINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.0	265.2	256.0	103.5	108	1752LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.9	265.2	256.0	103.5	122	1773LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.0	265.2	256.0	103.5	124	1777LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.9	265.2	256.0	103.5	127	1783LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.9	265.2	256.0	103.5	128	1784LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.0	265.2	256.0	103.5	150	1910LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.0	265.2	256.0	103.5	152	1950LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.0	265.2	256.0	103.5	161	8600LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.9	265.2	256.0	103.5	190	301-302LNS	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.0	265.2	256.0	103.5	200	347LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.0	265.2	256.0	103.5	201	347LREAC	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.0	265.2	256.0	103.5	222	383LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.0	265.2	256.0	103.5	234	1060-1165DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.0	265.2	256.0	103.5	237	1080-1280DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.8	265.2	256.0	103.5	244	1207-1775DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.9	265.2	256.0	103.5	265	1570-1580DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.1	265.2	256.0	103.5	270	1620-1975DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.0	265.2	256.0	103.5	284	1777-1779DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.0	265.2	256.0	103.5	313	SOUTH2XAUTO	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.1	265.2	256.0	103.5	336	BRANFORD4T	6C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

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	265.1	265.2	256.0	103.5	379	HADDAMAT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.9	265.2	256.0	103.5	422	SOTHNGTN25T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.9	265.2	256.0	103.5	432	WALLING2TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.1	265.2	256.0	103.5	434	WALLING4TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.1	265.2	256.0	103.5	435	WALLING5TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.0	265.2	256.0	103.5	464	SGTN5TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	265.0	265.2	256.0	103.5	470	orang-eshr	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.6	265.2	256.0	103.4	4	500LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.8	265.2	256.0	103.4	61	1508LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.8	265.2	256.0	103.4	70	1570LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.6	265.2	256.0	103.4	104	1732LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.7	265.2	256.0	103.4	138	1821LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.7	265.2	256.0	103.4	142	1836LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.7	265.2	256.0	103.4	177	88005ALINE-1	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.7	265.2	256.0	103.4	184	89005BLINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.7	265.2	256.0	103.4	185	89005BLINE-1	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.7	265.2	256.0	103.4	245	1208-1640DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.7	265.2	256.0	103.4	282	1751-1777DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.6	265.2	256.0	103.4	334	BRANFORD1T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.8	265.2	256.0	103.4	349	DEVON7TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.7	265.2	256.0	103.4	367	FROSTBR21T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.6	265.2	256.0	103.4	406	ROCKRIVER1T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.4	265.2	256.0	103.3	15	1080LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.4	265.2	256.0	103.3	41	1342LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.4	265.2	256.0	103.3	64	1545LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.5	265.2	256.0	103.3	100	1726LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.4	265.2	256.0	103.3	145	1876LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.4	265.2	256.0	103.3	332	BOKUM2T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.4	265.2	256.0	103.3	333	BOKUM3T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.5	265.2	256.0	103.3	467	NORSING1	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.4	265.2	256.0	103.3	468	SINGDEV1	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.1	265.2	256.0	103.2	81	1618LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.3	265.2	256.0	103.2	86	1630LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.1	265.2	256.0	103.2	178	88005ALINE-2	6C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

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	264.1	265.2	256.0	103.2	186	89005BLINE-2	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.1	265.2	256.0	103.2	206	352+AUTO	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.3	265.2	256.0	103.2	238	1080-1490DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.1	265.2	256.0	103.2	247	1261-1620DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.2	265.2	256.0	103.2	307	329-352DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.1	265.2	256.0	103.2	331	BOKUM1T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.1	265.2	256.0	103.2	380	HADDAMBT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.3	265.2	256.0	103.2	387	NOHAVN2TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.3	265.2	256.0	103.2	431	WALLING1TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	264.3	265.2	256.0	103.2	442	WESTON1T	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	263.8	265.2	256.0	103.1	216	368LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	263.9	265.2	256.0	103.1	219	376LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	263.9	265.2	256.0	103.1	305	310-368DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	263.8	265.2	256.0	103.1	469	SINGERSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	263.6	265.2	256.0	103.0	43	ONE1385	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	263.7	265.2	256.0	103.0	65	1545+SPS	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	263.4	265.2	256.0	102.9	31	1238+1813LNS	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	263.5	265.2	256.0	102.9	38	1300LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	263.4	265.2	256.0	102.9	103	1730CLINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	263.4	265.2	256.0	102.9	400	PEQUON32TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	263.4	254.3	256.0	102.9	250	1310-1763DCT	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	263.2	265.2	256.0	102.8	354	DEVON23TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	263.2	265.2	256.0	102.8	356	DEVON25TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	263.2	265.2	256.0	102.8	466	SGTN7TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.8	265.2	256.0	102.7	84	1622LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	263.0	265.2	256.0	102.7	99	1722LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.8	265.2	256.0	102.7	272	1622-1887DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.8	265.2	256.0	102.7	409	SHEPAUG13A	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.7	265.2	256.0	102.6	136	1813LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.3	265.2	256.0	102.5	304	310-348DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.5	265.2	256.0	102.5	309	371-383DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.2	265.2	256.0	102.4	30	1238LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.1	265.2	256.0	102.4	204	348+AUTO	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.0	265.2	256.0	102.3	87	1637LINE	6C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

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	261.9	265.2	256.0	102.3	217	371LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.0	265.2	256.0	102.3	262	1545-1570DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.8	265.2	256.0	102.3	273	1637-1720DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	262.0	265.2	256.0	102.3	348	DEVON6TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.8	265.2	256.0	102.3	357	DEVON26TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.9	265.2	256.0	102.3	461	SGTN1TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.7	265.2	256.0	102.2	203	348LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.7	265.2	256.0	102.2	218	371+AUTO	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.7	265.2	256.0	102.2	271	1975-348DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.7	265.2	256.0	102.2	308	362-376DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.7	265.2	256.0	102.2	311	PLUMAUT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.5	265.2	256.0	102.2	315	LOSSDEV7	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.7	254.3	256.0	102.2	455	NOMNTSTBKR	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	261.7	254.3	256.0	102.2	456	NMSTBKREAC	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.9	265.2	256.0	101.9	314	LOSSBPT3	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.8	254.3	256.0	101.9	283	1770-1887DCT	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.8	254.3	256.0	101.9	426	STONYHILL1T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.4	265.2	256.0	101.7	299	1759-353NDCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.2	254.3	256.0	101.7	285	1800-1810DCT	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.2	254.3	256.0	101.7	421	SOTHNGTN24T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.4	254.3	256.0	101.7	430	TRIANGLE4T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.0	265.2	256.0	101.6	454	MONTVSTBKR	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.1	254.3	256.0	101.6	192	312LINE	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.1	254.3	256.0	101.6	193	312+393LNS	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.1	254.3	256.0	101.6	194	312+393REAC	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.2	254.3	256.0	101.6	243	1163-1550D-2	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.2	254.3	256.0	101.6	424	SOTHNGTN28T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.0	254.3	256.0	101.6	425	STEVENSNSTK	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.1	254.3	256.0	101.6	477	NEWDEV2	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	260.0	265.2	256.0	101.5	215	364+AUTO	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.7	254.3	256.0	101.5	261	1505-1607DCT	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.8	254.3	256.0	101.5	385	MIXAVE1	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.5	254.3	256.0	101.4	263	1560-1570DCT	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.4	265.2	256.0	101.3	57	1470LINE	6C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

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	259.0	265.2	256.0	101.2	260	1470-1720DCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.0	265.2	256.0	101.2	389	NORWALKST1	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	259.1	265.2	256.0	101.2	448	CARD2TSTK	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.9	265.2	256.0	101.1	207	353NLINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.8	254.3	256.0	101.1	329	BATESROCK1T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.4	265.2	256.0	101.0	212	353N+AUTO	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.6	254.3	256.0	101.0	200	347LINE	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.6	254.3	256.0	101.0	201	347LREAC	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.4	265.2	256.0	100.9	106	1750LINE	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.3	265.2	256.0	100.9	300	1767-353NDCT	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.4	254.3	256.0	100.9	258	1470-1565DCT	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.2	254.3	256.0	100.9	286	1800-1825DCT	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.4	254.3	256.0	100.9	342	COLONY1T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.4	254.3	256.0	100.9	397	PEACEABLE1T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.2	254.3	256.0	100.9	429	TRIANGLE3T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.1	254.3	256.0	100.8	225	393LINE	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.9	254.3	256.0	100.8	249	1280-1870DCT	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.1	254.3	256.0	100.8	264	1570-1575DCT	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.9	254.3	256.0	100.8	378	GREENHLL2T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.1	254.3	256.0	100.8	405	QUINIPACST1	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	258.1	254.3	256.0	100.8	427	TRPFALLST1	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.8	265.2	256.0	100.7	396	OLDTOWNST	6C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.9	254.3	256.0	100.7	407	SACKETST1	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.5	254.3	256.0	100.6	59	1500LINE	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.4	254.3	256.0	100.6	60	1505LINE	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.5	254.3	256.0	100.6	78	1605LINE	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.4	254.3	256.0	100.6	239	1100-1200DCT	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.5	254.3	256.0	100.6	475	ESHR-XFR	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.2	254.3	256.0	100.5	330	BECONFLSTK	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.9	254.3	256.0	100.4	94	1690LINE	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.0	254.3	256.0	100.4	113	1760+1876LNS	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.0	254.3	256.0	100.4	119	1770LINE	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.1	254.3	256.0	100.4	251	1355-1610DCT	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.1	254.3	256.0	100.4	253	1394-1515DCT	7C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

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	256.9	254.3	256.0	100.4	276	1670-1830DCT	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.1	254.3	256.0	100.4	384	MLLRVR2TSTK	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.0	254.3	256.0	100.4	402	PLUMTREE25T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.1	254.3	256.0	100.4	414	SOTHNGTN13T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.9	254.3	256.0	100.4	417	SOTHNGTN16T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.1	254.3	256.0	100.4	418	SOTHNGTN20T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.0	254.3	256.0	100.4	439	WBROOKFLD1T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	257.1	254.3	256.0	100.4	443	WOODMNT1TSTK	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.9	254.3	256.0	100.3	42	1355LINE	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.7	254.3	256.0	100.3	126	1780LINE	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.7	254.3	256.0	100.3	132	1790LINE	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.7	254.3	256.0	100.3	176	88005ALINE	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.8	254.3	256.0	100.3	179	88006ALINE	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.8	254.3	256.0	100.3	188	89006BLINE-1	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.7	254.3	256.0	100.3	248	1272-1721DCT	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.8	254.3	256.0	100.3	338	BROADWYST1	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.7	254.3	256.0	100.3	340	BUNKERH2T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.7	254.3	256.0	100.3	362	DEVSWST4TSTK	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.7	254.3	256.0	100.3	363	EMERIDEN1T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.8	254.3	256.0	100.3	383	MLLRVR1TSTK	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.9	254.3	256.0	100.3	403	PLUMTREE28T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.4	254.3	256.0	100.2	137	1820LINE	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.4	254.3	256.0	100.2	281	1732-1788DCT	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.6	254.3	256.0	100.2	327	BAIRDASTK	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.5	254.3	256.0	100.2	382	JUNEST1	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.2	254.3	256.0	100.1	36	1272+1445LNS	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.3	254.3	256.0	100.1	52	1443+1759LNS	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.3	254.3	256.0	100.1	195	318LINE	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.3	254.3	256.0	100.1	205	352LINE	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.3	254.3	256.0	100.1	266	1575-1585DCT	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.3	254.3	256.0	100.1	267	1575-1990DCT	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.2	254.3	256.0	100.1	268	1580-1585DCT	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.3	254.3	256.0	100.1	287	1810-1825DCT	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.3	254.3	256.0	100.1	306	310-383DCT	7C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

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	256.3	254.3	256.0	100.1	341	BUNKERH3T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.3	254.3	256.0	100.1	359	DEVSWST1TSTK	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.3	254.3	256.0	100.1	361	DEVSWST3TSTK	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.2	254.3	256.0	100.1	375	GRNDAV5TSTK	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.2	254.3	256.0	100.1	376	GRNDAV6TSTK	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.2	254.3	256.0	100.1	412	SNAUGA1T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.2	254.3	256.0	100.1	419	SOTHNGTN22T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.3	254.3	256.0	100.1	420	SOTHNGTN23T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.3	254.3	256.0	100.1	458	SCOVRK5TSTK	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.0	254.3	256.0	100.0	2	100+400LINES	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.0	254.3	256.0	100.0	73	1575LINE	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.1	254.3	256.0	100.0	165	8809ALINE-2	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.1	254.3	256.0	100.0	168	8909BLINE-2	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.1	254.3	256.0	100.0	274	1668-1721DCT	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.0	254.3	256.0	100.0	339	BUNKERH1T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.0	254.3	256.0	100.0	366	FROSTBR15T	7C	FIX
73172 NORWALK 115	73207 FLAX HIL 115	1	LN	256.0	254.3	256.0	100.0	462	SGTN3TSTK	7C	FIX
73183 SHAWSHIL 115	73185 BUNKER H 115	1	LN	279.1	164.6	253.0	110.3	368	FROSTBR27T	9C	FIX
73183 SHAWSHIL 115	73185 BUNKER H 115	1	LN	278.8	163.4	253.0	110.2	368	FROSTBR27T	6C	FIX
73188 BCNFL PF 115	73192 DRBY J B 115	1	LN	149.4	21.9	112.0	133.4	248	1272-1721DCT	9C	FIX
73188 BCNFL PF 115	73192 DRBY J B 115	1	LN	146.9	24.1	112.0	131.2	248	1272-1721DCT	6C	FIX
73188 BCNFL PF 115	73192 DRBY J B 115	1	LN	143.4	10.4	112.0	128.0	248	1272-1721DCT	7C	FIX
73188 BCNFL PF 115	73192 DRBY J B 115	1	LN	142.2	24.7	112.0	126.9	248	1272-1721DCT	8C	FIX
73188 BCNFL PF 115	73192 DRBY J B 115	1	LN	122.8	21.9	112.0	109.6	340	BUNKERH2T	9C	FIX
73188 BCNFL PF 115	73192 DRBY J B 115	1	LN	120.7	24.1	112.0	107.8	340	BUNKERH2T	6C	FIX
73188 BCNFL PF 115	73192 DRBY J B 115	1	LN	117.2	10.4	112.0	104.6	340	BUNKERH2T	7C	FIX
73188 BCNFL PF 115	73192 DRBY J B 115	1	LN	115.9	24.7	112.0	103.5	340	BUNKERH2T	8C	FIX
73196 GLEN JCT 115	73198 SOUTHGTN 115	1	LN	275.6	136.9	228.0	120.9	460	SCOVRK8TSTK	6C	FIX
73196 GLEN JCT 115	73198 SOUTHGTN 115	1	LN	273.9	136.9	228.0	120.1	295	1460-387DCT	6C	FIX
73196 GLEN JCT 115	73198 SOUTHGTN 115	1	LN	273.3	139.1	228.0	119.9	295	1460-387DCT	9C	FIX
73196 GLEN JCT 115	73198 SOUTHGTN 115	1	LN	266.3	139.1	228.0	116.8	460	SCOVRK8TSTK	9C	FIX
73196 GLEN JCT 115	73198 SOUTHGTN 115	1	LN	265.9	136.9	228.0	116.6	224	387LINE	6C	FIX
73196 GLEN JCT 115	73198 SOUTHGTN 115	1	LN	266.0	139.1	228.0	116.6	224	387LINE	9C	FIX
73196 GLEN JCT 115	73198 SOUTHGTN 115	1	LN	247.3	136.9	228.0	108.5	458	SCOVRK5TSTK	6C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

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
73196 GLEN JCT 115	73198 SOUTHGTN 115	1	LN	246.6	139.1	228.0	108.2	458	SCOVRK5TSTK	9C	FIX
73196 GLEN JCT 115	73198 SOUTHGTN 115	1	LN	236.4	136.9	228.0	103.7	459	SCOVRK7TSTK	6C	FIX
73196 GLEN JCT 115	73198 SOUTHGTN 115	1	LN	235.0	139.1	228.0	103.1	459	SCOVRK7TSTK	9C	FIX
73198 SOUTHGTN 115	73631 WLNGF PF 115	1	LN	345.0	173.8	330.0	104.5	460	SCOVRK8TSTK	6C	FIX
73198 SOUTHGTN 115	73631 WLNGF PF 115	1	LN	336.4	173.8	330.0	101.9	224	387LINE	6C	FIX
73198 SOUTHGTN 115	73631 WLNGF PF 115	1	LN	333.8	174.1	330.0	101.2	224	387LINE	9C	FIX
73198 SOUTHGTN 115	73631 WLNGF PF 115	1	LN	333.0	174.1	330.0	100.9	460	SCOVRK8TSTK	9C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	466.2	221.5	256.0	182.1	255	1416-1880DCT	6C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	450.8	210.0	256.0	176.1	255	1416-1880DCT	7C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	439.0	221.5	256.0	171.5	292	1880-1977DCT	6C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	423.7	210.0	256.0	165.5	292	1880-1977DCT	7C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	382.8	221.5	256.0	149.5	242	113091001DCT	6C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	376.2	210.0	256.0	147.0	242	113091001DCT	7C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	372.2	221.5	256.0	145.4	369	GLENBROOK3T	6C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	369.8	221.5	256.0	144.5	146	1880LINE	6C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	369.8	221.5	256.0	144.5	394	NORWLKHAR4T	6C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	368.2	221.5	256.0	143.8	390	NORWALKST2	6C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	354.4	210.0	256.0	138.4	369	GLENBROOK3T	7C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	352.9	210.0	256.0	137.8	146	1880LINE	7C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	352.9	210.0	256.0	137.8	394	NORWLKHAR4T	7C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	351.0	221.5	256.0	137.1	291	1880-1890DCT	6C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	350.0	221.5	256.0	136.7	241	1130-1430DCT	6C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	349.5	210.0	256.0	136.5	390	NORWALKST2	7C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	347.0	221.5	256.0	135.6	256	1416-1890DCT	6C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	343.7	210.0	256.0	134.3	241	1130-1430DCT	7C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	341.0	210.0	256.0	133.2	256	1416-1890DCT	7C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	340.2	210.0	256.0	132.9	291	1880-1890DCT	7C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	323.2	221.5	256.0	126.3	293	1890-1977DCT	6C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	317.4	210.0	256.0	124.0	293	1890-1977DCT	7C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	296.6	221.5	256.0	115.9	189	91001LINE	6C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	287.5	210.0	256.0	112.3	189	91001LINE	7C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	276.2	221.5	256.0	107.9	326	ASHCREEKBKR	6C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	276.1	221.5	256.0	107.8	18	1130LINE	6C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	273.4	221.5	256.0	106.8	398	PEQUON12TSTK	6C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

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	272.5	221.5	256.0	106.4	393	NORWLKHAR3T	6C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	271.1	221.5	256.0	105.9	49	1430LINE	6C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	267.2	210.0	256.0	104.4	326	ASHCREEKBKR	7C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	266.7	221.5	256.0	104.2	19	1130+1416LNS	6C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	266.3	210.0	256.0	104.0	18	1130LINE	7C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	265.8	221.5	256.0	103.8	408	SASCOCR1T	6C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	265.4	221.5	256.0	103.7	370	GLENBROOK8T	6C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	221.5	221.5	214.0	103.5		** Base Case *	6C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	265.1	221.5	256.0	103.5	148	1890LINE	6C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	265.1	221.5	256.0	103.5	391	NORWLKHAR1T	6C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	264.5	221.5	256.0	103.3	48	1416LINE	6C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	262.3	210.0	256.0	102.5	398	PEQUON12TSTK	7C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	262.2	210.0	256.0	102.4	49	1430LINE	7C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	257.2	210.0	256.0	100.5	408	SASCOCR1T	7C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	257.0	210.0	256.0	100.4	19	1130+1416LNS	7C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	256.6	210.0	256.0	100.3	370	GLENBROOK8T	7C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	256.4	210.0	256.0	100.2	148	1890LINE	7C	FIX
73207 FLAX HIL 115	73271 RYTN J B 115	1	LN	256.4	210.0	256.0	100.2	391	NORWLKHAR1T	7C	FIX
73228 BALDWNJB 115	73185 BUNKER H 115	1	LN	167.3	107.0	165.0	101.4	460	SCOVRK8TSTK	6C	FIX
73230 HADDAM 115	73231 BOKUM 115	1	LN	200.4	113.1	165.0	121.5	82	1620SLINE	6C	FIX
73230 HADDAM 115	73231 BOKUM 115	1	LN	200.3	113.0	165.0	121.4	82	1620SLINE	9C	FIX
73230 HADDAM 115	73231 BOKUM 115	1	LN	179.5	113.1	165.0	108.8	460	SCOVRK8TSTK	6C	FIX
73230 HADDAM 115	73231 BOKUM 115	1	LN	172.6	113.0	165.0	104.6	460	SCOVRK8TSTK	9C	FIX
73230 HADDAM 115	73231 BOKUM 115	1	LN	168.6	113.1	165.0	102.2	224	387LINE	6C	FIX
73230 HADDAM 115	73231 BOKUM 115	1	LN	167.8	113.0	165.0	101.7	224	387LINE	9C	FIX
73230 HADDAM 115	73231 BOKUM 115	2	LN	201.6	115.9	191.0	105.6	33	1261LINE	6C	FIX
73230 HADDAM 115	73231 BOKUM 115	2	LN	201.5	115.8	191.0	105.5	33	1261LINE	9C	FIX
73268 MIDDLRIV 115	73176 TRIANGLE 115	1	LN	303.3	22.5	134.0	226.3	428	TRIANGLE2T	6C	FIX
73268 MIDDLRIV 115	73176 TRIANGLE 115	1	LN	302.8	22.4	134.0	225.9	428	TRIANGLE2T	9C	FIX
73268 MIDDLRIV 115	73176 TRIANGLE 115	1	LN	298.8	22.5	134.0	223.0	428	TRIANGLE2T	7C	FIX
73268 MIDDLRIV 115	73176 TRIANGLE 115	1	LN	297.9	22.4	134.0	222.3	428	TRIANGLE2T	8C	FIX
73268 MIDDLRIV 115	73176 TRIANGLE 115	1	LN	149.3	22.5	134.0	111.4	234	1060-1165DCT	6C	FIX
73268 MIDDLRIV 115	73176 TRIANGLE 115	1	LN	149.3	22.5	134.0	111.4	234	1060-1165DCT	7C	FIX
73268 MIDDLRIV 115	73176 TRIANGLE 115	1	LN	149.0	22.4	134.0	111.2	234	1060-1165DCT	9C	FIX

List of Overloads: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

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
73268 MIDDLRIV 115	73176 TRIANGLE 115	1	LN	148.8	22.4	134.0	111.1	234	1060-1165DCT	8C	FIX
73701 CRRA JCT 115	73703 ASHCREEK 115	1	LN	441.5	277.9	439.0	100.6	252	1389-1880DCT	7C	FIX
73701 CRRA JCT 115	73703 ASHCREEK 115	1	LN	439.5	268.4	439.0	100.1	252	1389-1880DCT	6C	FIX

List of Contingencies

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
46	1394LINE

List of Contingencies

Contingency Index	Contingency
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
91	1670LINE
92	1675LINE

List of Contingencies

Contingency Index	Contingency
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
136	1813LINE
137	1820LINE
138	1821LINE

List of Contingencies

Contingency Index	Contingency
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
181	89003BLINE-1
182	89003BLINE-2
183	89003BLINE-3
184	89005BLINE

List of Contingencies

Contingency Index	Contingency
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	353NLINE
208	353SLINE
209	KLEENSTK1
210	KLEENSTK2
211	KLEENSTK3
212	353N+AUTO
213	354LINE
214	362LINE
215	364+AUTO
216	368LINE
217	371LINE
218	371+AUTO
219	376LINE
220	381LINE
221	381LREAC
222	383LINE
223	384LINE
224	387LINE
225	393LINE
226	395LINE
227	395+AUTO
228	398LINE
229	398LREAC
230	PLUMNOR

List of Contingencies

Contingency Index	Contingency
231	PLUMNOR+AUTO
232	NORAUTO
233	1000-1090DCT
234	1060-1165DCT
235	1060-1270DCT
236	1070-1080DCT
237	1080-1280DCT
238	1080-1490DCT
239	1100-1200DCT
240	1100-1300DCT
241	1130-1430DCT
242	113091001DCT
243	1163-1550D-2
244	1207-1775DCT
245	1208-1640DCT
246	1222-1730ADC
247	1261-1620DCT
248	1272-1721DCT
249	1280-1870DCT
250	1310-1763DCT
251	1355-1610DCT
252	1389-1880DCT
253	1394-1515DCT
254	1416-1867DCT
255	1416-1880DCT
256	1416-1890DCT
257	1440-1450DCT
258	1470-1565DCT
259	1470-1637DCT
260	1470-1720DCT
261	1505-1607DCT
262	1545-1570DCT
263	1560-1570DCT
264	1570-1575DCT
265	1570-1580DCT
266	1575-1585DCT
267	1575-1990DCT
268	1580-1585DCT
269	1580-1730BDC
270	1620-1975DCT
271	1975-348DCT
272	1622-1887DCT
273	1637-1720DCT
274	1668-1721DCT
275	1670-1771DCT
276	1670-1830DCT

List of Contingencies

Contingency Index	Contingency
277	1710-1730ADC
278	1710-1730BDC
279	1710-1730CDC
280	1720-1730ADC
281	1732-1788DCT
282	1751-1777DCT
283	1770-1887DCT
284	1777-1779DCT
285	1800-1810DCT
286	1800-1825DCT
287	1810-1825DCT
288	1867-1880DCT
289	1867-1890DCT
290	1867-1977DCT
291	1880-1890DCT
292	1880-1977DCT
293	1890-1977DCT
294	8100-8200DCT
295	1460-387DCT
296	1565-PLNRDCT
297	1618-321DCT
298	1751-395DCT
299	1759-353NDCT
300	1767-353NDCT
301	1770-321DCT
302	1779-395DCT
303	1887-321DCT
304	310-348DCT
305	310-368DCT
306	310-383DCT
307	329-352DCT
308	362-376DCT
309	371-383DCT
310	MANCHAUTO1
311	PLUMAUT
312	SOUTH1XAUTO
313	SOUTH2XAUTO
314	LOSSBPT3
315	LOSSDEV7
316	LOLAKERD
317	LOSSMID4
318	LOSSMP2
319	LOSSMP3
320	LOSSMON6
321	LOSSNHAV
322	LOSSNOR1

List of Contingencies

Contingency Index	Contingency
323	LOSSNOR2
324	ALLINGS1TSTK
325	ALLINGS2TSTK
326	ASHCREEKBKR
327	BAIRDASTK
328	BAIRDBSTK
329	BATESROCK1T
330	BECONFLSTK
331	BOKUM1T
332	BOKUM2T
333	BOKUM3T
334	BRANFORD1T
335	BRANFORD2T
336	BRANFORD4T
337	BRANFRDRR1T
338	BROADWYST1
339	BUNKERH1T
340	BUNKERH2T
341	BUNKERH3T
342	COLONY1T
343	DARIEN1T
344	DEVON1TSTK
345	DEVON2TSTK
346	DEVON3TSTK
347	DEVON4TSTK
348	DEVON6TSTK
349	DEVON7TSTK
350	DEVON8TSTK
351	DEVON10TSTK
352	DEVON11TSTK
353	DEVON12TSTK
354	DEVON23TSTK
355	DEVON24TSTK
356	DEVON25TSTK
357	DEVON26TSTK
358	DEVON27TSTK
359	DEVSWST1TSTK
360	DEVSWST2TSTK
361	DEVSWST3TSTK
362	DEVSWST4TSTK
363	EMERIDEN1T
364	ESHORE12TSTK
365	FLAXHILL2T
366	FROSTBR15T
367	FROSTBR21T
368	FROSTBR27T

List of Contingencies

Contingency Index	Contingency
369	GLENBROOK3T
370	GLENBROOK8T
371	GRNDAV1TSTK
372	GRNDAV2TSTK
373	GRNDAV3TSTK
374	GRNDAV4TSTK
375	GRNDAV5TSTK
376	GRNDAV6TSTK
377	GRNDAV7TSTK
378	GREENHLL2T
379	HADDAMAT
380	HADDAMBT
381	HAWTHORNST
382	JUNEST1
383	MLLRVR1TSTK
384	MLLRVR2TSTK
385	MIXAVE1
386	NOHAVN1TSTK
387	NOHAVN2TSTK
388	NWALLING1T
389	NORWALKST1
390	NORWALKST2
391	NORWLKHAR1T
392	NORWLKHAR2T
393	NORWLKHAR3T
394	NORWLKHAR4T
395	NORWLKHAR7T
396	OLDTOWNST
397	PEACEABLE1T
398	PEQUON12TSTK
399	PEQUON22TSTK
400	PEQUON32TSTK
401	PEQUON42TSTK
402	PLUMTREE25T
403	PLUMTREE28T
404	PLUMTREE31T
405	QUINIPACST1
406	ROCKRIVER1T
407	SACKETST1
408	SASCOCR1T
409	SHEPAUG13A
410	SOUTHEND5T
411	SOUTHEND6T
412	SNAUGA1T
413	SOTHNGTN12T
414	SOTHNGTN13T

List of Contingencies

Contingency Index	Contingency
415	SOTHNGTN14T
416	SOTHNGTN15T
417	SOTHNGTN16T
418	SOTHNGTN20T
419	SOTHNGTN22T
420	SOTHNGTN23T
421	SOTHNGTN24T
422	SOTHNGTN25T
423	SOTHNGTN26T
424	SOTHNGTN28T
425	STEVENSNSTK
426	STONYHILL1T
427	TRPFALLST1
428	TRIANGLE2T
429	TRIANGLE3T
430	TRIANGLE4T
431	WALLING1TSTK
432	WALLING2TSTK
433	WALLING3TSTK
434	WALLING4TSTK
435	WALLING5TSTK
436	WATERST1TSTK
437	WATERST2TSTK
438	WATERSIDE2T
439	WBROOKFLD1T
440	WRIVER1TSTK
441	WRIVER2TSTK
442	WESTON1T
443	WOODMNT1TSTK
444	WOODMNT2TSTK
445	318-362STKBR
446	CARD1TSTK
447	CARD1T+LAKE
448	CARD2TSTK
449	CARD3TSTK
450	CARD3T+LAKE
451	LONGMT5TSTK
452	LUDLOWSTBKR
453	MANCH21TSTK
454	MONTVSTBKR
455	NOMNTSTBKR
456	NMSTBKREAC
457	SCOVRK4TSTK
458	SCOVRK5TSTK
459	SCOVRK7TSTK
460	SCOVRK8TSTK

List of Contingencies

Contingency Index	Contingency
461	SGTN1TSTK
462	SGTN3TSTK
463	SGTN4TSTK
464	SGTN5TSTK
465	SGTN6TSTK
466	SGTN7TSTK
467	NORSING1
468	SINGDEV1
469	SINGERSTK
470	orang-eshr
471	orang-dev
472	SNG-PEQTAP
473	SNGPEQ-XFR
474	DEV-XFR
475	ESHR-XFR
476	NEWDEV1
477	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 6C, 7C, 8C and 9C

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	WorstLoVio	Ncon Lo	Cont Name Worst Lo	WorstHiVio	Ncon Hi	Cont Name Worst Hi	Dispatch	Controls
73684	ALLINGSA	115.0	701	185	1	0.021	460	SCOVRK8TSTK	-	-		6C	FIX
73685	ALLINGSB	115.0	701	185	1	0.021	460	SCOVRK8TSTK	-	-		6C	FIX
73706	ANSONIA	115.0	701	185	1	0.030	460	SCOVRK8TSTK	-	-		6C	FIX
73186	BALDWINA	115.0	701	171	1	0.013	460	SCOVRK8TSTK	-	-		6C	FIX
73160	BALDWINB	115.0	701	171	2	0.029	248	1272-1721DCT	-	-		6C	FIX
73160	BALDWINB	115.0	701	171	1	0.016	248	1272-1721DCT	-	-		7C	FIX
73160	BALDWINB	115.0	701	171	1	0.016	248	1272-1721DCT	-	-		8C	FIX
73160	BALDWINB	115.0	701	171	2	0.043	248	1272-1721DCT	-	-		9C	FIX
73164	BALDWNJA	115.0	701	171	1	0.008	460	SCOVRK8TSTK	-	-		6C	FIX
73188	BCNFL PF	115.0	701	171	1	0.030	460	SCOVRK8TSTK	-	-		6C	FIX
73188	BCNFL PF	115.0	701	171	1	0.013	248	1272-1721DCT	-	-		9C	FIX
73231	BOKUM	115.0	701	171	1	0.005	460	SCOVRK8TSTK	-	-		6C	FIX
73231	BOKUM	115.0	701	171	3	0.002	247	1261-1620DCT	-	-		9C	FIX
73287	BRANF RR	115.0	701	171	1	0.022	460	SCOVRK8TSTK	-	-		6C	FIX
73153	BRANFORD	115.0	701	171	1	-	-		0.000	336	BRANFORD4T	7C	FIX
73153	BRANFORD	115.0	701	171	1	-	-		0.002	336	BRANFORD4T	8C	FIX
73153	BRANFORD	115.0	701	171	1	0.034	460	SCOVRK8TSTK	-	-		6C	FIX
73678	BROADWAY	115.0	701	185	1	0.022	460	SCOVRK8TSTK	-	-		6C	FIX
73185	BUNKER H	115.0	701	171	1	0.028	248	1272-1721DCT	-	-		6C	FIX
73185	BUNKER H	115.0	701	171	1	0.016	248	1272-1721DCT	-	-		7C	FIX
73185	BUNKER H	115.0	701	171	1	0.016	248	1272-1721DCT	-	-		8C	FIX
73185	BUNKER H	115.0	701	171	2	0.043	248	1272-1721DCT	-	-		9C	FIX
73697	CONGRESS	115.0	701	185	1	0.021	401	PEQUON42TSTK	-	-		9C	FIX
73297	DEVON	345.0	701	171	1	0.042	460	SCOVRK8TSTK	-	-		6C	FIX
73126	DEVON#2	115.0	701	171	1	0.000	460	SCOVRK8TSTK	-	-		6C	FIX
73191	DRBY J A	115.0	701	171	1	0.018	460	SCOVRK8TSTK	-	-		6C	FIX
73192	DRBY J B	115.0	701	171	1	0.026	460	SCOVRK8TSTK	-	-		6C	FIX
73663	E.SHORE	345.0	701	185	1	0.052	460	SCOVRK8TSTK	-	-		6C	FIX
73668	E.SHORE	115.0	701	185	1	0.014	460	SCOVRK8TSTK	-	-		6C	FIX
73663	E.SHORE	345.0	701	185	1	0.000	460	SCOVRK8TSTK	-	-		9C	FIX
73682	ELMWST A	115.0	701	185	4	0.023	377	GRNDAV7TSTK	-	-		6C	FIX

Voltage Violations, Worst & Total: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

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	WorstLoVio	Ncon Lo	Cont Name Worst Lo	WorstHiVio	Ncon Hi	Cont Name Worst Hi	Dispatch	Controls
73682	ELMWST A	115.0	701	185	3	0.029	377	GRNDAV7TSTK	-	-		9C	FIX
73683	ELMWST B	115.0	701	185	2	0.001	441	WRIVER2TSTK	-	-		7C	FIX
73683	ELMWST B	115.0	701	185	4	0.025	374	GRNDAV4TSTK	-	-		6C	FIX
73683	ELMWST B	115.0	701	185	3	0.031	374	GRNDAV4TSTK	-	-		9C	FIX
73679	ENG STA	115.0	701	185	1	0.020	460	SCOVRK8TSTK	-	-		6C	FIX
73189	FREIGHT	115.0	701	171	1	0.030	248	1272-1721DCT	-	-		6C	FIX
73189	FREIGHT	115.0	701	171	1	0.017	248	1272-1721DCT	-	-		7C	FIX
73189	FREIGHT	115.0	701	171	1	0.017	248	1272-1721DCT	-	-		8C	FIX
73189	FREIGHT	115.0	701	171	1	0.044	248	1272-1721DCT	-	-		9C	FIX
73104	FRSTBDGE	345.0	701	171	1	0.018	460	SCOVRK8TSTK	-	-		6C	FIX
73196	GLEN JCT	115.0	701	171	1	0.048	460	SCOVRK8TSTK	-	-		6C	FIX
73669	GRAND AV	115.0	701	185	1	0.020	460	SCOVRK8TSTK	-	-		6C	FIX
73265	GREEN HL	115.0	701	171	1	0.047	460	SCOVRK8TSTK	-	-		6C	FIX
73265	GREEN HL	115.0	701	171	1	0.003	460	SCOVRK8TSTK	-	-		9C	FIX
73705	IND.WELL	115.0	701	185	1	0.031	460	SCOVRK8TSTK	-	-		6C	FIX
73707	JUNE ST	115.0	701	185	1	0.043	460	SCOVRK8TSTK	-	-		6C	FIX
73105	LONG MTN	345.0	701	171	1	0.022	460	SCOVRK8TSTK	-	-		6C	FIX
73676	MILL RVR	115.0	701	185	1	0.021	460	SCOVRK8TSTK	-	-		6C	FIX
73688	MILVON A	115.0	701	185	1	0.005	460	SCOVRK8TSTK	-	-		6C	FIX
73689	MILVON B	115.0	701	185	1	0.005	460	SCOVRK8TSTK	-	-		6C	FIX
73675	MIX AVE	115.0	701	185	1	0.055	460	SCOVRK8TSTK	-	-		6C	FIX
73194	NEWTOWN	115.0	701	171	1	0.002	460	SCOVRK8TSTK	-	-		6C	FIX
73671	NO.HAVEN	115.0	701	185	1	-	-		0.000	387	NOHAVN2TSTK	8C	FIX
73671	NO.HAVEN	115.0	701	185	1	0.025	460	SCOVRK8TSTK	-	-		6C	FIX
73135	NOROH	345.0	701	171	1	0.039	460	SCOVRK8TSTK	-	-		6C	FIX
73134	NORUG	345.0	701	171	1	0.037	460	SCOVRK8TSTK	-	-		6C	FIX
73293	NORWALK	345.0	701	171	1	0.039	460	SCOVRK8TSTK	-	-		6C	FIX
73371	ORANGE	345.0	701	185	1	0.051	460	SCOVRK8TSTK	-	-		6C	FIX
73132	PLUMREAC	345.0	701	171	1	0.040	460	SCOVRK8TSTK	-	-		6C	FIX
73115	PLUMTREE	345.0	701	171	1	0.040	460	SCOVRK8TSTK	-	-		6C	FIX
73133	PLUMUG	345.0	701	171	1	0.040	460	SCOVRK8TSTK	-	-		6C	FIX

Voltage Violations, Worst & Total: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

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	WorstLoVio	Ncon Lo	Cont Name Worst Lo	WorstHiVio	Ncon Hi	Cont Name Worst Hi	Dispatch	Controls
73670	QUINNIP	115.0	701	185	1	0.028	460	SCOVRK8TSTK	-	-		6C	FIX
73672	SACKETT	115.0	701	185	1	0.031	460	SCOVRK8TSTK	-	-		6C	FIX
73673	SACKPHS	115.0	701	185	1	0.053	460	SCOVRK8TSTK	-	-		6C	FIX
73301	SINGER	345.0	701	186	1	0.041	460	SCOVRK8TSTK	-	-		6C	FIX
73282	SNDYHK	115.0	701	171	1	0.008	460	SCOVRK8TSTK	-	-		6C	FIX
73199	SO.NAUG	115.0	701	171	1	0.010	460	SCOVRK8TSTK	-	-		6C	FIX
73199	SO.NAUG	115.0	701	171	1	0.012	248	1272-1721DCT	-	-		9C	FIX
73106	SOUTHGTN	345.0	701	171	1	0.000	460	SCOVRK8TSTK	-	-		6C	FIX
73187	STEVENSN	115.0	701	171	1	0.011	460	SCOVRK8TSTK	-	-		6C	FIX
73704	TRAP FLS	115.0	701	185	1	0.016	460	SCOVRK8TSTK	-	-		6C	FIX
73632	WALLFRDJ	115.0	701	179	1	0.023	460	SCOVRK8TSTK	-	-		6C	FIX
73680	WATER ST	115.0	701	185	1	0.021	460	SCOVRK8TSTK	-	-		6C	FIX
73686	WDMONT A	115.0	701	185	1	0.017	460	SCOVRK8TSTK	-	-		6C	FIX
73687	WDMONT B	115.0	701	185	1	0.017	460	SCOVRK8TSTK	-	-		6C	FIX
73681	WEST RIV	115.0	701	185	1	0.021	460	SCOVRK8TSTK	-	-		6C	FIX
73631	WLNGF PF	115.0	701	179	1	0.021	460	SCOVRK8TSTK	-	-		6C	FIX

List of Voltage Violations: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

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
73684	ALLINGSA	115.0	701	185	0.8787	1.0206	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73685	ALLINGSB	115.0	701	185	0.8787	1.0206	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73706	ANSONIA	115.0	701	185	0.8703	1.0028	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73186	BALDWINA	115.0	701	171	0.8874	1.0077	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73160	BALDWINB	115.0	701	171	0.8569	1.0040	0.9000	1.0500	-	-	L	248	1272-1721DCT	9C	FIX
73160	BALDWINB	115.0	701	171	0.8713	1.0057	0.9000	1.0500	-	-	L	248	1272-1721DCT	6C	FIX
73160	BALDWINB	115.0	701	171	0.8837	1.0082	0.9000	1.0500	-	-	L	248	1272-1721DCT	7C	FIX
73160	BALDWINB	115.0	701	171	0.8840	1.0063	0.9000	1.0500	-	-	L	248	1272-1721DCT	8C	FIX
73160	BALDWINB	115.0	701	171	0.8878	1.0057	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73160	BALDWINB	115.0	701	171	0.8905	1.0040	0.9000	1.0500	-	-	L	340	BUNKERH2T	9C	FIX
73164	BALDWNJA	115.0	701	171	0.8916	1.0112	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73188	BCNFL PF	115.0	701	171	0.8697	0.9973	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73188	BCNFL PF	115.0	701	171	0.8867	0.9935	0.9000	1.0500	-	-	L	248	1272-1721DCT	9C	FIX
73231	BOKUM	115.0	701	171	0.8951	1.0019	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73231	BOKUM	115.0	701	171	0.8977	1.0013	0.9000	1.0500	-	-	L	247	1261-1620DCT	9C	FIX
73231	BOKUM	115.0	701	171	0.8977	1.0013	0.9000	1.0500	-	-	L	331	BOKUM1T	9C	FIX
73231	BOKUM	115.0	701	171	0.8977	1.0013	0.9000	1.0500	-	-	L	380	HADDAMBT	9C	FIX
73287	BRANF RR	115.0	701	171	0.8781	1.0207	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73153	BRANFORD	115.0	701	171	0.8659	1.0151	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73153	BRANFORD	115.0	701	171	1.0519	1.0311	0.9000	1.0500	-	-	H	336	BRANFORD4T	8C	FIX
73678	BROADWAY	115.0	701	185	0.8784	1.0224	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73185	BUNKER H	115.0	701	171	0.8572	1.0144	0.9000	1.0500	-	-	L	248	1272-1721DCT	9C	FIX
73185	BUNKER H	115.0	701	171	0.8716	1.0154	0.9000	1.0500	-	-	L	248	1272-1721DCT	6C	FIX
73185	BUNKER H	115.0	701	171	0.8840	1.0176	0.9000	1.0500	-	-	L	248	1272-1721DCT	7C	FIX
73185	BUNKER H	115.0	701	171	0.8842	1.0154	0.9000	1.0500	-	-	L	248	1272-1721DCT	8C	FIX
73185	BUNKER H	115.0	701	171	0.8926	1.0144	0.9000	1.0500	-	-	L	340	BUNKERH2T	9C	FIX
73697	CONGRESS	115.0	701	185	0.8786	1.0241	0.9000	1.0500	-	-	L	401	PEQUON42TSTK	9C	FIX
73117	CTNY398	345.0	701	171	0.9394	1.0057	0.9500	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73297	DEVON	345.0	701	171	0.9079	1.0130	0.9500	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73310	DEVSING1	345.0	701	171	0.9079	1.0130	0.9500	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73311	DEVSING2	345.0	701	171	0.9079	1.0130	0.9500	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73191	DRBY J A	115.0	701	171	0.8815	1.0084	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73192	DRBY J B	115.0	701	171	0.8739	1.0053	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73668	E.SHORE	115.0	701	185	0.8857	1.0240	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73663	E.SHORE	345.0	701	185	0.8977	1.0097	0.9500	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73682	ELMWST A	115.0	701	185	0.8710	1.0159	0.9000	1.0500	-	-	L	377	GRNDAV7TSTK	9C	FIX

List of Voltage Violations: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

H = High
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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
73682	ELMWST A	115.0	701	185	0.8714	1.0159	0.9000	1.0500	-	-	L	440	WRIVER1TSTK	9C	FIX
73682	ELMWST A	115.0	701	185	0.8758	1.0159	0.9000	1.0500	-	-	L	376	GRNDAV6TSTK	9C	FIX
73682	ELMWST A	115.0	701	185	0.8773	1.0211	0.9000	1.0500	-	-	L	377	GRNDAV7TSTK	6C	FIX
73682	ELMWST A	115.0	701	185	0.8776	1.0211	0.9000	1.0500	-	-	L	440	WRIVER1TSTK	6C	FIX
73682	ELMWST A	115.0	701	185	0.8779	1.0211	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73682	ELMWST A	115.0	701	185	0.8805	1.0211	0.9000	1.0500	-	-	L	376	GRNDAV6TSTK	6C	FIX
73683	ELMWST B	115.0	701	185	0.8687	1.0159	0.9000	1.0500	-	-	L	374	GRNDAV4TSTK	9C	FIX
73683	ELMWST B	115.0	701	185	0.8692	1.0159	0.9000	1.0500	-	-	L	441	WRIVER2TSTK	9C	FIX
73683	ELMWST B	115.0	701	185	0.8736	1.0159	0.9000	1.0500	-	-	L	375	GRNDAV5TSTK	9C	FIX
73683	ELMWST B	115.0	701	185	0.8752	1.0211	0.9000	1.0500	-	-	L	374	GRNDAV4TSTK	6C	FIX
73683	ELMWST B	115.0	701	185	0.8755	1.0211	0.9000	1.0500	-	-	L	441	WRIVER2TSTK	6C	FIX
73683	ELMWST B	115.0	701	185	0.8779	1.0211	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73683	ELMWST B	115.0	701	185	0.8783	1.0211	0.9000	1.0500	-	-	L	375	GRNDAV5TSTK	6C	FIX
73683	ELMWST B	115.0	701	185	0.8995	1.0293	0.9000	1.0500	-	-	L	441	WRIVER2TSTK	7C	FIX
73683	ELMWST B	115.0	701	185	0.8998	1.0293	0.9000	1.0500	-	-	L	374	GRNDAV4TSTK	7C	FIX
73679	ENG STA	115.0	701	185	0.8799	1.0229	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73306	ESHR1-OR	345.0	701	185	0.8978	1.0098	0.9500	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73307	ESHR2-OR	345.0	701	185	0.8978	1.0098	0.9500	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73308	ESHR3-OR	345.0	701	185	0.8978	1.0098	0.9500	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73189	FREIGHT	115.0	701	171	0.8557	1.0162	0.9000	1.0500	-	-	L	248	1272-1721DCT	9C	FIX
73189	FREIGHT	115.0	701	171	0.8701	1.0169	0.9000	1.0500	-	-	L	248	1272-1721DCT	6C	FIX
73189	FREIGHT	115.0	701	171	0.8825	1.0192	0.9000	1.0500	-	-	L	248	1272-1721DCT	7C	FIX
73189	FREIGHT	115.0	701	171	0.8827	1.0171	0.9000	1.0500	-	-	L	248	1272-1721DCT	8C	FIX
73104	FRSTBDGE	345.0	701	171	0.9317	1.0208	0.9500	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73196	GLEN JCT	115.0	701	171	0.8521	1.0114	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73669	GRAND AV	115.0	701	185	0.8796	1.0229	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73265	GREEN HL	115.0	701	171	0.8526	0.9941	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73265	GREEN HL	115.0	701	171	0.8971	0.9926	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	9C	FIX
73705	IND.WELL	115.0	701	185	0.8686	1.0026	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73707	JUNE ST	115.0	701	185	0.8570	1.0123	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73105	LONG MTN	345.0	701	171	0.9281	1.0072	0.9500	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73676	MILL RVR	115.0	701	185	0.8793	1.0228	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73688	MILVON A	115.0	701	185	0.8954	1.0231	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73689	MILVON B	115.0	701	185	0.8954	1.0231	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73675	MIX AVE	115.0	701	185	0.8453	1.0114	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73194	NEWTOWN	115.0	701	171	0.8980	1.0099	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX

List of Voltage Violations: 27.7 GW NE Load, Dispatches 6C, 7C, 8C and 9C

H = High
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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
73671	NO.HAVEN	115.0	701	185	0.8750	1.0229	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73135	NOROH	345.0	701	171	0.9107	1.0077	0.9500	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73316	NORSING1	345.0	701	171	0.9106	1.0093	0.9500	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73317	NORSING2	345.0	701	171	0.9106	1.0093	0.9500	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73134	NORUG	345.0	701	171	0.9127	1.0084	0.9500	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73293	NORWALK	345.0	701	171	0.9105	1.0092	0.9500	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73371	ORANGE	345.0	701	185	0.8990	1.0098	0.9500	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73303	OR-ESHR1	345.0	701	185	0.8989	1.0097	0.9500	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73304	OR-ESHR2	345.0	701	185	0.8989	1.0097	0.9500	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73305	OR-ESHR3	345.0	701	185	0.8989	1.0097	0.9500	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73132	PLUMREAC	345.0	701	171	0.9100	1.0032	0.9500	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73115	PLUMTREE	345.0	701	171	0.9100	1.0032	0.9500	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73133	PLUMUG	345.0	701	171	0.9101	1.0037	0.9500	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73670	QUINNIP	115.0	701	185	0.8719	1.0207	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73672	SACKETT	115.0	701	185	0.8695	1.0238	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73673	SACKPHS	115.0	701	185	0.8472	1.0131	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73312	SINGDEV1	345.0	701	186	0.9093	1.0122	0.9500	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73313	SINGDEV2	345.0	701	186	0.9093	1.0122	0.9500	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73301	SINGER	345.0	701	186	0.9093	1.0122	0.9500	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73314	SINGNOR1	345.0	701	186	0.9094	1.0122	0.9500	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73315	SINGNOR2	345.0	701	186	0.9094	1.0122	0.9500	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73282	SNDYHK	115.0	701	171	0.8925	1.0094	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73199	SO.NAUG	115.0	701	171	0.8876	1.0044	0.9000	1.0500	-	-	L	248	1272-1721DCT	9C	FIX
73199	SO.NAUG	115.0	701	171	0.8899	1.0084	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73106	SOUTHGTN	345.0	701	171	0.9498	1.0263	0.9500	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73187	STEVENSN	115.0	701	171	0.8892	1.0096	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73704	TRAP FLS	115.0	701	185	0.8837	1.0104	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73632	WALLFRDJ	115.0	701	179	0.8774	1.0209	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73680	WATER ST	115.0	701	185	0.8787	1.0224	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73686	WDMONT A	115.0	701	185	0.8832	1.0207	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73687	WDMONT B	115.0	701	185	0.8832	1.0207	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73681	WEST RIV	115.0	701	185	0.8789	1.0222	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX
73631	WLNGF PF	115.0	701	179	0.8792	1.0207	0.9000	1.0500	-	-	L	460	SCOVRK8TSTK	6C	FIX

List of Contingencies

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
46	1394LINE

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Contingency Index	Contingency
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
91	1670LINE
92	1675LINE

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Contingency Index	Contingency
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
136	1813LINE
137	1820LINE
138	1821LINE

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Contingency Index	Contingency
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
181	89003BLINE-1
182	89003BLINE-2
183	89003BLINE-3
184	89005BLINE

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Contingency Index	Contingency
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	353NLINE
208	353SLINE
209	KLEENSTK1
210	KLEENSTK2
211	KLEENSTK3
212	353N+AUTO
213	354LINE
214	362LINE
215	364+AUTO
216	368LINE
217	371LINE
218	371+AUTO
219	376LINE
220	381LINE
221	381LREAC
222	383LINE
223	384LINE
224	387LINE
225	393LINE
226	395LINE
227	395+AUTO
228	398LINE
229	398LREAC
230	PLUMNOR

List of Contingencies

Contingency Index	Contingency
231	PLUMNOR+AUTO
232	NORAUTO
233	1000-1090DCT
234	1060-1165DCT
235	1060-1270DCT
236	1070-1080DCT
237	1080-1280DCT
238	1080-1490DCT
239	1100-1200DCT
240	1100-1300DCT
241	1130-1430DCT
242	113091001DCT
243	1163-1550D-2
244	1207-1775DCT
245	1208-1640DCT
246	1222-1730ADC
247	1261-1620DCT
248	1272-1721DCT
249	1280-1870DCT
250	1310-1763DCT
251	1355-1610DCT
252	1389-1880DCT
253	1394-1515DCT
254	1416-1867DCT
255	1416-1880DCT
256	1416-1890DCT
257	1440-1450DCT
258	1470-1565DCT
259	1470-1637DCT
260	1470-1720DCT
261	1505-1607DCT
262	1545-1570DCT
263	1560-1570DCT
264	1570-1575DCT
265	1570-1580DCT
266	1575-1585DCT
267	1575-1990DCT
268	1580-1585DCT
269	1580-1730BDC
270	1620-1975DCT
271	1975-348DCT
272	1622-1887DCT
273	1637-1720DCT
274	1668-1721DCT
275	1670-1771DCT
276	1670-1830DCT

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Contingency Index	Contingency
277	1710-1730ADC
278	1710-1730BDC
279	1710-1730CDC
280	1720-1730ADC
281	1732-1788DCT
282	1751-1777DCT
283	1770-1887DCT
284	1777-1779DCT
285	1800-1810DCT
286	1800-1825DCT
287	1810-1825DCT
288	1867-1880DCT
289	1867-1890DCT
290	1867-1977DCT
291	1880-1890DCT
292	1880-1977DCT
293	1890-1977DCT
294	8100-8200DCT
295	1460-387DCT
296	1565-PLNRDCT
297	1618-321DCT
298	1751-395DCT
299	1759-353NDCT
300	1767-353NDCT
301	1770-321DCT
302	1779-395DCT
303	1887-321DCT
304	310-348DCT
305	310-368DCT
306	310-383DCT
307	329-352DCT
308	362-376DCT
309	371-383DCT
310	MANCHAUTO1
311	PLUMAUT
312	SOUTH1XAUTO
313	SOUTH2XAUTO
314	LOSSBPT3
315	LOSSDEV7
316	LOLAKERD
317	LOSSMID4
318	LOSSMP2
319	LOSSMP3
320	LOSSMON6
321	LOSSNHAV
322	LOSSNOR1

List of Contingencies

Contingency Index	Contingency
323	LOSSNOR2
324	ALLINGS1TSTK
325	ALLINGS2TSTK
326	ASHCREEKBKR
327	BAIRDASTK
328	BAIRDBSTK
329	BATESROCK1T
330	BECONFLSTK
331	BOKUM1T
332	BOKUM2T
333	BOKUM3T
334	BRANFORD1T
335	BRANFORD2T
336	BRANFORD4T
337	BRANFRDRR1T
338	BROADWYST1
339	BUNKERH1T
340	BUNKERH2T
341	BUNKERH3T
342	COLONY1T
343	DARIEN1T
344	DEVON1TSTK
345	DEVON2TSTK
346	DEVON3TSTK
347	DEVON4TSTK
348	DEVON6TSTK
349	DEVON7TSTK
350	DEVON8TSTK
351	DEVON10TSTK
352	DEVON11TSTK
353	DEVON12TSTK
354	DEVON23TSTK
355	DEVON24TSTK
356	DEVON25TSTK
357	DEVON26TSTK
358	DEVON27TSTK
359	DEVSWST1TSTK
360	DEVSWST2TSTK
361	DEVSWST3TSTK
362	DEVSWST4TSTK
363	EMERIDEN1T
364	ESHORE12TSTK
365	FLAXHILL2T
366	FROSTBR15T
367	FROSTBR21T
368	FROSTBR27T

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Contingency Index	Contingency
369	GLENBROOK3T
370	GLENBROOK8T
371	GRNDAV1TSTK
372	GRNDAV2TSTK
373	GRNDAV3TSTK
374	GRNDAV4TSTK
375	GRNDAV5TSTK
376	GRNDAV6TSTK
377	GRNDAV7TSTK
378	GREENHLL2T
379	HADDAMAT
380	HADDAMBT
381	HAWTHORNST
382	JUNEST1
383	MLLRVR1TSTK
384	MLLRVR2TSTK
385	MIXAVE1
386	NOHAVN1TSTK
387	NOHAVN2TSTK
388	NWALLING1T
389	NORWALKST1
390	NORWALKST2
391	NORWLKHAR1T
392	NORWLKHAR2T
393	NORWLKHAR3T
394	NORWLKHAR4T
395	NORWLKHAR7T
396	OLDTOWNST
397	PEACEABLE1T
398	PEQUON12TSTK
399	PEQUON22TSTK
400	PEQUON32TSTK
401	PEQUON42TSTK
402	PLUMTREE25T
403	PLUMTREE28T
404	PLUMTREE31T
405	QUINIPACST1
406	ROCKRIVER1T
407	SACKETST1
408	SASCOCR1T
409	SHEPAUG13A
410	SOUTHEND5T
411	SOUTHEND6T
412	SNAUGA1T
413	SOTHNGTN12T
414	SOTHNGTN13T

List of Contingencies

Contingency Index	Contingency
415	SOTHNGTN14T
416	SOTHNGTN15T
417	SOTHNGTN16T
418	SOTHNGTN20T
419	SOTHNGTN22T
420	SOTHNGTN23T
421	SOTHNGTN24T
422	SOTHNGTN25T
423	SOTHNGTN26T
424	SOTHNGTN28T
425	STEVENSNSTK
426	STONYHILL1T
427	TRPFALLST1
428	TRIANGLE2T
429	TRIANGLE3T
430	TRIANGLE4T
431	WALLING1TSTK
432	WALLING2TSTK
433	WALLING3TSTK
434	WALLING4TSTK
435	WALLING5TSTK
436	WATERST1TSTK
437	WATERST2TSTK
438	WATERSIDE2T
439	WBROOKFLD1T
440	WRIVER1TSTK
441	WRIVER2TSTK
442	WESTON1T
443	WOODMNT1TSTK
444	WOODMNT2TSTK
445	318-362STKBR
446	CARD1TSTK
447	CARD1T+LAKE
448	CARD2TSTK
449	CARD3TSTK
450	CARD3T+LAKE
451	LONGMT5TSTK
452	LUDLOWSTBKR
453	MANCH21TSTK
454	MONTVSTBKR
455	NOMNTSTBKR
456	NMSTBKREAC
457	SCOVRK4TSTK
458	SCOVRK5TSTK
459	SCOVRK7TSTK
460	SCOVRK8TSTK

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Contingency Index	Contingency
461	SGTN1TSTK
462	SGTN3TSTK
463	SGTN4TSTK
464	SGTN5TSTK
465	SGTN6TSTK
466	SGTN7TSTK
467	NORSING1
468	SINGDEV1
469	SINGERSTK
470	orang-eshr
471	orang-dev
472	SNG-PEQTAP
473	SNGPEQ-XFR
474	DEV-XFR
475	ESHR-XFR
476	NEWDEV1
477	NEWDEV2