
APPENDIX I

EXTREME CONTINGENCY POWERFLOW ANALYSIS

APPENDIX I

Extreme Contingency Powerflow Analysis Results

I.1	Extreme Contingency Summary Table	I-1
I.2	Extreme Contingency Analysis Results	I-3

Extreme Contingency	OP-1 Violations	Facilities (kV) Above 90% STE Loading				
		765	500	345	230	138/115
EC01 – L/O NY-ON TIES AT NIAGARA	-	-	-	-	-	-
EC02 - L/O NIAGARA STATION & GENERATION PLANT	-	-	-	-	1	-
EC03 - L/O R.O.W. WEST OF ROCHESTER	-	-	-	-	-	2
EC04 - L/O ROW EAST OF ROCHESTER	-	-	-	-	-	-
EC05 - L/O WATERCURE SUBSTATION	-	-	-	-	-	-
EC06 - L/O R.O.W. NORTH OF VOLNEY	-	-	-	-	-	-
EC07 - L/O R.O.W. SOUTH OF VOLNEY	-	-	-	-	-	-
EC08 - L/O CLAY SUBSTATION	-	-	-	-	-	-
EC09 - L/O LAFAYETTE SUBSTATION	-	-	-	-	-	-
EC10 - L/O OAKDALE SUBSTATION	-	-	-	-	-	5
EC11 - L/O R.O.W. NORTH OF ADIRONDACK	-	-	-	-	-	-
EC12 - L/O MARCY-VOLNEY AND MARCY-EDIC	-	-	-	-	-	-
EC13 - L/O EDIC SUBSTATION	-	-	-	-	-	-
EC14 - L/O R.O.W. SOUTH OF UTICA	-	-	-	-	-	1
EC15 - L/O R.O.W. EAST OF UTICA	-	-	-	-	-	1
EC16 - L/O FRASER SUBSTATION	-	-	-	-	-	-
EC17 - L/O R.O.W. WEST OF ROTTERDAM	-	-	-	-	-	2
EC18 - L/O NEW SCOTLAND SUBSTATION	-	-	-	-	-	1
EC19 - L/O LEEDS SUBSTATION	-	-	-	-	-	6
EC20 - L/O FISHKILL SUBSTATION	-	-	-	1	-	-
EC21 - L/O ROSETON SUBSTATION AND GENERATION	-	-	-	-	-	-
EC22 - L/O RAMAPO SUBSTATION	-	-	-	-	-	1

EC23 - L/O BUCHANAN SUBSTATION	-	-	-	-	-	-
EC25 - L/O MILLWOOD SUBSTATION	-	-	-	-	-	-
EC26 - L/O R.O.W. SOUTH OF MILLWOOD	-	-	-	-	-	-
EC27 - L/O ASTORIA GENERATION	-	-	-	-	-	-
EC28 - L/O RAVENSWOOD GENERATION	-	-	-	-	-	-
EC29 - L/O NORTHPORT SUBSTATION AND GENERATION	-	-	-	-	-	-
EC30 - 3PH/STK @MOSES 230 / MASSENA-MOSES 765/230 MMS-2	-	-	-	-	-	-
EC31 - 3PH/STK @EDIC 345 ON EDIC-FRASER	-	-	-	-	-	-
EC32 - 3PH/STK @EDIC 345 ON EDIC-NSCOT, CLR@FITZ345	-	-	-	-	-	-
EC33 - 3PH@ ROCHESTER 345KV ON ROCHESTER-PANNELL RP-1	-	-	-	-	-	-
EC35 - 3PH/STK@EDIC345KV FITZ-EDIC #FE-1/BKUP CLR@N.SCOT345	-	-	-	-	-	-
LOG1 – L/O BETHLEHEM AND BESICORP GENERATION	-	-	-	-	-	-

EXTREME CONTINGENCY NUMBER 1
LOSS OF NYISO-IESO TIES AT NIAGARA
LOSS OF PA27, BP76, AND (2) BECK-NIAGARA

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 1
LOSS OF NYISO-IESO TIES AT NIAGARA
LOSS OF PA27, BP76, AND (2) BECK-NIAGARA

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 1
LOSS OF NYISO-IESO TIES AT NIAGARA
LOSS OF PA27, BP76, AND (2) BECK-NIAGARA

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

EXTREME CONTINGENCY NUMBER 2
LOSS OF NIAGARA SUBSTATION AND GENERATION PLANT
LOSS OF NIAGARA 345, NIAGARA 230, NIAGARA 115
LOSS OF NIAGARA AND LEWISTON GENERATION.

High limit violations at 200 kV and above:

Bus	Name	Base kV	Voltage	Limit
137927	RECTOR	230.00	230.00	1.050

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:

Bus	Name	Base kV	Voltage	Limit
136181	CLAY	115.00	115.00	1.051

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 2
LOSS OF NIAGARA SUBSTATION AND GENERATION PLANT
LOSS OF NIAGARA 345, NIAGARA 230, NIAGARA 115
LOSS OF NIAGARA AND LEWISTON GENERATION.

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:

From Bus	Name	To Bus	Name	ID	MVA Flow	Rating
135415	PACKARD2	230.00	157062	BCK2BP76	230.00	1 568.1 557.0

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 2
LOSS OF NIAGARA SUBSTATION AND GENERATION PLANT
LOSS OF NIAGARA 345, NIAGARA 230, NIAGARA 115
LOSS OF NIAGARA AND LEWISTON GENERATION.

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

EXTREME CONTINGENCY NUMBER 3
LOSS OF R.O.W. WEST OF ROCHESTER
LOSS OF NIAGARA-ROCH, AND KINTIGH-ROCH

High limit violations at 200 kV and above:

None

Low limit violations at 200 kV and above:

None

High limit violations at 100 kV and above:

None

Low limit violations at 100 kV and above:

None

EXTREME CONTINGENCY NUMBER 3

LOSS OF R.O.W. WEST OF ROCHESTER

LOSS OF NIAGARA-ROCH, AND KINTIGH-ROCH

Flow exceeding 90.0% of STE on 765kV lines:

None

Flow exceeding 90.0% of STE on 345kV lines:

None

Flow exceeding 90.0% of STE on 230kV lines:

None

Flow exceeding 90.0% of STE on 138kV lines:

None

Flow exceeding 90.0% of STE on 115kV lines:

From Bus	Name	To Bus	Name	ID	MVA Flow	Rating	
130815	HINMN115	115.00	135452 LOCKPORT	115.00	1	235.4	260.0
135850	SOUR-114	115.00	135861 MORTIMER	115.00	1	137.8	153.0

EXTREME CONTINGENCY NUMBER 3

LOSS OF R.O.W. WEST OF ROCHESTER

LOSS OF NIAGARA-ROCH, AND KINTIGH-ROCH

Flow exceeding 90.0% of STE on 765kV transformers:

None

Flow exceeding 90.0% of STE on 345kV transformers:

None

Flow exceeding 90.0% of STE on 230kV transformers:

None

Flow exceeding 90.0% of STE on 138kV transformers:

None

Flow exceeding 90.0% of STE on 115kV transformers:

None

EXTREME CONTINGENCY NUMBER 4

LOSS OF ROW EAST OF ROCHESTER

LOSS OF (2) ROCHESTER-PANNELL

High limit violations at 200 kV and above:

None

Low limit violations at 200 kV and above:

None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 4
LOSS OF ROW EAST OF ROCHESTER
LOSS OF (2) ROCHESTER-PANNELL

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 4
LOSS OF ROW EAST OF ROCHESTER
LOSS OF (2) ROCHESTER-PANNELL

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

EXTREME CONTINGENCY NUMBER 5
LOSS OF WATERCURE SUBSTATION
LOSS OF WATERCURE 345 AND WATERCURE 230

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 5
LOSS OF WATERCURE SUBSTATION
LOSS OF WATERCURE 345 AND WATERCURE 230

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 5
LOSS OF WATERCURE SUBSTATION
LOSS OF WATERCURE 345 AND WATERCURE 230

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

EXTREME CONTINGENCY NUMBER 6
LOSS OF R.O.W. NORTH OF VOLNEY
LOSS OF (2) SCRIBA-VOLNEY, SITHE-CLAY,
NMPT1-CLAY, AND FITZ-EDIC

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 6
LOSS OF R.O.W. NORTH OF VOLNEY
LOSS OF (2) SCRIBA-VOLNEY, SITHE-CLAY,
NMPT1-CLAY, AND FITZ-EDIC

Flow exceeding 90.0% of STE on 765kV lines:

None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 6
LOSS OF R.O.W. NORTH OF VOLNEY
LOSS OF (2) SCRIBA-VOLNEY, SITHE-CLAY,
NMPT1-CLAY, AND FITZ-EDIC

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

EXTREME CONTINGENCY NUMBER 7
LOSS OF R.O.W. SOUTH OF VOLNEY
LOSS OF VOLNEY-CLAY, SITHE-CLAY AND NMPT1-CLAY

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 7
LOSS OF R.O.W. SOUTH OF VOLNEY
LOSS OF VOLNEY-CLAY, SITHE-CLAY AND NMPT1-CLAY

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:

None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 7
LOSS OF R.O.W. SOUTH OF VOLNEY
LOSS OF VOLNEY-CLAY, SITHE-CLAY AND NMPT1-CLAY

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

EXTREME CONTINGENCY NUMBER 8
LOSS OF CLAY SUBSTATION
LOSS OF CLAY 345 AND CLAY 115

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 8
LOSS OF CLAY SUBSTATION
LOSS OF CLAY 345 AND CLAY 115

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 8
LOSS OF CLAY SUBSTATION
LOSS OF CLAY 345 AND CLAY 115

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

EXTREME CONTINGENCY NUMBER 9
LOSS OF LAFAYETTE SUBSTATION

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 9
LOSS OF LAFAYETTE SUBSTATION

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 9
LOSS OF LAFAYETTE SUBSTATION

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

EXTREME CONTINGENCY NUMBER 10
LOSS OF OAKDALE SUBSTATION
LOSS OF OAKDALE 345, OAKDALE 230 AND OAKDALE 115

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:

Bus	Name	Base kV	Voltage	Limit	
130780	CANDO115	115.00	115.00	0.748	0.900
130807	WESTOVER115	115.00	115.00	0.660	0.900
130818	JONES115	115.00	115.00	0.568	0.900
130832	MORGN115	115.00	115.00	0.517	0.900
130835	N.END115	115.00	115.00	0.612	0.900
130836	N.WAV115	115.00	115.00	0.860	0.900
130848	S.OWE115	115.00	115.00	0.749	0.900
131014	BINCO115	115.00	115.00	0.479	0.900
131015	CASTL115	115.00	115.00	0.583	0.900
131016	FUL H115	115.00	115.00	0.542	0.900
131017	LANGD115	115.00	115.00	0.498	0.900
131018	LOUNS115	115.00	115.00	0.801	0.900
131019	NSIDE115	115.00	115.00	0.479	0.900
131020	RANGH115	115.00	115.00	0.594	0.900
131021	ROBBL115	115.00	115.00	0.621	0.900
131162	CHEMU115	115.00	115.00	0.882	0.900
131850	CNYOG115	115.00	115.00	0.788	0.900

EXTREME CONTINGENCY NUMBER 10
LOSS OF OAKDALE SUBSTATION
LOSS OF OAKDALE 345, OAKDALE 230 AND OAKDALE 115

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:

From Bus	Name	To Bus	Name	ID	MVA Flow	Rating	
130814	HILSD115	115.00	131162 CHEMU115	115.00	1	185.5	179.0
130836	N.WAV115	115.00	131018 LOUNS115	115.00	1	165.3	143.0
130836	N.WAV115	115.00	131162 CHEMU115	115.00	1	169.7	179.0
130848	S.OWE115	115.00	131850 CNYOG115	115.00	1	148.4	143.0
131018	LOUNS115	115.00	131850 CNYOG115	115.00	1	152.0	143.0

EXTREME CONTINGENCY NUMBER 10
LOSS OF OAKDALE SUBSTATION
LOSS OF OAKDALE 345, OAKDALE 230 AND OAKDALE 115

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

EXTREME CONTINGENCY NUMBER 11
LOSS OF R.O.W. NORTH OF ADIRONDACK
LOSS OF MARCY-MASSENA 765, AND ADIRONDACK-Moses West
230 Double Circuit
* REJECT RADIAL QUEBEC GENERATION
OPEN MSC-7040 @ CHATEAUGUAY @ 6.0~ (REJECT HQ IMPORT)
OPEN MSC-7040 @ MASSENA @ 8.0~

High limit violations at 200 kV and above:

Bus	Name	Base kV	Voltage	Limit	
137210	PORTER 2	230.00	230.00	1.052	1.050
137927	RECTOR	230.00	230.00	1.064	1.050
137928	CHASES L	230.00	230.00	1.062	1.050
147835	ADRON B1	230.00	230.00	1.062	1.050
147836	ADRON B2	230.00	230.00	1.062	1.050

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:

Bus	Name	Base kV	Voltage	Limit	
136757	N.O-BRG	115.00	115.00	1.050	1.050
136785	MCINTYRE	115.00	115.00	1.053	1.050
136794	OGDENSBG	115.00	115.00	1.052	1.050

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 11
LOSS OF R.O.W. NORTH OF ADIRONDACK
LOSS OF MARCY-MASSENA 765, AND ADIRONDACK-Moses West
230 Double Circuit

* REJECT RADIAL QUEBEC GENERATION
OPEN MSC-7040 @ CHATEAUGUAY @ 6.0~ (REJECT HQ IMPORT)
OPEN MSC-7040 @ MASSENA @ 8.0~

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 11
LOSS OF R.O.W. NORTH OF ADIRONDACK
LOSS OF MARCY-MASSENA 765, AND ADIRONDACK-Moses West
230 Double Circuit
* REJECT RADIAL QUEBEC GENERATION
OPEN MSC-7040 @ CHATEAUGUAY @ 6.0~ (REJECT HQ IMPORT)
OPEN MSC-7040 @ MASSENA @ 8.0~

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

EXTREME CONTINGENCY NUMBER 12
FAULT ON MARCY-VOLNEY AND STUCK BREAKER AT MARCY
LOSS OF MARCY-VOLNEY AND MARCY-EDIC
3PH/STK@MARCY345/VOLNEY-MARCY VU-19/STK@MARCY 345
CLEAR VOLNEY @ 4.5~
CLEAR MARCY BACKUP @10.0~
CLEAR EDIC (UE1-7) @11.0~ (CLEAR FAULT)

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 12
FAULT ON MARCY-VOLNEY AND STUCK BREAKER AT MARCY
LOSS OF MARCY-VOLNEY AND MARCY-EDIC
3PH/STK@MARC345/VOLNEY-MARC345 VU-19/STK@MARC345
CLEAR VOLNEY @ 4.5~
CLEAR MARCY BACKUP @10.0~
CLEAR EDIC (UE1-7) @11.0~ (CLEAR FAULT)

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 12
FAULT ON MARCY-VOLNEY AND STUCK BREAKER AT MARCY
LOSS OF MARCY-VOLNEY AND MARCY-EDIC
3PH/STK@MARC345/VOLNEY-MARC345 VU-19/STK@MARC345
CLEAR VOLNEY @ 4.5~
CLEAR MARCY BACKUP @10.0~
CLEAR EDIC (UE1-7) @11.0~ (CLEAR FAULT)

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

EXTREME CONTINGENCY NUMBER 13
LOSS OF EDIC SUBSTATION

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 13
LOSS OF EDIC SUBSTATION

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 13
LOSS OF EDIC SUBSTATION

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

EXTREME CONTINGENCY NUMBER 14
LOSS OF R.O.W. SOUTH OF UTICA
LOSS OF (2) PORTER-ROTTERDAM, EDIC-FRASER,
MARCY-COOPERS CORNERS

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 14
LOSS OF R.O.W. SOUTH OF UTICA
LOSS OF (2) PORTER-ROTTERDAM, EDIC-FRASER,
MARCY-COOPERS CORNERS

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 14
LOSS OF R.O.W. SOUTH OF UTICA
LOSS OF (2) PORTER-ROTTERDAM, EDIC-FRASER,
MARCY-COOPERS CORNERS

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:

From Bus	Name	To Bus	Name	ID	MVA Flow	Rating
137228	INGMS-CD	115.00	137302 INGHAMS	46.000	1 11.7	12.0

EXTREME CONTINGENCY NUMBER 15
LOSS OF R.O.W. EAST OF UTICA
LOSS OF EDIC-N.SCOT AND MARCY-N.SCOT

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 15
LOSS OF R.O.W. EAST OF UTICA
LOSS OF EDIC-N.SCOT AND MARCY-N.SCOT

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 15
LOSS OF R.O.W. EAST OF UTICA
LOSS OF EDIC-N.SCOT AND MARCY-N.SCOT

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:

From Bus	Name	To Bus	Name	ID	MVA	Flow	Rating
137228	INGMS-CD	115.00	137302 INGHAMS	46.000	1	12.0	12.0

EXTREME CONTINGENCY NUMBER 16
LOSS OF FRASER SUBSTATION
LOSS OF FRASER 345, FRASER 115, AND FRASER SVC

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 16
LOSS OF FRASER SUBSTATION
LOSS OF FRASER 345, FRASER 115, AND FRASER SVC

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 16
LOSS OF FRASER SUBSTATION
LOSS OF FRASER 345, FRASER 115, AND FRASER SVC

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

EXTREME CONTINGENCY NUMBER 17
LOSS OF R.O.W. WEST OF ROTTERDAM
LOSS OF N.SCOT-EDIC, N.SCOT-MARCY,
(2) ROTTERDAM-PORTER

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 17
LOSS OF R.O.W. WEST OF ROTTERDAM
LOSS OF N.SCOT-EDIC, N.SCOT-MARCY,
(2) ROTTERDAM-PORTER

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 17

LOSS OF R.O.W. WEST OF ROTTERDAM
LOSS OF N.SCOT-EDIC, N.SCOT-MARCY,
(2) ROTTERDAM-PORTER

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:

From Bus	Name	To Bus	Name	ID	MVA Flow	Rating	
137228	INGMS-CD	115.00	137302 INGHAMS	46.000	1	14.0	12.0
137228	INGMS-CD	115.00	137886 INGHAM-E	115.00	1	233.1	239.0

EXTREME CONTINGENCY NUMBER 18
LOSS OF NEW SCOTLAND SUBSTATION
LOSS OF N.SCOT77, N.SCOT99, AND N.SCOT 115

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 18
LOSS OF NEW SCOTLAND SUBSTATION
LOSS OF N.SCOT77, N.SCOT99, AND N.SCOT 115

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 18
LOSS OF NEW SCOTLAND SUBSTATION
LOSS OF N.SCOT77, N.SCOT99, AND N.SCOT 115

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:

From Bus	Name	To Bus	Name	ID	MVA	Flow	Rating
137228	INGMS-CD	115.00	137302 INGHAMS	46.000	1	10.9	12.0

EXTREME CONTINGENCY NUMBER 19
LOSS OF LEEDS SUBSTATION

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 19
LOSS OF LEEDS SUBSTATION

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:

From Bus	Name	To Bus	Name	ID	MVA	Flow	Rating
125040	N.CAT. 1	115.00	137507 BOC 2T	115.00	2	166.0	145.0
130785	CHURC115	115.00	137489 BL STR E	115.00	1	152.2	120.0
137481	JMC1+7TP	115.00	137490 BLUECIRC	115.00	1	162.4	145.0
137490	BLUECIRC	115.00	137506 INDC+BKL	115.00	1	130.5	145.0
137502	GBSH+LGE	115.00	137539 SCHOD-E	115.00	1	182.8	199.0
137505	HUDSON	115.00	137549 VALKIN	115.00	1	152.5	159.0

EXTREME CONTINGENCY NUMBER 19
LOSS OF LEEDS SUBSTATION

Flow exceeding 90.0% of STE on 765kV transformers:

None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

EXTREME CONTINGENCY NUMBER 20
LOSS OF FISHKILL SUBSTATION
LOSS OF FISHKILL 345, FISHKILL 115,
E. FISHKILL 115

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:

Bus	Name	Base kV	Voltage	Limit
125048	SHENANDO	115.00	1.050	1.050

Low limit violations at 100 kV and above:

Bus	Name	Base kV	Voltage	Limit
130842	PAWLN115	115.00	0.891	0.900
131112	SYLVN115	115.00	0.888	0.900

EXTREME CONTINGENCY NUMBER 20
LOSS OF FISHKILL SUBSTATION
LOSS OF FISHKILL 345, FISHKILL 115,
E. FISHKILL 115

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 20
LOSS OF FISHKILL SUBSTATION
LOSS OF FISHKILL 345, FISHKILL 115,
E. FISHKILL 115

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:

From Bus	Name	To Bus	Name	ID	MVA Flow	Rating
137455	ATHENS	345.00	137456 ATHENSC1	16.000	1 238.9	265.0

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

EXTREME CONTINGENCY NUMBER 21
LOSS OF ROSETON SUBSTATION AND GENERATION

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 21
LOSS OF ROSETON SUBSTATION AND GENERATION

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 21
LOSS OF ROSETON SUBSTATION AND GENERATION

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

EXTREME CONTINGENCY NUMBER 22
LOSS OF RAMAPO SUBSTATION
L/O RAMAPO 345,138,500
L/O RAM PAR 345

High limit violations at 200 kV and above:

Bus	Name	Base kV	Voltage	Limit	
146752	SMAHWAH1	345.00	345.00	1.077	1.050
146753	SMAHWAH2	345.00	345.00	1.080	1.050

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 22
LOSS OF RAMAPO SUBSTATION
L/O RAMAPO 345,138,500
L/O RAM PAR 345

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:

From Bus	Name	To Bus	Name	ID	MVA Flow	Rating	
146761	BURNS138	138.00	146775 WHAV138	138.00	1	181.8	179.0

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 22
LOSS OF RAMAPO SUBSTATION
L/O RAMAPO 345,138,500
L/O RAM PAR 345

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:

None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

EXTREME CONTINGENCY NUMBER 23
LOSS OF BUCHANAN SUBSTATION
LOSS OF BUCH 345, BUCHANAN LOAD,
IND PT GENERATION

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 23
LOSS OF BUCHANAN SUBSTATION
LOSS OF BUCH 345, BUCHANAN LOAD,
IND PT GENERATION

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 23
LOSS OF BUCHANAN SUBSTATION
LOSS OF BUCH 345, BUCHANAN LOAD,
IND PT GENERATION

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

EXTREME CONTINGENCY NUMBER 25
LOSS OF MILLWOOD SUBSTATION
LOSS OF MILLWOOD 345, MILLWOOD 138,
MILLWOOD 13.8

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:

Bus	Name	Base kV	Voltage	Limit
126313	BUCH138	138.00	138.00	1.060
126314	PEEKDUM1	138.00	138.00	1.062
126360	BUCHNTA5	138.00	138.00	1.060

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 25
LOSS OF MILLWOOD SUBSTATION
LOSS OF MILLWOOD 345, MILLWOOD 138,
MILLWOOD 13.8

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 25
LOSS OF MILLWOOD SUBSTATION
LOSS OF MILLWOOD 345, MILLWOOD 138,
MILLWOOD 13.8

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

EXTREME CONTINGENCY NUMBER 26
LOSS OF R.O.W. SOUTH OF MILLWOOD
LOSS OF E.VIEW 1-4 CIRCUITS

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 26
LOSS OF R.O.W. SOUTH OF MILLWOOD
LOSS OF E.VIEW 1-4 CIRCUITS

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 26
LOSS OF R.O.W. SOUTH OF MILLWOOD
LOSS OF E.VIEW 1-4 CIRCUITS

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

EXTREME CONTINGENCY NUMBER 27
LOSS OF ASTORIA GENERATION

High limit violations at 200 kV and above:

None

Low limit violations at 200 kV and above:

None

High limit violations at 100 kV and above:

None

Low limit violations at 100 kV and above:

Bus	Name	Base kV	Voltage	Limit	
126253	ASTWGT	138.00	138.00	0.693	0.900
126310	ASTGT2	138.00	138.00	0.838	0.900
126318	ASTGT3	138.00	138.00	0.838	0.900
126324	ASTE GT4	138.00	138.00	0.838	0.900
126334	ASTE-ERG	138.00	138.00	0.838	0.900
126350	38Q03 T	138.00	138.00	0.865	0.900
126351	38Q01 T	138.00	138.00	0.866	0.900
126352	ASTE-WRG	138.00	138.00	0.838	0.900
126353	ASTORIA WEST	138.00	138.00	0.693	0.900
126363	CORONA-S	138.00	138.00	0.837	0.900
126370	DUN NO1R	138.00	138.00	0.880	0.900
126371	DUN NO2R	138.00	138.00	0.876	0.900
126374	DUN S01R	138.00	138.00	0.867	0.900
126377	38M01 T	138.00	138.00	0.864	0.900
126385	E179 ST	138.00	138.00	0.849	0.900
126415	CORONA-N	138.00	138.00	0.837	0.900
126421	GLNDLE T1	138.00	138.00	0.863	0.900
126422	GLNDLE T2	138.00	138.00	0.864	0.900
126423	GLNDLE T3	138.00	138.00	0.863	0.900
126427	GOWNUS1T	138.00	138.00	0.899	0.900
126429	GOWNUS2T	138.00	138.00	0.899	0.900
126442	HG 1	138.00	138.00	0.848	0.900
126443	HG 2	138.00	138.00	0.691	0.900
126444	HG 3	138.00	138.00	0.691	0.900
126445	HG 4	138.00	138.00	0.848	0.900
126446	HG 5	138.00	138.00	0.694	0.900
126447	HG 6	138.00	138.00	0.694	0.900
126462	PARK TR1	138.00	138.00	0.874	0.900
126463	PARK TR2	138.00	138.00	0.876	0.900
126466	SECT 11	138.00	138.00	0.849	0.900
126467	SECT 12	138.00	138.00	0.849	0.900
126470	38X01 T	138.00	138.00	0.849	0.900
126471	38X02 T	138.00	138.00	0.849	0.900
126472	38X03 T	138.00	138.00	0.849	0.900
126473	38X04 T	138.00	138.00	0.849	0.900
126475	QUENBRDG	138.00	138.00	0.694	0.900
126480	RAINEY8E	138.00	138.00	0.870	0.900
126481	RAINEY8W	138.00	138.00	0.867	0.900
126483	S CREEK	138.00	138.00	0.855	0.900
126491	SHCRK T3	138.00	138.00	0.855	0.900
126492	SHCRK T4	138.00	138.00	0.855	0.900
126493	SHCRK T6	138.00	138.00	0.855	0.900
126494	SHCRK T5	138.00	138.00	0.855	0.900
126506	VERNON-E	138.00	138.00	0.869	0.900
126507	VERNON-W	138.00	138.00	0.866	0.900
126525	38M04 T	138.00	138.00	0.868	0.900
126526	38M05 T	138.00	138.00	0.868	0.900
126528	38M03 T	138.00	138.00	0.864	0.900
126529	38M06 T	138.00	138.00	0.864	0.900

126581	HG TAP	138.00	138.00	0.694	0.900
126587	HG6 TAP2	138.00	138.00	0.694	0.900
126617	E40 T2&7	138.00	138.00	0.864	0.900
126672	SCS138-E	138.00	138.00	0.838	0.900
126673	SCS138-W	138.00	138.00	0.838	0.900
126730	15055 SR	138.00	138.00	0.708	0.900
126746	EAST 40 T5&6	138.00	138.00	0.868	0.900
126757	EAST40 T3&10	138.00	138.00	0.868	0.900
126780	SCK-PARW	138.00	138.00	0.877	0.900
126781	SCK-PARE	138.00	138.00	0.877	0.900
126804	BNH-T1&9	138.00	138.00	0.898	0.900
126805	BNH-T2&8	138.00	138.00	0.897	0.900
126806	BHN-T3&7	138.00	138.00	0.898	0.900
126807	BNH-T4&6	138.00	138.00	0.898	0.900
126827	EAST 40 T4&8	138.00	138.00	0.864	0.900
126850	38X01 COOP	138.00	138.00	0.849	0.900
126851	38X02 COOP	138.00	138.00	0.849	0.900
126852	38X03 COOP	138.00	138.00	0.849	0.900
126853	38X04 COOP	138.00	138.00	0.849	0.900
126862	AMTRAK T2	138.00	138.00	0.866	0.900
126863	AMTRAK T1	138.00	138.00	0.865	0.900
126864	GLNDLE T4	138.00	138.00	0.865	0.900

EXTREME CONTINGENCY NUMBER 27
LOSS OF ASTORIA GENERATION

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 27
LOSS OF ASTORIA GENERATION

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

EXTREME CONTINGENCY NUMBER 28
LOSS OF RAVENSWOOD GENERATION

LOSS OF RAVENSWOOD 1,2 AND 3

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 28
LOSS OF RAVENSWOOD GENERATION
LOSS OF RAVENSWOOD 1,2 AND 3

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 28
LOSS OF RAVENSWOOD GENERATION
LOSS OF RAVENSWOOD 1,2 AND 3

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

EXTREME CONTINGENCY NUMBER 29
LOSS OF NORTHPORT SUBSTATION AND GENERATION

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 29
LOSS OF NORTHPORT SUBSTATION AND GENERATION

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 29
LOSS OF NORTHPORT SUBSTATION AND GENERATION

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

EXTREME CONTINGENCY NUMBER 30
3PH-STK @MOSES 230 / MASSENA-MOSES 765/230 MMS-2
CLEAR MASSENA 765 @ 5.5~
CLEAR MOSES BACKUP @12.5~
CLEAR MOSES 230/115 @12.5~ (CLEAR FAULT)

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 30

3PH-STK @MOSES 230 / MASSENA-MOSES 765/230 MMS-2
CLEAR MASSENA 765 @ 5.5~
CLEAR MOSES BACKUP @12.5~
CLEAR MOSES 230/115 @12.5~ (CLEAR FAULT)

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 30
3PH-STK @MOSES 230 / MASSENA-MOSES 765/230 MMS-2
CLEAR MASSENA 765 @ 5.5~
CLEAR MOSES BACKUP @12.5~
CLEAR MOSES 230/115 @12.5~ (CLEAR FAULT)

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

EXTREME CONTINGENCY NUMBER 31
3PH/STK @EDIC 345 ON EDIC-FRASER
CLEAR FRASER @ 5.0~
CLEAR EDIC BACKUP @ 9.5~
CLEAR CLAY @12.0~ (CLEAR FAULT)

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 31
3PH/STK @EDIC 345 ON EDIC-FRASER

CLEAR FRASER @ 5.0~
CLEAR EDIC BACKUP @ 9.5~
CLEAR CLAY @12.0~ (CLEAR FAULT)

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 31
3PH@STK @EDIC 345 ON EDIC-FRASER
CLEAR FRASER @ 5.0~
CLEAR EDIC BACKUP @ 9.5~
CLEAR CLAY @12.0~ (CLEAR FAULT)

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

EXTREME CONTINGENCY NUMBER 32
3PH@EDIC(STK) 345KV EDIC-NEW SCOTLAND #14
CLEAR N.SCOTLAND @ 5.0~
CLEAR EDIC BACKUP @ 8.5~
CLEAR FITZ 345KV @10.5~ (CLEAR FAULT)

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 32
3PH@EDIC(STK) 345KV EDIC-NEW SCOTLAND #14
CLEAR N.SCOTLAND @ 5.0~

CLEAR EDIC BACKUP @ 8.5~
CLEAR FITZ 345KV @10.5~ (CLEAR FAULT)

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 32
3PH@EDIC(STK) 345KV EDIC-NEW SCOTLAND #14
CLEAR N.SCOTLAND @ 5.0~
CLEAR EDIC BACKUP @ 8.5~
CLEAR FITZ 345KV @10.5~ (CLEAR FAULT)

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

EXTREME CONTINGENCY NUMBER 33
3PH@ ROCHESTER 345KV ON ROCHESTER-PANNELL RP-1
CLEAR PANNELL @ 4.5~
CLEAR ROCHESTER @16.25~
CLEAR SOMERSET @16.25~(CLEAR FAULT)

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 33
3PH@ ROCHESTER 345KV ON ROCHESTER-PANNELL RP-1
CLEAR PANNELL @ 4.5~
CLEAR ROCHESTER @16.25~

CLEAR SOMERSET @16.25~(CLEAR FAULT)

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 33

3PH@ ROCHESTER 345KV ON ROCHESTER-PANNELL RP-1
CLEAR PANNELL @ 4.5~
CLEAR ROCHESTER @16.25~
CLEAR SOMERSET @16.25~(CLEAR FAULT)

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

EXTREME CONTINGENCY NUMBER 34

LOSS OF ROCKPORT SUBSTATION AND GENERATION PLANT
4 X 650 MW UNITS
2 X 765 KV CIRCUITS ROCKP-JEFFERSON (05JEFRS0 765)
ROCKP-SULLIVAN (05SULLVA 765)

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 34

LOSS OF ROCKPORT SUBSTATION AND GENERATION PLANT
4 X 650 MW UNITS
2 X 765 KV CIRCUITS ROCKP-JEFFERSON (05JEFRS0 765)
ROCKP-SULLIVAN (05SULLVA 765)

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 34
LOSS OF ROCKPORT SUBSTATION AND GENERATION PLANT
4 X 650 MW UNITS
2 X 765 KV CIRCUITS ROCKP-JEFFERSON (05JEFRSO 765)
ROCKP-SULLIVAN (05SULLVA 765)

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

EXTREME CONTINGENCY NUMBER 35
3PH/STK@EDIC345KV FITZ-EDIC #FE-1/BKUP CLR@N.SCOT345
CLEAR FITZPATRICK @ 5.5~
CLEAR EDIC BACKUP @ 8.5~
CLEAR N.SCOTLAND @10.0~ (CLEAR FAULT)

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:
None

EXTREME CONTINGENCY NUMBER 35
3PH/STK@EDIC345KV FITZ-EDIC #FE-1/BKUP CLR@N.SCOT345
CLEAR FITZPATRICK @ 5.5~
CLEAR EDIC BACKUP @ 8.5~
CLEAR N.SCOTLAND @10.0~ (CLEAR FAULT)

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:
None

Flow exceeding 90.0% of STE on 230kV lines:
None

Flow exceeding 90.0% of STE on 138kV lines:
None

Flow exceeding 90.0% of STE on 115kV lines:
None

EXTREME CONTINGENCY NUMBER 35
3PH/STK@EDIC345KV FITZ-EDIC #FE-1/BKUP CLR@N.SCOT345
CLEAR FITZPATRICK @ 5.5~
CLEAR EDIC BACKUP @ 8.5~
CLEAR N.SCOTLAND @10.0~ (CLEAR FAULT)

Flow exceeding 90.0% of STE on 765kV transformers:
None

Flow exceeding 90.0% of STE on 345kV transformers:
None

Flow exceeding 90.0% of STE on 230kV transformers:
None

Flow exceeding 90.0% of STE on 138kV transformers:
None

Flow exceeding 90.0% of STE on 115kV transformers:
None

LOG CONTINGENCY NUMBER 01
LOSS OF BETHLEHEM
AND BESICORP PLANTS

High limit violations at 200 kV and above:
None

Low limit violations at 200 kV and above:
None

High limit violations at 100 kV and above:
None

Low limit violations at 100 kV and above:
None

LOG CONTINGENCY NUMBER 01
LOSS OF BETHLEHEM
AND BESICORP PLANTS

Flow exceeding 90.0% of STE on 765kV lines:
None

Flow exceeding 90.0% of STE on 345kV lines:

None

Flow exceeding 90.0% of STE on 230kV lines:

None

Flow exceeding 90.0% of STE on 138kV lines:

None

Flow exceeding 90.0% of STE on 115kV lines:

None

LOG CONTINGENCY NUMBER 01

LOSS OF BETHLEHEM

AND BESICORP PLANTS

Flow exceeding 90.0% of STE on 765kV transformers:

None

Flow exceeding 90.0% of STE on 345kV transformers:

None

Flow exceeding 90.0% of STE on 230kV transformers:

None

Flow exceeding 90.0% of STE on 138kV transformers:

None

Flow exceeding 90.0% of STE on 115kV transformers:

None