APPENDIX A

# SCHEDULE OF SIGNIFICANT INTERCHANGES ASSUMED FOR TRANSFER LIMITS STUDIES

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## SCHEDULE OF NET INTERCHANGES

| TO / FROM | NYISO | PJM | PJM-NEW | IESO | ISONE | NB/NS | Trans Énergie | Other Control Areas | TOTAL EXPORT+ IMPORT- |
|---|---|---|---|---|---|---|---|---|---|
| **NYISO** | | -391 | 0 | 0 | 122 | 0 | 0 | 82 | -187 |
| **PJM** | 391 | | 297 | 0 | 0 | 0 | 0 | 353 | 1041 |
| **IESO** | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| **ISONE** | -122 | 0 | 0 | 0 | | -2 | -246 | 0 | -370 |
| **NB/NS** | 0 | 0 | 0 | 0 | 2 | | 198 | 0 | 200 |
| **Trans Énergie** | 0 | 0 | 0 | 0 | 246 | -198 | | 45 | 93 |

## *APPENDIX A*
## *SUMMARY OF WINTER 2005-06 BASE TRANSFERS*

| **NEW BRUNSWICK/NOVA SCOTIA** | |
|---|---|
| New Brunswick to TransÉnergie: Madawaska and Eel River HVdc | 200 |
| New Brunswick to New England | 0 |
| **Total Export (+) / Import (-)** | **200** |

| **NEW ENGLAND** | |
|---|---|
| New England to New Brunswick | -2 |
| New England to TransÉnergie: Sandy Pond and Highgate HVdc | -246 |
| New England to New York | -122 |
| **Total Export (+) / Import (-)** | **-370** |

| **NEW YORK ISO** | |
|---|---|
| New York to TransÉnergie | 0 |
| New York to New England | 122 |
| New York to PJM: NYPA to PA-RECS | 94 |
| New York to PJM: Sithe Allegheny | -36 |
| New York to PJM: Non-Firm Energy | -449 |
| New York to ECAR: NYPA to AMP- Ohio | 82 |
| New York to IESO (Ontario) | 0 |
| **Total Export (+) / Import (-)** | **-187** |

| **IESO (Ontario)** | |
|---|---|
| IESO to TransÉnergie | 0 |
| IESO to New York | 0 |
| IESO to ECAR: ITC & METC | 0 |
| IESO to MAPP | 0 |
| **Total Export (+) / Import (-)** | **0** |

## *APPENDIX A*
## *SUMMARY OF WINTER 2005-06 BASE TRANSFERS*

| **PJM** | |
|---|---|
| PJM to New York: NYPA to PA-RECS | -94 |
| PJM to New York: Sithe Allegheny | 36 |
| PJM to New York: Non Firm Energy | 449 |
| PJM to New PJM Control Areas | 297 |
| Miscellaneous Transfers to Other Areas | 353 |
| **Total Export (+) / Import (-)** | **1041** |

| **TRANSÉNERGIE** | |
|---|---|
| TransÉnergie to New Brunswick: Madawaska and Eel River HVdc | -198 |
| TransÉnergie to New England: Sandy Pond and Highgate HVdc | 246 |
| TransÉnergie to New York | 0 |
| TransÉnergie to IESO (Ontario) | 0 |
| TransÉnergie to Cornwall | 45 |
| **Total Export (+) / Import (-)** | **93** |

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## APPENDIX B

# WINTER 2005-06 BASE CASE CONDITIONS

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# WINTER 2005-06 Conditions

## GENERATION FACILITIES (LEVEL OF GENERATION IN CASE)

The status and dispatch of EHV-connected generation represented in this analysis is listed below.

***NYISO***

| | | |
|---|---|---|
| Huntley | 382 MW | In Service |
| Dunkirk | 360 MW | In Service |
| Niagara (1-13) | 2595 MW | In Service |
| AES/Somerset | 526 MW | In Service |
| Ginna | 519 MW | In Service |
| Sithe/Independence | 780 MW | In Service |
| Oswego #5 | 0MW | Out of Service |
| Oswego #6 | 671 MW | In Service |
| Nine Mile Pt #1 | 617 MW | In Service |
| Nine Mile Pt #2 | 1212 MW | In Service |
| J.A. Fitzpatrick | 849 MW | In Service |
| St. Lawrence/FDR (17-32) | 907 MW | In Service |
| Roseton 1 | 500 MW | In Service |
| Roseton 2 | 0 MW | Out of Service |
| Gilboa | 468 MW | In Service |
| Athens | 358 MW | In Service |
| Saranac Energy | 239 MW | In Service |
| Selkirk Cogen | 214 MW | In Service |
| Indian Pt #2 | 1025 MW | In Service |
| Indian Pt #3 | 1011 MW | In Service |
| Bowline Pt 1 | 592 MW | In Service |
| Bowline Pt 2 | 0 MW | Out of Service |
| Poletti | 1100 MW | In Service |
| Ravenswood #3 | 936 MW | In Service |
| ECP/Linden Cogen | 645 MW | In Service |
| Arthur Kill #3 | 0 MW | Out of Service |

***ISO-NE***

| | | |
|---|---|---|
| Millstone Point #2 | 878 MW | In Service |
| Millstone Point #3 | 1184 MW | In Service |
| Vermont Yankee | 517 MW | In Service |
| Northfield 1 & 3 | 750 MW | In Service |
| Bear Swamp 1 & 2 | 440 MW | In Service |
| Norwalk Harbor 1 & 2 | 162/168 MW | In Service |
| Seabrook | 1250 MW | In Service |

***IESO (Ontario)***

| | | |
|---|---|---|
| Darlington (4 Units) | 3544 MW | In Service |
| Beck 1 & 2 | 160/1249 MW | In Service |
| Bruce B (4 Units) | 3360 MW | In Service |
| Lambton (3 Units) | 1500 MW | In Service |
| Pickering (A & B, 8 Units) | 1533 MW | In Service |
| Nanticoke (7 Units) | 3505 MW | In Service |
| St. Lawrence/Saunders (1-16) | 779 MW | In Service |

***PJM***

| | | |
|---|---|---|
| Peach Bottom #2 | 1103MW | In Service |
| Peach Bottom #3 | 1035 MW | In Service |
| Salem #1 | 0 MW | Out of Service |
| Salem #2 | 1130 MW | In Service |
| Limerick #1 | 1090 MW | In Service |
| Limerick #2 | 1150 MW | In Service |
| Hope Creek | 1049 MW | In Service |
| Susquehanna #1 | 1107 MW | In Service |
| Susquehanna #2 | 1144 MW | In Service |

## TransEnergie HVdc CONVERTER SCHEDULES

| | | |
|---|---|---|
| Chateauguay HVdc | 440 MW | In Service |
| Sandy Pond HVdc | 0 MW | Out of Service |
| Highgate HVdc | 200 MW | In Service |
| Madawaska HVdc | 100 MW | In Service |
| Eel River HVdc | 100 MW | In Service |

## AREA LOADS & LOSSES

| | |
|---|---|
| NYISO | 25449MW |
| ISO-NE | 23994 MW |
| IESO (Ontario) | 24766 MW |
| PJM (Area 25-37) | 47673 MW |

## PHASE ANGLE REGULATOR SCHEDULES

| | |
|---|---|
| Inghams (CD-ED) | 120 MW |
| Plattsburgh-Sandbar (PV-20) | 115MW |
| St. Lawrence-Moses L33P | 0 MW |
| St. Lawrence-Moses L34P | 0 MW |
| Norwalk Harbor-Northport | 100 MW |
| Jamaica-Valley Stream | -120 MW |
| Jamaica-Lake Success | -200 MW |
| Hudson-Farragut (B3402) | 400 MW |
| Hudson-Farragut (C3403) | 400 MW |
| Linden-Goethals | 200 MW |
| Waldwick-Hinchmans | 325 MW |
| Waldwick-Fairlawn | 345 MW |
| Waldwick-Hillsdale | 330 MW |
| Ramapo PAR #1 (+ to NY) | 120 MW |
| Ramapo PAR #2 (+ to NY) | 120 MW |
| East Garden City #1 | 346 MW |
| East Garden City #2 | 346 MW |

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# APPENDIX C

# POWER FLOW TRANSCRIPTION DIAGRAMS

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# INDEX

**System Overview** . . . . . **C-3**

**Western NYISO** . . . . . **C-4**

**Eastern NYISO** . . . . . **C-5**

**Southern NYISO** . . . . . **C-6**

**Central Hudson** . . . . . **C-7**

**Consolidated Edison** . . . . . **C-8**

**LIPA** . . . . . **C-9,10**

**NYSEG** . . . . . **C-11,12**

**NMPC** . . . . . **C-13-18**

**Orange & Rockland** . . . . . **C-19**

**Rochester** . . . . . **C-20**

**Beauharnois** . . . . . **C-21**

**PJM** . . . . . **C-22**

**PSE&G** . . . . . **C-23**

**UPNY-ConEdison** . . . . . **C-24**

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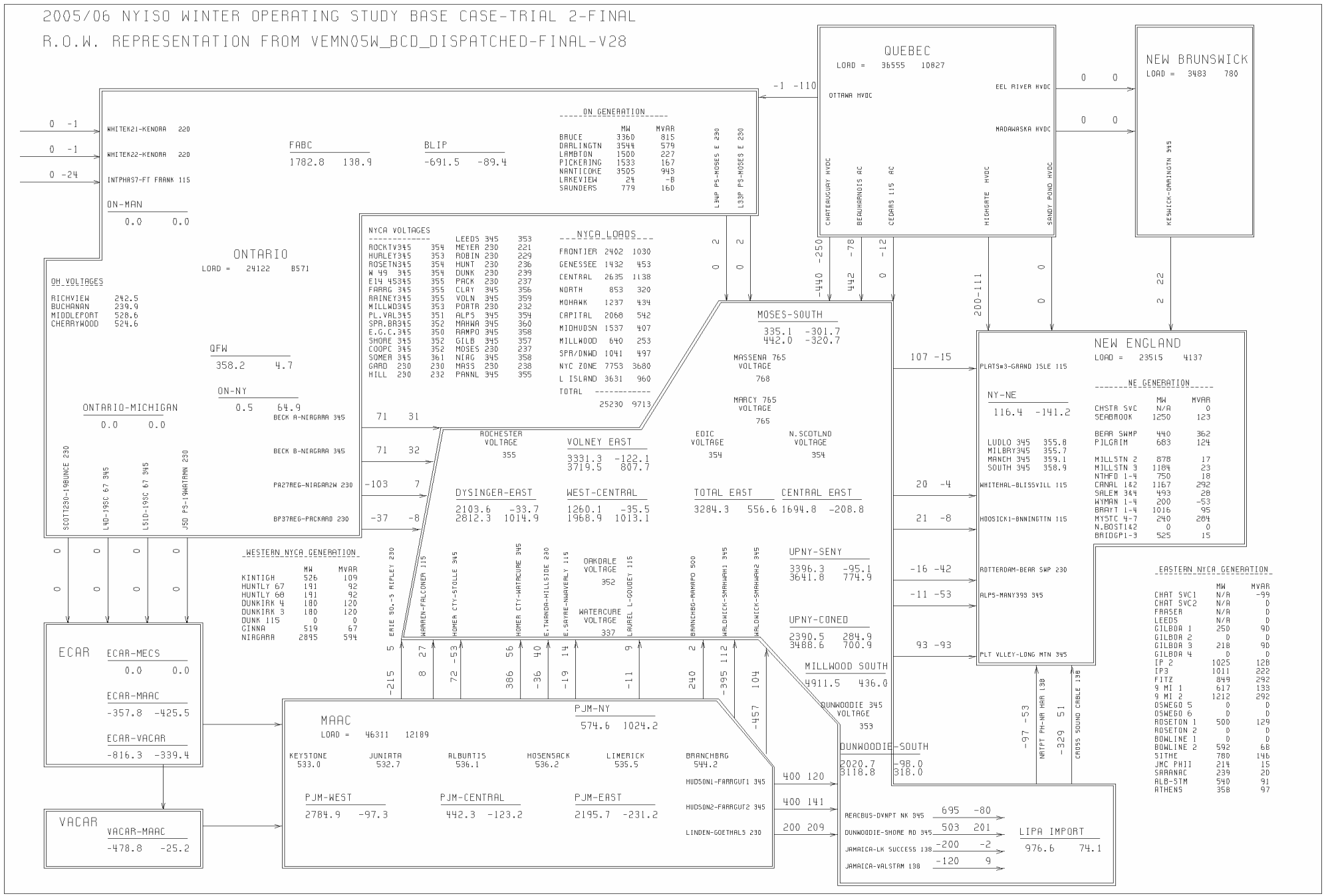
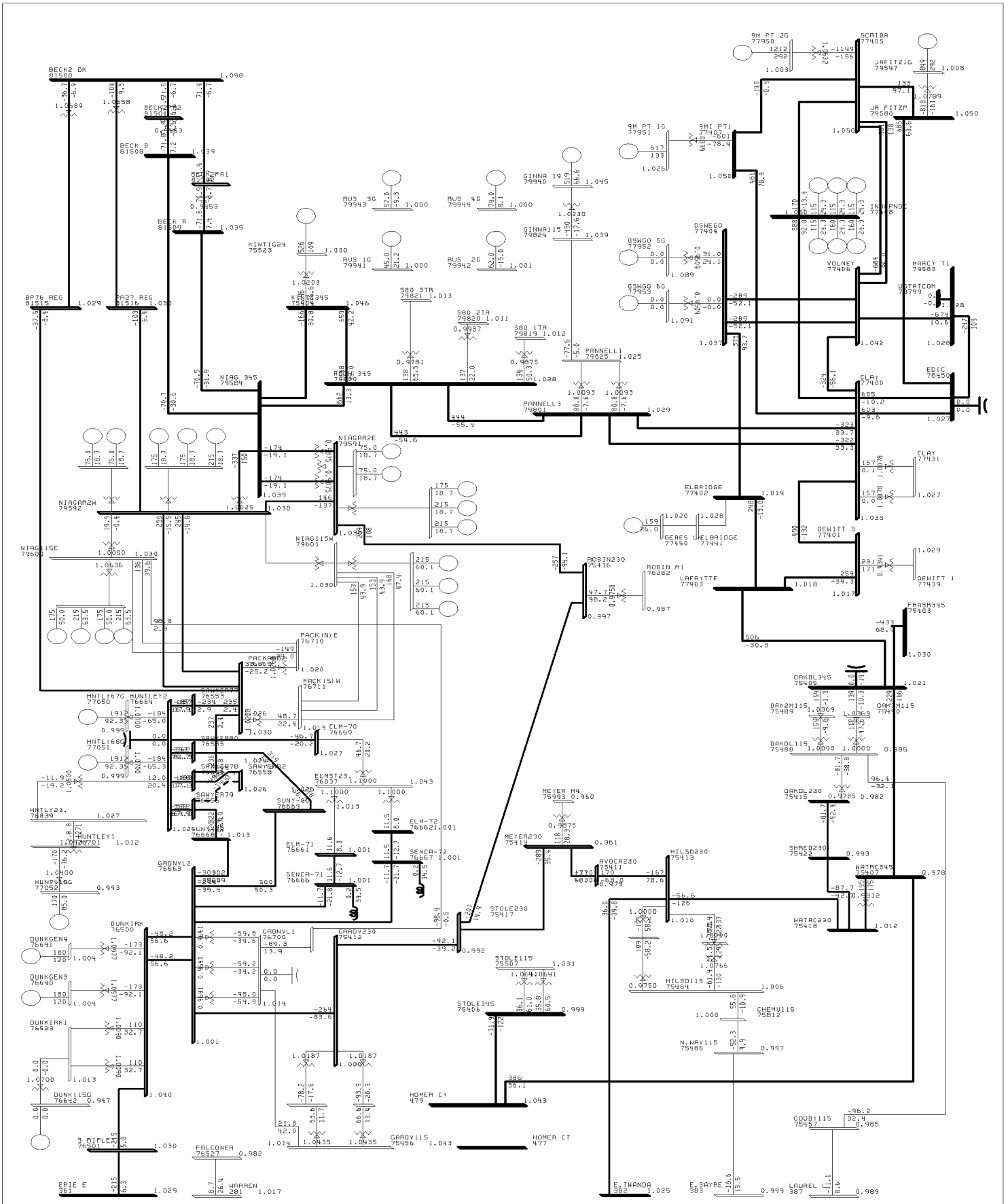
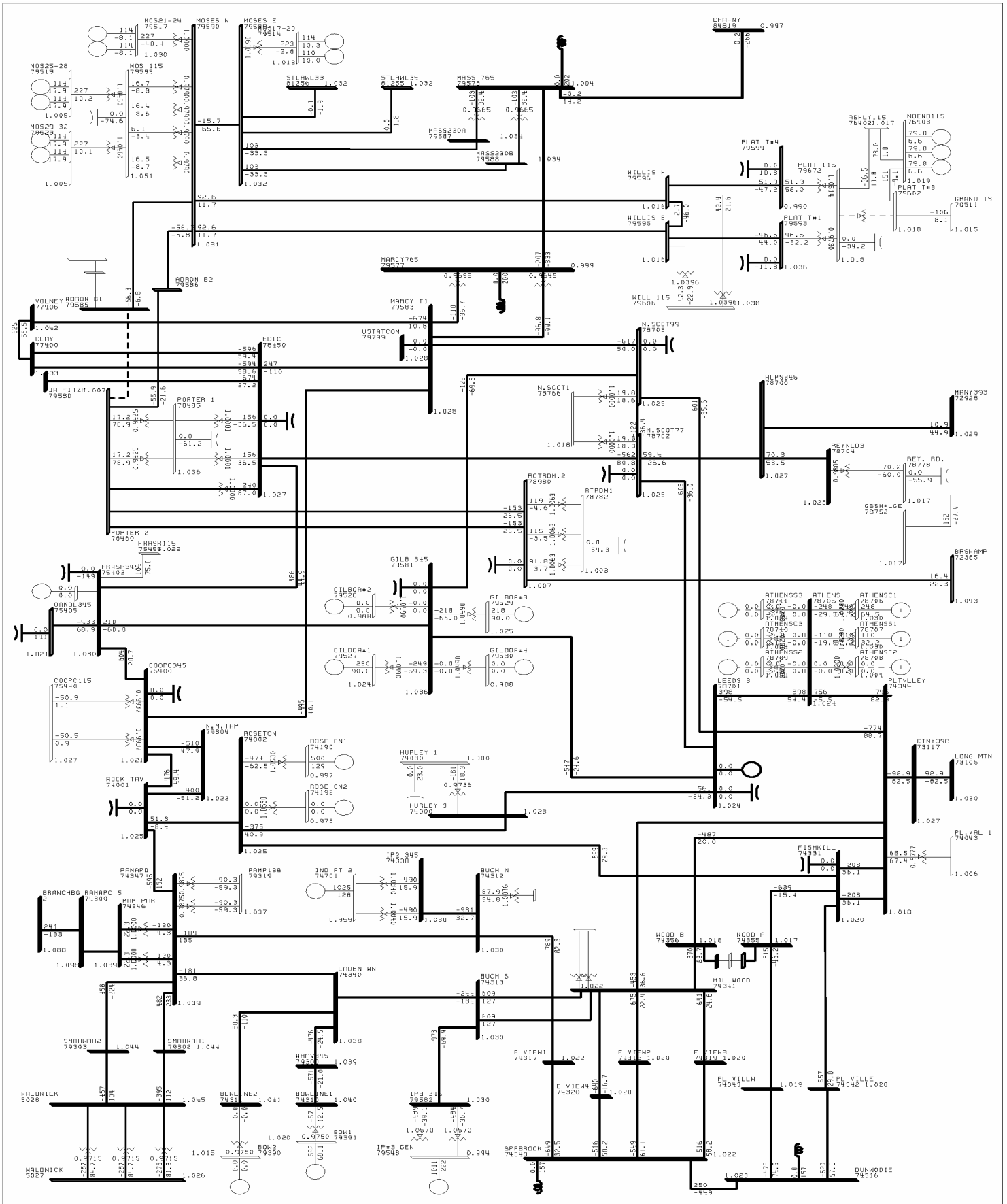
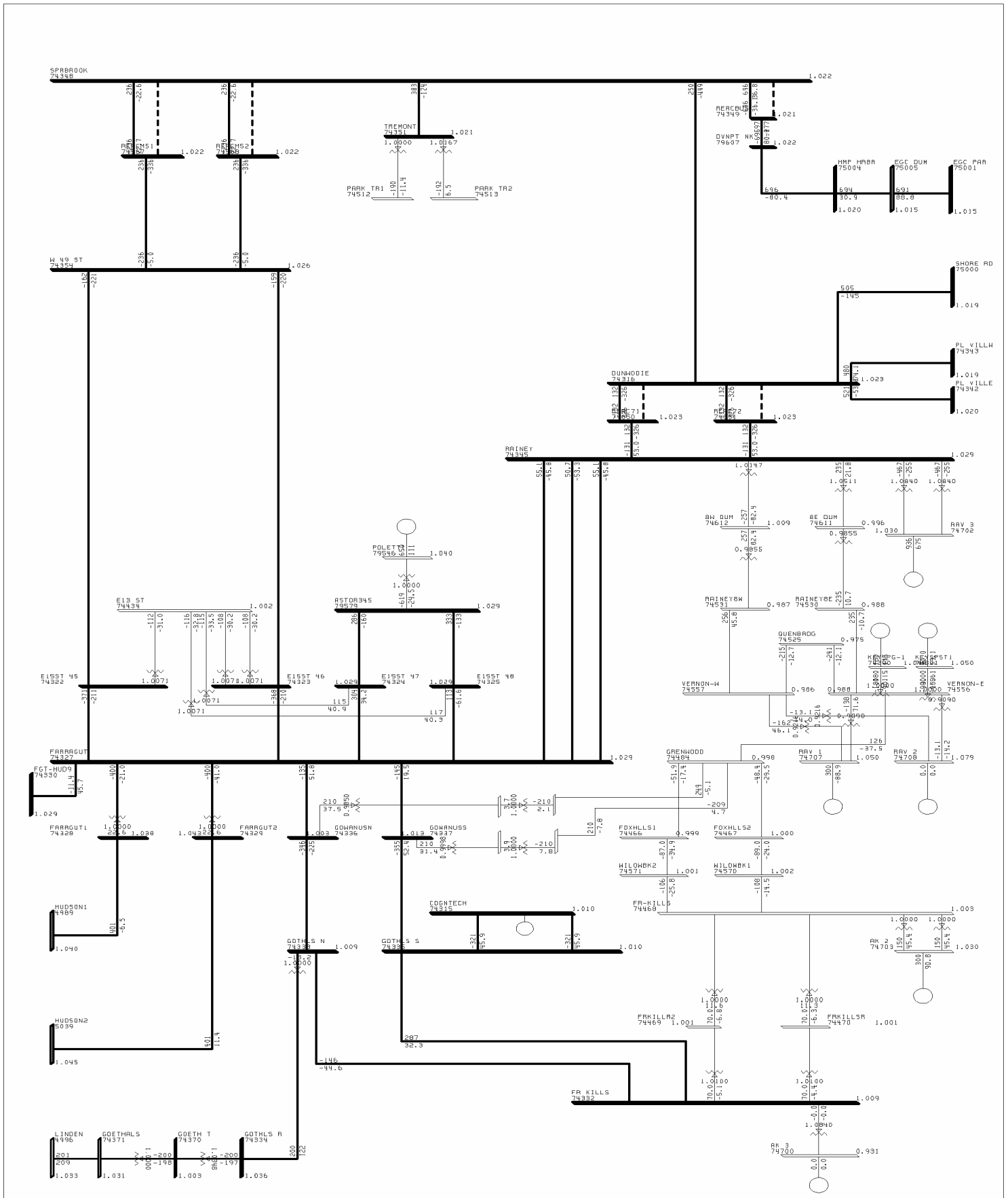

2005/06 NYISO WINTER OPERATING STUDY BASE CASE-TRIAL 2-FINAL
R.O.W. REPRESENTATION FROM VEMN05W_BCD_DISPATCHED-FINAL-V28
QUEBEC
LOAD = 36555 10827
OTTAWA HVDC
EEL RIVER HVDC
MADAWASKA HVDC
CHATEAUGUAY HVDC
BERAUHARNOIS AC
CEDARS 115 AC
HIGHGATE HVDC
SANDY POND HVDC
NEW BRUNSWICK
LOAD = 3483 780
KEWAUNEE-DARLINGTN 345
ON GENERATION
MW MVAR
BRUCE 3360 815
DARLINGTN 3544 579
LAMBTON 1500 227
PICKERING 1533 167
NANTICOKE 3505 943
LAKEVIEW 24 -8
SAUNDERS 779 160
L34P PS-MOSES E 230
L33P PS-MOSES E 230
WHITEK21-KENORA 220
WHITEK22-KENORA 220
INTPHA57-FT FRANK 115
FABC
1782.8 138.9
BLIP
-691.5 -89.4
ON-MAN
0.0 0.0
ONTARIO
LOAD = 24122 8571
OH VOLTAGES
RICHVIEW 242.5
BUCHANAN 239.9
MIDDLEPORT 528.6
CHERRYWOOD 524.6
QFW
358.2 4.7
ON-NY
0.5 64.9
ONTARIO-MICHIGAN
0.0 0.0
BECK A-NIAGARA 345
BECK B-NIAGARA 345
PA27REG-NIAGARA2W 230
BP37REG-PACKARD 230
SCOT230-19BUNCE 230
L4D-19SC 67 345
L51D-19SC 67 345
J5D PS-19WATANN 230
NYCA VOLTAGES
ROCKTV345 354
HURLEY345 353
ROSETN345 354
W 49 345 354
E14 453345 355
FARRG 345 355
RAINEY345 355
MILLWD345 353
PL.VAL345 351
SPR.BR345 352
E.G.C.345 350
SHORE 345 352
COOPC 345 352
SOMER 345 361
GARD 230 230
HILL 230 232
LEEDS 345 353
MEYER 230 221
ROBIN 230 229
HUNT 230 236
DUNK 230 239
PACK 230 237
CLAY 345 356
VOLN 345 359
PORTR 230 232
ALPS 345 354
MAHWA 345 360
RAMPO 345 358
GILB 345 357
MOSES 230 237
NIAG 345 358
MASS 230 238
PANNL 345 355
NYCA LOADS
FRONTIER 2402 1030
GENESSEE 1432 453
CENTRAL 2635 1138
NORTH 853 320
MOHAWK 1237 434
CAPITAL 2068 542
MIDHUDSN 1537 407
MILLWOOD 640 253
SPR/DNWD 1041 497
NYC ZONE 7753 3680
L ISLAND 3631 960
TOTAL 25230 9713
MOSES-SOUTH
335.1 -301.7
442.0 -320.7
MASSENA 765 VOLTAGE
768
MARCY 765 VOLTAGE
765
ROCHESTER VOLTAGE
355
VOLNEY EAST
3331.3 -122.1
3719.5 807.7
EDIC VOLTAGE
354
N.SCOTLND VOLTAGE
354
DYSINGER-EAST
2103.6 -33.7
2812.3 1014.9
WEST-CENTRAL
1260.1 -35.5
1968.9 1013.1
TOTAL EAST
3284.3 556.6
CENTRAL EAST
1694.8 -208.8
OAKDALE VOLTAGE
352
WATERCURE VOLTAGE
337
UPNY-SENY
3396.3 -95.1
3641.8 774.9
UPNY-CONED
2390.5 284.9
3488.6 700.9
MILLWOOD SOUTH
4911.5 436.0
DUNWOODIE 345 VOLTAGE
353
DUNWOODIE-SOUTH
2020.7 -98.0
3118.8 318.0
NEW ENGLAND
LOAD = 23515 4137
NE GENERATION
MW MVAR
CHSTR SVC N/A 0
SEABROOK 1250 123
BEAR SWMP 440 362
PILGRIM 683 124
MILLSTN 2 878 17
MILLSTN 3 1184 23
NTHFD 1-4 750 18
CANAL 1&2 1167 292
SALEM 3&4 493 28
WYMAN 1-4 200 -53
BRAYT 1-4 1016 95
MYSTC 4-7 240 284
N.BOST1&2 0 0
BRIDGP1-3 525 15
NY-NE
116.4 -141.2
LUDLO 345 355.8
MILBRY345 355.7
MANCH 345 359.1
SOUTH 345 358.9
PLATSM3-GRAND ISLE 115
WHITEHAL-BLISSVILL 115
HOOSICK1-BNNINGTN 115
ROTTERDAM-BEAR SWP 230
ALPS-MANY345 345
PLT VLLEY-LONG MTN 345
EASTERN NYCA GENERATION
MW MVAR
CHAT SVC1 N/A -99
CHAT SVC2 N/A 0
FRASER N/A 0
LEED5 N/A 0
GILBOA 1 250 90
GILBOA 2 0 0
GILBOA 3 218 90
GILBOA 4 0 0
IP 2 1025 128
IP3 1011 222
FITZ 849 292
9 MI 1 617 133
9 MI 2 1212 292
OSWEGO 5 0 0
OSWEGO 6 0 0
ROSETON 1 500 129
ROSETON 2 0 0
BOWLINE 1 0 0
BOWLINE 2 592 68
SITHE 780 146
JMC PHI1 214 15
SARANAC 239 20
ALB-STM 540 91
ATHENS 358 97
WESTERN NYCA GENERATION
MW MVAR
KINTIGH 526 109
HUNTLY 67 191 92
HUNTLY 68 191 92
DUNKIRK 4 180 120
DUNKIRK 3 180 120
DUNK 115 0 0
GINNA 519 67
NIAGARA 2895 594
ERIE 90--5 RIPLEY 230
WARREN-FALCONER 115
HOMER CTY-STOLLE 345
HOMER CTY-WATKCURE 345
E.TWNDA-HILLSIDE 230
E.SAYRE-WAVERLY 115
LAUREL L-GOUDEY 115
BRANCHBG-RAMAPO 500
WALDWICK-SMAHAW1 345
WALDWICK-SMAHAW2 345
PJM-NY
574.6 1024.2
MAAC
LOAD = 46311 12189
KEYSTONE 533.0
JUNIATA 532.7
ALBURTIS 536.1
MOSENSACK 536.2
LIMERICK 535.5
BRANCHBRG 544.2
PJM-WEST
2784.9 -97.3
PJM-CENTRAL
442.3 -123.2
PJM-EAST
2195.7 -231.2
HUDSON1-FARRGUT1 345
HUDSON2-FARRGUT2 345
LINDEN-GOETHAL5 230
ECAR
ECAR-MECS
0.0 0.0
ECAR-MAAC
-357.8 -425.5
ECAR-VACAR
-816.3 -339.4
VACAR
VACAR-MAAC
-478.8 -25.2
REACBUS-DYNPT NK 345
DUNWOODIE-SHORE RD 345
JAMAICA-LK SUCCESS 138
JAMAICA-VALSTRM 138
LIPA IMPORT
976.6 74.1
NRTPT PH-NA HAR 138
CROSS SOUND CABLE 138

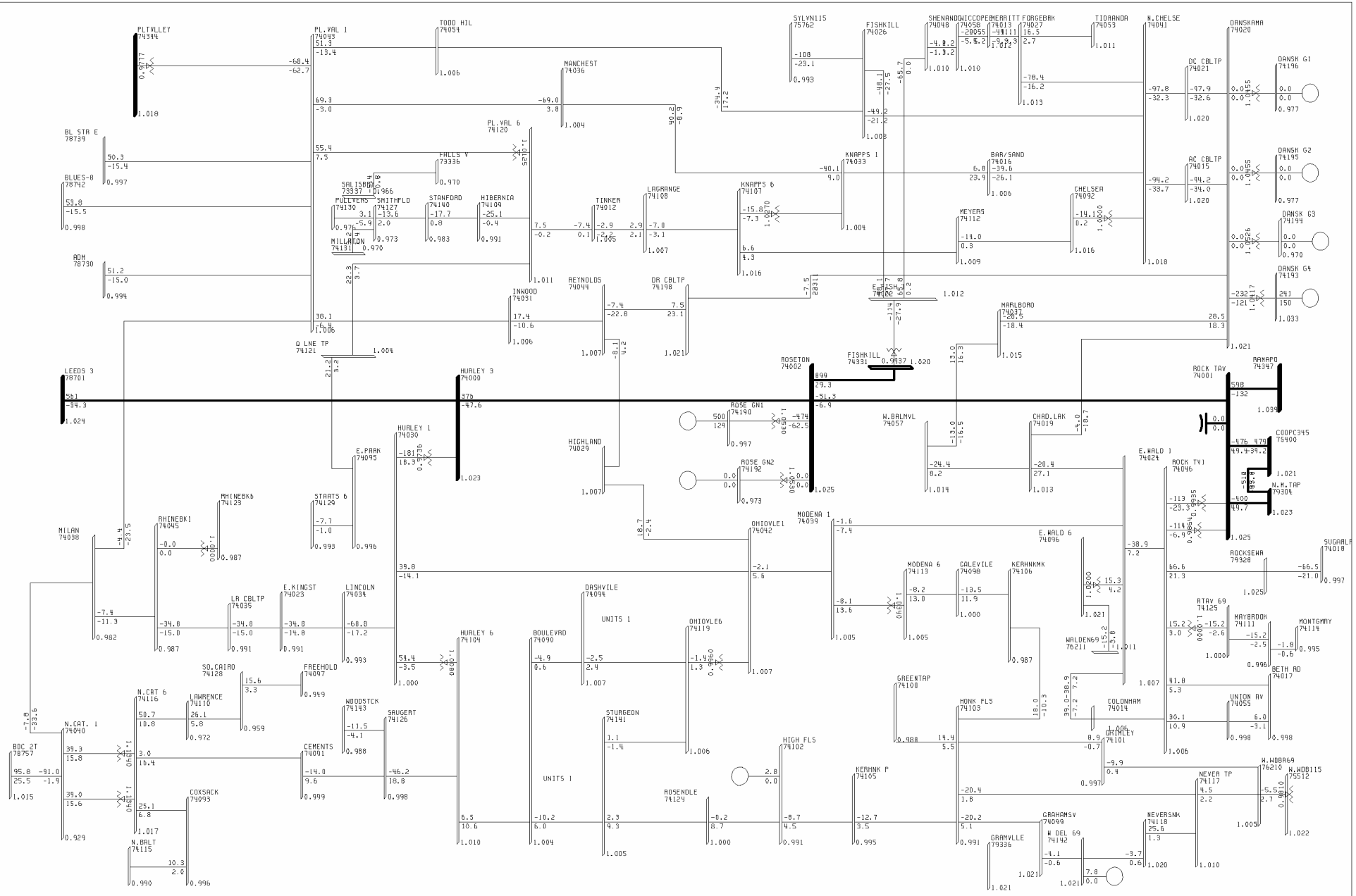

2005/06 NYISO WINTER OPERATING STUDY BASE CASE-TRIAL 2-FINAL
R.O.W. REPRESENTATION FROM VEMN05W_BCD_DISPATCHED-FINAL-V28
1) WESTERN NYISO FRI, SEP 23 2005 14:54
KV: ≤138 .≤230 .≤345
BUS - VOLTAGE(PU)
BRANCH - MW/MVAR
EQUIPMENT - MW/MVAR
POWER TECHNOLOGIES INC.



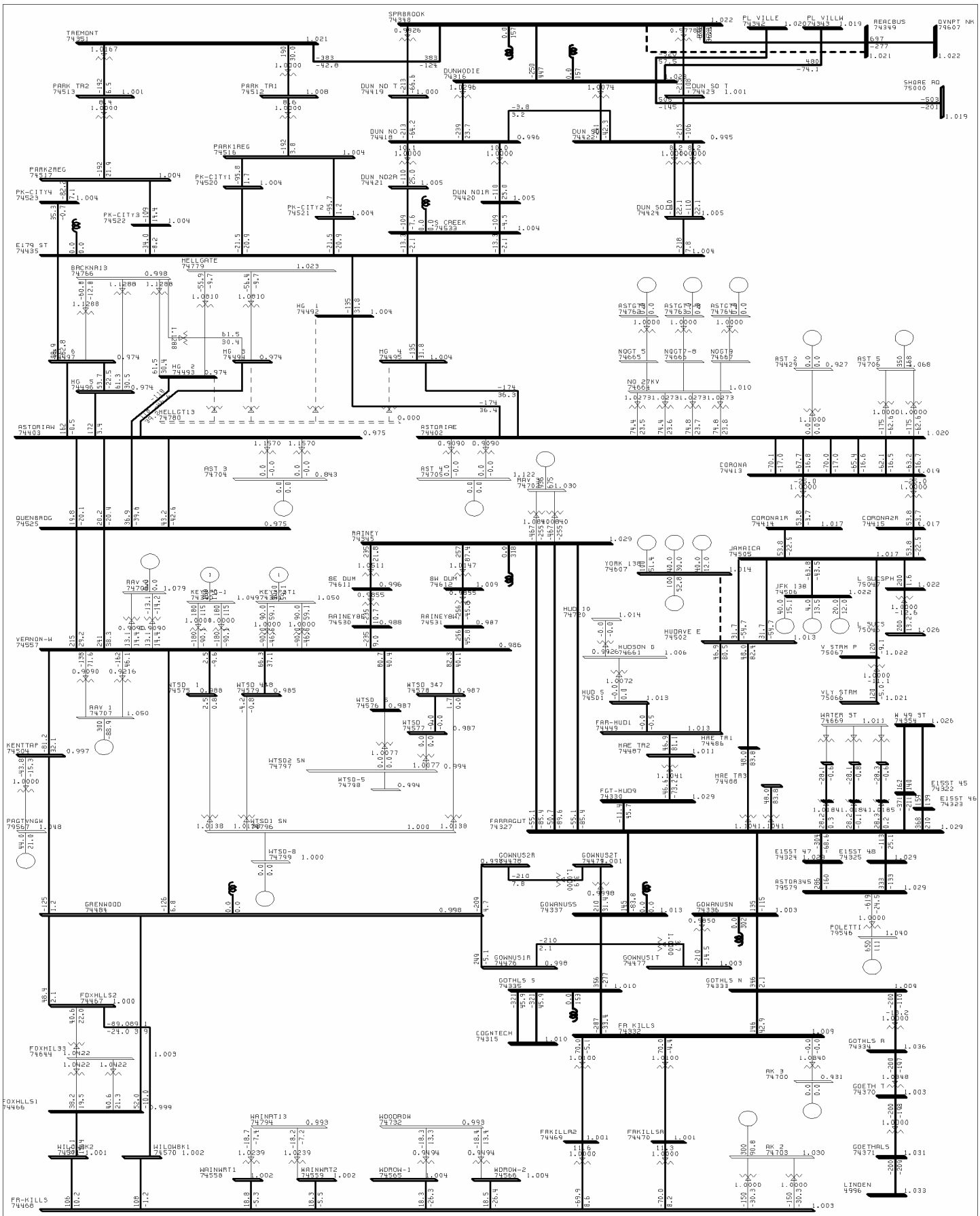

| | | | |
|---|---|---|---|
| POWER TECHNOLOGIES INC.® | 2005/06 NYISO WINTER OPERATING STUDY BASE CASE-TRIAL 2-FINAL<br>R.O.W. REPRESENTATION FROM VEMN05W_BCD_DISPATCHED-FINAL-V28<br>2) EASTERN NYISO FRI, SEP 23 2005 14:54 | KV: ≤138 . ≤230 . ≤345 | BUS - VOLTAGE(PU)<br>BRANCH - MW/MVAR<br>EQUIPMENT - MW/MVAR |

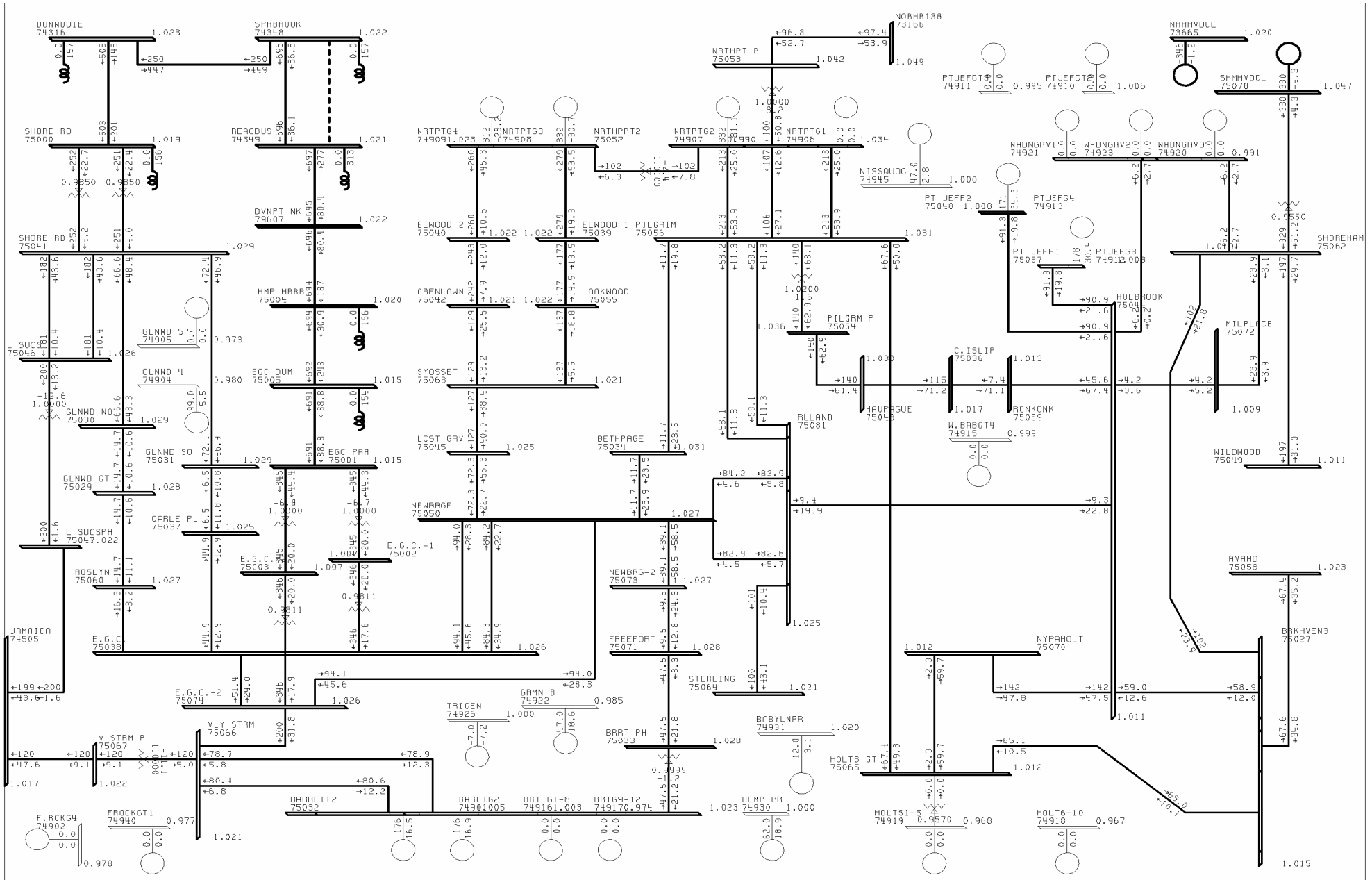



| | | | |
|---|---|---|---|
| POWER TECHNOLOGIES INC. | 2005/06 NYISO WINTER OPERATING STUDY BASE CASE-TRIAL 2-FINAL<br>R.O.W. REPRESENTATION FROM VEMN05W_BCD_DISPATCHED-FINAL-V28<br>3) SOUTHERN NYISO FRI, SEP 23 2005 14:54 | KV: ≤138 . ≤230 . ≤345 | BUS - VOLTAGE(PU)<br>BRANCH - MW/MVAR<br>EQUIPMENT - MW/MVAR |

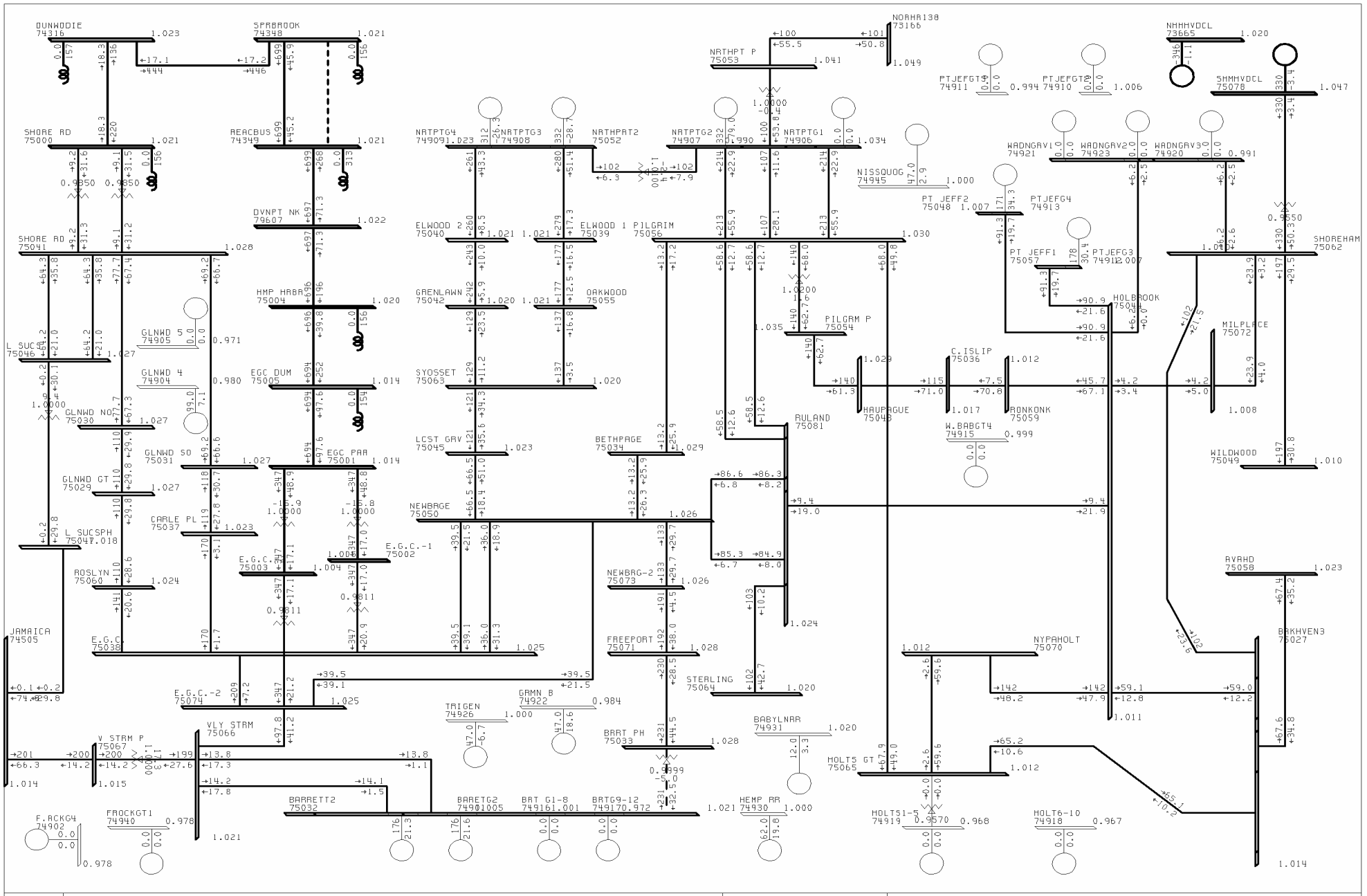



| | | | |
|---|---|---|---|
| POWER TECHNOLOGIES INC.® | 2005/06 NYISO WINTER OPERATING STUDY BASE CASE-TRIAL 2-FINAL<br>R.O.W. REPRESENTATION FROM VEMN05W_BCD_DISPATCHED-FINAL-V28<br>4) CENTRAL HUDSON FRI, SEP 23 2005 14:54 | KV: ≤138 .≤230 .≤345 | BUS - VOLTAGE(PU)<br>BRANCH - MW/MVAR<br>EQUIPMENT - MW/MVAR |

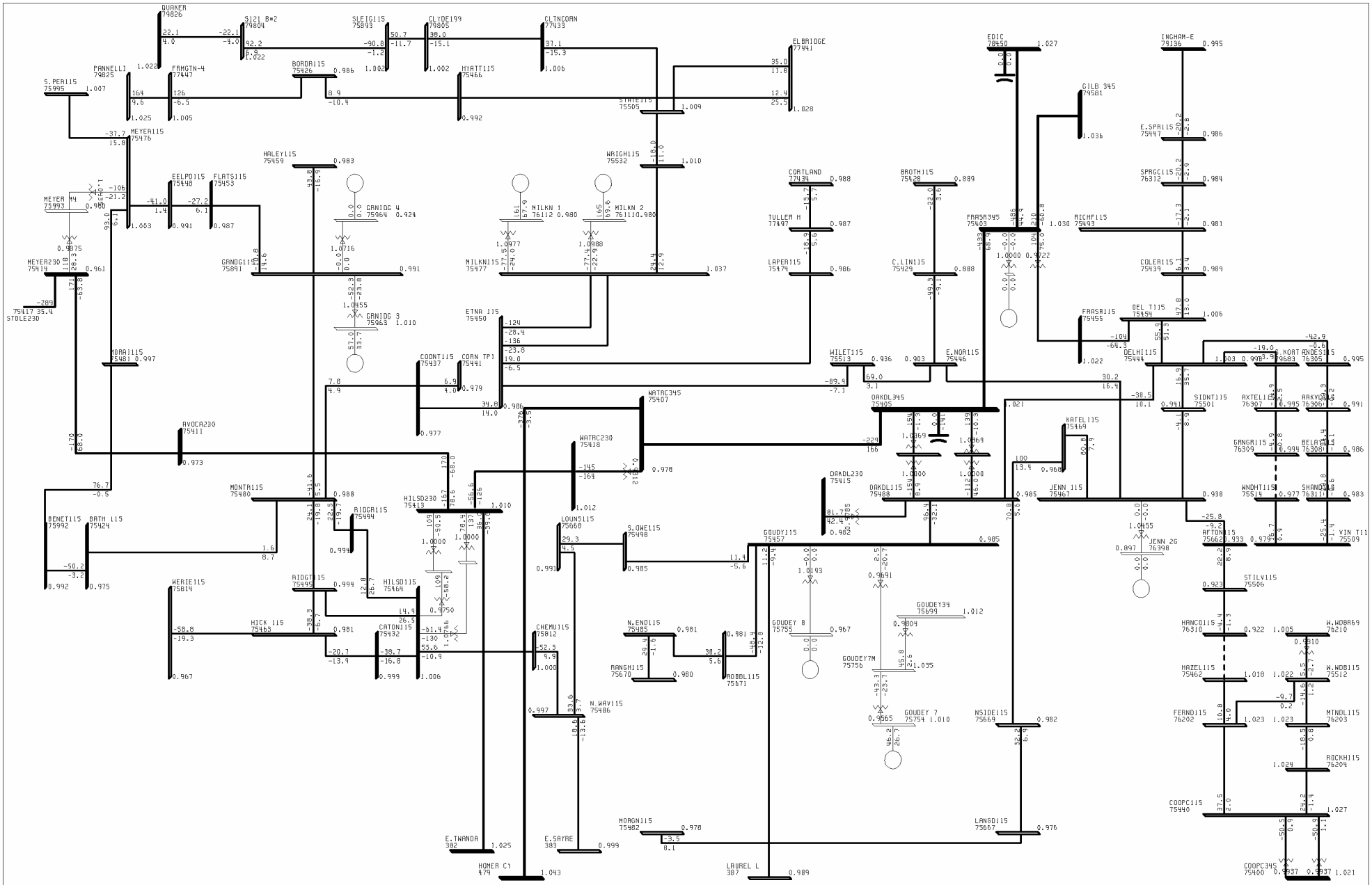

2005/06 NYISO WINTER OPERATING STUDY BASE CASE-TRIAL 2-FINAL
R.O.W. REPRESENTATION FROM VEMN05W_BCD_DISPATCHED-FINAL-V28
5) CON EDISON FRI, SEP 23 2005 14:54
KV: ≤34 . ≤138 . ≤345
BUS - VOLTAGE(PU)
BRANCH - MW/MVAR
EQUIPMENT - MW/MVAR
POWER TECHNOLOGIES INC



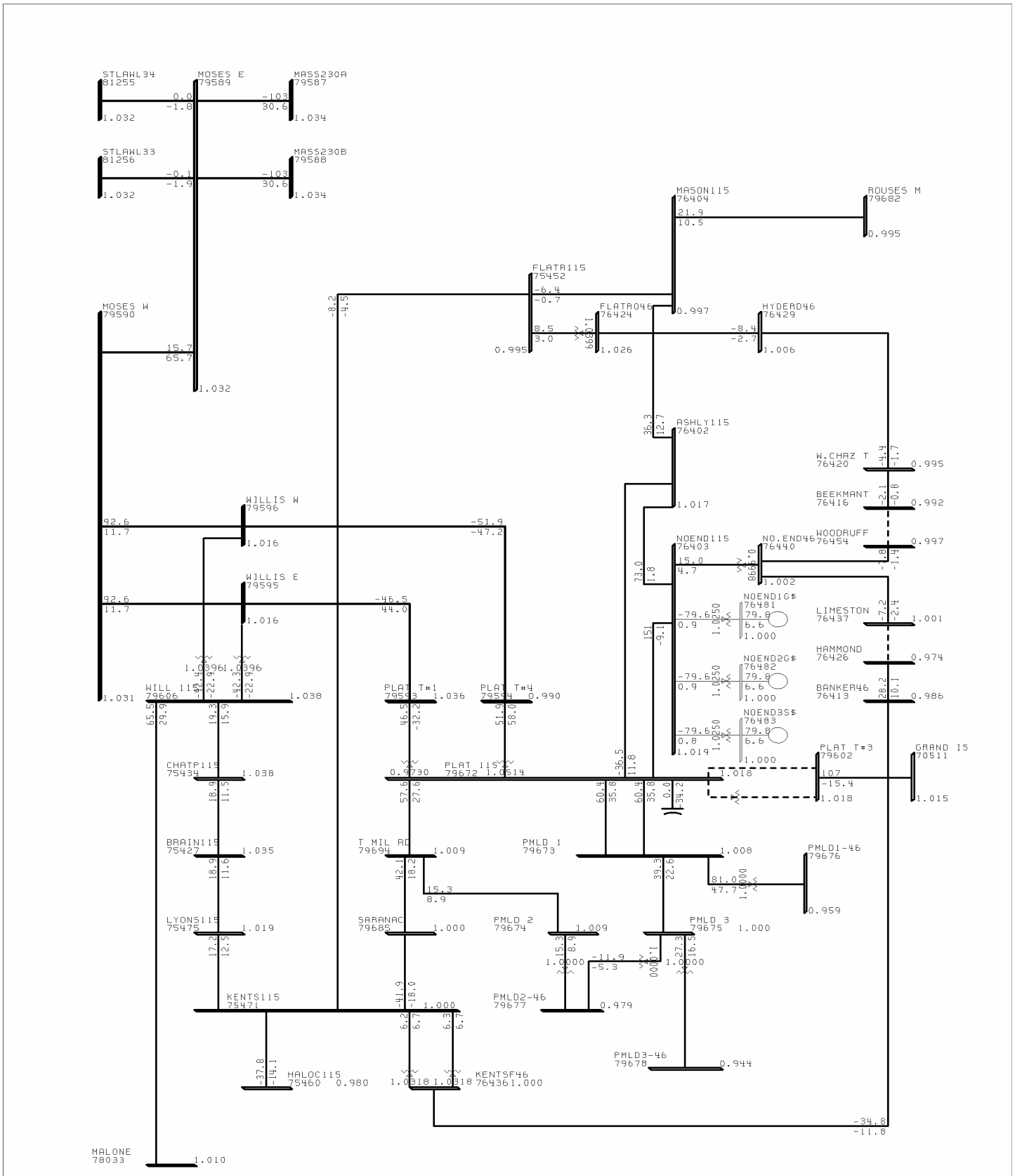

| | | | |
|---|---|---|---|
| POWER TECHNOLOGIES INC.© | 2005/06 NYISO WINTER OPERATING STUDY BASE CASE-TRIAL 2-FINAL<br>R.O.W. REPRESENTATION FROM VEMN05W_BCD_DISPATCHED-FINAL-V28<br>6) LIPA FRI, SEP 23 2005 14:54 | 100% RATEA<br>0.950 UV 1.050 OV<br>KV: ≤69 , ≤138 , ≤345 | BUS - VOLTAGE(PU)<br>BRANCH - MW/MVAR<br>EQUIPMENT - MW/MVAR |




| | | | |
|---|---|---|---|
| POWER TECHNOLOGIES INC.® | 2005/06 NYISO WINTER OPERATING STUDY LIPA EMERGENCY 09/19/05<br>R.O.W. REPRESENTATION FROM VEMN05W_BCD_DISPATCHED-FINAL-V28<br>7) LIPA EMERGENCY TRANSFER FRI, SEP 23 2005 14:54 | 100% RATEA<br>0.950 UV 1.050 OV<br>KV: ≤69 , ≤138 , ≤345 | BUS - VOLTAGE(PU)<br>BRANCH - MW/MVAR<br>EQUIPMENT - MW/MVAR |



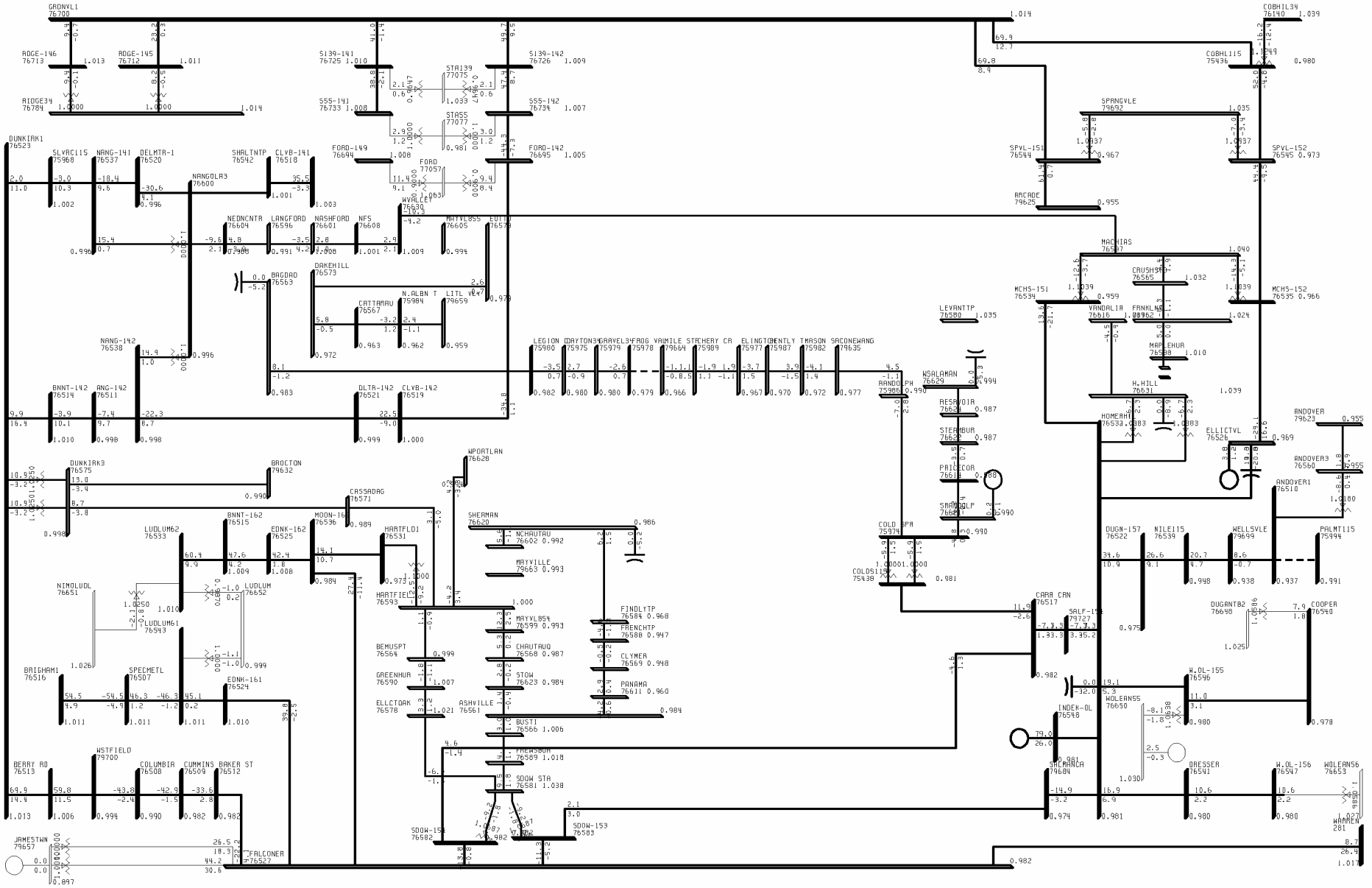

| | | | |
|---|---|---|---|
| POWER TECHNOLOGIES INC. | 2005/06 NYISO WINTER OPERATING STUDY BASE CASE-TRIAL 2-FINAL<br>R.O.W. REPRESENTATION FROM VEMN05W_BCD_DISPATCHED-FINAL-V28<br>8) NYSEG FRI, SEP 23 2005 14:54 | KV: ≤35 .≤115 .≤230 | BUS - VOLTAGE(PU)<br>BRANCH - MW/MVAR<br>EQUIPMENT - MW/MVAR |



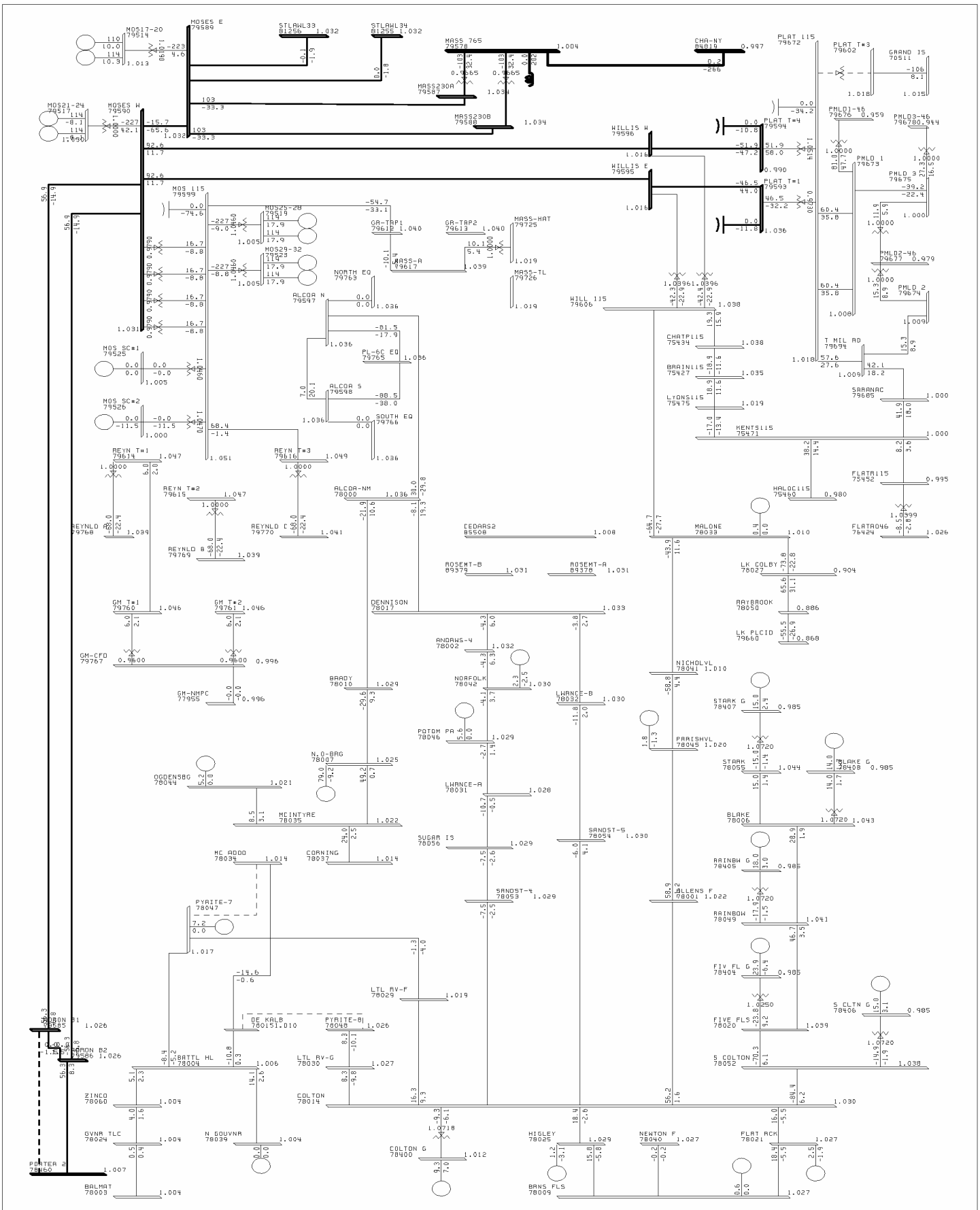

2005/06 NYISO WINTER OPERATING STUDY BASE CASE-TRIAL 2-FINAL
R.O.W. REPRESENTATION FROM VEMN05W_BCD_DISPATCHED-FINAL-V28
9) NYSEG PLATTSBG FRI, SEP 23 2005 14:54

KV: ≤38 , ≤115 , ≤230

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



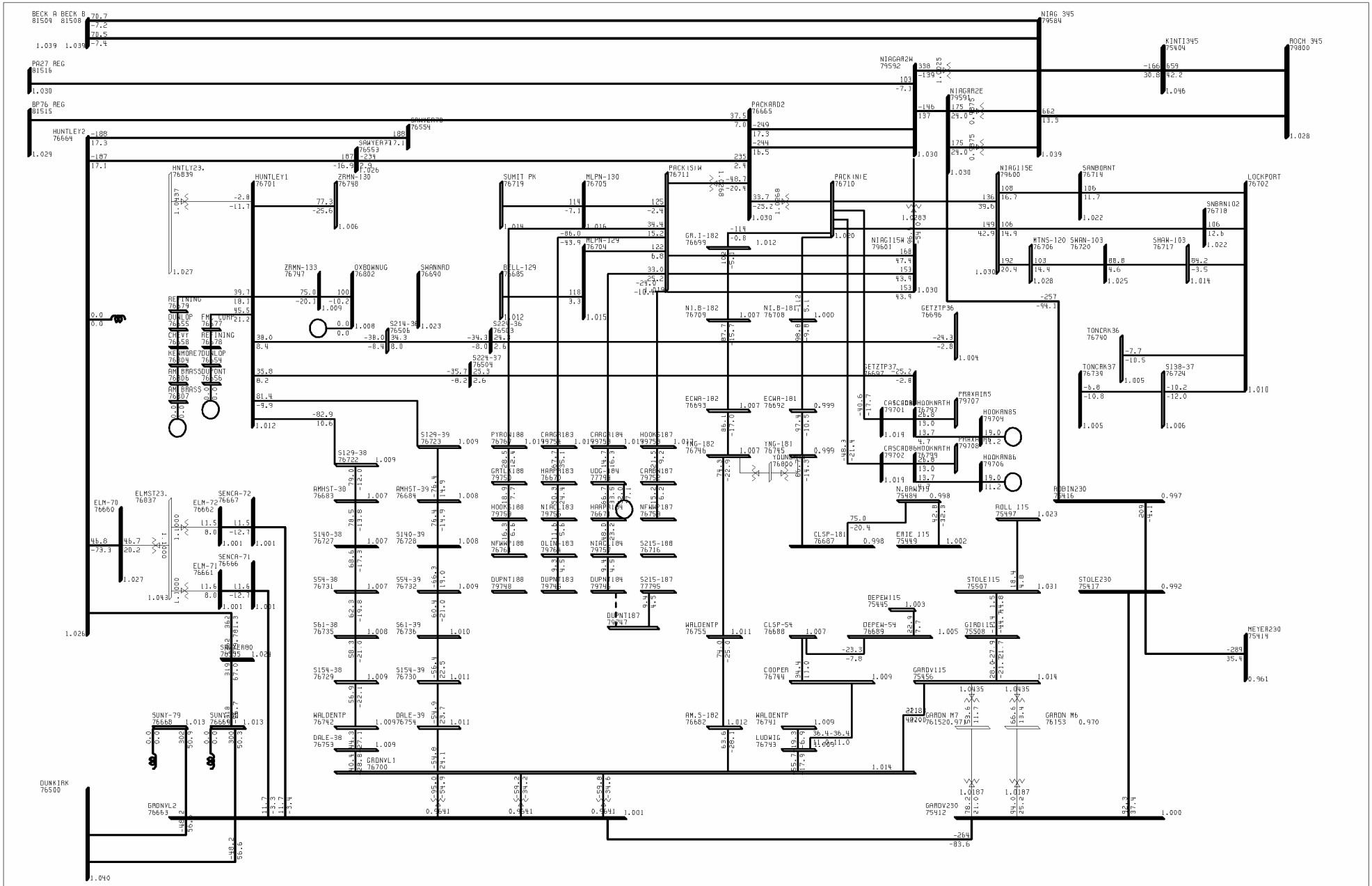

| | | | |
|---|---|---|---|
| POWER TECHNOLOGIES INC. | 2005/06 NYISO WINTER OPERATING STUDY BASE CASE-TRIAL 2-FINAL<br>R.O.W. REPRESENTATION FROM VEMN05W_BCD_DISPATCHED-FINAL-V28<br>10) NMPC SOUTHWEST FRI, SEP 23 2005 14:54 | KV: ≤23 . ≤35 . ≤115 | BUS - VOLTAGE(PU)<br>BRANCH - MW/MVAR<br>EQUIPMENT - MW/MVAR |



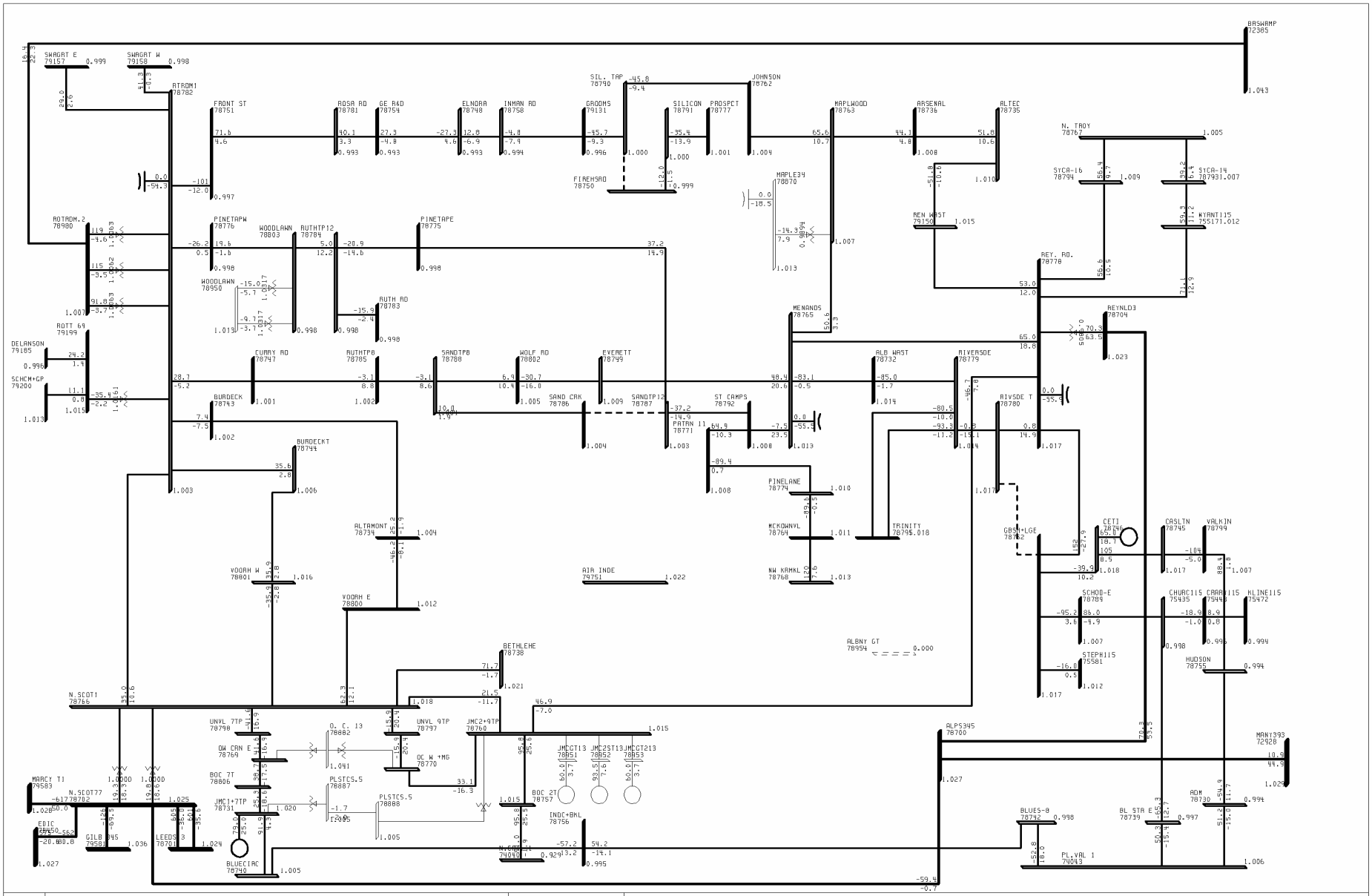

2005/06 NYISO WINTER OPERATING STUDY BASE CASE-TRIAL 2-FINAL
R.O.W. REPRESENTATION FROM VEMN05W_BCD_DISPATCHED-FINAL-V28
11) NMPC NORTH FRI, SEP 23 2005 14:54

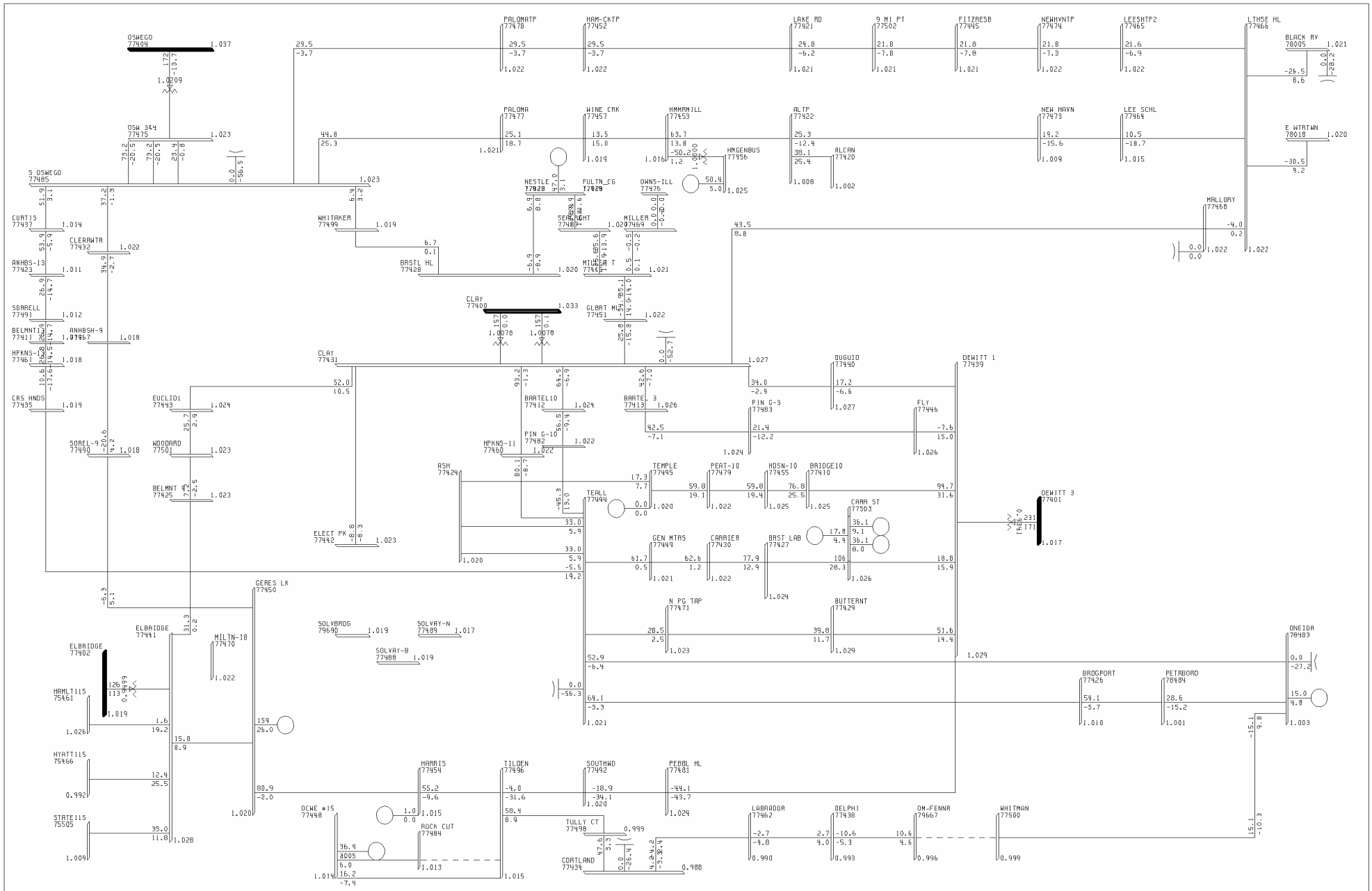
KV: ≤138 . ≤230 . ≤345

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




| | | | |
|---|---|---|---|
| POWER TECHNOLOGIES INC.® | 2005/06 NYISO WINTER OPERATING STUDY BASE CASE-TRIAL 2-FINAL<br>R.O.W. REPRESENTATION FROM VEMN05W_BCD_DISPATCHED-FINAL-V28<br>12) NMPC BUFFALO FRI, SEP 23 2005 14:54 | KV: ≤35 . ≤115 . ≤230 | BUS - VOLTAGE(PU)<br>BRANCH - MW/MVAR<br>EQUIPMENT - MW/MVAR |


2005/06 NYISO WINTER OPERATING STUDY BASE CASE-TRIAL 2-FINAL
R.O.W. REPRESENTATION FROM VEMN05W_BCD_DISPATCHED-FINAL-V28
13) NMPC ALBANY FRI, SEP 23 2005 14:54
KV: ≤35 .≤115 .≤230
BUS - VOLTAGE(PU)
BRANCH - MW/MVAR
EQUIPMENT - MW/MVAR
POWER TECHNOLOGIES INC.
BRSWAMP 72305
SWAGRT E 79157
SWAGRT W 79158
ATROM1 78782
FRONT ST 78751
ROSA RD 78781
GE R4D 78754
ELNORA 78748
INMAN RD 78758
GROOMS 79131
SIL. TAP 78790
JOHNSON 78762
SILICON 78791
PROSPCT 78777
MAPLWOOD 78763
ARSENAL 78736
ALTEC 78735
N. TROY 78767
SYCA-16 78794
SYCA-14 787931.007
MAPLE34 78870
FIREHSRD 78750
REN WAST 79150
WYANT115 755171.012
REY. RD. 78778
REYNLD3 78704
ROTROM.2 78980
PINETAPW 78776
WOODLAWN 78803
RUTHTP12 78784
PINETAPE 78775
WOODLAWN 78950
RUTH RD 78783
ROTT 69 79199
MENANDS 78765
DELANSON 79185
SCHCM+GP 79200
CURRY RD 78747
RUTHTP8 78785
SANDTP8 78780
WOLF RD 78802
EVERETT 78749
ALB WAST 78732
RIVERSDE 78779
BURDECK 78743
SAND CRK 78786
SANDTP12 78787
ST CAMPS 78792
PATRN 11 78771
RIVSDE T 78780
BURDECKT 78794
PINELANE 78774
ALTAMONT 78734
MCKOWNVL 78764
TRINITY 78795.018
VOORH W 78801
AIR INDE 79751
NW KRMKL 78768
VOORH E 78800
GRS+LGE 78762
CETI 78796
CASLTN 78745
VALKIN 78799
SCHOD-E 78789
CHURCI15 75435
CRARI15 75443
KLINE115 75472
STEPHI15 75581
HUDSON 78755
ALBNY GT 78954
BETHLEHE 78738
N.SCOT1 78786
UNVL 7TP 78798
O. C. 13 78882
UNVL 9TP 78797
JMC2+9TP 78760
OW CRN E 78769
OC W +MG 78770
JMCCT13 78851
JMC2ST13 78852
JMCCT213 78853
BOC 7T 78806
PLSTCS.5 78887
JMC1+7TP 78731
PLSTCS.5 78888
BOC 2T 78757
INDC+BKL 78756
ALPS345 78700
MARCY T1 79583
N.SCOT77 78702
EDIC 78450
GILB 79581
LEEDS 3 78701
BLUECIRC 78740
BLUES-8 78742
BL STR E 78739
ADM 78730
MANY393 72928
PL.VAL 1 79049

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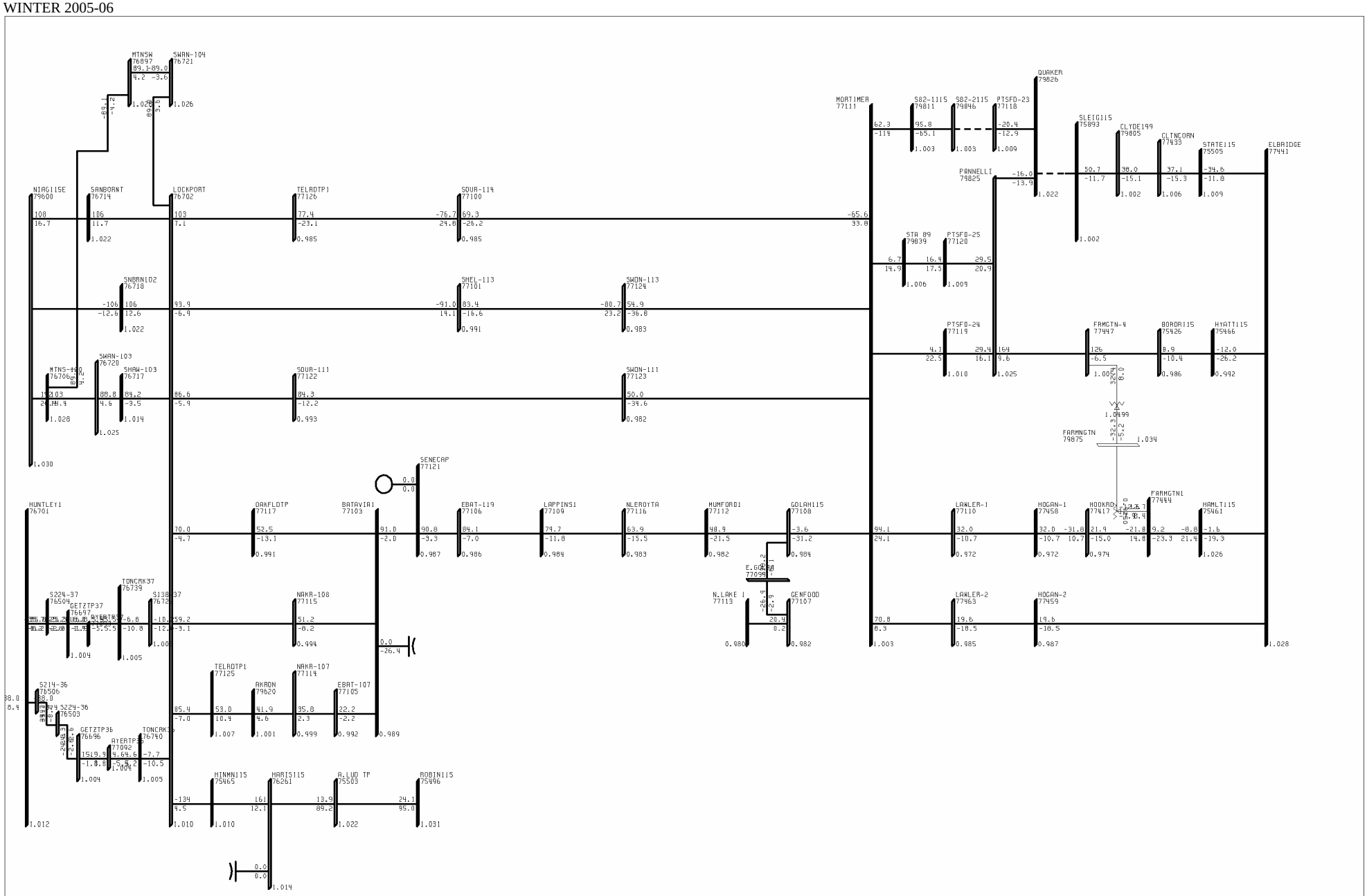
|---|---|---|---|
| POWER TECHNOLOGIES INC.® | 2005/06 NYISO WINTER OPERATING STUDY BASE CASE-TRIAL 2-FINAL<br>R.O.W. REPRESENTATION FROM VEMN05W_BCD_DISPATCHED-FINAL-V28<br>14) NMPC SYRACUSE FRI, SEP 23 2005 14:54 | KV: ≤138 , ≤230 , ≤345 | BUS - VOLTAGE(PU)<br>BRANCH - MW/MVAR<br>EQUIPMENT - MW/MVAR |

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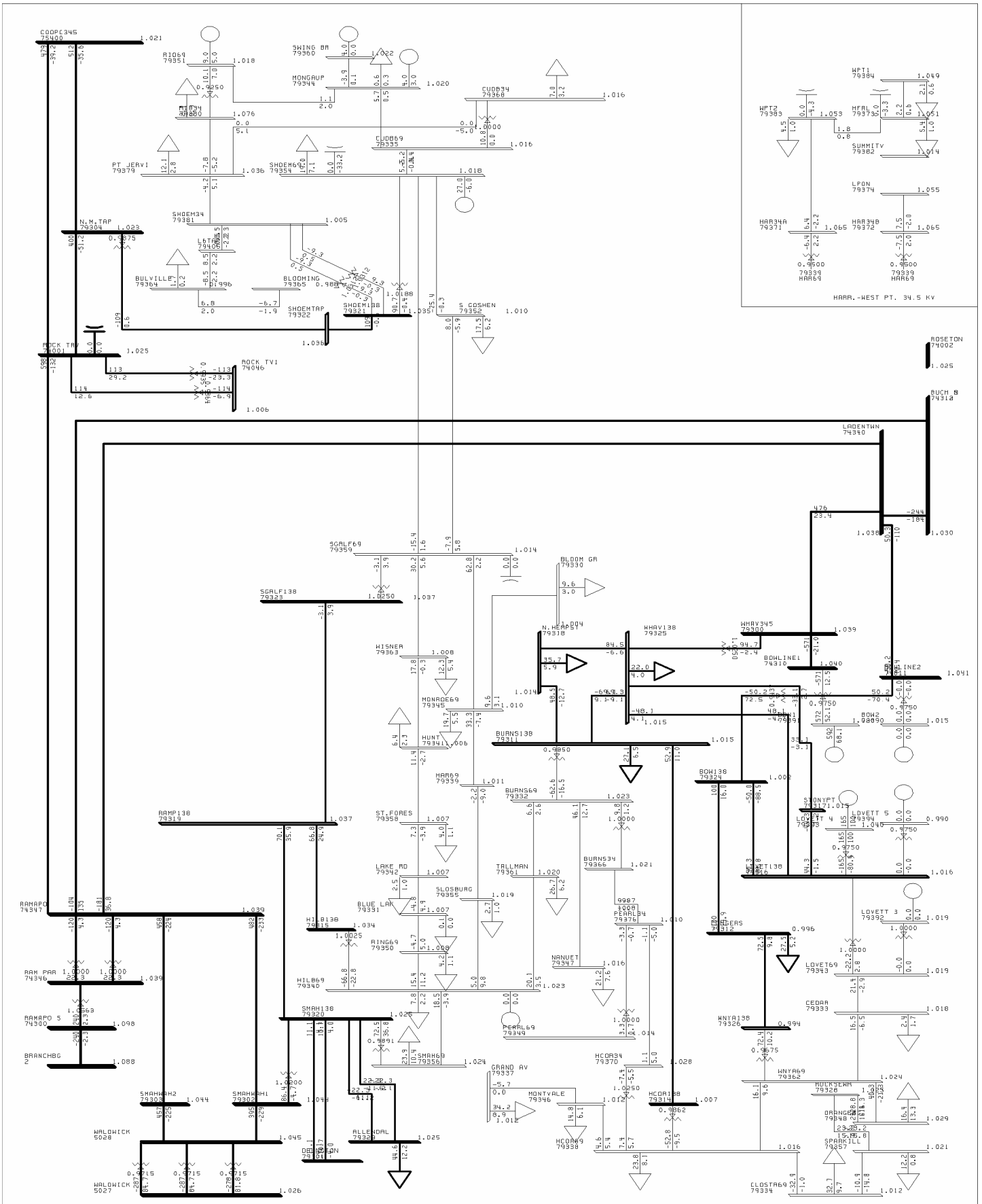
|---|---|---|---|
| POWER TECHNOLOGIES INC. | 2005/06 NYISO WINTER OPERATING STUDY BASE CASE-TRIAL 2-FINAL<br>R.O.W. REPRESENTATION FROM VEMN05W_BCD_DISPATCHED-FINAL-V28<br>15) NMPC LOCKPORT 115 FRI, SEP 23 2005 14:54 | KV: ≤69 . ≤138 . ≤345 | BUS - VOLTAGE(PU)<br>BRANCH - MW/MVAR<br>EQUIPMENT - MW/MVAR |

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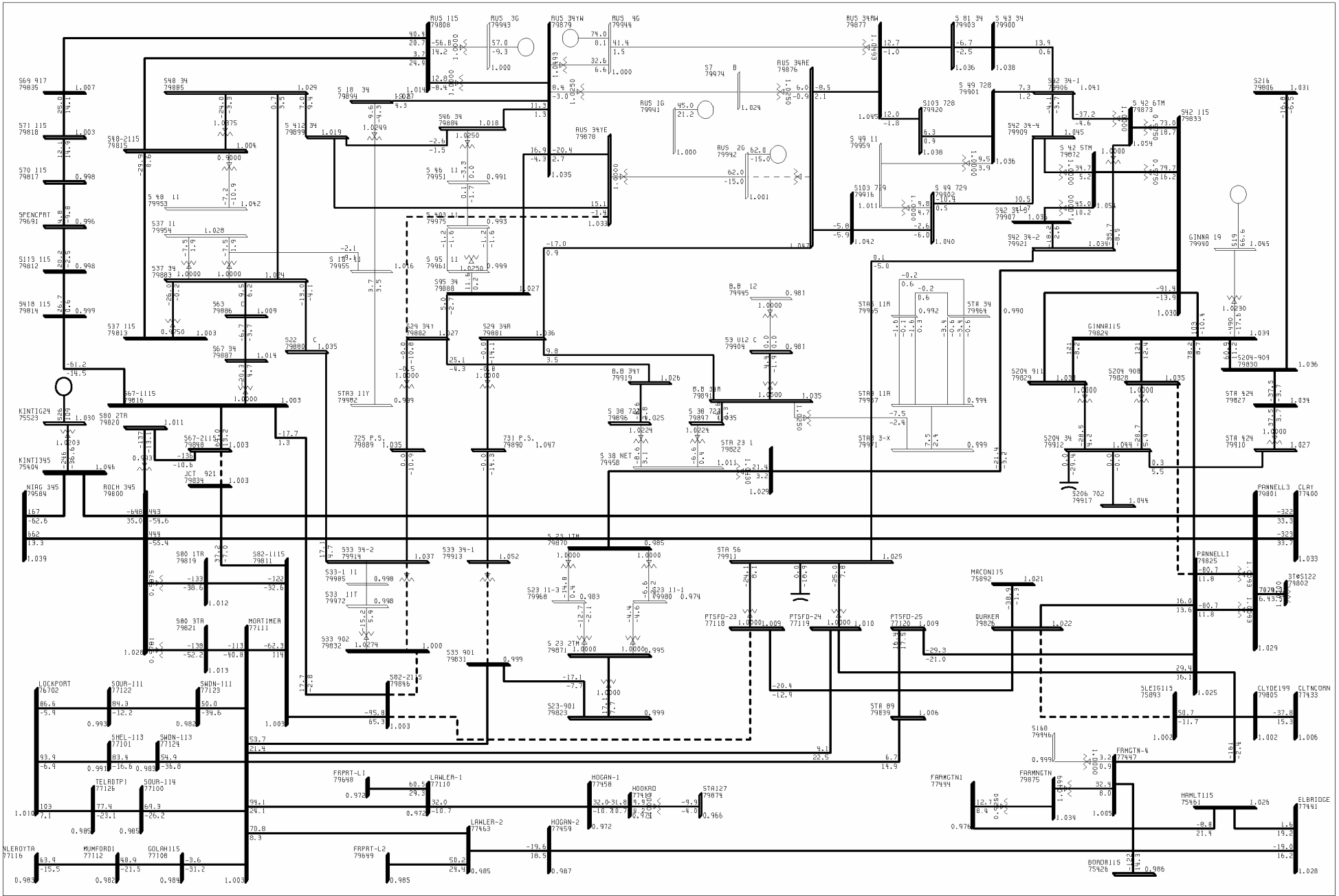
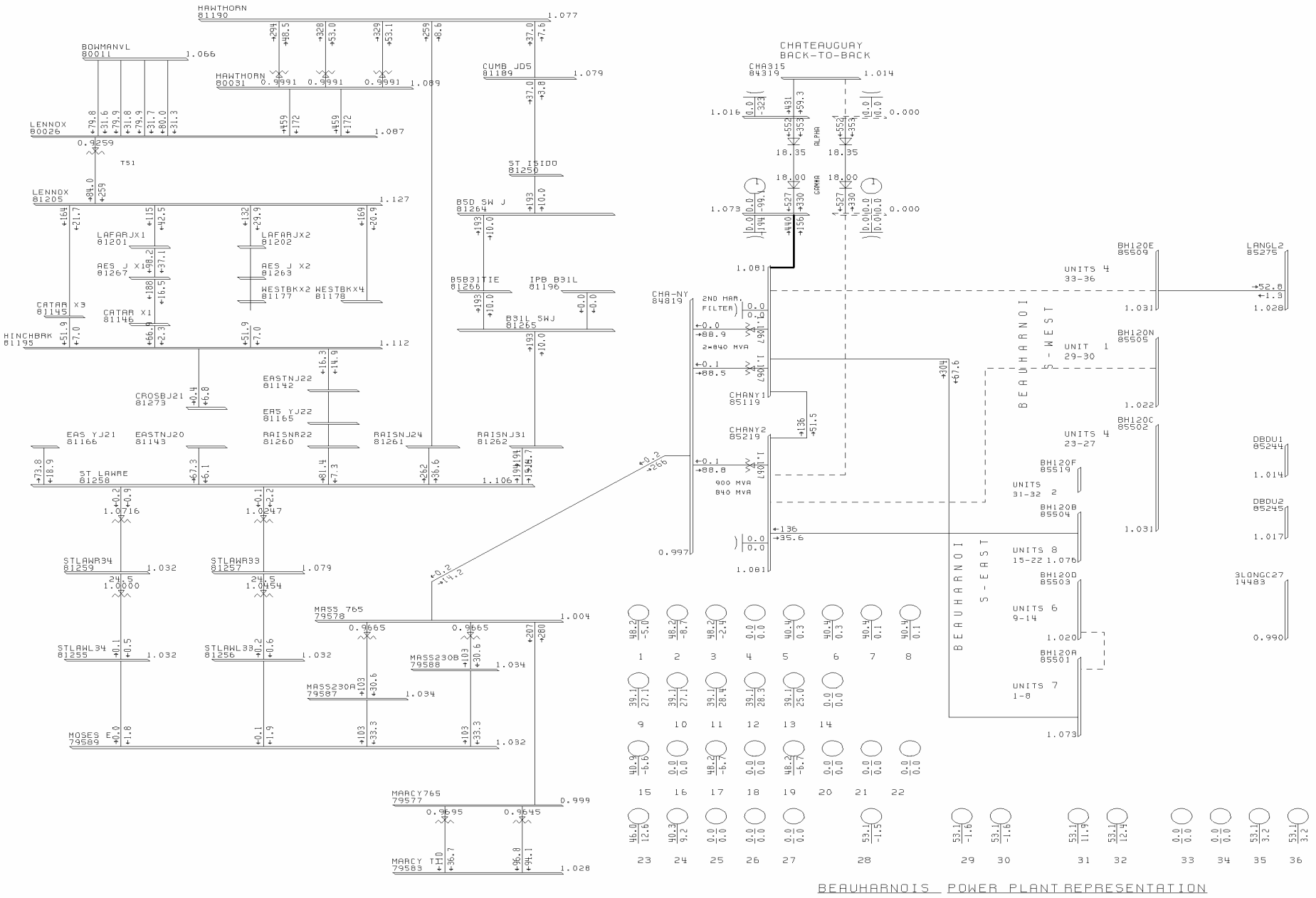
|---|---|---|---|
| POWER TECHNOLOGIES INC. | 2005/06 NYISO WINTER OPERATING STUDY BASE CASE-TRIAL 2-FINAL<br>R.O.W. REPRESENTATION FROM VEMN05W_BCD_DISPATCHED-FINAL-V28<br>16) ORANGE & ROCKLAND FRI, SEP 23 2005 14:54 | KV: ≤69 , ≤138 , ≤345 | BUS - VOLTAGE(PU)<br>BRANCH - MW/MVAR<br>EQUIPMENT - MW/MVAR |


2005/06 NYISO WINTER OPERATING STUDY BASE CASE-TRIAL 2-FINAL
R.O.W. REPRESENTATION FROM VEMN05W_BCD_DISPATCHED-FINAL-V28
17) ROCHESTER FRI, SEP 23 2005 14:54
POWER TECHNOLOGIES INC.
KV: ≤20 .≤35 .≤115
BUS - VOLTAGE(PU)
BRANCH - MW/MVAR
EQUIPMENT - MW/MVAR

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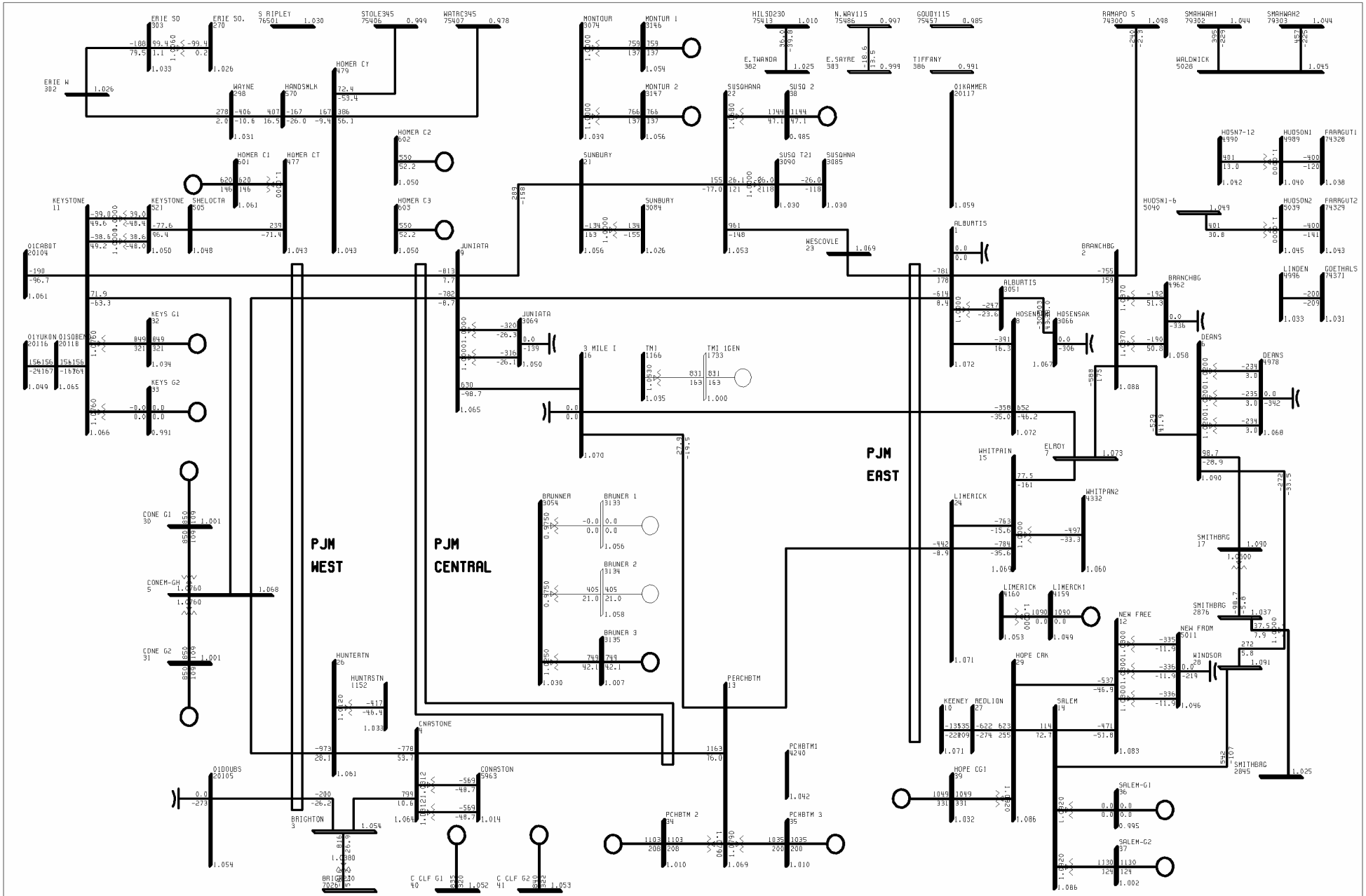
|---|---|---|
| POWER TECHNOLOGIES INC. | 2005/06 NYISO WINTER OPERATING STUDY BASE CASE-TRIAL 2-FINAL<br>R.O.W. REPRESENTATION FROM VEMN05W_BCD_DISPATCHED-FINAL-V28<br>18) BEAU FRI, SEP 23 2005 14:54 | BUS - VOLTAGE(PU)<br>BRANCH - MW/MVAR<br>EQUIPMENT - MW/MVAR |

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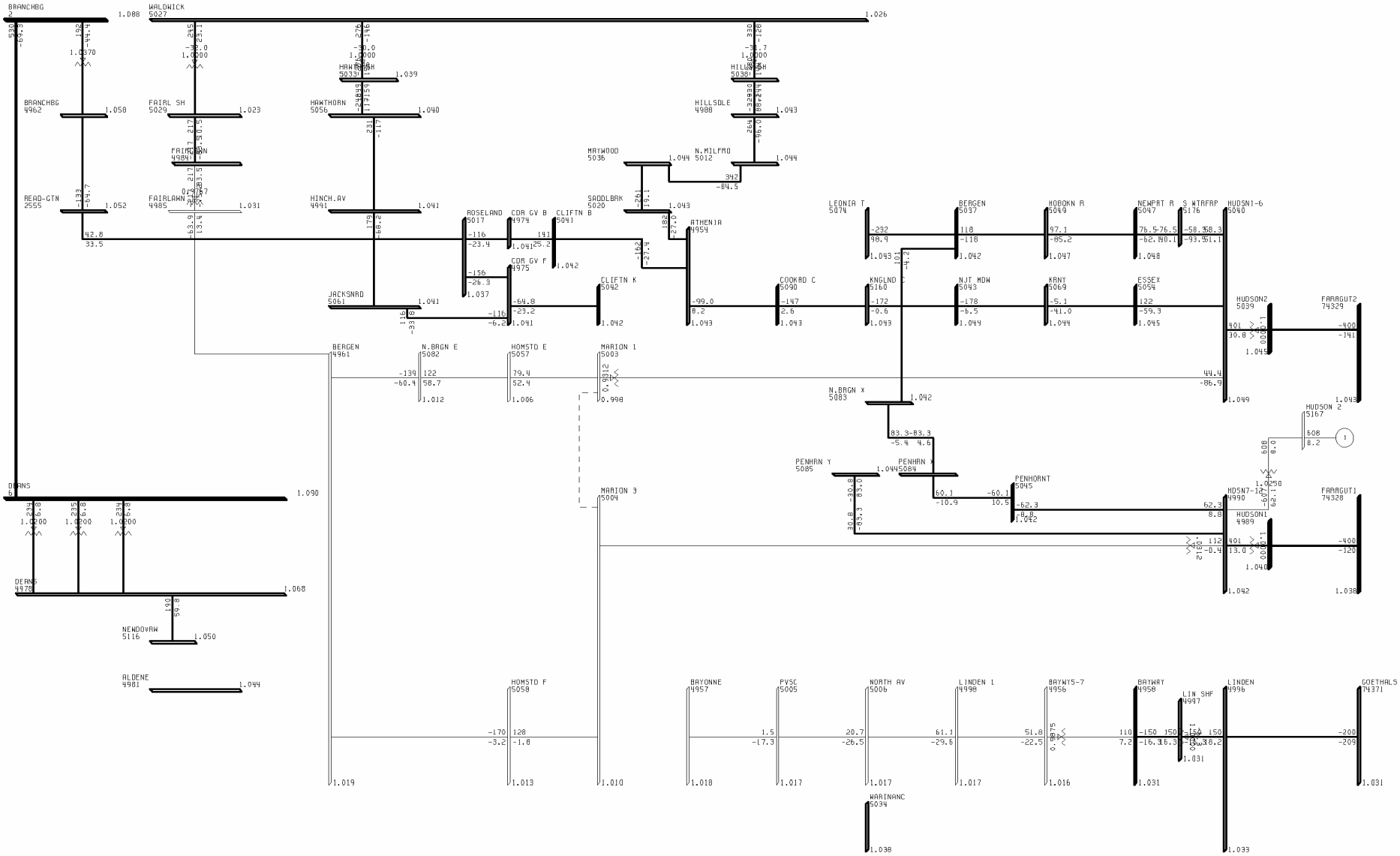
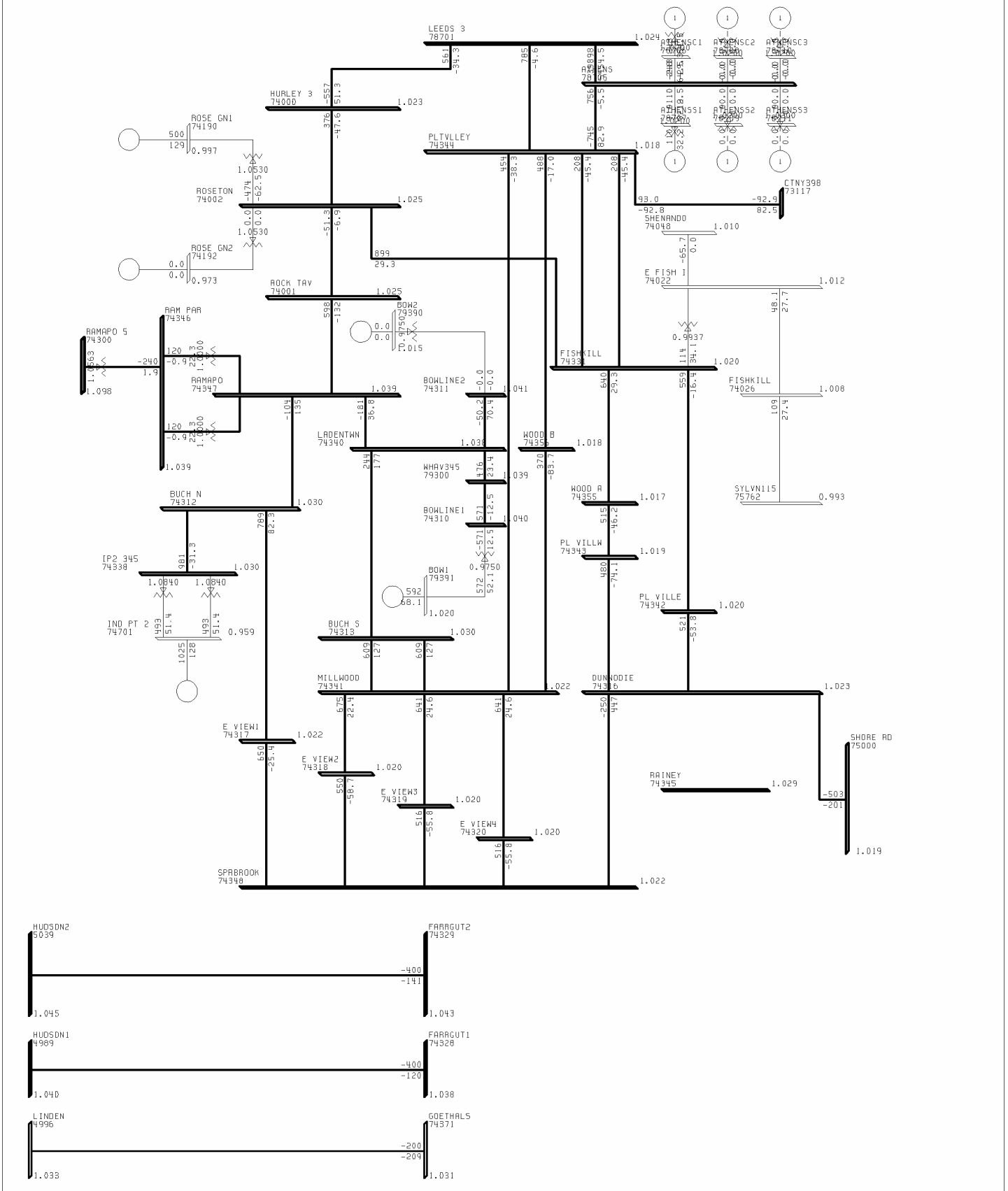
|---|---|---|---|
| POWER TECHNOLOGIES INC® | 2005/06 NYISO WINTER OPERATING STUDY BASE CASE-TRIAL 2-FINAL<br>R.O.W. REPRESENTATION FROM VEMN05W_BCD_DISPATCHED-FINAL-V28<br>19) PJM FRI, SEP 23 2005 14:54 | KV: ≤20 . ≤35 . ≤115 | BUS - VOLTAGE(PU)<br>BRANCH - MW/MVAR<br>EQUIPMENT - MW/MVAR |




2005/06 NYISO WINTER OPERATING STUDY BASE CASE-TRIAL 2-FINAL
R.O.W. REPRESENTATION FROM VEMN05W_BCD_DISPATCHED-FINAL-V28
20) PSE&G FRI, SEP 23 2005 14:54

KV: ≤138 .≤230 .≤345

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

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|---|---|---|
| POWER TECHNOLOGIES INC. | 2005/06 NYISO WINTER OPERATING STUDY BASE CASE-TRIAL 2-FINAL<br>R.O.W. REPRESENTATION FROM VEMN05W_BCD_DISPATCHED-FINAL-V28<br>21) UPNY - CONED FRI, SEP 23 2005 14:54 | KV: ≤115 . **≤230** . **≤345** |

# APPENDIX D

# RATINGS OF MAJOR TRANSMISSION FACILITIES

# IN NEW YORK

# NYISO WINTER 2005-06 OPERATING STUDY
## WINTER ONLINE RATINGS

| LINE NAME | LINE_ID | NORMAL | LTE | STE | MGF_NO | PTID |
|---|---|---|---|---|---|---|
| ADRON B1 - MOSES W | MA-1 | 359 | 359 | 478 | 782 | 25269 |
| ADRON B2 - MOSES W | MA-2 | 447 | 473 | 517 | 784 | 25270 |
| ALCOA N - GR-TAP1 | MAL-6 | 279 | 282 | 327 | 792 | 25582 |
| ALCOA-NM - ALCOA N | R8105 | 263 | 294 | 348 | 786 | 25202 |
| ALCOA-NM - BRADY | 13 | 156 | 159 | 159 | 787 | 25230 |
| ALCOA-NM - BRADY | 9 | 159 | 159 | 159 | 820 | 25230 |
| ALCOA-NM - DENNISON | 12 | 202 | 221 | 238 | 788 | 25227 |
| ALLENS F - COLTON | 3 | 145 | 152 | 159 | 846 | 25241 |
| ALPS345 - N.SCOT77 | 2 | 1278 | 1410 | 1780 | 993 | 25217 |
| ALPS345 - REYNLD3 | 1 | 585 | 676 | 796 | 994 | 25587 |
| ANDRWS-4 - DENNISON | 5 | 222 | 234 | 278 | 861 | 25226 |
| ANGORA - ANGORA | 311 | 1712 | 1885 | 1912 | 458 | 25069 |
| ASTORIAE - CORONA | 34186 | 177 | 254 | 394 | 133 | 25282 |
| ASTORIAE - CORONA | 34185 | 177 | 254 | 394 | 132 | 25281 |
| ASTORIAE - CORONA | 34184 | 177 | 254 | 394 | 131 | 25280 |
| ASTORIAE - CORONA | 34183 | 177 | 254 | 394 | 130 | 25279 |
| ASTORIAE - CORONA | 34182 | 177 | 254 | 394 | 129 | 25278 |
| ASTORIAE - CORONA | 34181 | 177 | 254 | 394 | 128 | 25277 |
| ASTORIAE - HG 1 | 34052 | 184 | 259 | 401 | 134 | 25324 |
| ASTORIAE - HG 4 | 34051 | 184 | 259 | 401 | 135 | 25323 |
| ASTORIAW - HG 2 | 24054 | 171 | 207 | 207 | 146 | 25213 |
| ASTORIAW - HG 3 | 24053 | 171 | 207 | 207 | 147 | 25212 |
| ASTORIAW - HG 5 | 24051 | 202 | 283 | 489 | 148 | 25210 |
| ASTORIAW - HG 6 | 24052 | 202 | 283 | 489 | 149 | 25211 |
| ASTORIAW - QUENBRDG | 28241 | 177 | 254 | 394 | 151 | 25315 |
| ASTORIAW - QUENBRDG | 28242 | 177 | 254 | 394 | 150 | 25316 |
| ASTORIAW - QUENBRDG | 28243 | 355 | 508 | 645 | 152 | 25317 |
| ASTORIAW - QUENBRDG | 28244 | 355 | 508 | 645 | 153 | 25318 |
| BARRETT2 - BRRT PH | 461 | 225 | 313 | 313 | 7 | 25155 |
| BARRETT2 - VLY STRM | 292 | 261 | 332 | 422 | 10 | 25313 |
| BATAVIA1 - EBAT-107 | 107 | 145 | 152 | 159 | 636 | 25124 |
| BATAVIA1 - NAKR-108 | 108 | 158 | 159 | 159 | 647 | 25125 |
| BATAVIA1 - OAKFLDTP | 112 | 156 | 162 | 181 | 446 | 25126 |
| BELL-129 - MLPN-129 | 129 | 199 | 199 | 199 | 765 | 69854 |
| BLISSVIL - WHITEHAL | K-37 | 239 | 239 | 239 | 1065 | 25028 |
| BLUE LAK - LAKE RD | 89/993 | 137 | 151 | 157 | 483 | 69353 |
| BLUE LAK - RING69 | 89/993 | 137 | 151 | 157 | 483 | 69353 |
| BNNINGTN - HOOSICK | K6 | 159 | 159 | 159 | 1022 | 25029 |
| BORDR115 - FRMGTN-4 | 977/4 | 187 | 208 | 221 | 507 | 25057 |
| BORDR115 - HYATT115 | 979 | 157 | 171 | 179 | 506 | 25106 |
| BOWLINE1 - WHAV345 | 67 | 777 | 837 | 837 | 164 | 25567 |
| BOWLINE2 - LADENTWN | 68 | 777 | 837 | 837 | 166 | 25249 |
| BRANCHBG - RAMAPO 5 | 5018 | 1158 | 1416 | 1924 | 366 | 25019 |
| BRDGPORT - PETRBORO | 5 | 141 | 144 | 165 | 940 | 25896 |

# NYISO WINTER 2005-06 OPERATING STUDY
## WINTER ONLINE RATINGS

| LINE NAME | LINE_ID | NORMAL | LTE | STE | MGF_NO | PTID |
|---|---|---|---|---|---|---|
| BRDGPORT - TEALL | 5 | 141 | 144 | 165 | 940 | 25896 |
| BRSWAMP - ROTRDM.2 | E205W | 511 | 545 | 574 | 1063 | 25030 |
| BUCH N - E VIEW1 | W93 | 1822 | 2010 | 2555 | 175 | 25133 |
| BUCH N - RAMAPO | Y94 | 1822 | 2010 | 2555 | 178 | 25184 |
| BUCH S - LADENTWN | Y88 | 1822 | 2010 | 2555 | 180 | 25185 |
| BUCH S - MILLWOOD | W98 | 1828 | 1976 | 2163 | 182 | 25146 |
| BUCH S - MILLWOOD | W97 | 1822 | 1976 | 2163 | 181 | 25247 |
| BUCH138 - MLWD TA | 96952 | 291 | 322 | 409 | 173 | 25283 |
| BUCH138 - MLWD TA | 96951 | 291 | 322 | 409 | 172 | 25284 |
| BURNS138 - WHAV138 | 530/531 | 274 | 302 | 313 | 473 | 68644 |
| BURNS69 - TALLMAN | 59/591 | 112 | 122 | 126 | 469 | 68642 |
| CARLE PL - E.G.C. | 361 | 304 | 334 | 364 | 18 | 25533 |
| CARML115 - UNION115 | 991/992 | 261 | 287 | 303 | 190 | 68885 |
| CARTZ_69 - DOVERAFB | 89/993 | 137 | 151 | 157 | 483 | 69353 |
| CATON115 - HICK 115 | 958/960 | 119 | 120 | 120 | 574 | 69341 |
| CHURC115 - BL STR E | 987/13 | 120 | 120 | 120 | 1002 | 68475 |
| CLAY - 9MI PT1 | 8 | 1278 | 1410 | 1792 | 839 | 25167 |
| CLAY - CLAY | BK#1 | 354 | 410 | 448 | 826 | 25387 |
| CLAY - CLAY | BK#2 | 354 | 410 | 448 | 827 | 25421 |
| CLAY - DEWITT 3 | 13 | 1348 | 1434 | 1434 | 835 | 25168 |
| CLAY - DUGUID | 5 | 245 | 260 | 282 | 829 | 25519 |
| CLAY - HPKNS-11 | 11 | 239 | 239 | 239 | 831 | 25516 |
| CLAY - HPKNS-11 | 10 | 141 | 144 | 165 | 834 | 25520 |
| CLAY - PANNELL3 | PC-2 | 1195 | 1314 | 1434 | 768 | 25050 |
| CLAY - PANNELL3 | PC-1 | 1195 | 1314 | 1434 | 769 | 25058 |
| CLAY - VOLNEY | 6 | 1348 | 1434 | 1434 | 838 | 25198 |
| CLINTON - MARSH115 | 12-Nov | 152 | 159 | 159 | 1012 | 68794 |
| CLTNCORN - CLYDE199 | 971/3 | 133 | 149 | 159 | 510 | 25063 |
| CLYDE199 - CLYDE 34 | 3 | 152 | 166 | 175 | 509 | 25221 |
| COBHL115 - COBHIL34 | 906 | 45 | 47 | 53 | 513 | 25426 |
| CODNT115 - ETNA 115 | 998 | 266 | 293 | 299 | 515 | 25734 |
| CODNT115 - MONTR115 | 982 | 133 | 149 | 162 | 516 | 25728 |
| COFFEEN - E WTRTWN | 5 | 119 | 119 | 119 | 840 | 25504 |
| COLDNHAM - ROCK TV1 | J | 255 | 282 | 350 | 417 | 69037 |
| COOPC345 - COOPC115 | #2 | 248 | 298 | 300 | 519 | 25433 |
| COOPC345 - COOPC115 | #3 | 270 | 300 | 300 | 520 | 25434 |
| COOPC345 - FRASR345 | FCC-33 | 1482 | 1631 | 1793 | 521 | 25236 |
| COOPC345 - MARCY T1 | UCC2-41 | 1345 | 1345 | 1345 | 2803 | 25113 |
| CORONA1R - JAMAICA | 18001 | 184 | 259 | 401 | 185 | 25285 |
| CORONA2R - JAMAICA | 18002 | 184 | 259 | 401 | 186 | 25286 |
| CORTLAND - LABRADOR | 3 | 152 | 159 | 159 | 855 | 25894 |
| CORTLAND - TULLER H | 947 | 133 | 149 | 162 | 631 | 25059 |
| CROTN115 - UNION115 | 991/992 | 261 | 287 | 303 | 190 | 68885 |
| CTNY398 - PLTVLLEY | 398 | 1283 | 1476 | 1635 | 349 | 25033 |

# NYISO WINTER 2005-06 OPERATING STUDY
## WINTER ONLINE RATINGS

| LINE NAME | LINE_ID | NORMAL | LTE | STE | MGF_NO | PTID |
|---|---|---|---|---|---|---|
| DANSKAMA - DR CBLTP | DR | 237 | 282 | 315 | 411 | 25831 |
| DELPHI - LABRADOR | 3 | 152 | 159 | 159 | 855 | 25894 |
| DELPHI - OM-FENNR | 3 | 152 | 159 | 159 | 855 | 25894 |
| DENNISON - LWRNCE-B | 4 | 222 | 234 | 278 | 796 | 25225 |
| DENNISON - LWRNCE-B | 4 | 222 | 234 | 278 | 935 | 25225 |
| DEWITT 3 - DEWITT 1 | 2 | 619 | 757 | 796 | 862 | 25418 |
| DEWITT 3 - LAFAYTTE | 22 | 1434 | 1434 | 1434 | 866 | 25174 |
| DUN NO - DUN NO T | 99941 | 381 | 451 | 472 | 196 | 25245 |
| DUN NO - DUN SO | 99997 | 280 | 359 | 383 | 194 | 25532 |
| DUN NO1R - S CREEK | 99031 | 149 | 259 | 290 | 197 | 25193 |
| DUN NO2R - S CREEK | 99032 | 149 | 259 | 290 | 198 | 25239 |
| DUN SO - DUN SO T | 99942 | 381 | 451 | 472 | 204 | 25246 |
| DUN SO1R - E179 ST | 99153LM | 252 | 348 | 439 | 203 | 25287 |
| DUNKIRK - DUNKIRK1 | 41 | 167 | 204 | 250 | 657 | 25386 |
| DUNKIRK - DUNKIRK1 | 31 | 164 | 199 | 250 | 656 | 25430 |
| DUNKIRK - GRDNVL2 | 73 | 637 | 637 | 637 | 663 | 25166 |
| DUNKIRK - GRDNVL2 | 74 | 637 | 637 | 637 | 664 | 25197 |
| DUNWODIE - DUN NO | W74 | 414 | 540 | 664 | 195 | 25209 |
| DUNWODIE - DUN SO | W73 | 414 | 540 | 664 | 202 | 25208 |
| DUNWODIE - PL VILLE | W89 | 1976 | 2282 | 2538 | 206 | 25182 |
| DUNWODIE - PL VILLW | W90 | 1976 | 2282 | 2538 | 205 | 25250 |
| DUNWODIE - SHORE RD | Y50 | 613 | 891 | 1419 | 115 | 25091 |
| DUNWODIE - SPRBROOK | W75 | 2838 | 3185 | 3662 | 209 | 25071 |
| E FISH I - FISHKILL | F33 | 505 | 531 | 531 | 2868 | 25724 |
| E VIEW1 - EASTVIEW | 87874 | 438 | 493 | 493 | 211 | 25471 |
| E VIEW1 - SPRBROOK | W79 | 1976 | 2384 | 2895 | 224 | 25153 |
| E VIEW2 - EASTVIEW | 87873 | 438 | 493 | 493 | 210 | 25472 |
| E VIEW2 - MILLWOOD | W82 | 2430 | 2821 | 3349 | 225 | 25147 |
| E VIEW2 - SPRBROOK | W64 | 2430 | 2821 | 3349 | 223 | 25143 |
| E VIEW3 - EASTVIEW | 87872 | 438 | 493 | 493 | 212 | 25470 |
| E VIEW3 - MILLWOOD | W99 | 2430 | 2821 | 3349 | 222 | 25255 |
| E VIEW3 - SPRBROOK | W65 | 1976 | 2384 | 2895 | 226 | 25144 |
| E VIEW4 - EASTVIEW | 87871 | 438 | 493 | 493 | 2835 | 25373 |
| E VIEW4 - MILLWOOD | W85 | 2430 | 2821 | 3349 | 325 | 25258 |
| E VIEW4 - SPRBROOK | W78 | 2430 | 2821 | 3349 | 2834 | 25346 |
| E.G.C. - NEWBRGE | 462 | 244 | 325 | 434 | 24 | 25303 |
| E.G.C. - NEWBRGE | 465 | 262 | 344 | 442 | 26 | 25535 |
| E.G.C. - ROSLYN | 362 | 314 | 345 | 376 | 28 | 25534 |
| E.G.C.-1 - E.G.C. | BK#2 | 444 | 641 | 855 | 2860 | 25552 |
| E.NOR115 - JENN 115 | 946 | 117 | 136 | 153 | 530 | 25729 |
| E.NOR115 - WILET115 | 945 | 133 | 149 | 162 | 531 | 25732 |
| E.SAYRE - N.WAV115 | 956 | 102 | 139 | 139 | 608 | 25013 |
| E.SPR115 - INGHAM-E | 941 | 114 | 131 | 152 | 536 | 25061 |
| E.TWANDA - HILSD230 | 70 | 512 | 564 | 598 | 582 | 25014 |

# NYISO WINTER 2005-06 OPERATING STUDY
## WINTER ONLINE RATINGS

| LINE NAME | LINE_ID | NORMAL | LTE | STE | MGF_NO | PTID |
|---|---|---|---|---|---|---|
| E.WALD 1 - ROCK TV1 | D | 255 | 282 | 350 | 416 | 69038 |
| E13 ST - T11MPT | 37375 | 284 | 297 | 315 | 228 | 25468 |
| E13 ST - T13MPT | 37377 | 274 | 297 | 315 | 233 | 25464 |
| E13 ST - T14MPT | 37373 | 295 | 326 | 369 | 230 | 25465 |
| E15ST 45 - E13 ST | 37372 | 323 | 369 | 410 | 229 | 25466 |
| E15ST 45 - FARRAGUT | 45 | 783 | 920 | 1285 | 234 | 25190 |
| E15ST 45 - T14MPT | 37373 | 295 | 326 | 369 | 230 | 25465 |
| E15ST 45 - W 49 ST | M55 | 828 | 920 | 1312 | 237 | 25222 |
| E15ST 46 - E13 ST | 37376 | 284 | 297 | 315 | 232 | 25463 |
| E15ST 46 - FARRAGUT | 46 | 783 | 920 | 1285 | 236 | 25251 |
| E15ST 46 - T13MPT | 37377 | 274 | 297 | 315 | 233 | 25464 |
| E15ST 46 - W 49 ST | M54 | 828 | 920 | 1312 | 235 | 25228 |
| E15ST 47 - ASTOR345 | Q35L | 598 | 675 | 1595 | 139 | 25134 |
| E15ST 47 - E RIVER | 44371 | 271 | 336 | 452 | 217 | 25459 |
| E15ST 47 - E13 ST | 37378 | 318 | 372 | 495 | 231 | 25469 |
| E15ST 47 - FARRAGUT | B47 | 492 | 726 | 1151 | 238 | 25177 |
| E15ST 48 - ASTOR345 | Q35M | 598 | 675 | 1595 | 140 | 25142 |
| E15ST 48 - E13 ST | 37374 | 294 | 326 | 367 | 227 | 25467 |
| E15ST 48 - FARRAGUT | 48 | 492 | 726 | 1151 | 239 | 25252 |
| E15ST 48 - T11MPT | 37375 | 284 | 297 | 315 | 228 | 25468 |
| E179 ST - HG 1 | 15054 | 184 | 259 | 401 | 240 | 25290 |
| E179 ST - HG 4 | 15053 | 184 | 259 | 401 | 241 | 25289 |
| E179 ST - HG 6 | 15055 | 251 | 347 | 516 | 242 | 25288 |
| E179 ST - PK-CITY1 | 38X01 | 127 | 169 | 204 | 243 | 25327 |
| E179 ST - PK-CITY2 | 38X02 | 127 | 169 | 204 | 244 | 25328 |
| E179 ST - PK-CITY3 | 38X03 | 127 | 169 | 204 | 245 | 25330 |
| E179 ST - PK-CITY4 | 38X04 | 127 | 169 | 204 | 246 | 25329 |
| E179 ST - S CREEK | 15032 | 184 | 259 | 401 | 248 | 25156 |
| E179 ST - S CREEK | 15031 | 184 | 259 | 401 | 247 | 25157 |
| EDIC - JA FITZP | FE-1 | 1434 | 1434 | 1912 | 867 | 25077 |
| EDIC - MARCY T1 | UE1-7 | 1792 | 1792 | 1792 | 868 | 25229 |
| EDIC - N.SCOT77 | 14 | 1624 | 1783 | 1792 | 873 | 25170 |
| EDIC - PORTER 1 | BK#3/10 | 524 | 602 | 760 | 871 | 25424 |
| EDIC - PORTER 1 | BK#4/20 | 602 | 721 | 796 | 870 | 25454 |
| EDIC - PORTER 2 | BK#2/17 | 551 | 626 | 637 | 872 | 25422 |
| ELBRIDGE - ELBRIDGE | BK#1 | 542 | 621 | 796 | 874 | 25448 |
| ELBRIDGE - LAFAYTTE | 17 | 940 | 1562 | 1912 | 880 | 25149 |
| ELBRIDGE - OSWEGO | 17 | 1278 | 1410 | 1792 | 881 | 25234 |
| ELWOOD 1 - NRTHPRT2 | 681 | 398 | 536 | 677 | 33 | 25544 |
| ELWOOD 2 - NRTHPRT2 | 678 | 398 | 536 | 677 | 2863 | 25543 |
| ERIE E - S RIPLEY | 69 | 553 | 637 | 637 | 665 | 25016 |
| ETNA 115 - WILET115 | 945 | 133 | 149 | 162 | 540 | 25731 |
| FARRAGUT - GOWANUSN | 41 | 688 | 855 | 1215 | 260 | 25141 |
| FARRAGUT - GOWANUSS | 42 | 688 | 855 | 1215 | 261 | 25140 |

# NYISO WINTER 2005-06 OPERATING STUDY
## WINTER ONLINE RATINGS

| LINE NAME | LINE_ID | NORMAL | LTE | STE | MGF_NO | PTID |
|---|---|---|---|---|---|---|
| FARRAGUT - HAE TR1 | B43 | 130 | 174 | 216 | 262 | 25293 |
| FARRAGUT - RAINEY | 63 | 758 | 866 | 1113 | 267 | 25152 |
| FARRAGUT - RAINEY | 62 | 796 | 898 | 1135 | 266 | 25253 |
| FARRAGUT - RAINEY | 61 | 758 | 866 | 1113 | 265 | 25254 |
| FISHKILL - PL VILLE | F38/Y86 | 2401 | 3031 | 3406 | 270 | 25367 |
| FISHKILL - PLTVLLEY | F36 | 1976 | 2384 | 2895 | 268 | 25256 |
| FISHKILL - PLTVLLEY | F37 | 1976 | 2384 | 2895 | 269 | 25257 |
| FISHKILL - SYLVN115 | A/990 | 256 | 282 | 350 | 376 | 25066 |
| FISHKILL - WOOD A | F39 | 2401 | 3031 | 3406 | 271 | 25368 |
| FOXHLLS1 - GRENWOOD | 29231 | 169 | 252 | 394 | 276 | 25321 |
| FOXHLLS2 - GRENWOOD | 29232 | 169 | 252 | 394 | 278 | 25322 |
| FR KILLS - FRKILLR2 | TA1 | 327 | 435 | 540 | 283 | 25457 |
| FR KILLS - FRKILLSR | TB1 | 329 | 410 | 478 | 284 | 25458 |
| FR KILLS - GOTHLS N | 22 | 1283 | 1618 | 1817 | 285 | 25137 |
| FR KILLS - GOTHLS S | 21 | 971 | 1073 | 1362 | 286 | 25138 |
| FRASR345 - EDIC | EF24-40 | 1380 | 1380 | 1380 | 2802 | 25112 |
| FRASR345 - FRASR115 | BK#2 | 356 | 420 | 420 | 2851 | 25391 |
| FRASR345 - GILB 345 | GF5-35 | 1524 | 1524 | 1524 | 544 | 25060 |
| FRASR345 - OAKDL345 | 32 | 1380 | 1380 | 1380 | 543 | 25235 |
| FR-KILLS - FRKILLR2 | 21192 | 327 | 435 | 540 | 2804 | 25639 |
| FR-KILLS - FRKILLSR | 21192 | 329 | 410 | 478 | 280 | 25640 |
| FR-KILLS - WILOWBK1 | 29211-2 | 195 | 286 | 463 | 282 | 25319 |
| FR-KILLS - WILOWBK2 | 29212-1 | 195 | 286 | 463 | 281 | 25320 |
| FRMGTN-4 - PANNELLI | 4 | 265 | 293 | 317 | 887 | 25080 |
| GALEVILE - KERHNKMK | MK | 40 | 47 | 49 | 425 | 69391 |
| GALEVILE - MODENA 6 | MK | 40 | 47 | 49 | 425 | 69391 |
| GARDV115 - LANGN115 | 903/904 | 179 | 197 | 213 | 524 | 68914 |
| GARDV230 - GARDN M6 | #6 | 370 | 420 | 420 | 545 | 25405 |
| GARDV230 - GARDN M7 | #7 | 246 | 288 | 300 | 546 | 25435 |
| GARDV230 - GRDNVL2 | T8-12 | 773 | 773 | 773 | 550 | 25089 |
| GARDV230 - STOLE230 | 66 | 478 | 478 | 478 | 549 | 25180 |
| GERES LK - SOREL-9 | 9 | 176 | 181 | 199 | 890 | 25510 |
| GINNA115 - PANNELLI | 912 | 265 | 295 | 335 | 1074 | 25260 |
| GLNWD GT - ROSLYN | 364 | 371 | 392 | 434 | 42 | 25556 |
| GLNWD NO - SHORE RD | 366 | 525 | 577 | 641 | 44 | 25154 |
| GLNWD SO - CARLE PL | 363 | 370 | 392 | 434 | 19 | 25554 |
| GLNWD SO - SHORE RD | 365 | 577 | 635 | 705 | 46 | 25205 |
| GOETH T - GOETHALS | BKA2253 | 630 | 789 | 886 | 287 | 25642 |
| GOTHLS N - GOWANUSN | 25 | 527 | 726 | 1076 | 290 | 25139 |
| GOTHLS R - GOETH T | BKA2253 | 630 | 789 | 886 | 287 | 25642 |
| GOTHLS S - GOWANUSS | 26 | 527 | 726 | 1076 | 291 | 25571 |
| GOUDY115 - S.OWE115 | 961 | 143 | 157 | 167 | 555 | 25725 |
| GOWANUSN - GOWNUS1T | T2 | 272 | 308 | 376 | 292 | 25476 |
| GOWANUSS - GOWNUS2T | T14 | 272 | 308 | 376 | 293 | 25475 |

# NYISO WINTER 2005-06 OPERATING STUDY
## WINTER ONLINE RATINGS

| LINE NAME | LINE_ID | NORMAL | LTE | STE | MGF_NO | PTID |
|---|---|---|---|---|---|---|
| GOWNUS1R - GRENWOOD | 42232 | 262 | 325 | 452 | 301 | 25214 |
| GOWNUS2R - GRENWOOD | 42231 | 262 | 325 | 452 | 297 | 25215 |
| GRDNVL2 - GRDNVL1 | 2 | 298 | 334 | 396 | 677 | 25385 |
| GRDNVL2 - GRDNVL1 | 4 | 169 | 210 | 250 | 679 | 25417 |
| GRDNVL2 - GRDNVL1 | 3 | 168 | 210 | 250 | 678 | 25416 |
| GRDNVL2 - SUNY-79 | 79 | 692 | 760 | 848 | 690 | 25165 |
| GRDNVL2 - SUNY-80 | 80 | 692 | 760 | 848 | 691 | 25196 |
| GRENWOOD - VERNON-E | 31231-2 | 177 | 254 | 394 | 305 | 25298 |
| GRENWOOD - VERNON-E | 31232-2 | 177 | 254 | 394 | 304 | 25299 |
| HAE TR1 - HUDAVE E | 32077 | 130 | 174 | 216 | 264 | 25291 |
| HAMLT115 - ELBRIDGE | 983 | 152 | 166 | 175 | 878 | 69053 |
| HAMLT115 - FARMGTN1 | 983 | 152 | 166 | 175 | 884 | 69138 |
| HAMLT115 - HAMLTN34 | 1 | 34 | 42 | 56 | 563 | 25394 |
| HAR69 - SLOSBURG | 31/311 | 137 | 151 | 157 | 479 | 69318 |
| HCOR69 - WNYA69 | 751 | 81 | 88 | 92 | 478 | 69314 |
| HILB69 - RING69 | 89/993 | 137 | 151 | 157 | 483 | 69353 |
| HILB69 - SLOSBURG | 31/311 | 137 | 151 | 157 | 479 | 69318 |
| HILB69 - TALLMAN | 59/591 | 112 | 122 | 126 | 469 | 68642 |
| HILSD230 - HILSD M3 | BK#3 | 271 | 332 | 336 | 576 | 25397 |
| HILSD230 - WATRC230 | 69 | 615 | 657 | 657 | 581 | 25181 |
| HINMN115 - LOCKPORT | 100 | 268 | 293 | 317 | 585 | 25087 |
| HOLBROOK - NYPAHOLT | 888 | 858 | 942 | 1047 | 2927 | 25542 |
| HOLBROOK - PT JEFF1 | 886 | 301 | 331 | 419 | 61 | 25540 |
| HOLBROOK - WADNGRV1 | 884 | 400 | 440 | 487 | 70 | 25341 |
| HOMER CY - STOLE345 | 37 | 703 | 835 | 840 | 630 | 25036 |
| HOMER CY - WATRC345 | 30 | 927 | 927 | 927 | 635 | 25018 |
| HONK FLS - KERHNKMK | MK | 40 | 47 | 49 | 425 | 69391 |
| HUDAVE E - JAMAICA | 702 | 175 | 228 | 370 | 317 | 25295 |
| HUDAVE E - JAMAICA | 701 | 175 | 228 | 370 | 316 | 25294 |
| HUDSON1 - FARRGUT1 | B3402 | 586 | 748 | 863 | 257 | 25020 |
| HUDSON2 - FARRGUT2 | C3403 | 543 | 737 | 827 | 259 | 25038 |
| HUNT - ST.FORES | 89/993 | 137 | 151 | 157 | 483 | 69353 |
| HUNT - WISNER | 89/993 | 137 | 151 | 157 | 483 | 69353 |
| HUNTLEY1 - S129-39 | 38 | 168 | 181 | 199 | 703 | 69428 |
| HUNTLEY1 - ZRMN-130 | 129 | 199 | 199 | 199 | 705 | 69426 |
| HUNTLEY2 - HNTLY68G | BK455 | 519 | 610 | 773 | 2939 | 25664 |
| HURLEY 3 - HURLEY 1 | BK 1 | 486 | 560 | 560 | 431 | 25419 |
| HURLEY 3 - LEEDS 3 | 301 | 1712 | 1885 | 1912 | 435 | 25055 |
| HURLEY 3 - ROSETON | 303 | 1712 | 1885 | 1912 | 434 | 25218 |
| HYATT115 - ELBRIDGE | 15 | 157 | 171 | 182 | 587 | 25109 |
| INGMS-CD - INGHAM-E | 2 | 197 | 234 | 239 | 898 | 25242 |
| JAMAICA - L SUCSPH | 903 | 268 | 361 | 428 | 78 | 25090 |
| JAMAICA - V STRM P | 901L+M | 307 | 391 | 428 | 118 | 25048 |
| KINTI345 - NIAG 345 | NS1-38 | 1591 | 1745 | 1793 | 623 | 25074 |

# NYISO WINTER 2005-06 OPERATING STUDY
## WINTER ONLINE RATINGS

| LINE NAME | LINE_ID | NORMAL | LTE | STE | MGF_NO | PTID |
|---|---|---|---|---|---|---|
| KINTI345 - ROCH 345 | SR1-39 | 1591 | 1745 | 1793 | 624 | 25073 |
| KNAPPS 6 - LAGRANGE | G | 49 | 52 | 58 | 438 | 69534 |
| LADENTWN - RAMAPO | W72 | 1822 | 2010 | 2555 | 320 | 25233 |
| LADENTWN - WHAV345 | 67 | 1976 | 2384 | 2895 | 321 | 25248 |
| LAKE RD - ST.FORES | 89/993 | 137 | 151 | 157 | 483 | 69353 |
| LAUREL L - GOUDY115 | 952 | 128 | 149 | 162 | 556 | 25012 |
| LCST GRV - NEWBRGE | 558 | 446 | 572 | 657 | 2898 | 25158 |
| LEEDS 3 - ATHENS | 95 | 1624 | 1783 | 1912 | 2929 | 25789 |
| LEEDS 3 - GILB 345 | GL-3 | 1762 | 1793 | 1912 | 1017 | 25219 |
| LEEDS 3 - N.SCOT77 | 93 | 1534 | 1692 | 1912 | 1029 | 25171 |
| LEEDS 3 - N.SCOT99 | 94 | 1534 | 1692 | 1912 | 1028 | 25203 |
| LINDEN - GOETHALS | A2253 | 613 | 768 | 768 | 288 | 25017 |
| LOCKPORT - NAKR-108 | 108 | 158 | 162 | 187 | 712 | 25266 |
| LOCKPORT - OAKFLDTP | 112 | 166 | 175 | 187 | 646 | 25300 |
| LOCKPORT - SHEL-113 | 113 | 174 | 191 | 199 | 718 | 25263 |
| LOCKPORT - SOUR-111 | 111 | 166 | 175 | 187 | 717 | 25262 |
| LOCKPORT - TELRDTP1 | 107 | 199 | 199 | 199 | 637 | 25265 |
| LOCKPORT - TELRDTP1 | 114 | 174 | 191 | 199 | 721 | 25264 |
| LONGTAP - NIAG115E | GV-180 | 194 | 199 | 233 | 681 | 25104 |
| LTHSE HL - BLACK RV | 6 | 128 | 135 | 152 | 805 | 25506 |
| LTHSE HL - E WTRTWN | 5 | 119 | 119 | 119 | 840 | 25504 |
| MACDN115 - QUAKER | 930 | 68 | 85 | 112 | 594 | 25093 |
| MALONE - NICHOLVL | 3 | 145 | 152 | 159 | 905 | 25585 |
| MALONE - WILL 115 | WM-1 | 168 | 191 | 199 | 906 | 25586 |
| MANY393 - ALPS345 | 393 | 1601 | 1757 | 1912 | 995 | 25034 |
| MARCY765 - MARCY T1 | MAR-AT2 | 1793 | 1793 | 2390 | 908 | 25456 |
| MARCY765 - MARCY T1 | MAR-AT1 | 1654 | 1654 | 1654 | 907 | 25455 |
| MARCY765 - MASS 765 | MSU1 | 3975 | 3975 | 5300 | 911 | 25224 |
| MASS 765 - CHA-NY | MSC7040 | 3975 | 3975 | 5300 | 825 | 25301 |
| MASS 765 - MASS230A | MAS-AT1 | 1076 | 1254 | 1404 | 912 | 25665 |
| MASS 765 - MASS230B | MAS-AT2 | 1076 | 1254 | 1404 | 914 | 25666 |
| MASS230A - MOSES E | MMS1 | 1076 | 1195 | 1404 | 913 | 25274 |
| MASS230B - MOSES E | MMS2 | 1076 | 1195 | 1404 | 915 | 25275 |
| MEYER230 - MEYER M4 | BK#4 | 271 | 332 | 336 | 595 | 25398 |
| MEYER230 - STOLE230 | 67 | 512 | 564 | 606 | 598 | 25064 |
| MILAN - N.CAT. 1 | T7 | 145 | 160 | 178 | 441 | 69719 |
| MILAN - PL.VAL 1 | R10 | 168 | 199 | 233 | 338 | 69896 |
| MILLWOOD - MLWD TA | 96922 | 248 | 333 | 359 | 323 | 25530 |
| MILLWOOD - MLWD TA | 96921 | 234 | 305 | 321 | 322 | 25531 |
| MILLWOOD - WOOD B | W80 | 1976 | 2384 | 2895 | 326 | 25148 |
| MLPN-129 - PACK(S)W | 133 | 199 | 199 | 199 | 465 | 69854 |
| MLPN-130 - PACK(S)W | 130 | 211 | 217 | 239 | 764 | 69855 |
| MLPN-130 - SUMIT PK | 130 | 211 | 217 | 239 | 764 | 69855 |
| MORAI115 - BENET115 | 966 | 149 | 172 | 179 | 503 | 68439 |

# NYISO WINTER 2005-06 OPERATING STUDY
## WINTER ONLINE RATINGS

| LINE NAME | LINE_ID | NORMAL | LTE | STE | MGF_NO | PTID |
|---|---|---|---|---|---|---|
| MORTIMER - PTSFD-24 | NMP #24 | 157 | 171 | 182 | 728 | 25096 |
| MORTIMER - S80 3TR | 904 | 289 | 305 | 335 | 732 | 25081 |
| MORTIMER - STA 89 | NMP#25 | 139 | 145 | 162 | 729 | 25095 |
| MORTIMER - SWDN-111 | 111 | 129 | 149 | 153 | 723 | 25347 |
| MOS 115 - GR-TAP1 | MAL-6 | 279 | 282 | 327 | 792 | 25582 |
| MOSES E - STLAWL33 | L33P | 285 | 298 | 363 | 929 | 25118 |
| MOSES E - STLAWL34 | L34P | 356 | 375 | 525 | 930 | 25119 |
| MOSES W - MOS 115 | SL-AT1 | 526 | 589 | 722 | 922 | 25411 |
| MOSES W - MOS 115 | SL-AT2 | 526 | 589 | 722 | 923 | 25451 |
| MOSES W - MOS 115 | SL-AT3 | 220 | 276 | 287 | 920 | 25452 |
| MOSES W - MOS 115 | SL-AT4 | 598 | 598 | 797 | 921 | 25453 |
| MOSES W - WILLIS E | MW-2 | 447 | 478 | 577 | 927 | 25188 |
| MOSES W - WILLIS W | MW-1 | 447 | 478 | 577 | 926 | 25271 |
| MOUNTAIN - NIAG115E | MT-121 | 224 | 239 | 282 | 2902 | 25070 |
| MOUNTAIN - NIAG115E | MT-122 | 224 | 239 | 282 | 2903 | 25072 |
| MTNS-120 - NIAG115E | MT-120 | 224 | 239 | 239 | 733 | 25135 |
| N.M.TAP - SHOEMTAP | BK114 | 519 | 610 | 773 | 2920 | 26465 |
| N.SCOT1 - AIR INDE | 8 | 340 | 373 | 414 | 2817 | 25496 |
| N.SCOT1 - RTRDM1 | 13 | 255 | 282 | 318 | 1041 | 25494 |
| N.SCOT77 - N.SCOT1 | BK#1 | 529 | 560 | 619 | 1039 | 25445 |
| N.SCOT99 - GILB 345 | GNS-1 | 1458 | 1601 | 1780 | 1018 | 25052 |
| N.SCOT99 - MARCY T1 | UNS-18 | 1792 | 1792 | 1792 | 910 | 25276 |
| N.SCOT99 - N.SCOT1 | BK#2 | 533 | 547 | 597 | 2816 | 25460 |
| N.WAV115 - CHEMU115 | 962 | 170 | 179 | 179 | 577 | 25726 |
| N.WAV115 - LOUNS115 | 962 | 143 | 157 | 167 | 607 | 25727 |
| NI.B-181 - PACK(N)E | 181/922 | 146 | 160 | 178 | 737 | 69816 |
| NIAG 345 - BECK A | PA302 | 1180 | 1469 | 1860 | 759 | 25041 |
| NIAG 345 - BECK B | PA301 | 1180 | 1469 | 1860 | 758 | 25040 |
| NIAG 345 - NIAGAR2E | N-AT5 | 441 | 552 | 575 | 745 | 25408 |
| NIAG 345 - NIAGAR2E | N-AT3 | 441 | 552 | 575 | 744 | 25450 |
| NIAG 345 - NIAGAR2W | N-AT4 | 881 | 1027 | 1150 | 752 | 25449 |
| NIAG 345 - ROCH 345 | NR2 | 1591 | 1745 | 1904 | 757 | 25084 |
| NIAGAR2W - NIAG115E | N-AT1 | 220 | 276 | 288 | 739 | 25409 |
| NIAGAR2W - NIAG115W | N-AT2 | 286 | 359 | 470 | 747 | 25410 |
| NIAGAR2W - PA27 REG | PA27 | 480 | 540 | 685 | 756 | 25025 |
| NORHR138 - NRTHPT P | 1385A+B | 271 | 363 | 428 | 90 | 25035 |
| NRTHPRT1 - NRTHPRT2 | BUS/PS2 | 463 | 570 | 570 | 91 | 25599 |
| NRTHPRT1 - PILGRIM | 679 | 459 | 609 | 677 | 93 | 25309 |
| OAKDL230 - OAKDL115 | BK#1 | 318 | 435 | 440 | 609 | 25400 |
| OAKDL345 - LAFAYTTE | Apr-36 | 1380 | 1380 | 1380 | 614 | 25049 |
| OAKDL345 - OAK2M115 | BK#3 | 508 | 600 | 600 | 571 | 25399 |
| OAKDL345 - OAK3M115 | BK#2 | 508 | 600 | 600 | 610 | 25401 |
| OAKDL345 - WATRC345 | 31 | 1076 | 1076 | 1076 | 613 | 25178 |
| OAKWOOD - SYOSSET | 675 | 301 | 418 | 650 | 96 | 25547 |

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## WINTER ONLINE RATINGS

| LINE NAME | LINE_ID | NORMAL | LTE | STE | MGF_NO | PTID |
|---|---|---|---|---|---|---|
| OC W +MG - UNVL 9TP | 2 | 141 | 144 | 165 | 450 | 25067 |
| ONEIDA - PETRBORO | 5 | 141 | 144 | 165 | 940 | 25896 |
| OSW 3&4 - S OSWEGO | 5 | 209 | 239 | 239 | 952 | 25508 |
| OSW 3&4 - S OSWEGO | 8 | 478 | 478 | 478 | 953 | 25509 |
| OSWEGO - OSW 3&4 | BK 7 | 592 | 657 | 774 | 966 | 25372 |
| OSWEGO - VOLNEY | 11 | 1278 | 1410 | 1792 | 948 | 25199 |
| OSWEGO - VOLNEY | 12 | 1278 | 1410 | 1792 | 949 | 25201 |
| PACK(N)E - NIAG115E | PK-191 | 319 | 357 | 413 | 742 | 25075 |
| PACK(N)E - NIAG115E | PK-192 | 319 | 357 | 398 | 741 | 25099 |
| PACK(S)W - NIAG115W | PK-194 | 319 | 357 | 413 | 750 | 25100 |
| PACK(S)W - NIAG115W | PK-193 | 319 | 357 | 413 | 749 | 25101 |
| PACK(S)W - NIAG115W | PK-195 | 285 | 300 | 371 | 751 | 25102 |
| PACKARD2 - BP76 REG | BP76 | 559 | 586 | 700 | 763 | 25024 |
| PACKARD2 - NIAGAR2W | PK-62 | 717 | 717 | 942 | 755 | 25186 |
| PACKARD2 - NIAGAR2W | PK-61 | 717 | 717 | 942 | 754 | 25220 |
| PACKARD2 - PACK(N)E | 3 | 168 | 210 | 250 | 760 | 25414 |
| PACKARD2 - PACK(S)W | 4 | 168 | 210 | 250 | 762 | 25415 |
| PALMT115 - ANDOVER1 | 932 | 95 | 100 | 111 | 615 | 25094 |
| PALOMA - S OSWEGO | 6 | 139 | 144 | 161 | 903 | 25513 |
| PALOMA - S OSWEGO | 6 | 141 | 144 | 165 | 954 | 25513 |
| PANNELL3 - PANNELLI | 122 2TR | 280 | 320 | 330 | 771 | 25396 |
| PANNELL3 - PANNELLI | 122 1TR | 280 | 320 | 330 | 770 | 25431 |
| PANNELLI - QUAKER | 914 | 265 | 295 | 335 | 1081 | 25261 |
| PANNELLI - QUAKER | 883/889 | 496 | 547 | 696 | 67 | 25682 |
| PANNELLI - QUAKER | 925 | 351 | 372 | 414 | 136 | 25682 |
| PARK TR1 - PARK1REG | R11 | 310 | 350 | 395 | 330 | 25649 |
| PARK TR2 - PARK2REG | R12 | 310 | 350 | 395 | 333 | 25650 |
| PAWLN115 - SYLVN115 | 990/994 | 179 | 179 | 179 | 188 | 68887 |
| PL VILLE - PLTVILLE | 1 | 64 | 70 | 70 | 345 | 25477 |
| PL VILLW - PLTVILLE | 2 | 64 | 70 | 70 | 344 | 25478 |
| PL VILLW - WOOD A | Y87 | 2401 | 3031 | 3406 | 352 | 25132 |
| PL.VAL 1 - PLTVLLEY | BK S1 | 478 | 478 | 478 | 334 | 25382 |
| PLAT 115 - T MIL RD | PS-1/B | 128 | 148 | 170 | 959 | 25078 |
| PLAT T#1 - WILLIS E | WP-1 | 217 | 242 | 281 | 967 | 25272 |
| PLAT T#4 - WILLIS W | WP-2 | 217 | 242 | 281 | 956 | 25273 |
| PLTVLLEY - ATHENS | 91 | 1624 | 1783 | 1912 | 347 | 25054 |
| PLTVLLEY - LEEDS 3 | 92 | 1624 | 1783 | 1912 | 348 | 25056 |
| PLTVLLEY - WOOD B | F30 | 1976 | 2384 | 2895 | 346 | 25237 |
| PORTER 1 - ILION | 5 | 141 | 144 | 165 | 896 | 25232 |
| PORTER 1 - ILION | 2 | 141 | 144 | 159 | 991 | 25232 |
| PORTER 1 - VALLEY | 4 | 141 | 144 | 165 | 973 | 25231 |
| PORTER 2 - ADRON B1 | AP11 | 341 | 376 | 478 | 783 | 25051 |
| PORTER 2 - ADRON B2 | AP12 | 341 | 376 | 478 | 785 | 25082 |
| PORTER 2 - PORTER 1 | 2 | 320 | 365 | 398 | 972 | 25389 |

# NYISO WINTER 2005-06 OPERATING STUDY
## WINTER ONLINE RATINGS

| LINE NAME | LINE_ID | NORMAL | LTE | STE | MGF_NO | PTID |
|---|---|---|---|---|---|---|
| PORTER 2 - PORTER 1 | 1 | 320 | 365 | 398 | 971 | 25423 |
| PORTER 2 - ROTRDM.2 | 30 | 511 | 564 | 634 | 974 | 25173 |
| PORTER 2 - ROTRDM.2 | 31 | 511 | 564 | 634 | 975 | 25194 |
| PTSFD-24 - PANNELLI | 24 | 157 | 171 | 182 | 1079 | 69863 |
| PTSFD-25 - PANNELLI | 25 | 139 | 145 | 162 | 1080 | 69862 |
| QUENBRDG - VERNON-E | 31282 | 355 | 508 | 602 | 354 | 25159 |
| QUENBRDG - VERNON-W | 31281 | 368 | 570 | 602 | 353 | 25160 |
| RAINEY - 8E DUM | 36311 | 321 | 368 | 422 | 358 | 25296 |
| RAINEY - 8W DUM | 36312 | 286 | 328 | 374 | 359 | 25297 |
| RAM PAR - RAMAPO | BK4500 | 588 | 840 | 1113 | 2806 | 25370 |
| RAM PAR - RAMAPO | BK3500 | 588 | 840 | 1113 | 2805 | 25371 |
| RAMAPO - RAMP138 | 1300 | 453 | 567 | 745 | 363 | 25441 |
| RAMAPO - RAMP138 | 2300 | 453 | 567 | 745 | 362 | 25442 |
| RAMAPO - SMAHWAH1 | 69 | 1601 | 2010 | 2271 | 364 | 25021 |
| RAMAPO - SMAHWAH2 | 70 | 1822 | 2010 | 2555 | 365 | 25259 |
| RAMAPO 5 - RAM PAR | 1500 | 1160 | 1419 | 1925 | 360 | 25656 |
| REYNLD3 - REY. RD. | BK#2 | 585 | 676 | 796 | 1050 | 25403 |
| ROBIN230 - NIAGAR2E | RR-64 | 639 | 714 | 717 | 618 | 25088 |
| ROBIN230 - ROBIN M1 | BK#1 | 344 | 412 | 420 | 616 | 25395 |
| ROBIN230 - STOLE230 | 65 | 673 | 717 | 717 | 617 | 25065 |
| ROCH 345 - PANNELL3 | RP-1 | 1591 | 1745 | 1904 | 767 | 25192 |
| ROCH 345 - PANNELL3 | RP-2 | 1591 | 1745 | 1904 | 766 | 25172 |
| ROCH 345 - S80 3TR | BK #3TR | 286 | 320 | 360 | 774 | 25446 |
| ROCK TAV - COOPC345 | CRT-42 | 1793 | 1793 | 1793 | 2801 | 25111 |
| ROCK TAV - ROCK TV1 | BK TR1 | 485 | 530 | 530 | 457 | 25406 |
| ROCK TAV - ROCK TV1 | BK TR3 | 485 | 533 | 560 | 2930 | 26168 |
| ROCK TAV - ROSETON | 311 | 1712 | 1885 | 1912 | 458 | 25069 |
| ROSETON - FISHKILL | RFK-305 | 2527 | 2773 | 3137 | 272 | 25108 |
| RTRDM1 - ROTRDM.2 | BK#6 | 406 | 447 | 585 | 1056 | 25407 |
| RTRDM1 - ROTRDM.2 | BK#7 | 346 | 396 | 448 | 1057 | 25392 |
| RTRDM1 - ROTRDM.2 | BK#8 | 377 | 427 | 474 | 1058 | 25413 |
| S.PER115 - STA 162 | T224 | 125 | 152 | 180 | 625 | 25062 |
| SANBORNT - NIAG115E | LK-101 | 285 | 300 | 318 | 713 | 25267 |
| SARANAC - T MIL RD | PS-1/B | 128 | 148 | 170 | 959 | 25078 |
| SCRIBA - 9M PT 2G | 23 | 2041 | 2242 | 2390 | 981 | 70513 |
| SCRIBA - 9MI PT1 | 9 | 1166 | 1281 | 1424 | 980 | 25359 |
| SCRIBA - JA FITZP | FS-10 | 1434 | 1434 | 1912 | 900 | 25076 |
| SCRIBA - VOLNEY | 20 | 1474 | 1626 | 1881 | 978 | 25204 |
| SCRIBA - VOLNEY | 21 | 1912 | 1912 | 1912 | 979 | 25314 |
| SGRLF69 - WISNER | 89/993 | 137 | 151 | 157 | 483 | 69353 |
| SHEL-113 - SWDN-113 | 113 | 129 | 149 | 153 | 724 | 25263 |
| SHORE RD - L SUCS | 368 | 258 | 377 | 623 | 76 | 25150 |
| SHORE RD - L SUCS | 367 | 258 | 377 | 623 | 75 | 25145 |
| SHORE RD - SHORE RD | BK#2 | 522 | 641 | 731 | 114 | 25440 |

# NYISO WINTER 2005-06 OPERATING STUDY
## WINTER ONLINE RATINGS

| LINE NAME | LINE_ID | NORMAL | LTE | STE | MGF_NO | PTID |
|---|---|---|---|---|---|---|
| SHORE RD - SHORE RD | BK#1 | 522 | 641 | 731 | 113 | 25439 |
| SLEIG115 - QUAKER | NMP #13 | 187 | 207 | 222 | 621 | 25079 |
| SMAHWAH1 - SMAH138 | 258 | 496 | 646 | 656 | 496 | 25393 |
| SNBRN102 - NIAG115E | LK-102 | 285 | 300 | 318 | 743 | 25103 |
| SOUR-114 - MORTIMER | 114 | 129 | 149 | 153 | 725 | 25349 |
| SPRBROOK - TREMONT | X28 | 524 | 710 | 973 | 373 | 25175 |
| SPRBROOK - REACBUS | Y49 | 693 | 936 | 1360 | 2865 | 25105 |
| STATE115 - CLTNCORN | 971/3 | 133 | 149 | 159 | 510 | 25063 |
| STATE115 - ELBRIDGE | 972/5 | 145 | 159 | 169 | 627 | 25107 |
| STILV115 - HANCO115 | 954/955 | 119 | 120 | 120 | 565 | 69271 |
| STOLE345 - STOLE115 | #4 | 356 | 420 | 420 | 629 | 25462 |
| STOLE345 - STOLE115 | #3 | 347 | 415 | 420 | 628 | 25461 |
| SUGARLF - ROCK TV1 | SL/6108 | 179 | 196 | 206 | 498 | 25420 |
| TEALL - ONEIDA | 2 | 141 | 144 | 159 | 939 | 25895 |
| TREMONT - PARK TR1 | R11 | 255 | 339 | 409 | 350 | 25473 |
| TREMONT - PARK TR2 | R12 | 258 | 337 | 409 | 351 | 25474 |
| VOLNEY - MARCY T1 | VU-19 | 1434 | 1793 | 1912 | 909 | 25345 |
| W.WDB115 - W.WDBR69 | T152 | 50 | 50 | 50 | 467 | 25404 |
| WALDWICK - SMAHWAH1 | J3410 | 645 | 914 | 1189 | 2304 | 25032 |
| WALDWICK - SMAHWAH2 | K3411 | 670 | 956 | 1249 | 2305 | 25039 |
| WARREN - FALCONER | 171 | 96 | 136 | 136 | 673 | 25015 |
| WATRC345 - WATRC230 | BK#1 | 528 | 600 | 600 | 634 | 25402 |
| WHAV345 - WHAV138 | BK#194 | 501 | 623 | 756 | 382 | 25447 |
| WHITMAN - ONEIDA | 3 | 152 | 159 | 159 | 855 | 25894 |
| WHTMARSH - WHTMRSH2 | 25 | 527 | 726 | 1076 | 290 | 25139 |
| WILLIS E - WILL 115 | WIL-AT1 | 172 | 201 | 225 | 984 | 25388 |
| WILLIS W - WILL 115 | WIL-AT2 | 172 | 201 | 225 | 983 | 25390 |
| WOODA345 - WOODS115 | BK#1 | 378 | 420 | 420 | 384 | 25437 |
| WOODB345 - WOODS115 | BK#2 | 375 | 420 | 420 | 383 | 25438 |
| WOODS115 - AMWLK115 | 996 | 261 | 287 | 311 | 327 | 25574 |
| WYANT115 - REY. RD. | 13 | 227 | 249 | 268 | 1052 | 69928 |

**APPENDIX E**

# INTERFACE DEFINITIONS AND GENERATION CHANGES ASSUMED FOR THERMAL ANALYSIS

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# NYISO OPERATING INTERFACES & OASIS TRANSMISSION PATHS

| CENTRAL EAST | | |
|---|---|---|
| **Name** | **Line ID** | **Voltage (kV)** |
| Edic-New Scotland* | 14 | 345 |
| Marcy-New Scotland* | UNS-18 | 345 |
| Porter-Rotterdam* | 30 | 230 |
| Porter-Rotterdam* | 31 | 230 |
| *Plattsburgh - Grand Isle | PV-20 | 115 |
| East Springfield - Inghams* | 942 | 115 |
| Inghams Bus Tie | PAR | 115 |

| TOTAL EAST | | |
|---|---|---|
| **Central-Capital/MidHudson** | | |
| **Name** | **Line ID** | **Voltage (kV)** |
| Coopers-Middletown* | CCRT-34 | 345 |
| Coopers-Rock Tavern* | CCRT-42 | 345 |
| Edic-New Scotland* | 14 | 345 |
| *Fraser-Gilboa | 35 | 345 |
| Marcy-New Scotland* | UNS-18 | 345 |
| Porter-Rotterdam* | 30 | 230 |
| Porter-Rotterdam* | 31 | 230 |
| East Springfield - Inghams* | 942 | 115 |
| Inghams Bus Tie | PAR | 115 |
| West Woodbourne*115/69 | T152 | 115/69 |
| **PJM East-Capital/MidHudson** | | |
| Branchburg-Ramapo* | 5018 | 500 |
| *Waldwick- S.Mahwah | J3410 | 345 |
| * Waldwick-S.Mahwah | K3411 | 345 |
| **PJM East-New York City** | | |
| Hudson-Farragut* | C3403 | 345 |
| Hudson-Farragut* | B3402 | 345 |
| Linden-Goethals* | A2253 | 230 |
| **Adirondack-ISO-NE** | | |
| *Plattsburgh-Grand Isle | PV-20 | 115 |
| **PJM (Rockland Electric) - MidHudson** | | |
| Closter – Sparkill | 751 | 69 |
| Harings Corners – W. Nyack | 701 | 69 |
| Harings Corners – Burns | 702 | 138 |
| Montvale – Pearl River | 491 | 69 |
| Harings Corners – Pearl River | 45 | 34 |
| S. Mahwah – Ramapo | 51 | 138 |
| S. Mahwah - Hilburn | 65 | 69 |
| S. Mahwah 138/345 | BK258 | 138/345 |

***** indicates the metered end of circuit

| MOSES SOUTH | | |
|---|---|---|
| **Adirondack-Central** | | |
| **Name** | **Line ID** | **Voltage (kV)** |
| *Massena-Marcy | MSU1 | 765 |
| *Moses-Adirondack | MA-1 | 230 |
| *Moses-Adirondack | MA-2 | 230 |
| *Dennison-Colton | 4 | 115 |
| *Dennison-Colton | 5 | 115 |
| *Alcoa-N. Ogdensburg | 13 | 115 |
| Malone-Colton* | 3 | 115 |

| DYSINGER EAST | | |
|---|---|---|
| **Frontier-Genessee** | | |
| **Name** | **Line ID** | **Voltage (kV)** |
| *AES Somerset-Rochester (Sta 80) | SR-1/39 | 345 |
| Niagara-Rochester* | NR2 | 345 |
| *Stolle-Meyer | 67 | 230 |
| *Andover - Palmiter | 932 | 115 |
| *Lockport-Batavia | 107 | 115 |
| *Lockport-N. Akron | 108 | 115 |
| *Lockport-Oakfield | 112 | 115 |
| *Lockport-Sweden 1 | 111 | 115 |
| *Lockport-Sweden 3 | 113 | 115 |
| *Lockport-Telegraph | 114 | 115 |

| WEST CENTRAL | | |
|---|---|---|
| **Genessee-Central** | | |
| **Name** | **Line ID** | **Voltage (kV)** |
| Pannell Road-Clay | PC-1 | 345 |
| Pannell Road-Clay* | PC-2 | 345 |
| *Stolle-Meyer | 67 | 230 |
| *Andover - Palmiter | 932 | 115 |
| *Quake-Macedon | 930 | 115 |
| *Mortimer-Hook Rd- Elbridge | 1/7 | 115 |
| *Mortimer-Elbridge | 2 | 115 |
| *Pannell-Farmington | 4 | 115 |
| *Station 121-Sleight Road | 13 | 115 |
| St. 162 - S. Perry | 906 | 115 |
| *Clyde 199-Sleight Rd | | 115 |
| Clyde 199-Clinton Corn | | 115 |
| Hook Rd (RGE-NMPC) | TB#3 | 34.5/115 |
| (Farmington 34.5/115kV) | #7 | 34.5/115 |
| (Farmtn 34.5/115kV&12/115 kV) | #4 | 34.5/115 & 12/115 |

***** indicates the metered end of circuit

| UPNY-CONED | | |
|---|---|---|
| **Capital/MidHudson-Westchester** | | |
| **Name** | **Line ID** | **Voltage(kV)** |
| Ladentown-Buchanan South* | Y88 | 345 |
| *Pleasant Valley-Wood St. | F30 | 345 |
| *Pleasant Valley-E. Fishkill | F36 | 345 |
| *Pleasant Valley-E. Fishkill | F37 | 345 |
| *Pleasant Valley-Millwood | F31 | 345 |
| *Ramapo-Buchanan North | Y94 | 345 |
| Roseton-E. Fishkill* | 305 | 345 |
| East Fishkill – Sylvan Lake | A/990 | 115 |
| East Fishkill 115/345 | | 115/345 |

| SPRAINBROOK-DUNWOODIE SOUTH | | |
|---|---|---|
| **Name** | **Line ID** | **Voltage(kV)** |
| *Dunwoodie-Rainey | 71 | 345 |
| *Dunwoodie-Rainey | 72 | 345 |
| Sprainbrook-Tremont* | 28 | 345 |
| *Sprainbrook-West 49th Street | M51 | 345 |
| *Sprainbrook-West 49th Street | M52 | 345 |
| *Lake Success-Jamaica | 903 | 138 |
| *Valley Stream-Jamaica | 901L/M | 138 |
| *Dunwoodie-Sherman Creek | 99031 | 138 |
| Dunwoodie-Sherman Creek* | 99032 | 138 |
| *Dunwoodie-East 179th Street | 99153 | 138 |

| NYISO-ISO-NE | | |
|---|---|---|
| **Adirondack-ISO-NE** | | |
| **Name** | **Line ID** | **Voltage (kV)** |
| *Plattsburgh-Grand Isle | PV-20 | 115 |
| **Capital/MidHudson-ISO-NE** | | |
| *Alps-Berkshire | 393 | 345 |
| *Pleasant Valley-Long Mnt. | 398 | 345 |
| Rotterdam-Bear Swamp* | E205W | 230 |
| Hoosick -Bennington* | 6 | 115 |
| *Whitehall-Rutland (Velco) | 7/K37 | 115 |
| *Smithfield-Salisbury | | 69 |
| **Long Island-ISO-NE** | | |
| *Northport-Norwalk | 1385 | 138 |

***** indicates the metered end of circuit

| PJM-NYISO | | |
|---|---|---|
| **PJM East-New York City** | | |
| **Name** | **Line ID** | **Voltage (kV)** |
| Hudson-Farragut* | C3403 | 345 |
| Hudson-Farragut* | B3402 | 345 |
| Linden-Goethals* | A2253 | 230 |
| **PJM West-Central** | | |
| *Homer City-Watercure | 30 | 345 |
| E. Towanda-Hillside* | 70 | 230 |
| Tiffany-Goudey* | 952 | 115 |
| *E. Sayre-N. Waverly | 956 | 115 |
| **PJM West-Frontier** | | |
| *Homer City-Stolle Road | 37 | 345 |
| Erie East - South Ripley* | 69 | 230 |
| *Warren-Falconer | 171 | 115 |
| **PJM East-Capital/MidHudson** | | |
| Branchburg-Ramapo* | 5018 | 500 |
| *Waldwick-S.Mahwah | J3410 | 345 |
| *Waldwick-S.Mahwah | K3411 | 345 |
| **PJM (Rockland Electric) - MidHudson** | | |
| Closter – Sparkill | 751 | 69 |
| Harings Corners – W. Nyak | 701 | 69 |
| Harings Corners – Burns | 702 | 138 |
| Montvale – Pearl River | 491 | 69 |
| Harings Corners – Pearl River | 45 | 34 |
| S. Mahwah – Ramapo | 51 | 138 |
| S. Mahwah - Hilburn | 65 | 69 |
| S. Mahwah 138/345 | BK258 | 138/345 |

| IESO (Ontario)-NYISO | | |
|---|---|---|
| **Ontario East-Adirondack** | | |
| **Name** | **Line ID** | **Voltage (kV)** |
| St. Lawrence-Moses* | L33P | 240 |
| St.Lawrence-Moses* | L34P | 230 |
| **Ontario South-Frontier** | | |
| Beck-Niagara* | PA301 | 345 |
| Beck-Niagara* | PA302 | 345 |
| Beck-Niagara* | PA27 | 230 |
| *Beck-Packard | BP76 | 230 |

***** indicates the metered end of circuit

| **CONED - LIPA** | | |
|---|---|---|
| **Westchester - Long Island** | | |
| **Name** | **Line ID** | **Voltage (kV)** |
| *Dunwoodie-Shore Road | Y50 | 345 |
| *Sprainbrook-East Garden City | Y49 | 345 |
| **New York City - Long Island** | | |
| Jamaica-Valley Stream* | 901L/M | 138 |
| Jamaica-Lake Success* | 903 | 138 |

***** indicates the metered end of circuit

# GENERATION PARTICIPATION FOR INTERFACES

| <---------- STUDY SYSTEM -------> | | | | | <--------- OPPOSING SYSTEM ----------> | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | <---- GENERATOR MW ----> | | | | | <---- GENERATOR MW ----> | | | |
| BUS | BUS NAME | BASE | SHIFT | CHANGE | BUS | BUS NAME | BASE | SHIFT | CHANGE |
| **DYSINGER EAST, WEST CENTRAL** | | | | | | | | | |
| 80900 | MINAKIB2 | 25.0 | - | - | 25.0 | 74190 | ROSE GN1 | 24.0 | 499.6 | 491.6 | -8.0 |
| 81422 | LENNOXG2 | 20.0 | 450.0 | 475.0 | 25.0 | 74702 | RAV 3 | 22.0 | 936.0 | 910.0 | -26.0 |
| 81424 | LENNOXG3 | 20.0 | 0.0 | 25.0 | 25.0 | 74703 | AK 2 | 20.0 | 300.0 | 292.0 | -8.0 |
| 81425 | LENNOXG4 | 20.0 | 450.0 | 475.0 | 25.0 | 74705 | AST 4 | 20.0 | 0.0 | -8.0 | -8.0 |
| | | | | | | 79390 | BOW2 | 20.0 | 0.0 | -12.0 | -12.0 |
| | | | | | | 79546 | POLETTI | 26.0 | 650.0 | 632.0 | -18.0 |
| | | | | | | 74907 | NRTPTG2 | 22.0 | 332.0 | 322.0 | -10.0 |
| | | | | | | 74908 | NRTPTG3 | 22.0 | 332.0 | 322.0 | -10.0 |
| **TOTAL EAST, CENTRAL EAST** | | | | | | | | | |
| 80900 | MINAKIB2 | 25.0 | - | - | 15.0 | 74302 | ER G7 | 13.2 | 70.0 | 84.0 | -14.0 |
| 81765 | NANTICG6 | 22.0 | 500.0 | 515.0 | 15.0 | 74702 | RAV 3 | 22.0 | 936.0 | 964.0 | -28.0 |
| 76641 | DUNKGEN4 | 13.8 | 180.0 | 185.0 | 5.0 | 74705 | AST 4 | 20.0 | 0.0 | 10.0 | -10.0 |
| 77051 | HNTLY68G | 13.8 | 190.6 | 195.6 | 5.0 | 74706 | AST 5 | 20.0 | 350.0 | 362.0 | -12.0 |
| 77951 | 9M PT 1G | 23.0 | 617.3 | 667.3 | 50.0 | 79390 | BOW2 | 20.0 | 0.0 | 10.0 | -10.0 |
| 79515 | MOS19-20 | 13.8 | 114.0 | 124.0 | 10.0 | 79546 | POLETTI | 26.0 | 650.0 | 669.0 | -19.0 |
| | | | | | | 74906 | NRTPTG1 | 22.0 | 0.0 | 7.0 | -7.0 |
| **SPRAINBROOK/DUNWOODIE SOUTH** | | | | | | | | | |
| 79513 | MOS17-18 | 13.8 | 109.6 | 159.6 | 50.0 | 74702 | RAV 3 | 22.0 | 936.0 | 875.8 | -30.0 |
| 79516 | MOS21-22 | 13.8 | 114.0 | 164.0 | 50.0 | 76641 | DUNKGEN4 | 13.8 | 180.0 | 290.0 | -10.0 |
| | | | | | | 77051 | HNTLY68G | 13.8 | 190.6 | -10.0 | -10.0 |
| | | | | | | 77951 | 9M PT 1G | 23.0 | 617.3 | 825.0 | -30.0 |
| | | | | | | 79546 | POLETTI | 26.0 | 650.0 | 290.0 | -10.0 |
| **UPNY - CONED** | | | | | | | | | |
| 80900 | LAKEVWG518.0 | | 212.5 | 232.5 | 20.0 | 74302 | ER G7 | 13.2 | 70.0 | 63.0 | -7.0 |
| 81422 | LENNOXG220.0 | | 490.7 | 530.7 | 40.0 | 74702 | RAV 3 | 22.0 | 905.8 | 875.8 | -30.0 |
| 81424 | LENNOXG320.0 | | 125.0 | 165.0 | 40.0 | 74705 | AST 4 | 20.0 | 0.0 | -20.0 | -20.0 |
| | | | | | | 74706 | AST 5 | 20.0 | 369.0 | 359.0 | -10.0 |
| | | | | | | 74707 | RAV 1 | 20.0 | 259.3 | 244.3 | -15.0 |
| | | | | | | 74907 | NRTPTG2 | 22.0 | 300.0 | 282.0 | -18.0 |
| **MOSES – SOUTH** | | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 79513 | MOS17-1813.8 | 106.4 | 156.4 | 50.0 | 74702 | RAV 3 22.0 | 905.8 | 926.0 | -10.0 |
| 79516 | MOS21-2213.8 | 114.0 | 164.0 | 50.0 | 76641 | DUNKGEN413.8 | 180.0 | 170.0 | -10.0 |
| | | | | | 77051 | HNTLY68G13.8 | 190.6 | 180.6 | -10.0 |
| | | | | | 77951 | 9M PT 1G23.0 | 626.0 | 567.3 | -50.0 |
| | | | | | 79546 | POLETTI 26.0 | 855.0 | 630.0 | -20.0 |

**CONED - LONG ISLAND POWER AUTHORITY**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 74190 | ROSE GN1 | 24.0 | 499.6 | 514.6 | 15.0 | 74900 | BARETG1 | 20.0 | 176.0 | 156.0 | -20.0 |
| 74302 | ER G7 | 13.2 | 70.0 | 75.0 | 5.0 | 74907 | NRTPTG2 | 22.0 | 332.0 | 305.3 | -26.7 |
| 74700 | AK 3 | 22.0 | 0.0 | 10.0 | 10.0 | 74908 | NRTPTG3 | 22.0 | 332.0 | 305.3 | -26.7 |
| 74705 | AST 4 | 20.0 | 0.0 | 5.0 | 5.0 | 74909 | NRTPTG4 | 22.0 | 312.0 | 285.3 | -26.7 |
| 74706 | AST 5 | 20.0 | 350.0 | 360.0 | 10.0 | | | | | | |
| 74707 | RAV 1 | 20.0 | 300.0 | 315.0 | 15.0 | | | | | | |
| 79390 | BOW2 | 20.0 | 0.0 | 25.0 | 25.0 | | | | | | |
| 79546 | POLETTI | 26.0 | 650.0 | 665.0 | 15.0 | | | | | | |

**ONTARIO - NEW YORK**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 81422 | LENNOXG2 | 20.0 | 450.0 | 470.0 | 20.0 | 74192 | ROSE GN2 | 24.0 | 0.0 | -7.5 | -7.5 |
| 81423 | LENNOXG1 | 20.0 | 450.0 | 470.0 | 20.0 | 74700 | AK 3 | 22.0 | 0.0 | -5.0 | -5.0 |
| 81424 | LENNOXG3 | 20.0 | 0.0 | 20.0 | 20.0 | 74705 | AST 4 | 20.0 | 0.0 | -5.0 | -5.0 |
| 81425 | LENNOXG4 | 20.0 | 450.0 | 470.0 | 20.0 | 74707 | RAV 1 | 20.0 | 300.0 | 292.5 | -7.5 |
| 81770 | NANTICG1 | 22.0 | 0.0 | 20.0 | 20.0 | 75523 | KINTIG24 | 24.0 | 525.5 | 516.5 | -9.0 |
| | | | | | | 75963 | GRNIDG 3 | 13.8 | 57.0 | 56.0 | -1.0 |
| | | | | | | 75964 | GRNIDG 4 | 13.8 | 0.0 | -2.0 | -2.0 |
| | | | | | | 76111 | MILKN 2 | 18.0 | 164.5 | 162.0 | -2.5 |
| | | | | | | 76112 | MILKN 1 | 13.8 | 160.7 | 158.2 | -2.5 |
| | | | | | | 76641 | DUNKGEN4 | 13.8 | 180.0 | 175.5 | -4.5 |
| | | | | | | 77050 | HNTLY67G | 13.8 | 191.4 | 186.9 | -4.5 |
| | | | | | | 77052 | HUNT115G | 13.8 | 170.0 | 165.5 | -4.5 |
| | | | | | | 77953 | OSWGO 6G | 22.0 | 0.0 | -16.5 | -16.5 |
| | | | | | | 77965 | SITH-G1 | 18.0 | 115.0 | 113.0 | -2.0 |
| | | | | | | 77966 | SITH-G2 | 18.0 | 115.0 | 113.0 | -2.0 |
| | | | | | | 77967 | SITH-G3 | 18.0 | 115.0 | 113.0 | -2.0 |
| | | | | | | 77968 | SITH-G4 | 18.0 | 115.0 | 113.0 | -2.0 |
| | | | | | | 77969 | SITH-S5 | 18.0 | 160.0 | 157.5 | -2.5 |
| | | | | | | 77970 | SITH-S6 | 18.0 | 160.0 | 157.5 | -2.5 |
| | | | | | | 78706 | ATHENSC1 | 16.0 | 248.4 | 244.9 | -3.4 |
| | | | | | | 78707 | ATHENSS1 | 13.8 | 110.0 | 108.5 | -1.5 |
| | | | | | | 79390 | BOW2 | 20.0 | 0.0 | -5.0 | -5.0 |
| | | | | | | 79546 | POLETTI | 26.0 | 650.0 | 645.0 | -5.0 |

**NEW YORK – ONTARIO**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 74308 | GOWGT3A | 13.8 | 0.0 | 3.5 | 3.5 | 80882 | DARL G2 | 22.0 | 900.0 | 875.0 | -25.0 |
| 74339 | GOWGT3B | 13.8 | 0.0 | 3.5 | 3.5 | 80883 | DARL G4 | 22.0 | 900.0 | 875.0 | -25.0 |
| 74700 | AK 3 | 22.0 | 0.0 | 6.5 | 6.5 | 80884 | DARL G3 | 22.0 | 900.0 | 875.0 | -25.0 |
| 77952 | OSWGO 5G | 22.0 | 0.0 | 25.8 | 25.8 | 80913 | PIC B G5 | 24.0 | 0.0 | -25.0 | -25.0 |
| 78708 | ATHENSC2 | 16.0 | 0.0 | 13.5 | 13.5 | | | | | | |
| 78709 | ATHENSS2 | 13.8 | 0.0 | 5.8 | 5.8 | | | | | | |
| 79391 | BOW1 | 20.0 | 592.0 | 624.3 | 32.3 | | | | | | |
| 79546 | POLETTI | 26.0 | 650.0 | 653.2 | 3.2 | | | | | | |
| 74919 | HOLTS1-5 | 13.8 | 0.0 | 5.8 | 5.8 | | | | | | |

**NEW ENGLAND- NEW YORK**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 71063 | MYST G7 | 22.0 | 240.0 | 265.0 | 25.0 | 74193 | DANSK G4 | 16.1 | 241.0 | 216.0 | -25.0 |
| 71252 | CANAL G2 | 18.0 | 580.0 | 610.0 | 30.0 | 74702 | RAV 3 | 22.0 | 936.0 | 911.0 | -25.0 |
| 72868 | NWNGT G1 | 24.0 | 240.0 | 265.0 | 25.0 | 79546 | POLETTI | 26.0 | 650.0 | 600.0 | -50.0 |
| 73563 | MILL#3 | 24.0 | 1184.0 | 1204.0 | 20.0 | | | | | | |

**NEW YORK – NEW ENGLAND**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 74190 | ROSE GN1 | 24.0 | 499.6 | 529.6 | 30.0 | 71063 | MYST G7 | 22.0 | 240.0 | 215.0 | -25.0 |
| 74700 | AK 3 | 22.0 | 0.0 | 20.0 | 20.0 | 71252 | CANAL G2 | 18.0 | 580.0 | 550.0 | -30.0 |
| 74702 | RAV 3 | 22.0 | 936.0 | 946.0 | 10.0 | 72868 | NWNGT G1 | 24.0 | 240.0 | 215.0 | -25.0 |
| 74707 | RAV 1 | 20.0 | 300.0 | 310.0 | 10.0 | 73563 | MILL#3 | 24.0 | 1184.0 | 1164.0 | -20.0 |
| 79391 | BOW1 | 20.0 | 592.0 | 602.0 | 10.0 | | | | | | |
| 79546 | POLETTI | 26.0 | 650.0 | 670.0 | 20.0 | | | | | | |

**PJM – NYISO**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20574 | 01MITCH3 | 24.0 | 183.0 | 183.3 | 0.3 | 74192 | ROSE GN2 | 24.0 | 0.0 | -7.5 | -7.5 |
| 20612 | 01SPRGD3 | 16.5 | 185.0 | 191.2 | 6.2 | 74700 | AK 3 | 22.0 | 0.0 | -5.0 | -5.0 |
| 22604 | 05WATERF | 345 | 591.0 | 610.7 | 19.7 | 74705 | AST 4 | 20.0 | 0.0 | -5.0 | -5.0 |
| 26599 | 09GRNVIL | 69.0 | 82.0 | 84.7 | 2.7 | 74707 | RAV 1 | 20.0 | 300.0 | 292.5 | -7.5 |
| 27726 | 15ELRMA1 | 13.2 | 34.0 | 35.1 | 1.1 | 75523 | KINTIG24 | 24.0 | 399.3 | 390.3 | -9.0 |
| 27728 | 15ELRMA3 | 16.0 | 111.4 | 112.5 | 1.1 | 75963 | GRNIDG 3 | 13.8 | 57.0 | 56.0 | -1.0 |
| 44 | BETH CT1 | 13.8 | 115.0 | 118.8 | 3.8 | 75964 | GRNIDG 4 | 13.8 | 0.0 | -2.0 | -2.0 |
| 55 | ROCKSP 4 | 18.0 | 155.0 | 160.2 | 5.2 | 76111 | MILKN 2 | 18.0 | 74.5 | 72.0 | -2.5 |
| 61 | HUNTR401 | 22.0 | 130.5 | 130.8 | 0.3 | 76112 | MILKN 1 | 13.8 | 160.7 | 158.2 | -2.5 |
| 577 | SEWRDB34 | 22.0 | 86.0 | 88.9 | 2.9 | 76641 | DUNKGEN4 | 13.8 | 180.0 | 175.5 | -4.5 |
| 1726 | PORT1GEN | 13.8 | 141.7 | 144.3 | 2.6 | 77050 | HNTLY67G | 13.8 | 131.4 | 126.9 | -4.5 |
| 2911 | GIL 8 | 13.8 | 76.0 | 78.5 | 2.5 | 77052 | HUNT115G | 13.8 | 60.0 | 55.5 | -4.5 |
| 3129 | LMBE ST1 | 16.5 | 167.0 | 172.6 | 5.6 | 77953 | OSWGO 6G | 22.0 | 0.0 | -16.5 | -16.5 |
| 4562 | PHLISCT2 | 18.0 | 138.0 | 142.6 | 4.6 | 77965 | SITH-G1 | 18.0 | 40.0 | 38.0 | -2.0 |
| 5052 | ESSEX 11 | 13.0 | 179.0 | 183.6 | 4.6 | 77966 | SITH-G2 | 18.0 | 40.0 | 38.0 | -2.0 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5903 | CRANE G1 | 20.0 | 181.0 | 181.5 | 0.5 | 77967 | SITH-G3 | 18.0 | 115.0 | 113.0 | -2.0 |
| 5916 | RVRSDG78 | 13.8 | 50.0 | 51.7 | 1.7 | 77968 | SITH-G4 | 18.0 | 115.0 | 113.0 | -2.0 |
| 7091 | BENN U15 | 21.2 | 195.5 | 199.7 | 4.2 | 77969 | SITH-S5 | 18.0 | 160.0 | 157.5 | -2.5 |
| 8102 | BLE#2 ST | 18.0 | 150.0 | 150.7 | 0.7 | 77970 | SITH-S6 | 18.0 | 160.0 | 157.5 | -2.5 |
| 8890 | HR4 | 13.8 | 172.0 | 173.7 | 1.7 | 78706 | ATHENSC1 | 16.0 | 128.4 | 124.9 | -3.4 |
| 9981 | HUN GEN2 | 13.2 | 1.0 | 1.0 | 0.0 | 78707 | ATHENSS1 | 13.8 | 55.0 | 53.5 | -1.5 |
| 37533 | CRAWF;7Y | 12.5 | 50.0 | 50.7 | 0.7 | 79390 | BOW2 | 20.0 | 0.0 | -5.0 | -5.0 |
| 37534 | CRAWF;7G | 12.5 | 50.0 | 50.7 | 0.7 | 79546 | POLETTI | 26.0 | 390.0 | 385.0 | -5.0 |
| 7540 | FISK ;9U | 18.0 | 0.0 | 6.0 | 6.0 | | | | | | |
| 37557 | WAUKE;8U | 18.0 | 170.0 | 176.4 | 6.4 | | | | | | |
| 95006 | 1POSSM 4 | 22.0 | 0.0 | 7.4 | 7.4 | | | | | | |
| 95050 | 1FRIVERG | 18.0 | 0.0 | 6.1 | 6.1 | | | | | | |
| 95098 | 1CHESPKA | 13.8 | 0.0 | 0.6 | 0.6 | | | | | | |

**NYISO-PJM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 74308 | GOWGT3A | 13.8 | 0.0 | 3.5 | 3.5 | 20504 | 01RIDGLY | 138 | 158.0 | 157.3 | -0.7 |
| 74339 | GOWGT3B | 13.8 | 0.0 | 3.5 | 3.5 | 20574 | 01MITCH3 | 24.0 | 0.0 | -5.8 | -5.8 |
| 74700 | AK 3 | 22.0 | 300.0 | 306.5 | 6.5 | 23240 | 05TIDD | 138 | 0.0 | -19.7 | -19.7 |
| 77952 | OSWGO 5G | 22.0 | 0.0 | 25.8 | 25.8 | 26630 | 09OHH E. | 69.0 | 30.0 | 27.6 | -2.4 |
| 78708 | ATHENSC2 | 16.0 | 200.0 | 213.5 | 13.5 | 26631 | 09OHH W. | 69.0 | 109.7 | 109.4 | -0.3 |
| 78709 | ATHENSS2 | 13.8 | 85.0 | 90.8 | 5.8 | 27721 | 15AES1 | 13.2 | 3.1 | 0.8 | -2.2 |
| 79391 | BOW1 | 20.0 | 592.0 | 624.3 | 32.3 | 30 | CONE G1 | 22.0 | 571.0 | 561.7 | -9.3 |
| 79546 | POLETTI | 26.0 | 710.0 | 713.2 | 3.2 | 204 | C.SLOPE | 115 | 138.0 | 136.3 | -1.7 |
| 74919 | HOLTS1-5 | 13.8 | 100.0 | 105.8 | 5.8 | 572 | HNSMLK 1 | 13.8 | 12.0 | 10.8 | -1.2 |
| | | | | | | 1722 | MOUNT CT | 13.8 | 23.5 | 23.0 | -0.5 |
| | | | | | | 1731 | TITUS 2G | 13.8 | 62.0 | 59.9 | -2.1 |
| | | | | | | 2899 | S RIV G3 | 13.8 | 8.0 | 5.5 | -2.5 |
| | | | | | | 3150 | MTN CK 3 | 24.0 | 682.0 | 676.4 | -5.6 |
| | | | | | | 4071 | CROMBY 2 | 20.0 | 63.0 | 58.4 | -4.6 |
| | | | | | | 5133 | BURLNGT9 | 13.0 | 45.0 | 40.4 | -4.6 |
| | | | | | | 5919 | WAGNERG3 | 18.0 | 331.0 | 328.8 | -2.2 |
| | | | | | | 7116 | MORGTU2 | 24.0 | 493.0 | 488.8 | -4.2 |
| | | | | | | 8102 | BLE#2 ST | 18.0 | 108.0 | 107.3 | -0.7 |
| | | | | | | 8890 | HR4 | 13.8 | 121.0 | 121.0 | 0.0 |
| | | | | | | 9006 | DEMECNUG | 138 | 0.0 | -1.6 | -1.6 |
| | | | | | | 9980 | HUN GEN | 13.2 | 46.7 | 46.6 | 0.0 |
| | | | | | | 37556 | WAUKE;7U | 18.0 | 328.0 | 317.1 | -10.9 |
| | | | | | | 37561 | WILL ;4U | 20.0 | 510.0 | 507.1 | -2.9 |
| | | | | | | 95037 | 1LDYSMT1 | 18.0 | 160.0 | 158.3 | -1.7 |
| | | | | | | 95038 | 1LDYSMT2 | 18.0 | 160.0 | 158.3 | -1.7 |
| | | | | | | 95060 | 1CHESTF5 | 22.0 | 317.0 | 306.4 | -10.6 |

## TABLE 1

## DISTRIBUTION FACTORS FOR DYSINGER EAST CIRCUITS

| FROM | TO | CK | % Pickup of Transfer | KINTI-ROCH | NIAGAR-ROCH | STOLLE-MEYER | LOCKPT-SOUR | LOCKPT-SHEL | NIAGAR-ROCH |
|---|---|---|---|---|---|---|---|---|---|
| STOLE230 230 | MEYER230 230 | 1 | 11.0% | 6.1% | 7.4% | TRIP | 6.8% | 6.2% | 13.4% |
| LOCKPORT 115 | NAKR-108 115 | 1 | 1.1% | 1.3% | 1.6% | 1.5% | 4.1% | 3.8% | 2.9% |
| LOCKPORT 115 | OAKFLDTP 115 | 1 | 1.3% | 1.6% | 1.9% | 1.8% | 4.8% | 4.5% | 3.5% |
| LOCKPORT 115 | SOUR-111 115 | 1 | 2.8% | 3.3% | 4.0% | 3.7% | TRIP | 12.0% | 7.3% |
| LOCKPORT 115 | SHEL-113 115 | 1 | 2.9% | 3.5% | 4.2% | 3.9% | 14.1% | TRIP | 7.8% |
| LOCKPORT 115 | TELRDTP1 115 | 1 | 1.3% | 1.6% | 1.9% | 1.8% | 6.1% | 6.6% | 3.5% |
| LOCKPORT 115 | TELRDTP1 115 | 1 | 2.8% | 3.4% | 4.1% | 3.8% | 11.6% | 19.2% | 7.5% |
| KINTI345 345 | ROCH 345 345 | 1 | 24.5% | TRIP | 45.2% | 14.8% | 14.8% | 13.5% | O/S |
| NIAG 345 345 | ROCH 345 345 | 1 | 36.0% | 54.8% | TRIP | 21.7% | 21.8% | 19.8% | TRIP |
| | | | | --- | --- | --- | --- | --- | --- |
| | **SUB-TOTALS** | | | **75.5%** | **70.4%** | **53.0%** | **84.0%** | **85.5%** | **45.9%** |
| L33P-L34P | | | | 9.4% | 11.3% | 9.5% | 4.9% | 4.4% | 20.7% |
| PJM-NYISO | | | | 14.4% | 17.5% | 34.6% | 10.5% | 9.6% | 31.9% |
| | | | --- | --- | --- | --- | --- | --- | --- |
| | **TOTALS** | | **83.7%** | **99.3%** | **99.2%** | **97.0%** | **99.4%** | **99.5%** | **98.5%** |

TABLE 2

## DISTRIBUTION FACTORS FOR WEST CENTRAL CIRCUITS

| FROM | TO | CK | % Pickup of Transfer | PANNEL-CLAY | STOLLE-MEYER | S121-SLEGH | PANNEL-FARM | PANNEL-CLAY |
|---|---|---|---|---|---|---|---|---|
| PANNELL3 345 | CLAY 345 | 1 | 30.4% | TRIP | 9.7% | 18.6% | 20.0% | O/S |
| PANNELL3 345 | CLAY 345 | 2 | 30.5% | 57.9% | 9.8% | 18.7% | 20.1% | TRIP |
| STOLE230 230 | MEYER230 230 | 1 | 11.0% | 2.8% | TRIP | 2.8% | 7.7% | 6.7% |
| MORTIMER 115 | LAWLER-1 115 | 1 | 2.5% | 2.5% | 1.0% | 4.0% | 16.9% | 6.0% |
| MORTIMER 115 | LAWLER-2 115 | 1 | 2.6% | 2.9% | 0.9% | 4.6% | 4.0% | 6.8% |
| S121 B#2 115 | SLEIG115 115 | 1 | 2.5% | 3.5% | 1.8% | TRIP | 11.1% | 8.4% |
| PANNELLI 115 | FRMGTN-4 115 | 1 | 3.4% | 6.1% | 8.1% | 18.0% | TRIP | 14.5% |
| STA 162 115 | S.PER115 115 | 1 | 0.5% | 2.3% | 21.3% | 3.0% | 6.4% | 5.6% |
| QUAKER 115 | MACDN115 115 | 1 | 0.3% | 0.4% | 0.3% | 19.9% | 2.6% | 1.0% |
| | **SUB-TOTALS** | | | **78.5%** | **53.0%** | **89.4%** | **88.8%** | **48.9%** |
| L33P-L34P | | | | 8.4% | 9.5% | 3.4% | 2.7% | 19.9% |
| PJM-NYISO | | | | 12.9% | 34.6% | 6.4% | 6.5% | 30.7% |
| | | | --- | --- | --- | --- | --- | --- |
| | **TOTALS** | | **83.7%** | **99.8%** | **97.0%** | **99.2%** | **98.0%** | **99.5%** |

TABLE 3

## DISTRIBUTION FACTORS FOR TOTAL EAST CIRCUITS

| FROM | TO | CK | % Pickup of Trfer | PRTR-RTRDM | EDIC34-NSCOT | MARCY-NSCOT | FRSR-GILBA | BRBRG-RAMPO | WLDWK-SMAWA | HUD-FARGT | LINDEN-GOETH | WLDK-SMWA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EDIC 345 | N.SCOT77 345 | 1 | 19.1% | 13.8% | TRIP | 33.0% | 19.5% | 3.2% | 0.2% | 1.5% | 2.7% | 1.6% |
| MARCY T1 345 | N.SCOT99 345 | 1 | 20.6% | 14.7% | 34.9% | TRIP | 21.0% | 3.5% | 0.2% | 1.6% | 2.9% | 1.7% |
| PORTER 2 230 | ROTRDM.2 230 | 1 | 4.6% | TRIP | 5.4% | 5.5% | 3.1% | 0.7% | 0.0% | 0.4% | 0.6% | 0.4% |
| PORTER 2 230 | ROTRDM.2 230 | 2 | 4.7% | 34.0% | 5.6% | 5.6% | 3.2% | 0.8% | 0.0% | 0.4% | 0.6% | 0.4% |
| E.SPR115 115 | INGHAM-E 115 | 1 | 0.9% | 0.9% | -0.2% | -0.2% | 2.5% | 0.2% | 0.0% | 0.1% | 0.2% | 0.1% |
| INGMS-CD 115 | INGHAM-E 115 | 1 | 0.0% | 10.0% | 3.8% | 3.9% | 0.7% | 0.4% | 0.0% | 0.2% | 0.3% | 0.2% |
| PLAT T#3 115 | GRAND IS 115 | 1 | 0.0% | 2.8% | 2.5% | 2.7% | 1.5% | 0.7% | 0.0% | 0.3% | 0.6% | 0.3% |
| FRASR345 345 | GILB 345 345 | 1 | 16.3% | 9.3% | 22.9% | 23.5% | TRIP | 3.4% | 0.2% | 2.3% | 3.7% | 1.3% |
| BRANCHBG 500 | RAMAPO 5 500 | 1 | 0.0% | 1.9% | 3.2% | 3.3% | 2.9% | TRIP | 2.9% | 7.4% | 21.4% | 25.6% |
| COOPC345 345 | N.M.TAP 345 | 1 | 16.9% | 3.8% | 6.7% | 7.1% | 18.1% | 4.6% | 0.4% | 0.4% | 1.6% | 3.5% |
| COOPC345 345 | ROCK TAV 345 | 2 | 16.5% | 3.7% | 6.7% | 7.0% | 17.8% | 4.5% | 0.4% | 0.4% | 1.7% | 3.3% |
| HUDSON2 345 | FARRGUT2 345 | 1 | 0.0% | 1.0% | 1.6% | 1.7% | 2.1% | 8.0% | 2.8% | 29.4% | 18.7% | 25.1% |
| HUDSON1 345 | FARRGUT1 345 | 1 | 0.0% | 1.0% | 1.6% | 1.7% | 2.1% | 8.0% | 2.9% | TRIP | 18.5% | 25.8% |
| LINDEN 230 | GOETHALS 230 | 1 | 0.0% | 1.2% | 2.0% | 2.0% | 2.3% | 15.8% | 1.2% | 12.6% | TRIP | 10.8% |
| WALDWICK 345 | SMAHWAH1 345 | 1 | -0.1% | 0.8% | 1.5% | 1.5% | 1.0% | 23.3% | 88.9% | 21.9% | 13.5% | O/S |
| WALDWICK 345 | SMAHWAH2 345 | 1 | 0.1% | 0.8% | 1.4% | 1.4% | 1.0% | 22.9% | TRIP | 21.0% | 12.9% | TRIP |
| | **TOTALS** | | **99.5%** | **99.7%** | **99.6%** | **99.6%** | **99.0%** | **99.9%** | **100.0%** | **99.9%** | **99.9%** | **100.0%** |

TABLE 4

## DISTRIBUTION FACTORS FOR UPNY-CONED CIRCUITS

| FROM | TO | CK | % Pickup of Transfer | PLVLLY-MILLW | PLVLLY-FISHK | RAMAPO-BUCHN | LADNTW-BUCHS | LINDEN-GOETH | HUDSON-FARGT | ROSETN-FISHK |
|---|---|---|---|---|---|---|---|---|---|---|
| ROSETON 345 | FISHKILL 345 | 1 | 20.6% | -11.2% | 15.2% | 15.7% | 21.6% | 9.8% | 8.7% | TRIP |
| PLTVLLEY 345 | MILLWOOD 345 | 1 | 17.5% | TRIP | 8.8% | 3.0% | 12.6% | 3.0% | 1.9% | -8.7% |
| PLTVLLEY 345 | FISHKILL 345 | 1 | 7.7% | 23.9% | TRIP | -0.5% | -7.2% | 1.1% | 0.6% | 32.2% |
| PLTVLLEY 345 | FISHKILL 345 | 2 | 7.7% | 23.9% | 66.5% | -0.5% | -7.2% | 1.1% | 0.6% | 32.2% |
| PLTVLLEY 345 | WOOD B 345 | 1 | 17.3% | 35.2% | 9.2% | 2.9% | 12.2% | 3.0% | 1.9% | -8.5% |
| RAMAPO 345 | BUCH N 345 | 1 | 13.3% | 3.1% | -0.2% | TRIP | 42.3% | 17.1% | 17.0% | 13.1% |
| LADENTWN 345 | BUCH S 345 | 1 | 13.1% | 17.6% | -3.7% | 55.5% | TRIP | 24.8% | 25.1% | 23.6% |
| FISHKILL 115 | SYLVN115 115 | 1 | 1.0% | 0.8% | -0.1% | 0.3% | 0.6% | 0.3% | 0.2% | 0.6% |
| E FISH I 115 | FISHKILL 345 | 1 | 1.9% | -0.5% | 2.5% | 0.8% | 0.9% | 0.6% | 0.5% | 6.7% |
| | **SUB-TOTALS** | | | **92.7%** | **98.2%** | **77.3%** | **75.9%** | **60.9%** | **56.6%** | **91.0%** |
| LINDEN-GOETH | | | | 1.0% | 0.1% | 5.4% | 5.9% | TRIP | 12.6% | 2.6% |
| HUDSON-FAR1 | | | | 0.9% | 0.1% | 7.7% | 8.6% | 18.7% | 29.4% | 3.6% |
| HUDSON-FAR2 | | | | 0.9% | 0.1% | 7.8% | 8.8% | 18.5% | TRIP | 3.7% |
| NORHBR-NRPRT | | | | 4.5% | 1.5% | 1.8% | 0.8% | 1.9% | 1.4% | -0.2% |
| | **TOTALS** | | **100.0%** | **100.0%** | **100.0%** | **100.0%** | **100.0%** | **100.0%** | **100.0%** | **100.7%** |

TABLE 5

## DISTRIBUTION FACTORS FOR SPRAINBROOK / DUNWOODIE SOUTH CIRCUITS

| FROM | TO | CK | % Pickup of Transfer | SPRAIN-TRMNT | SPRAIN-W49TH | DUNWDE-RAINY | DUNWDE-SHORE | SPRAIN-DVNPT | SPRAIN-W49TH | DUNWDE-RAINY |
|---|---|---|---|---|---|---|---|---|---|---|
| DUN NO1R 138 | S CREEK 138 | 1 | 0.0% | 17.2% | 0.2% | 0.3% | 1.9% | 1.4% | 0.4% | 0.6% |
| DUN NO2R 138 | S CREEK 138 | 1 | 0.0% | 17.4% | 0.2% | 0.3% | 2.0% | 1.4% | 0.4% | 0.6% |
| DUN SO1R 138 | E179 ST 138 | 1 | 0.0% | 26.3% | 0.3% | 0.5% | 3.0% | 2.1% | 0.6% | 0.8% |
| REAC71 345 | RAINEY 345 | 3 | 22.5% | 5.7% | 24.3% | TRIP | 9.7% | 3.4% | 43.8% | O/S |
| REAC72 345 | RAINEY 345 | 4 | 22.5% | 5.7% | 24.3% | 45.3% | 9.7% | 3.4% | 43.8% | TRIP |
| DUNWODIE 345 | SHORE RD 345 | 1 | | 6.1% | 0.6% | 1.2% | TRIP | 53.4% | 1.1% | 2.3% |
| SPRBROOK 345 | TREMONT 345 | 1 | 0.0% | TRIP | 0.6% | 0.5% | 3.9% | 3.1% | 1.1% | 0.8% |
| REACM51 345 | W 49 ST 345 | 1 | 17.5% | 7.2% | TRIP | 23.8% | 4.8% | 7.3% | O/S | 43.5% |
| REACM52 345 | W 49 ST 345 | 2 | 17.5% | 7.2% | 44.6% | 23.8% | 4.8% | 7.3% | TRIP | 43.5% |
| REACBUS 345 | DVNPT NK 345 | 1 | | 4.2% | 0.8% | 0.4% | 46.0% | TRIP | 1.5% | 0.7% |
| | | | | --- | --- | --- | --- | --- | --- | --- |
| | **SUB-TOTALS** | | | **97.1%** | **95.8%** | **96.0%** | **85.9%** | **82.8%** | **92.4%** | **92.6%** |
| LINDEN-GOETH | | | | 1.4% | 1.0% | 1.1% | 0.0% | -0.1% | 1.8% | 1.9% |
| HUDSON-FAR#1 | | | | 0.1% | 1.5% | 1.4% | -0.1% | -0.2% | 2.8% | 2.6% |
| HUDSON-FAR#2 | | | | 0.2% | 1.6% | 1.5% | -0.1% | -0.2% | 2.8% | 2.7% |
| NORHRBR-NRPRT | | | | 1.2% | 0.1% | 0.1% | 14.4% | 17.7% | 0.2% | 0.1% |
| | | | --- | --- | --- | --- | --- | --- | --- | --- |
| | **TOTALS** | | **80.0%** | **100.0%** | **100.0%** | **100.0%** | **100.0%** | **100.0%** | **100.0%** | **100.0%** |

TABLE 6

## DISTRIBUTION FACTORS FOR MOSES SOUTH CIRCUITS

| FROM | TO | CK | % Pickup of Transfer | MASSEN-MARCY | MASSEN-CHAT | MOSES2-ADRON | MOSES2-PORTR |
|---|---|---|---|---|---|---|---|
| MASS 765 765 | MARCY765 765 | 1 | 74.0% | TRIP | 66.0% | 44.0% | O/S |
| DENNISON 115 | ANDRWS-4 115 | 1 | 2.2% | 4.1% | 0.8% | 1.5% | 3.6% |
| MOSES W 230 | ADRON B1 230 | 1 | 9.5% | 18.8% | 3.3% | TRIP | TRIP |
| MOSES W 230 | ADRON B2 230 | 1 | 9.5% | 18.8% | 3.3% | 36.3% | 48.6% |
| DENNISON 115 | LWRNCE-B 115 | 1 | 2.2% | 4.1% | 0.8% | 1.5% | 3.6% |
| ALCOA-NM 115 | BRADY 115 | 1 | 1.1% | 2.1% | 0.4% | 0.8% | 1.8% |
| ALLENS F 115 | COLTON 115 | 1 | 1.5% | 1.9% | 0.3% | 0.7% | 1.6% |
| | | | | --- | --- | --- | --- |
| | **SUB-TOTALS** | | | **49.9%** | **74.9%** | **84.7%** | **59.3%** |
| MOSES-L33P | | | | 6.5% | 1.7% | 2.2% | 5.5% |
| MOSES-L34P | | | | 6.5% | 1.7% | 2.2% | 5.5% |
| MOSES-WILLE | | | | 22.1% | 12.4% | 6.5% | 17.7% |
| MOSES-WILLW | | | | 16.9% | 9.5% | 5.0% | 13.6% |
| | | | --- | --- | --- | --- | --- |
| | **TOTALS** | | **100.0%** | **101.9%** | **100.3%** | **100.7%** | **101.7%** |

TABLE 7

## DISTRIBUTION FACTORS FOR NYISO-ISONE CIRCUITS

| FROM | TO | CK | % Pickup of Transfer | ALPS34-MANY | PV.345-LNGMT | NHHAR-GEN | VTYANK-GEN | YRMTH-GEN | SBRK-GEN | HIGATE-DC | EEL RIVER | MADWAS-DC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ALPS345 345 | MANY393 345 | 1 | 32.2% | TRIP | 38.2% | 21.0% | 43.0% | 36.8% | 36.4% | 20.7% | 36.7% | 36.7% |
| PLAT T#3 115 | GRAND IS 115 | 1 | 4.8% | 7.5% | 4.3% | 3.7% | 6.2% | 6.9% | 6.8% | 43.6% | 6.9% | 6.9% |
| HOOSICK 115 | BNNINGTN 115 | 1 | 2.5% | 9.8% | 2.8% | 1.5% | 2.2% | 2.6% | 2.7% | 1.2% | 2.6% | 2.6% |
| WHITEHAL 115 | BLISSVIL 115 | 1 | 4.0% | 10.5% | 4.1% | 2.3% | 6.2% | 5.0% | 4.9% | 6.4% | 5.0% | 5.0% |
| ROTRDM.2 230 | BRSWAMP 23( | 1 | 6.7% | 15.8% | 6.9% | 4.5% | 6.2% | 7.8% | 7.9% | 3.6% | 7.8% | 7.8% |
| PLTVLLEY 345 | CTNY398 345 | 1 | 35.6% | 42.6% | TRIP | 45.2% | 25.7% | 29.2% | 29.5% | 16.9% | 29.2% | 29.2% |
| NRTHPT P 138 | NORHR138 138 | 1 | 13.2% | 12.3% | 40.4% | 20.4% | 9.8% | 10.8% | 10.9% | 6.9% | 10.8% | 10.8% |
| | | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | **TOTALS** | | **98.9%** | **98.5%** | **96.6%** | **98.6%** | **99.1%** | **99.0%** | **99.0%** | **99.4%** | **99.0%** | **99.0%** |

TABLE 8

## DISTRIBUTION FACTORS FOR ONTARIO-NYISO CIRCUITS

| FROM | TO | CK | % Pickup of Transfer | PA27-NIAGAR | BP76-PACKD2 | STLAWR-MOSES | STLAWR-MOSES | BECKB-NIAGAR |
|---|---|---|---|---|---|---|---|---|
| STLAWL34 230 | 9 MOSES E 230 | 1 | 0.0% | 1.4% | 1.5% | TRIP | 62.3% | 1.6% |
| STLAWL33 230 | 9 MOSES E 230 | 1 | 0.0% | 1.1% | 1.1% | 55.9% | TRIP | 1.2% |
| BECK B 345 | 4 NIAG 345 345 | 1 | 31.2% | 33.7% | 30.8% | 9.1% | 7.8% | TRIP |
| BECK A 345 | 4 NIAG 345 345 | 1 | 31.2% | 33.7% | 30.8% | 9.1% | 7.8% | 52.6% |
| PA27 REG 230 | 2 NIAGAR2W 230 | 1 | 20.1% | TRIP | 31.3% | 5.5% | 4.7% | 23.2% |
| BP76 REG 230 | 5 PACKARD2 230 | 1 | 17.6% | 26.0% | TRIP | 4.7% | 4.0% | 17.6% |
| | | | | --- | --- | --- | --- | --- |
| | **SUB-TOTALS** | | | **95.9%** | **95.4%** | **84.2%** | **86.5%** | **96.3%** |
| IESO-MICH | | | | | | | | |
| | | | --- | --- | --- | --- | --- | --- |
| | **TOTALS** | | **100.0%** | **95.9%** | **95.4%** | **84.2%** | **86.5%** | **96.3%** |

TABLE 9

## DISTRIBUTION FACTORS FOR PJM-NYISO CIRCUITS

| | | CK | % Pickup of Transfer | ERIE_E - S_RIPPY | HMRCTY- STOLL | HMRCTY- WATER | E.TOWD- HILLS | BRBURG- RAMPO | WALDWK- SMAWA | HUDSON- FARGT | LINDEN- GOETH | WALDWK- SMAWA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ERIE E 230 | S RIPLEY 230 | 1 | 22.6% | TRIP | 22.2% | 7.8% | 4.8% | 2.5% | 0.1% | 0.8% | 1.7% | 1.3% |
| WARREN 115 | FALCONER 115 | 1 | 7.3% | 21.5% | 8.4% | 1.8% | 2.9% | 0.9% | 0.1% | 0.3% | 0.6% | 0.5% |
| HOMER CY 345 | STOLE345 345 | 1 | 14.7% | 15.8% | TRIP | 15.2% | 2.0% | 1.8% | 0.1% | 0.6% | 1.2% | 1.0% |
| HOMER CY 345 | WATRC345 345 | 1 | 21.4% | 6.7% | 18.6% | TRIP | 13.4% | 3.7% | 0.2% | 1.2% | 2.5% | 2.0% |
| E.TWANDA 230 | HILSD230 230 | 1 | 20.5% | 6.0% | 3.6% | 19.5% | TRIP | 3.5% | 0.3% | 1.4% | 2.5% | 2.4% |
| E.SAYRE 115 | N.WAV115 115 | 1 | 7.7% | 2.0% | 1.4% | 4.1% | 30.6% | 1.3% | 0.1% | 0.5% | 0.9% | 0.9% |
| LAUREL L 115 | GOUDY115 115 | 1 | 5.9% | 0.9% | 0.7% | 2.3% | 11.6% | 1.1% | 0.1% | 0.4% | 0.8% | 0.7% |
| BRANCHBG 500 | RAMAPO 5 500 | 1 | 0.0% | 6.5% | 6.6% | 11.3% | 7.4% | TRIP | 2.9% | 7.4% | 21.4% | 25.6% |
| HUDSON2 345 | FARRGUT2 345 | 1 | 0.0% | 2.3% | 2.4% | 3.9% | 3.1% | 8.0% | 2.8% | 29.5% | 18.7% | 25.1% |
| HUDSON1 345 | FARRGUT1 345 | 1 | 0.0% | 2.4% | 2.4% | 3.9% | 3.2% | 8.0% | 2.9% | TRIP | 18.5% | 25.8% |
| LINDEN 230 | GOETHALS 230 | 1 | 0.0% | 3.3% | 3.3% | 5.6% | 3.8% | 15.8% | 1.2% | 12.6% | TRIP | 10.8% |
| WALDWICK 345 | SMAHWAH1 345 | 1 | 0.0% | 3.3% | 3.4% | 5.6% | 4.7% | 23.2% | 88.9% | 21.9% | 13.5% | O/S |
| WALDWICK 345 | SMAHWAH2 345 | 1 | 0.0% | 3.1% | 3.1% | 5.2% | 4.4% | 22.9% | TRIP | 21.0% | 12.9% | TRIP |
| | | | | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | **SUB-TOTALS** | | | **73.8%** | **76.1%** | **86.4%** | **91.9%** | **92.8%** | **99.6%** | **97.6%** | **95.0%** | **96.1%** |
| IESO-MICH | | | | | | | | | | | | |
| | | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | **TOTALS** | | **100.1%** | **73.8%** | **76.1%** | **86.4%** | **91.9%** | **92.8%** | **99.6%** | **97.6%** | **95.0%** | **96.1%** |

TABLE 10A

**GENERATION SHIFT FACTORS WITH ALL PAR'S HOLDING MW FLOW**

| | WEST-CENTRAL | UTICA-ALBANY | MARCY-SOUTH | CENTRAL-EAST | ONT-NYISO | BBURG-RAMAPO | PJM-NYISO |
|---|---|---|---|---|---|---|---|
| BB-RAMAPO | 37.1% | 38.9% | 15.5% | 42.7% | 0.0% | -100.0% | -0.2% |
| BECK | -81.2% | -44.3% | -22.8% | -47.8% | -100.0% | 0.0% | 0.1% |
| BOWEN | -39.4% | -39.1% | -15.8% | -42.9% | 0.0% | 0.0% | -99.7% |
| BOWLINE | 0.0% | -1.1% | 1.1% | -1.3% | 0.0% | 0.0% | 0.1% |
| BRANDON | -38.3% | -39.0% | -15.7% | -42.8% | 0.0% | 0.0% | -99.8% |
| BRAYTON | 0.3% | 6.2% | -8.4% | 11.3% | 0.0% | 0.0% | 0.1% |
| CONEMAUGH | -38.5% | -39.0% | -15.7% | -42.8% | 0.0% | 0.0% | -99.8% |
| DUNKIRK | -66.7% | -42.1% | -19.8% | -45.7% | 0.0% | 0.0% | 0.2% |
| EDDYSTONE | -37.3% | -38.9% | -15.6% | -42.7% | 0.0% | 0.0% | -99.8% |
| GILBOA | -0.2% | -0.3% | -1.4% | -1.2% | 0.0% | 0.0% | 0.1% |
| HATFIELD | -39.2% | -39.1% | -15.8% | -42.9% | 0.0% | 0.0% | -99.8% |
| HUDSON | -36.8% | -38.9% | -15.5% | -42.7% | 0.0% | 0.0% | -99.8% |
| HUNTLEY | -78.4% | -43.7% | -21.9% | -47.2% | 0.0% | 0.0% | 0.1% |
| INDIANPT2 | 0.0% | -0.9% | 0.8% | -1.0% | 0.0% | 0.0% | 0.1% |
| JEAMOS | -39.6% | -39.2% | -15.9% | -42.9% | 0.0% | 0.0% | -99.7% |
| LAMBTON | -81.2% | -44.3% | -22.8% | -47.8% | -100.0% | 0.0% | 0.1% |
| NANTICOKE | -81.2% | -44.3% | -22.8% | -47.8% | -100.0% | 0.0% | 0.1% |
| NEWTON | -39.6% | -39.2% | -15.9% | -42.9% | 0.0% | 0.0% | -99.7% |
| NIAGARA | -79.2% | -43.9% | -22.2% | -47.4% | 0.0% | 0.0% | 0.1% |
| NORWALK | 0.2% | 4.1% | -5.1% | 6.7% | 0.0% | 0.0% | 0.1% |
| OSWEGO | 2.3% | -48.9% | -29.0% | -52.1% | 0.0% | 0.0% | 0.1% |
| PORTLAND | -36.5% | -38.9% | -15.5% | -42.6% | 0.0% | 0.0% | -99.8% |
| ROSETON | 0.0% | -0.3% | 0.3% | -0.4% | 0.0% | 0.0% | 0.0% |
| SALEM | -37.4% | -38.9% | -15.6% | -42.7% | 0.0% | 0.0% | -99.8% |

TABLE 10B

## GENERATION SHIFT FACTORS WITH PAR'S FREE FLOW

| | WEST-CENTRAL | UTICA-ALBANY | MARCY-SOUTH | CENTRAL-EAST | ONT-NYISO | BBURG-RAMAPO | PJM-NYISO |
|---|---|---|---|---|---|---|---|
| BB-RAMAPO | 7.8% | 8.2% | 4.9% | 9.4% | 7.2% | -100.0% | -7.3% |
| BECK | -44.6% | -27.1% | -15.2% | -31.0% | -77.5% | -10.4% | -22.4% |
| BOWEN | -15.0% | -14.5% | -6.6% | -16.7% | -17.6% | -18.3% | -82.3% |
| BOWLINE | -0.2% | -1.2% | 0.8% | -1.4% | -0.2% | 4.4% | 0.3% |
| BRANDON | -10.6% | -11.4% | -4.7% | -13.2% | -10.6% | -20.4% | -89.3% |
| BRAYTON | 2.9% | 9.0% | -6.0% | 14.9% | 3.4% | -0.9% | -3.4% |
| CONEMAUGH | -11.3% | -12.2% | -5.0% | -14.0% | -10.1% | -19.7% | -89.8% |
| DUNKIRK | -37.8% | -22.8% | -11.8% | -26.0% | 7.0% | -12.7% | -6.9% |
| EDDYSTONE | -7.0% | -8.5% | -3.1% | -9.8% | -6.6% | -22.5% | -93.3% |
| GILBOA | 4.5% | 4.8% | 1.3% | 4.4% | 3.9% | -1.7% | -3.9% |
| HATFIELD | -13.4% | -13.6% | -5.9% | -15.6% | -13.5% | -18.8% | -86.4% |
| HUDSON | -1.9% | -2.8% | -0.5% | -3.3% | -1.8% | -5.5% | -98.1% |
| HUNTLEY | -46.8% | -26.3% | -14.4% | -30.0% | 16.0% | -10.7% | -15.9% |
| INDIANPT2 | -0.2% | -0.9% | 0.6% | -1.1% | -0.2% | 3.5% | 0.2% |
| JEAMOS | -15.4% | -14.7% | -6.7% | -17.0% | -17.7% | -18.1% | -82.2% |
| LAMBTON | -25.8% | -21.4% | -11.5% | -24.8% | -46.4% | -14.0% | -53.5% |
| NANTICOKE | -32.4% | -25.9% | -14.7% | -30.0% | -66.2% | -11.3% | -33.7% |
| NEWTON | -16.2% | -15.2% | -7.1% | -17.6% | -19.9% | -17.8% | -80.0% |
| NIAGARA | -48.8% | -26.8% | -14.8% | -30.6% | 15.6% | -10.4% | -15.5% |
| NORWALK | 1.3% | 3.7% | -1.8% | 5.4% | 1.4% | 0.1% | -1.4% |
| OSWEGO | 12.9% | -37.7% | -23.6% | -41.7% | 8.5% | -5.0% | -8.4% |
| PORTLAND | -5.3% | -7.4% | -2.4% | -8.6% | -5.0% | -17.7% | -94.9% |
| ROSETON | 1.7% | 1.6% | 1.3% | 1.7% | 1.5% | 0.9% | -1.5% |
| SALEM | -7.1% | -8.5% | -3.1% | -9.8% | -6.7% | -22.4% | -93.2% |

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APPENDIX F

# ANNOTATED MUST OUTPUT

This Section Is Available
On Computer Diskette If Requested

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# APPENDIX G

# TRANSFER LIMIT SENSITIVITY GRAPHS

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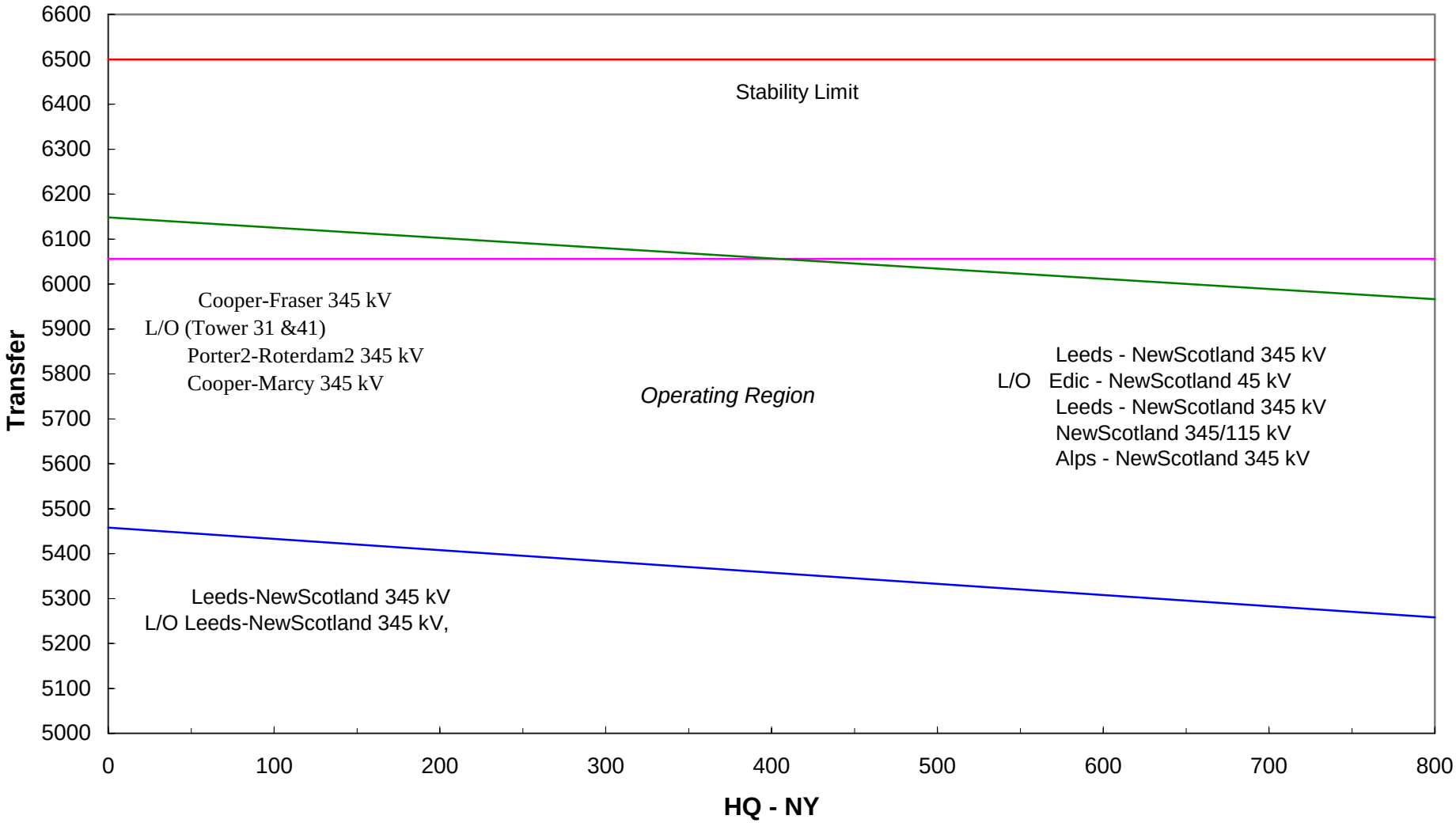
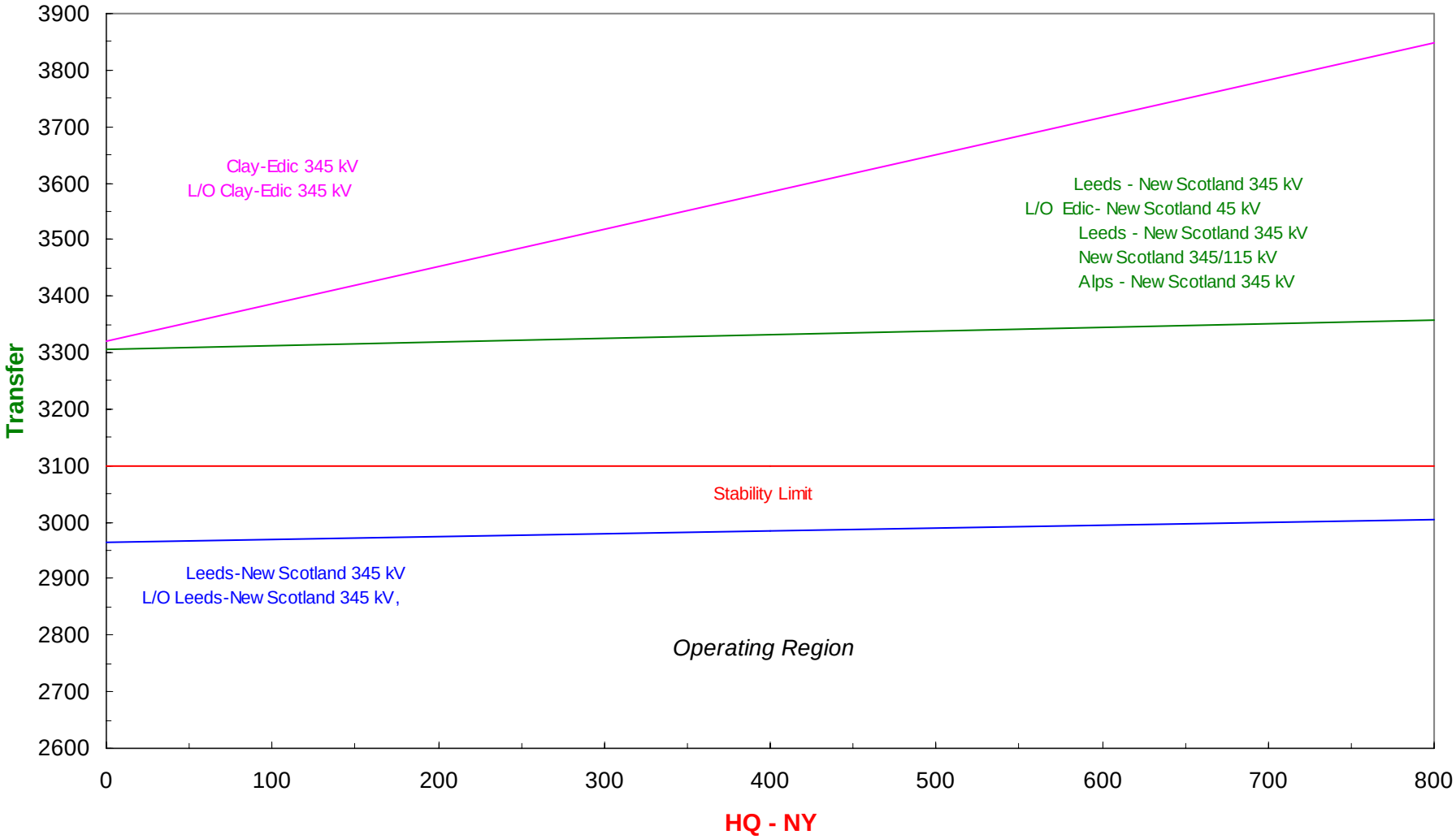
# Total East vs. HQ

## For Normal Transfer Criteria
## Winter 2005



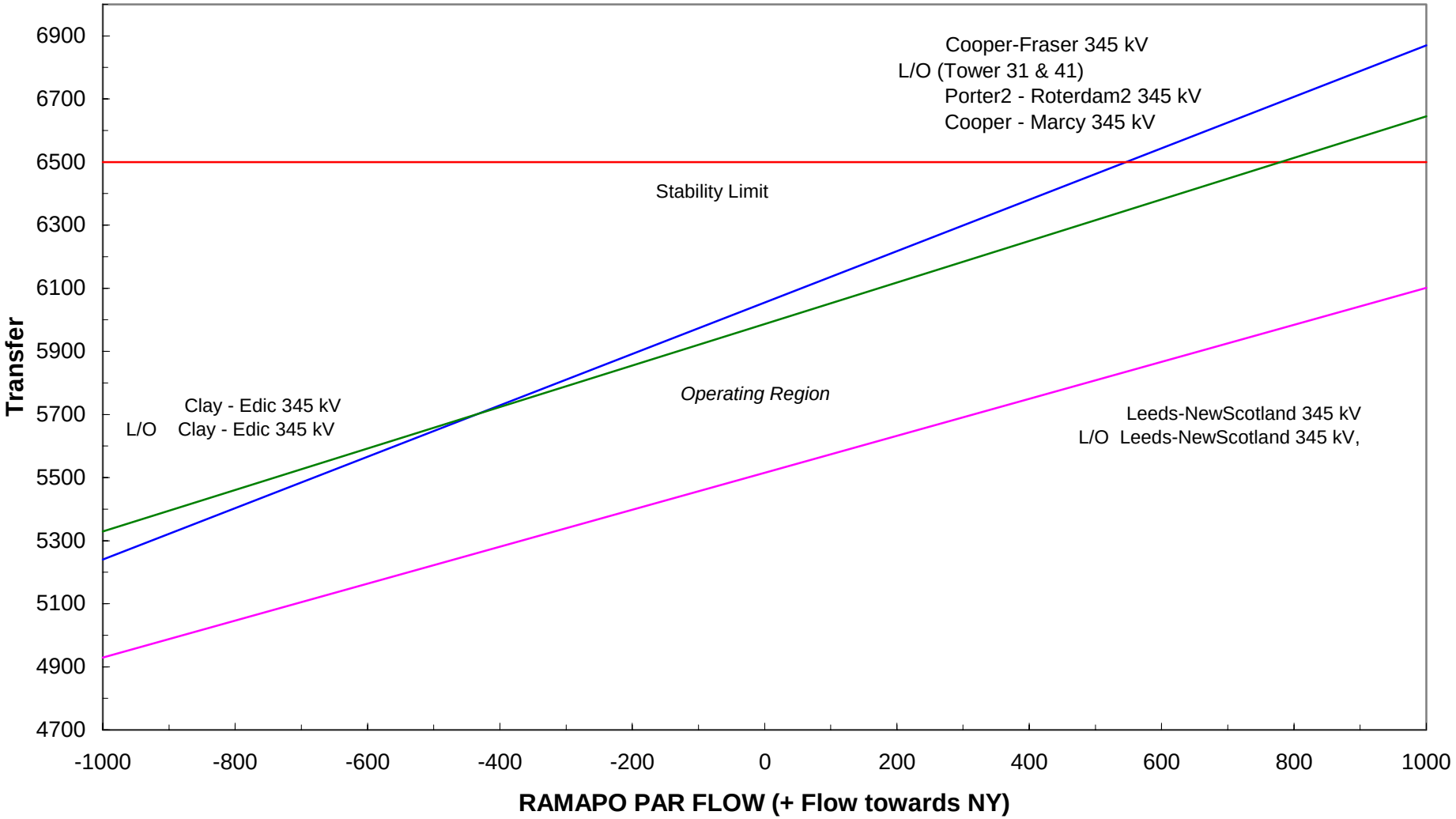
# Central East vs. HQ

## For Normal Transfer Criteria
## Winter 2005



# Total East vs. RAMAPO PAR Flow

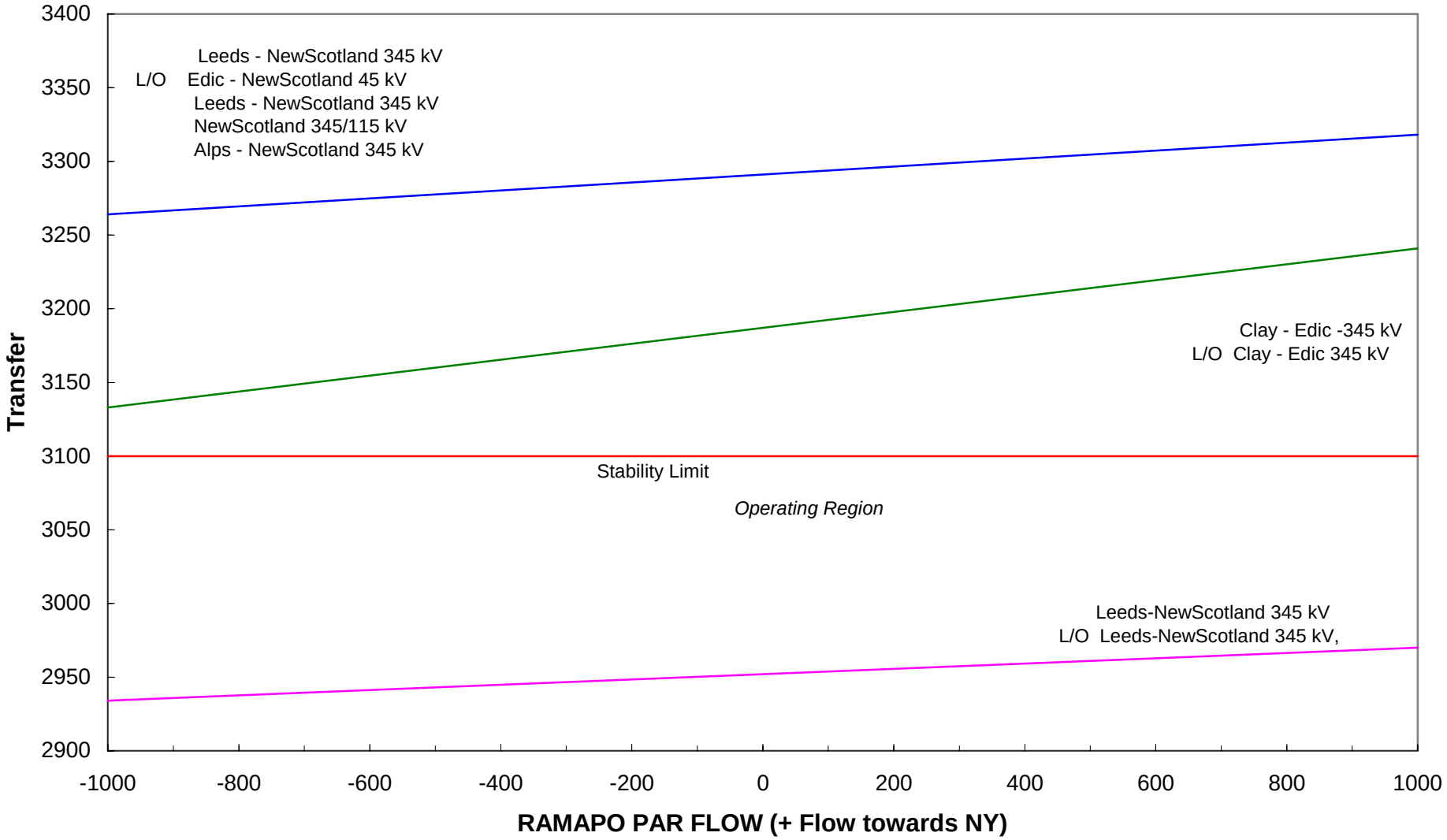
## For Normal Transfer Criteria
## Winter 2005



# Central East vs. RAMAPO PAR Flow

## For Normal Transfer Criteria

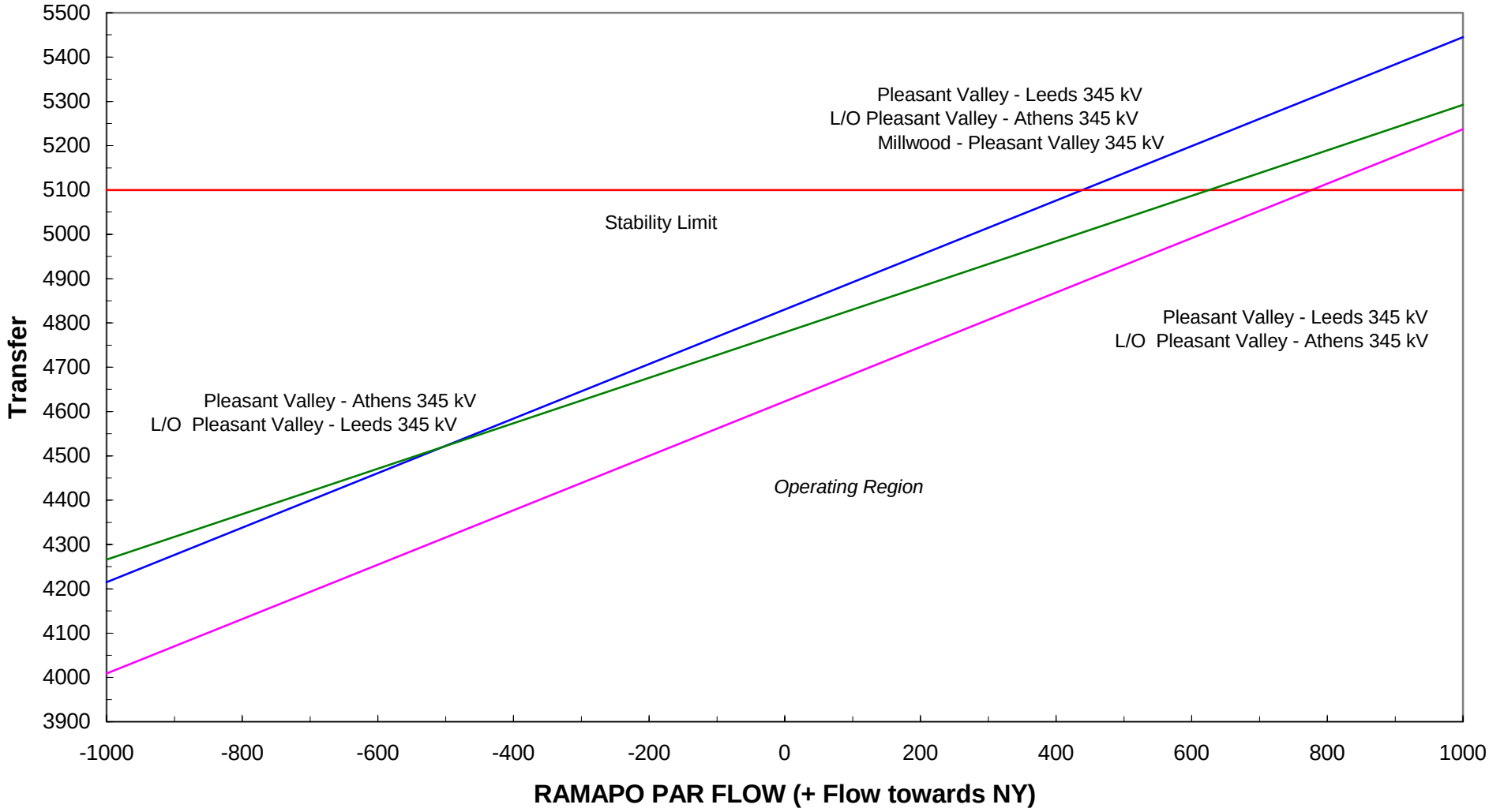
## Winter 2005



# UPNY-CONED vs. RAMAPO PAR Flow

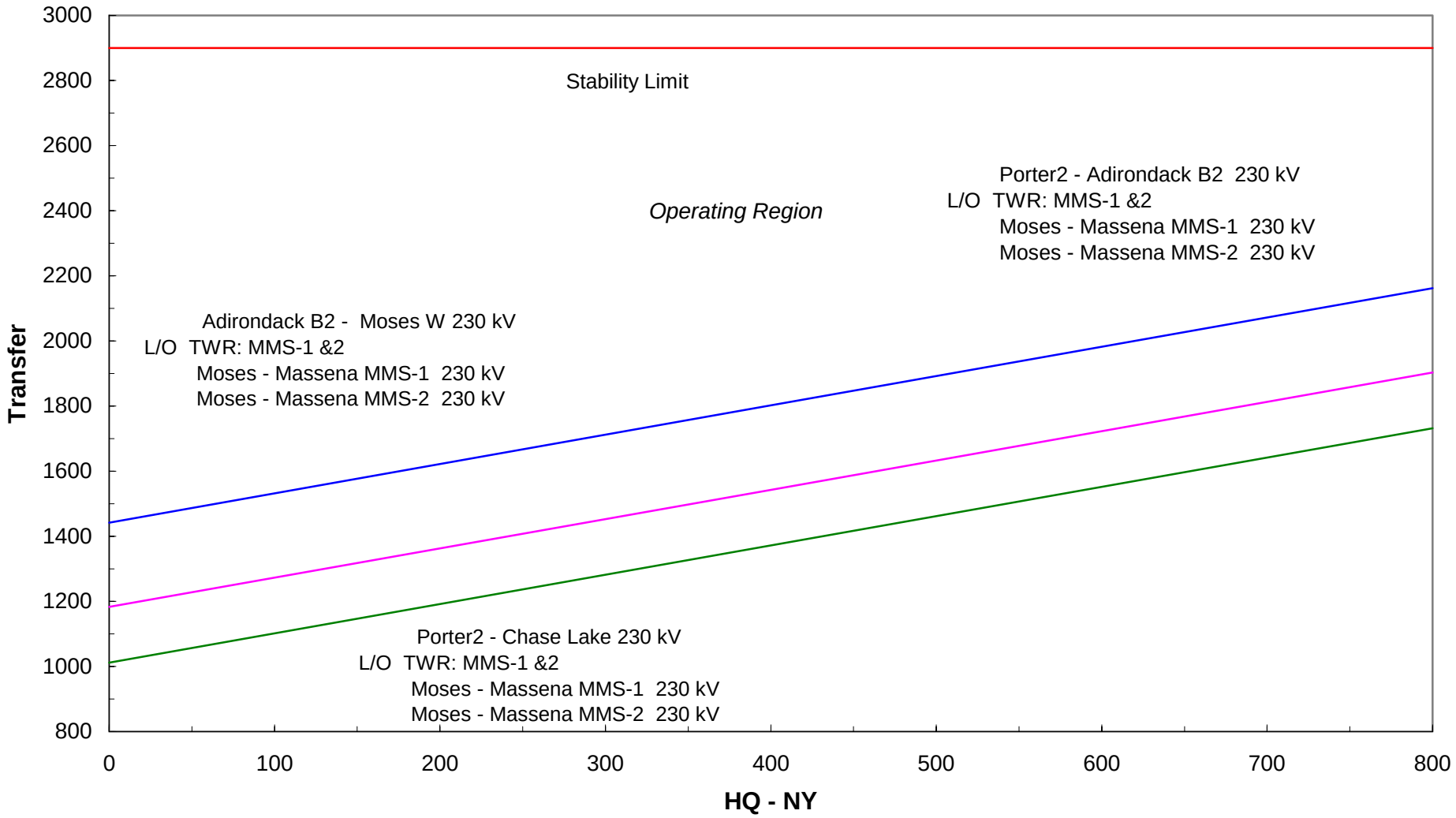
## For Normal Transfer Criteria

## Winter 2005



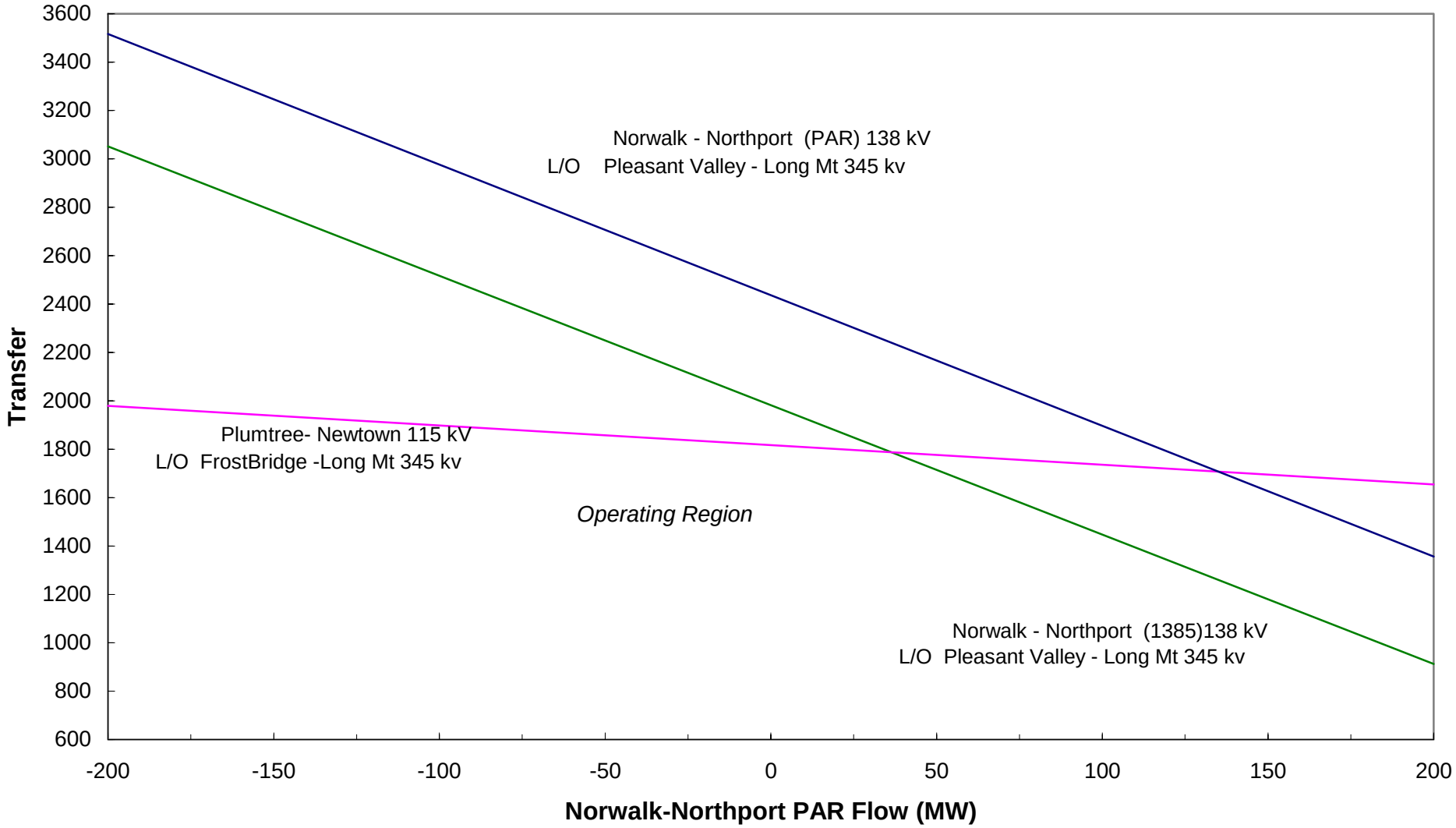
# Moses South vs. HQ Export to New York

**For Normal Transfer Criteria**
**Winter 2005**



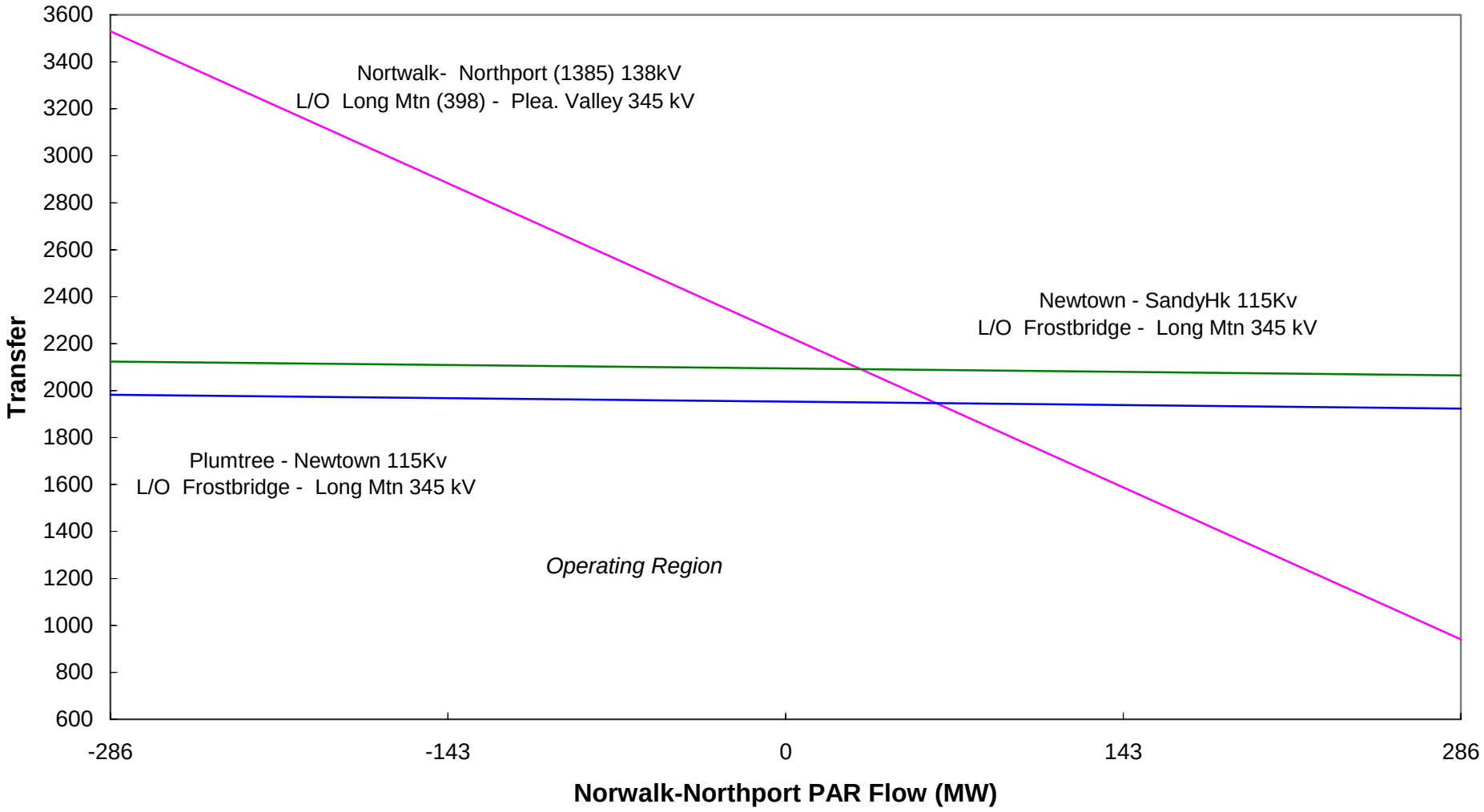
# NE-NY vs. NORWALK-NORTHPORT PAR Flow

**For Normal Transfer Criteria**
**Winter 2005**

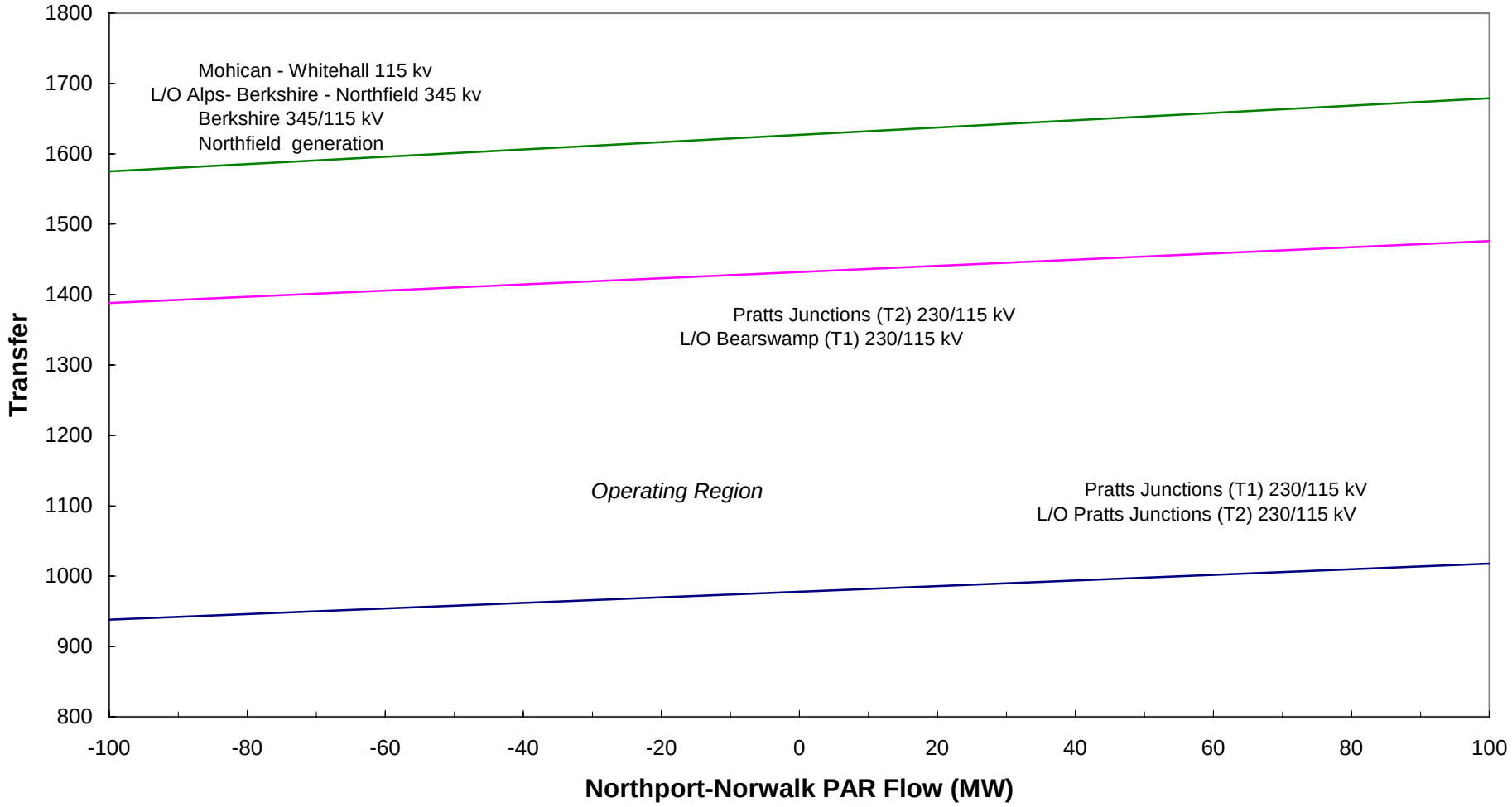


# NE-NY vs. NORWALK-NORTHPORT PAR Flow

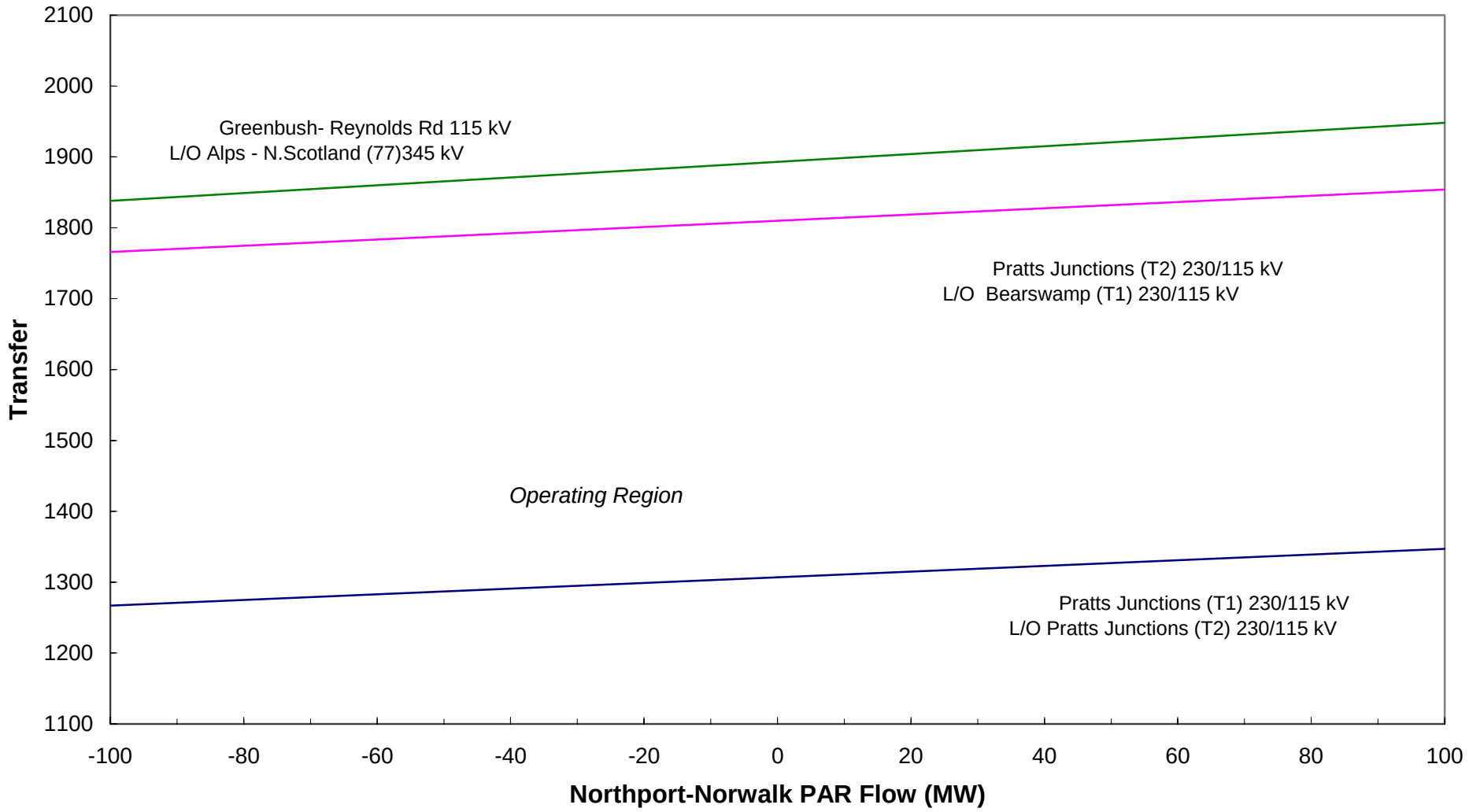
## For Emergency Transfer Criteria
## Winter 2005



# NY-NE vs. NORTHPORT-NORWALK PAR Flow
## For Normal Transfer Criteria
## Winter 2005

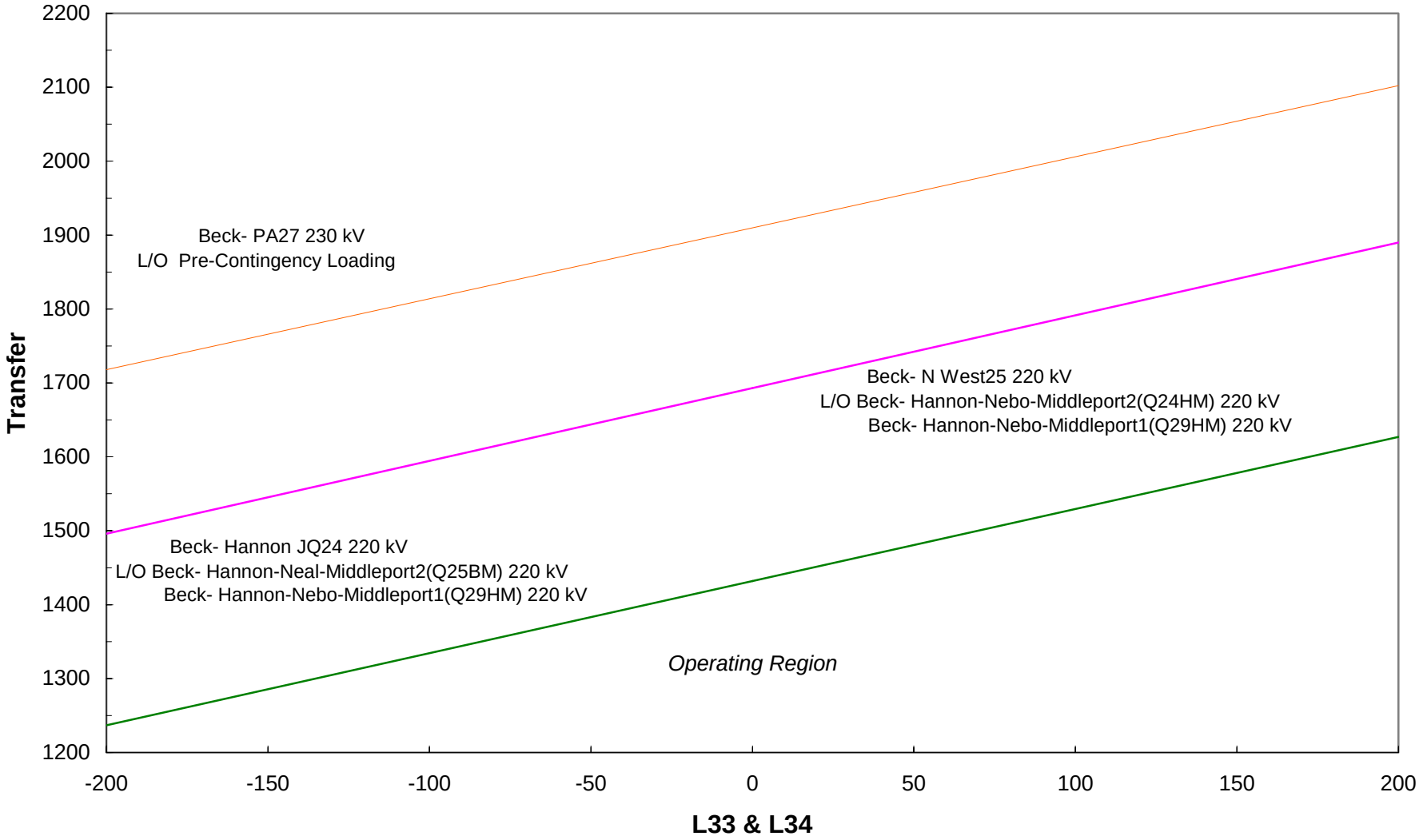


# NY-NE vs. NORTHPORT-NORWALK PAR Flow
## For Emergency Transfer Criteria
## Winter 2005



# NY- IESO (Ontario) Transfer vs. L33 & L34

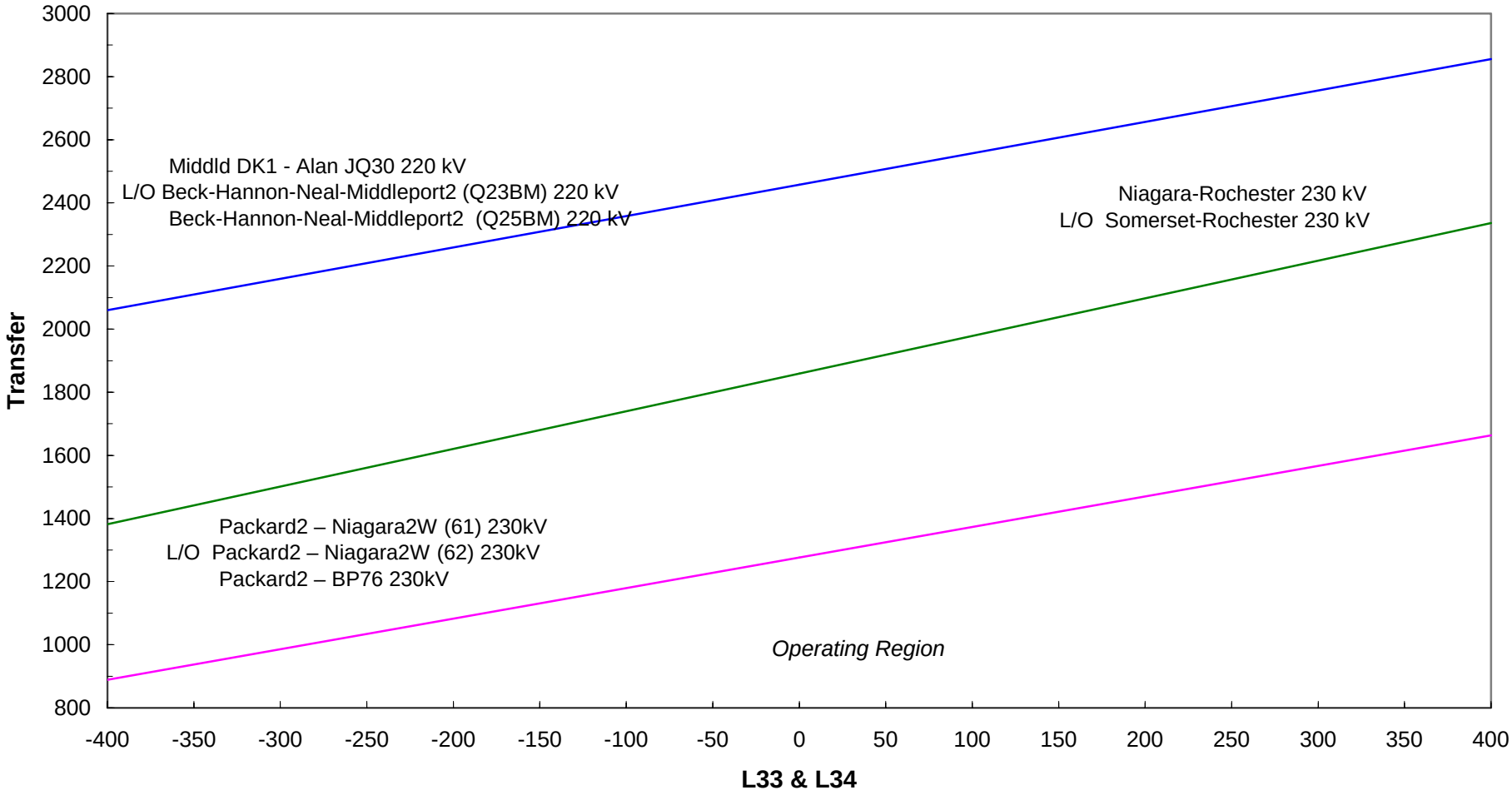
## For Normal Transfer Criteria
## Winter 2005



# IESO (Ontario)-NY Transfer vs. L33 & L34

## For Normal Transfer Criteria

## Winter 2005



## APPENDIX H

# COMPARISON OF TRANSFER LIMITS WINTER 2005-06 vs. WINTER 2004-05

# Comparison of WINTER 2005-06 to WINTER 2004-05 Thermal Limits

| | | WINTER 2005-06 | | WINTER 2004-05 | | DELTA |
|---|---|---|---|---|---|---|
| **Interface** | **Rating** | **Limit (MW)** | **Contingency** | **Limit (MW)** | **Contingency** | |
| **Dysinger East** | Normal | 3325 | 1 | 3350 | 1 | -25 |
| | Emergency | 3600 | 1b | 3600 | 1b | 0 |
| **West Central** | Normal | 2650 | 2c | 2600 | 2 | 50 |
| | Emergency | 2925 | 2d | 2925 | 2b | 0 |
| **UPNY - ConEd** | Normal | 4650 | 4 | 4600 | 4 | 50 |
| | Emergency | 5100 | 4b | 5050 | 4b | 50 |
| **SprBk/Dun-South** | Normal | 3825 | 5 | 3825 | 5 | 0 |
| | Emergency | 4125 | 5b | 4100 | 5b | 25 |
| **Con Ed - LIPA** | Normal | 925 | 7b | 875 | 7 | 50 |
| | Emergency | 1550 | 6b | 1525 | 6 | 25 |
| **Central East** | | | | | | |
| HQ ----> NY 400 MW | Normal | 2975 | 9 | 3425 | 12 | -450 |
| | Emergency | 3350 | 9b | 3550 | 3b | -200 |
| HQ ----> NY 0 MW | Normal | 2950 | 9 | 3250 | 3 | -300 |
| | Emergency | 3300 | 3b | 3275 | 3b | 25 |
| **Total East** | | | | | | |
| HQ ----> NY 400 MW | Normal | 5350 | 9 | 6200 | 12 | -850 |
| | Emergency | 6100 | 9b | 6425 | 3b | -325 |
| HQ ----> NY 0 MW | Normal | 5450 | 9 | 5925 | 3 | -475 |
| | Emergency | 6150 | 3b | 6025 | 3b | 125 |
| **Moses - South** | | | | | | |
| HQ ----> NY 400 MW | Normal | 1300 | 8 | 700 | 10b | 600 |
| | Emergency | 1750 | 8c | 2650 | 11 | -200 |
| HQ ----> NY 0 MW | Normal | 1000 | 8b | 1325 | 10 | -325 |
| | Emergency | 1425 | 8c | 2150 | 11 | 125 |

# NYISO WINTER 2005-06CROSS-STATE THERMAL LIMIT CONTINGENCY LIST

| | Limiting Element | | | | Contingency |
|---|---|---|---|---|---|
| (1) | Niagara - Rochester (NR-2) 345kV | @LTE | 1745 MW | L/O | AES/Somerset - Rochester (SR-1) 345kV |
| (1b) | Niagara - Rochester (NR-2) 345kV | @STE | 1904 MW | L/O | AES/Somerset - Rochester (SR-1) 345kV |
| (2) | Meyer - Stolle 230kV | @LTE | 564 MW | L/O | (Breaker failure @ Roch 345kV)<br>Rochester (NR2) – Pannell 345kV<br>Niagara – Rochester (NR2) 345kV |
| (2b) | Meyer - Stolle 230kV | @NOR | 512 MW | | Pre-Contingency Loading |
| (2c) | Meyer - Stolle 230kV | @LTE | 564 MW | | Niagara – Rochester (NR2) 345kV |
| (2d) | Meyer - Stolle 230kV | @STE | 606 MW | | Niagara – Rochester (NR2) 345kV |
| (3) | Clay – Edic 345kV | @LTE | 1434 MW | L/O | Clay – Edic 345kV<br>Clay 345/115kV |
| (3b) | Clay – Edic 345kV | @STE | 1434 MW | L/O | Clay – Edic 345kV |
| (4) | Leeds - Pleasant Valley (92) 345kV | @LTE | 1783 MW | L/O | Athens - Pleasant Valley (91) 345kV |
| (4b | Leeds - Pleasant Valley (92) 345kV | @STE | 1912 MW | L/O | Athens - Pleasant Valley (91) 345kV |
| (5) | Dunwoodie - Rainey 345 kV | @SCUC | 992 MW | L/O | Dunwoodie – Rainey 345kV |
| (5b) | Dunwoodie - Rainey 345 kV | @STE | 1113 MW | L/O | Dunwoodie – Rainey 345kV |
| (6) | Dunwoodie – Shore Rd. 345 kV | @NOR | 613 MW | | Pre-Contingency Loading |
| (6b) | Dunwoodie – Shore Rd. 345 kV | @NOR | 664 MW | | Pre-Contingency Loading |
| (7) | Dunwoodie – Shore Rd. 345 kV | @LTE | 891MW | L/O | Sprain Brook – E.G.C. (Y49)345 kV |
| (7b) | Dunwoodie – Shore Rd. 345 kV | @LTE | 925MW | L/O | Sprain Brook – E.G.C. (Y49)345 kV |
| (8) | Porter 2– Chase Lake(Flat Rock 20%) 230 kV | @LTE | 376 MW | L/O | Marcy - Massena 765kV<br>Chateauguay - Massena 765kV |
| (8b) | Porter 2– Chase Lake(Flat Rock 20%) 230 kV | @LTE | 376 MW | L/O | Moses - Massena MMS-1 230kV<br>Moses - Massena MMS-2 230kV |
| (8c) | Porter 2– Chase Lake(Flat Rock 20%) 230 kV | @STE | 478 MW | | Marcy - Massena 765kV<br>Chateauguay - Massena 765kV |
| (9) | New Scotland - Leeds (93) 345kV | @LTE | 1692 MW | L/O | New Scotland - Leeds (94) 345kV |
| (9b) | New Scotland - Leeds (93) 345kV | @STE | 1912 MW | L/O | New Scotland - Leeds (94) 345kV |
| (10) | Moses - Adirondack 230kV | @LTE | 359 MW | L/O | Moses - Massena MMS-1 230kV<br>Moses - Massena MMS-2 230kV |
| (10b) | Moses - Adirondack 230kV | @LTE | 359 MW | L/O | Marcy - Massena 765kV<br>Chateauguay - Massena 765kV<br>and Quebec delivery |
| (11) | Moses – Massena MMS-1 230kV | @STE | 1404 MW | L/O | Moses - Massena MMS-2 230kV |
| (12) | New Scotland - Marcy 345kV | @LTE | 1792MW | L/O | (Breaker failure Edic 345kV)<br>Edic - New Scotland (14)345kV<br>Edic 345kV - Porter (2) 230kV<br>Edic 345kV – Porter (4) 115kV |

# APPENDIX I

# SUMMARY OF NYISO INTERFACE LIMITS

**(APPENDIX I)** **NYISO INTERFACE LIMITS**

| **SEASONAL ASSESSMENTS** | ***THERMAL LIMIT*** | ***REPORT*** | ***DATE*** |
|---|---|---|---|
| **THERMAL TRANSFER LIMIT ASSESSMENT** | | | |
| WINTER 03-04 OPERATING STUDY | | OPST-w03 | 11/2003 |
| SUMMER 04 OPERATING STUDY | | OPST-s04 | 4/2004 |
| **FAULT CURRENT ASSESSMENT** | ***FAULT CURRENT*** | ***REPORT*** | ***DATE*** |
| NYISO SUMMER 2004 FAULT CURRENT STUDY (DRAFT) | | NYISO-s04 | 05/2004 |
| ***STABILITY ASSESSMENT*** | ***STABILITY LIMIT*** | ***REPORT*** | ***DATE*** |
| **TOTAL-EAST** | | | |
| SEASONAL LIMIT | 6500 | SLO-04 | 4/2004 |
| 5018 BRANCHBURG-RAMAPO 500 KV O/S | 6400 | SLO-04 | 4/2004 |
| 5018 BRANCHBURG-RAMAPO 500 KV O/S WITH ANY SVC O/S | 6300 | SLO-04 | 4/2004 |
| **UPNY-CONED** | | | |
| SEASONAL LIMIT | 5100 | SLO-04 | 4/2004 |
| Y88 LADENTOWN-BUCHANAN 345 KV O/S | 4150 | SLO-04 | 4/2004 |
| Y94 RAMAPO-BUCHANAN N. 345 KV O/S | 4150 | SLO-04 | 4/2004 |
| RFK-305 ROSETON-E. FISHKILL 345 KV O/S | 4100 | SLO-04 | 4/2004 |
| 5018 BRANCHBURG-RAMAPO 500 KV O/S | 4000 | SLO-04 | 4/2004 |
| **CENTRAL-EAST VOLTAGE CONSTRAINTS** | ***VOLTAGE LIMIT*** | | |
| MARCY FACTS PROJECT – PHASE 1 | | **CE-14** | *4/2001* |
| MARCY FACTS PROJECT – PHASE 2 | | **CE-15** | 11/2002 |
| CENTRAL EAST VOLTAGE STUDY FOR ADDITION OF ATHENS | | **SV-04** | 6/2004 |
| **CENTRAL EAST STABILITY CONSTRAINTS** | ***STABILITY LIMIT*** | | |
| SEASONAL LIMIT WITH 3 OSWEGO & 5 SITHE UNITS, SVCs and STATCOM in service | 3100 | CE-14 | *4/2001* |
| 4 LAFAYETTE-OAKDALE 345 KV O/S | 2900 | SLO-04 | 4/2004 |
| 32 OAKDALE-FRASER 345 KV O/S | 3050 | SLO-04 | 4/2004 |
| *Oswego Complex, Sithe and Marcy STATCOM, Leeds and Fraser SVC Limits have been revised as a result of the addition of the Marcy STATCOM Please refer to the NYISO Report:* ***"Marcy FACTS Project – Phase I Voltage and Stability Limits April 11, 2001)"*** | | *CE-14* | *4/2001* |

| | | | |
|---|---|---|---|
| *Both Chateauguay HVdc poles O/S, or 1 Chateauguay HVdc pole I/S <100 MW, or both Chateauguay HVdc poles <150 MW (net), then:*<br>Limit Oswego Complex to 3200 MW for 4 Units I/S & Sithe O/S<br>Limit Oswego Complex to 3500 MW for 5 Units I/S & Sithe O/S<br>or 4600 for 5-Units I/S & Sithe I/S | | CE-3 | 9/20/93 |
| NEW SCOTLAND 77 OR 99 BUS O/S | 2050 | SLO-04 | 4/2004 |
| 14 EDIC-NEW SCOTLAND 345 KV O/S | 2050 | SLO-04 | 4/2004 |
| UNS-18 MARCY-NEW SCOTLAND 345 KV O/S | 2050 | SLO-04 | 4/2004 |
| MSU-1 MASSENA-MARCY 765 KV O/S | 2700 | **CE-16** | 02/2003 |
| | | | |
| **MOSES-SOUTH** | | | |
| SEASONAL LIMIT WITH 2 HVDC POLES I/S<br>(MAX CHAT-MASSENA = 2370) | 2900 | MS-6 | 5/6/93 |
| R8105 ALCOA BUS TIE 115 KV O/S | 2600 | MS-1 | 1/23/91 |
| 3 CHAT BANKS 765/120 KV I/S, (MAX CHAT-MASSENA = 1800) | 2500 | | |
| ONE MOSES-ADIRONDACK-PORTER 230 KV CKT O/S | 2450 | MS-2 | 1/9/88 |
| 4 CHAT 765/120 kV BANKS I/S - SPLIT BUS & 1 HVDC POLE I/S<br>(MAX CHAT - MASSENA = 1870 MW) | 2600 | MS-7 | 3/15/94 |
| 2 CHAT 765/120 KV BANKS I/S & 1 HVDC POLE I/S<br>(MAX CHAT-MASSENA = 1650 MW) | 2350 | MS-5 | 1/14/94 |
| 3 CHAT 765/120 KV BANKS I/S & 1 HVDC POLE I/S<br>(MAX CHAT-MASSENA = 1400) | 2150 | MS-5 | 1/14/94 |
| 2 HVDC POLES O/S (MAX CHAT-MASSENA = 1170) | 2000 | MS-4 | 1990 |
| MSU-1 I/S WITH NO DIRECT TRANSFER TRIP FOR GEN REJECTION AT QUEBEC (MAX CHAT-MASSENA = 650) | 1100 | MS-2 | 11/29/84 |
| MSU-1 MASSENA-MARCY 765KV O/S<br>(MAX CHAT-MASSENA= 475) | 675 | | 2/9/84 |
| MSU-1 MASSENA-MARCY 765 KV AND ONE MOSES-ADIRONDACK-PORTER 230 KV O/S | 500 | | |

"SLO-04" is System Line Outage Report 2004

| | | | |
|---|---|---|---|
| **MOSES-NORTH** | | | |
| SEASONAL LIMIT | 1600 | MN-1 | 12/1/89 |
| ONE OR TWO MOSES-ADIRONDACK-PORTER 230 KV CKTS O/S | 1600 | MN-2 | 2/10/90 |
| MSU-1 MASSENA-MARCY 765 KV O/S | 1100 | MN-2 | |
| **WEST-CENTRAL** | | | |
| SEASONAL LIMIT | 2250 | SLO-04 | 4/2004 |
| RP-1 ROCHESTER – PANNELL 345 KV O/S | 1900 | SLO-04 | 4/2004 |
| PC-1 PANNELL – CLAY 345 KV O/S | 1900 | SLO-04 | 4/2004 |
| NR-2 NIAGARA-ROCHESTER 345 KV OR<br>SR-1 SOMERST-ROCHESTER 345 KV O/S | 1750<br>1700 | SLO-04<br>SLO-04 | 4/2004<br>4/2004 |
| **DYSINGER-EAST** | | | |
| SEASONAL LIMIT | 2850 | SLO-04 | 4/2004 |
| 67 STOLLE ROAD-MEYER 230 KV OR<br>68 MEYER-HILLSIDE 230 KV O/S | 2650 | SLO-04 | 4/2004 |
| NR-2 NIAGARA - ROCHESTER 345 KV OR<br>SR-1 SOMERST - ROCHESTER 345 KV O/S | 2350 | SLO-04 | 4/2004 |
| **NYISO-PJM** | | | |
| SEASONAL LIMIT | 3600 | NP-1 | 9/94 |
| **PJM-NYISO** | | | |
| SEASONAL LIMIT | 3600 | NP-1 | 9/94 |
| **NYISO-IESO** | | | |
| SEASONAL LIMIT | 2500 | NOH-1 | 11/10/93 |
| PA301 OR PA302 BECK-NIAGARA 345 KV O/S | 2300 | NOH-1 | 11/10/93 |
| PA27 OR BP76 OR L33P OR L34P O/S | 2300 | NOH-1 | 11/10/93 |
| PA301 & PA302 BECK-NIAGARA 345 KV O/S | 500 | NOH-3 | 1995 |
| **IESO-NYISO** | | | |
| SEASONAL LIMIT | 2500 | NOH-1 | 11/10/93 |
| PA301 OR PA302 BECK-NIAGARA 345 KV O/S | 2300 | NOH-1 | 11/10/93 |
| PA27 OR BP76 OR L33P OR L34P O/S | 2300 | NOH-1 | 11/10/93 |
| PA301 & PA302 BECK-NIAGARA 345 KV O/S | 800 | NOH-3 | 1995 |

| | | | |
|---|---|---|---|
| **WESTERN NY EXPORT** | | | |
| BOTH BECK-NIAGARA 345 KV CKTS O/S W/ NIAGARA GEN REJ I/S | 1700 | NOH-3 | 2/95 |
| BOTH BECK-NIAGARA 345 KV CKTS O/S W/ NIAGARA GEN REJ O/S<br>OR BOTH<br>BECK-NIAGARA 345 KV CKTS O/S & PA27 CKT O/S OR<br>ONE BECK-NIAGARA 345KV CKT O/S & PA27 & BP76 CKTS O/S | 1100 | NOH-3 | 2/95 |
| **NYISO-ISO-NE** | | | |
| SEASONAL LIMIT | 2200 | NE-1 | 10/92-1996 |
| 2 NEW SCOTLAND - ALPS 345 KV O/S | 2150 | NE-1 | 10/92 |
| 329 FROST BRIDGE - SOUTHINGTON 345 KV O/S | 2100 | NE-1 | 10/92 |
| 312 BERKSHIRE - NORTHFIELD 345 KV O/S | 1950 | NE-1 | 10/92 |
| 352 LONG MOUNTAIN - FROST BRIDGE 345 KV O/S | 1850 | NE-1 | 10/92 |
| 393 ALPS - BERKSHIRE 345 KV O/S | 1600 | NE-1 | 10/92 |
| 393/312 ALPS-BERKSHIRE-NORTHFIELD 345 KV O/S | 1500 | NE-1 | 10/92 |
| 398 PLEASANT VALLEY - LONG MOUNTAIN 345 KV O/S | 1150 | NE-1 | 10/92 |
| **ISO-NE-NYISO** | | | |
| THIS LIMIT IS SET BY NE, NYISO SPD MUST CALL FOR LIMIT | | NE-1 | 10/92 |

**NYISO STABILITY REPORT**
**SUMMARY**

| REPORT | REPORT TITLE | LAST REVISED DATE |
|---|---|---|
| SLO-04 | NYISO INTERFACE STABILITY LIMIT ANALYSIS FOR ALL LINES I/S AND LINE OUTAGE CONDITIONS. | 4/2004 |
| TE-2 | TOTAL EAST STABILITY ANALYSIS WITH SITHE GENERATION O/S | 1/95 |
| TE-3 | NYISO TOTAL EAST ANALYSIS - A. HARGRAVE | 3/95 |
| UC-1 | REVISED MAINTENANCE STABILITY TRANSFER LIMITS FOR BRANCH-RAMAPO O/S-NYPP | 1/93 |
| UC-2 | RWW ANALYSIS - NYPP | 1/93 |
| CE-1 | REVISED CENTRAL EAST STABILITY LIMITS BASED ON SVC RESERVE | 5/10/89 |
| CE-2 | CENTRAL EAST STABILITY LIMIT W/ 765 KV SYSTEM O/S - | 7/12/90 |
| CE-3 | CE & OSWEGO COMPLEX STABILITY LIMITS FOR THE CHATEAUGUAY HVDC O/S-NYPP/NYPA | 9/20/93 |
| CE-5 | NYISO CE STABILITY LIMITS FOR LEEDS OR FRASER SVC 0/S | 4/12/94 |
| CE-6 | CENTRAL EAST STABILITY ANALYSIS PRE-SITHE CONFIGURATION | 10/94 |
| CE-7 | CENTRAL EAST STABILITY ANALYSIS POST SITHE CONFIGURATION | 2/95 |
| CE-8 | CENTRAL EAST STABILITY LIMITS FOR THREE OSWEGO UNITS I/S | 6/1/95 |
| CE-9 | CENTRAL EAST STABILITY LIMITS FOR TWO OSWEGO UNITS I/S | 4/17/96 |
| CE-10 | CENTRAL EAST STABILITY LIMITS FOR ONE OSWEGO UNIT I/S | 4/1796 |
| CE-11 | CENTRAL EAST STABILITY LIMITS FOR ZERO OSWEGO UNITS I/S | 6/27/97 |
| CE-12 | CENTRAL EAST STABILITY LIMITS FOR 4/5 OSWEGO UNIT I/S | 11/99 |
| CE-14 | CENTRAL EAST VOLTAGE AND STABILITY ANALYSIS FOR MARCY FACT1 | 04/11/2001 |
| CE-15 | MARCY FACTS PROJECT – PHASE 11 CSC IPFC STABILITY STUDY | 11/2002 |
| CE-16 | CENTRAL EAST STABILITY LIMITS FOR MASSENA-MARCY (MSU1) O/S | 02/12/2003 |
| MS-2 | RT GONZALES ANALYSIS | 1/9/88 |
| MS-3 | RW WALDELE ANLAYSIS | 11/29/84 |
| MS-4 | NYPA ANALYSIS W/2 HVDC POLES O/S | 1990 |
| MS-5 | OPERATION OF THE MSC-7040 LINE W/1650 MW IMPORT FROM HYDRO QUEBEC & ONE HVDC CONVERTER I/S | 12/20/93 |
| MS-6 | CHATEAUGUAY 2370MW IMPORT ANAYLSIS | 5/6/93 |
| MS-7 | SPLIT 120 KV BUS OPERATION OF THE CHAT/BEAU COMPLEX W/ ONE HVDC CONVERTER O/S -NYPA | 3/15/94 |
| MN-1 | RWW ANALYSIS 12/13/89 KT MEMO TO JEK | 12/1/89 |
| MN-2 | JAM ANALYSIS #89030S MOSES-SOUTH W/MAP OS | 2/10/90 |

| | | |
|---|---|---|
| WC-1 | AWH ANALYSIS - NYISO | 9/18/89 |
| WC-2 | WEST CENTRAL TRANSIENT STABILITY LIMITS FOR LINE OUTAGE CONDITIONS - NYISO | 10/14/91 |
| DE-1 | DYSINGER EAST TRANSIENT STABILITY LIMITS FOR LINE OUTAGE CONDITIONS - NYISO | 7/27/92 |
| NOH-1 | NYISO-OH DIRECT TIE STUDY OCTOBER 1993 SEE CA KING LETTER TO SOAS DATED 11/10/93 | 10/93 |
| NOH-2 | OH-NYISO TS STUDY GROUP ANALYSIS | 1983-1984 |
| NOH-3 | NYISO STABILITY ANALYSIS WITH PA301/PA303 O/S | 2/95 |
| NE-1 | 1992-1996 NYISO-NEPOOL TRANSFER LIMIT STUDY | 10/92 |
| NP-1 | NYISO-PJM STABILITY ANALYSIS ON THE DIRECT TIE TRANSFER CAPABILITY | 9/94 |