

SUMMARY OF NYISO  
INTERFACE LIMITS  
AND  
OPERATING STUDIES



## SUMMARY OF NYISO INTERFACE LIMITS AND OPERATING STUDIES

| SEASONAL ASSESSMENTS                                                                                                                                                                                                                                                                     |                 | REPORT          | DATE    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------|---------|
| THERMAL TRANSFER LIMIT ASSESSMENT                                                                                                                                                                                                                                                        |                 |                 |         |
| <a href="#">SUMMER 07 OPERATING STUDY</a>                                                                                                                                                                                                                                                |                 | OPST-S07        | 5/2007  |
| <a href="#">WINTER 07 OPERATING STUDY</a>                                                                                                                                                                                                                                                |                 | OPST-W07        | 11/07   |
| FAULT CURRENT ASSESSMENT                                                                                                                                                                                                                                                                 |                 | REPORT          | DATE    |
| <a href="#">NYISO SUMMER 2006 FAULT CURRENT STUDY</a>                                                                                                                                                                                                                                    |                 | NYISO-S06       | 05/2006 |
| STABILITY ASSESSMENT                                                                                                                                                                                                                                                                     | STABILITY LIMIT | REPORT          | DATE    |
| TOTAL-EAST                                                                                                                                                                                                                                                                               |                 |                 |         |
| <a href="#">SEASONAL LIMIT</a>                                                                                                                                                                                                                                                           | 6500            | SLO-04          | 4/2004  |
| <a href="#">5018 BRANCHBURG-RAMAPO 500 KV O/S</a>                                                                                                                                                                                                                                        | 6400            | SLO-04          | 4/2004  |
| <a href="#">5018 BRANCHBURG-RAMAPO 500 KV O/S WITH ANY SVC O/S</a>                                                                                                                                                                                                                       | 6300            | SLO-04          | 4/2004  |
| UPNY-CONED                                                                                                                                                                                                                                                                               |                 |                 |         |
| <a href="#">SEASONAL LIMIT</a>                                                                                                                                                                                                                                                           | 5100            | SLO-04          | 4/2004  |
| <a href="#">SEASONAL LIMIT WITH SERIES REACTORS IN SERVICE</a>                                                                                                                                                                                                                           | 4850            | SPDS-01         | 2/2005  |
| <a href="#">Y88 LADENTOWN-BUCHANAN 345 KV O/S</a>                                                                                                                                                                                                                                        | 4150            | SLO-04          | 4/2004  |
| <a href="#">Y94 RAMAPO-BUCHANAN N. 345 KV O/S</a>                                                                                                                                                                                                                                        | 4150            | SLO-04          | 4/2004  |
| <a href="#">RFK-305 ROSETON-E. FISHKILL 345 KV O/S</a>                                                                                                                                                                                                                                   | 4100            | SLO-04          | 4/2004  |
| <a href="#">5018 BRANCHBURG-RAMAPO 500 KV O/S</a>                                                                                                                                                                                                                                        | 4000            | SLO-04          | 4/2004  |
| CENTRAL-EAST VOLTAGE CONSTRAINTS                                                                                                                                                                                                                                                         |                 | VOLTAGE LIMIT   |         |
| <a href="#">MARCY FACTS PROJECT – PHASE 1</a>                                                                                                                                                                                                                                            |                 | CE-14           | 4/2001  |
| <a href="#">MARCY FACTS PROJECT – PHASE 2</a>                                                                                                                                                                                                                                            |                 | CE-15           | 11/2002 |
| <a href="#">CENTRAL EAST VOLTAGE STUDY FOR ADDITION OF ATHENS</a>                                                                                                                                                                                                                        |                 | SV-04           | 6/2004  |
| CENTRAL EAST STABILITY CONSTRAINTS                                                                                                                                                                                                                                                       |                 | STABILITY LIMIT |         |
| <a href="#">SEASONAL LIMIT WITH 3 OSWEGO &amp; 5 SITHE UNITS, SVCs and STATCOM in service</a>                                                                                                                                                                                            | 3100            | CE-14           | 4/2001  |
| <a href="#">4 LAFAYETTE-OAKDALE 345 KV O/S</a>                                                                                                                                                                                                                                           | 2900            | SLO-04          | 4/2004  |
| <a href="#">32 OAKDALE-FRASER 345 KV O/S</a>                                                                                                                                                                                                                                             | 3050            | SLO-04          | 4/2004  |
| <i>Oswego Complex, Sithe and Marcy STATCOM, Leeds and Fraser SVC<br/>Limits have been revised as a result of the addition of the Marcy STATCOM<br/>Please refer to the NYISO Report:<br/><a href="#">“Marcy FACTS Project – Phase I Voltage and Stability Limits April 11, 2001”</a></i> |                 | CE-14           | 4/2001  |

|                                                                                                                                                                                                                                                                                                                            |      |         |          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---------|----------|
| <i>Both Chateaugay HVdc poles O/S, or 1 Chateaugay HVdc pole I/S &lt;100 MW, or both Chateaugay HVdc poles &lt;150 MW (net), then:<br/>Limit Oswego Complex to 3200 MW for 4 Units I/S &amp; Sithe O/S<br/>Limit Oswego Complex to 3500 MW for 5 Units I/S &amp; Sithe O/S<br/>or 4600 for 5-Units I/S &amp; Sithe I/S</i> |      | CE-3    | 9/20/93  |
| <a href="#">NEW SCOTLAND 77 OR 99 BUS O/S</a>                                                                                                                                                                                                                                                                              | 2050 | SLO-04  | 4/2004   |
| <a href="#">14 EDIC-NEW SCOTLAND 345 KV O/S</a>                                                                                                                                                                                                                                                                            | 2050 | SLO-04  | 4/2004   |
| <a href="#">UNS-18 MARCY-NEW SCOTLAND 345 KV O/S</a>                                                                                                                                                                                                                                                                       | 2050 | SLO-04  | 4/2004   |
| <a href="#">MSU-1 MASSENA-MARCY 765 KV O/S</a>                                                                                                                                                                                                                                                                             | 2700 | CE-16   | 02/2003  |
|                                                                                                                                                                                                                                                                                                                            |      |         |          |
| <b>SPRAIN BROOK / DUNWOODIE SOUTH</b>                                                                                                                                                                                                                                                                                      |      |         |          |
| <a href="#">SEASONAL LIMIT WITH SERIES REACTORS BY-PASSED</a>                                                                                                                                                                                                                                                              | 4850 | SPDS-01 | 2/2005   |
| <a href="#">SEASONAL LIMIT WITH SERIES REACTORS IN SERVICE</a>                                                                                                                                                                                                                                                             | 4350 | SPDS-01 | 2/2005   |
|                                                                                                                                                                                                                                                                                                                            |      |         |          |
| <b>MOSES-SOUTH</b>                                                                                                                                                                                                                                                                                                         |      |         |          |
| 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<br>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-<br>ADIRONDACK-PORTER 230 KV O/S                                                                                                                                                                                                                                                  | 500  |         |          |

“SLO-04” is System Line Outage Report 2004

|                                                                                                           |      |        |          |
|-----------------------------------------------------------------------------------------------------------|------|--------|----------|
| <b>MOSES-NORTH</b>                                                                                        |      |        |          |
| 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   |          |
| <b>WEST-CENTRAL</b>                                                                                       |      |        |          |
| <a href="#">SEASONAL LIMIT</a>                                                                            | 2250 | SLO-04 | 4/2004   |
| <a href="#">RP-1 ROCHESTER – PANNELL 345 KV O/S</a>                                                       | 1900 | SLO-04 | 4/2004   |
| <a href="#">PC-1 PANNELL – CLAY 345 KV O/S</a>                                                            | 1900 | SLO-04 | 4/2004   |
| <a href="#">NR-2 NIAGARA-ROCHESTER 345 KV OR</a>                                                          | 1750 | SLO-04 | 4/2004   |
| <a href="#">SR-1 SOMERST-ROCHESTER 345 KV O/S</a>                                                         | 1700 | SLO-04 | 4/2004   |
| <b>DYSINGER-EAST</b>                                                                                      |      |        |          |
| <a href="#">SEASONAL LIMIT</a>                                                                            | 2850 | SLO-04 | 4/2004   |
| <a href="#">67 STOLLE ROAD-MEYER 230 KV OR</a><br><a href="#">68 MEYER-HILLSIDE 230 KV O/S</a>            | 2650 | SLO-04 | 4/2004   |
| <a href="#">NR-2 NIAGARA - ROCHESTER 345 KV OR</a><br><a href="#">SR-1 SOMERST - ROCHESTER 345 KV O/S</a> | 2350 | SLO-04 | 4/2004   |
| <b>NYISO-PJM</b>                                                                                          |      |        |          |
| SEASONAL LIMIT                                                                                            | 3600 | NP-1   | 9/94     |
| <b>PJM-NYISO</b>                                                                                          |      |        |          |
| SEASONAL LIMIT                                                                                            | 3600 | NP-1   | 9/94     |
| <b>NYISO-IMO</b>                                                                                          |      |        |          |
| 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     |
| <b>IMO-NYISO</b>                                                                                          |      |        |          |
| 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     |

| <b>WESTERN NY EXPORT</b>                                                                                                                                                       |      |       |        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|--------|
| 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   |
| <b>NYISO-ISO-NE</b>                                                                                                                                                            |      |       |        |
| <b>SEASONAL LIMIT</b>                                                                                                                                                          | 2200 | NE-07 | 5/2007 |
| NEW SCOTLAND – ALPS (2) 345 KV O/S                                                                                                                                             | 2200 | NE-07 | 5/2007 |
| FROST BRIDGE – SOUTHTON (329) 345 KV O/S                                                                                                                                       | 2200 | NE-07 | 5/2007 |
| BERKSHIRE – NORTHFIELD (312) 345 KV O/S                                                                                                                                        | 2200 | NE-07 | 5/2007 |
| LONG MOUNTAIN - FROST BRIDGE (352) 345 KV O/S                                                                                                                                  | 2200 | NE-07 | 5/2007 |
| ALPS - BERKSHIRE (393) 345 KV O/S                                                                                                                                              | 1800 | NE-07 | 5/2007 |
| ALPS-BERKSHIRE-NORTHFIELD (393/312) 345 KV O/S                                                                                                                                 | 1800 | NE-07 | 5/2007 |
| PLEASANT VALLEY - LONG MOUNTAIN (398) 345 KV O/S                                                                                                                               | 1600 | NE-07 | 5/2007 |
| <b>ISO-NE-NYISO</b>                                                                                                                                                            |      |       |        |
| THIS LIMIT IS SET BY NE, NYISO SPD MUST CALL FOR LIMIT                                                                                                                         |      | NE-07 | 5/2007 |

## NYISO STABILITY REPORT SUMMARY

| REPORT  | REPORT TITLE                                                                                           | LAST REVISED DATE |
|---------|--------------------------------------------------------------------------------------------------------|-------------------|
| SPDS-01 | <a href="#">SPRAIN BROOK-DUNWOODIE SOUTH STABILITY LIMIT ANALYSIS</a>                                  | 2/2005            |
| SLO-04  | <a href="#">NYISO INTERFACE STABILITY LIMIT ANALYSIS FOR ALL LINES I/S AND LINE OUTAGE CONDITIONS.</a> | 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 O/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   | <a href="#">CENTRAL EAST VOLTAGE AND STABILITY ANALYSIS FOR MARCY FACT1</a>                            | 04/11/2001        |
| CE-15   | <a href="#">MARCY FACTS PROJECT – PHASE 11 CSC IPFC STABILITY STUDY</a>                                | 11/2002           |
| CE-16   | <a href="#">CENTRAL EAST STABILITY LIMITS FOR MASSENA-MARCY (MSU1) O/S</a>                             | 02/12/2003        |
| MS-2    | RT GONZALES ANALYSIS                                                                                   | 1/9/88            |
| MS-3    | RW WALDELE ANALYSIS                                                                                    | 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 ANALYSIS                                                                     | 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      |