June 19, 2017

By Electronic Delivery

Honorable Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Re: New York Independent System Operator, Inc.'s Informational Filing Regarding the Simultaneous Import Limitation Study, Docket No. AD10-2-008

Dear Secretary Bose:

In accordance with Commission Order No. 697[1] and Commission staff direction, the New York Independent System Operator, Inc. ("NYISO") respectfully submits, for informational purposes, an amended presentation titled "NYISO 2015 Simultaneous Import Limit Determination," dated June 15, 2017.[2] The data in this presentation was compiled by the NYISO in order to assist the New York Transmission Owners in fulfilling their obligations associated with Commission Order No. 697. This presentation details the NYISO seasonal Simultaneous Import Limits for 2015, along with the methodology used in developing these limit levels.

The NYISO also submits herewith an affidavit of Allen Hargrave. The affidavit describes how the NYISO develops Total Transfer Capability ("TTC") values, Transmission Reliability Margin ("TRM") values, and Available Transfer Capability ("ATC") values for External Interfaces and Scheduled Lines.

[1] *Market-Based Rates for Wholesale Sales of Electric Energy, Capacity And Ancillary Services By Public Utilities*, Final Rule, Order No. 697, 119 FERC ¶ 61,295 (June 21, 2007).

[2] The NYISO submitted the original presentation titled "NYISO 2015 Simultaneous Import Limit Determination" in this docket on December 19, 2016.

The NYISO respectfully requests that the Commission accept this informational report. If you have any questions please do not hesitate to contact the undersigned.

Respectfully Submitted,

/s/ James H. Sweeney

James H. Sweeney
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Jamie Simler
Gary Will

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding in accordance with the requirements of Rule 2010 of the Rules of Practice and Procedure, 18 C.F.R. § 385.2010.

Dated at Rensselaer, NY this 19th day of June 2017.

By: */s/ John C. Cutting*

John C. Cutting
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NYISO
2015 Simultaneous Import Limit Determination

Revised Jun 15, 2017

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Data Utilized for SIL Study

- **Four seasonal historic total NYISO Simultaneous Import Limit (SIL) values for the period winter 2014/15 through Fall 2015**

- **Allocation of the total historical SIL values to specific limits with neighboring Balancing Authorities**
  (PJM, ISONE, IESO, and HQ)

- **Adjustments for firm transmission commitments held by affiliated companies that represent transfer capability not available to unaffiliated companies**

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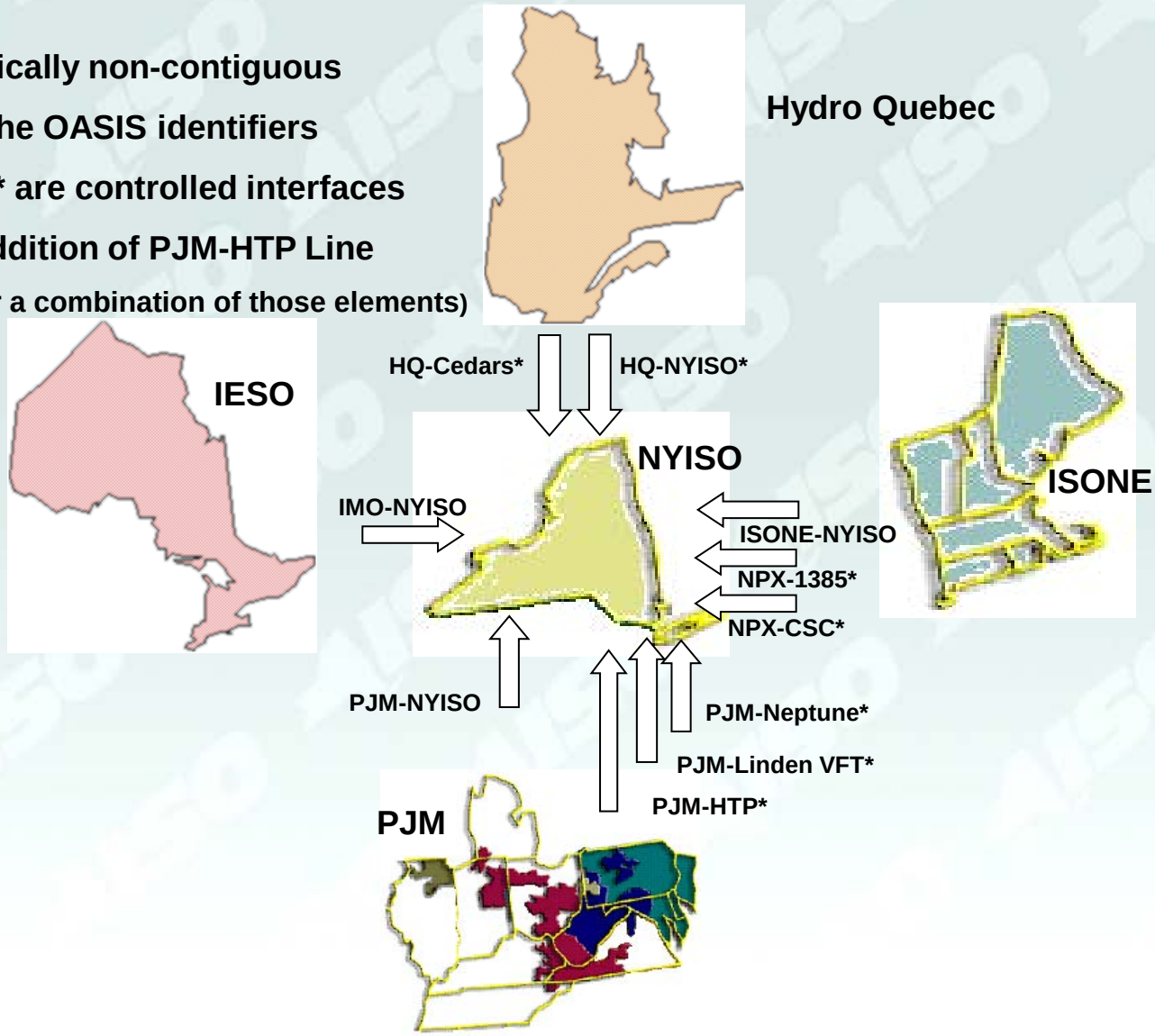
Posted OASIS Interfaces

- Neighboring BAs are electrically non-contiguous
- Interface names listed are the OASIS identifiers
- Interfaces identified with a * are controlled interfaces
- 2015 Report includes the addition of PJM-HTP Line

(HVDC, VFT, radial generation or a combination of those elements)



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2015 NYISO Simultaneous Import Limits with Adjusted TTC FOR Controllable Ties Included

Seasonal Simultaneous Import Limit (SIL)		
2014-15 Season	NYISO Simultaneous Import Limits	NYISO System Peak Loads
Winter	8294 MW	24893 MW
Spring	7620 MW	24418 MW
Summer	8465 MW	31266 MW
Fall	8405 MW	31179 MW

Simultaneous import limit (SIL) values are provided consistent with historical data of actual, hourly, real-time TTC values used in operating the transmission system and posted transmission capacity availability on OASIS during the seasonal peak loads periods of 2014-15

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2015 NYISO Simultaneous Import Limits with Adjusted TTC for Controllable Ties Set to Zero

Seasonal Simultaneous Import Limit (SIL) without Scheduled Lines*		
2014-15 Season	NYISO Simultaneous Import Limits	NYISO System Peak Loads
Winter	6659 MW	24893 MW
Spring	5655 MW	24418 MW
Summer	6500 MW	31266 MW
Fall	6440 MW	31179 MW

*FERC Order 816 at P. 177 provides that "where the seller is unaware of the terms and conditions for third-party capacity rights on controllable merchant lines, the seller must make a conservative assumption and subtract from the Total Simultaneous Transfer Capability and Historical Peak Load values the full capacity of the controllable merchant line as a long-term firm transmission reservation." This chart provides the NYISO's Simultaneous Import Limits after subtracting the full capacity of four controllable lines from the Adjusted TTC, as required by FERC Order 816. Detailed data supporting this chart appears in slides 11, 13, 15, and 17.

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Approach (1 OF 2)

In accordance with FERC Order 697:

- **NYISO accounts for simultaneity in determining the SIL through analysis of actual operational data during the peak periods identified**
- **The TTC values employed are those used during actual operation of the transmission system and posted availability on OASIS**
- **The TTC values were studied in a manner which includes the TTC/ATC methodologies identified in the NYISO OATT**
- **The TTC values employed represent more than interface constraints at the balancing authority area border and reflect all transmission limitations within the study area and limitations within first-tier areas**

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Approach (2 OF 2)

No Physical Transaction Scheduling in NYISO:

- **The NYISO OATT does not permit firm transmission commitment reservations of tie capability [for companies affiliated with transmission owners in NY]**
  - ***All NYISO transmission scheduling is achieved via financial evaluation of transaction bids placed by MPs in the DAM and HAM markets.***
  - ***Long-term financial scheduling is not available; [all scheduling is conducted in the DAM and HAM evaluations]***

- **Thus, no TTC adjustments for applicable firm transmission commitments held by affiliated companies, representing transfer capability not available to first-tier supply, are required**

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Required Evidence w/r/t TTCs

The TTC values employed-

- Account for simultaneity through the application of significant (200-300 MW) Transmission Reliability Margins (TRMs) applied to first-tier areas where transfers to NYISO would result in loop flow through other first-tier entities
  - ***TRM is the amount of TTC reserved by the ISO to ensure the interconnected transmission network is secure under a reasonable range of uncertainties in system conditions.***
  - ***NYISO OATT Section 9.6 provides that the "TRM used for purposes of ATC calculations conducted for External Interfaces for the Day-Ahead Market and the Real-Time Market shall be used to address unexpected system conditions equal to the sum of the following components: (1) uncertainty in unscheduled loop or parallel flows ranging in value from zero (0) to five hundred (500) MW based on the greater of the average of the last three months of historical parallel flows observed for each External Interface or the average of the deviation in parallel flows observed over the last three months for each External Interface, (2) load forecast uncertainty, normally of value zero (0) MW, and (3) uncertainty in external system conditions, normally of value zero (0) MW."***
- Account for all external transmission limitations existing in first-tier areas as demonstrated by historical record of adjustments to TTC values day-ahead and hour-ahead based on operating restrictions within first-tier areas
- Account for all transmission reliability margins as defined in the NYISO OATT
- Are used in operating the transmission system and posting availability on OASIS

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Data Sources

- **NYISO website posting of TTC and ATC**
  - ***http://mis.nyiso.com/public/P-8list.htm***
- **NYISO website posting of TRM and CBM**
  - ***http://www.nyiso.com/public/webdocs/market_data/power_grid_info/margin_with_external_trm.pdf***
- **NYISO website posting of TRM methodology**
  - ***http://www.nyiso.com/public/webdocs/markets_operations/market_data/power_grid_info/CurrentTRMImplementationDocumentTRMID.pdf***
- **NYISO website posting of load**
  - ***http://mis.nyiso.com/public/P-58Clist.htm***

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Winter Peak Load

Load 24,893 MW on 01/07/2015 17:56:00*

Interface Name	TTC	TRM***	CBM	Adjusted TTC	ATC	Scheduled
HQ-CEDARS	199	0	0	199	199	0
HQ-NYISO**	1310	0	0	1310	1200	110
IMO-NYISO	1900	300	0	1600	198	1402
ISONE-NYISO	1400	200	0	1200	1200	0
NPX-1385	200	0	0	200	95	105
NPX-CSC	0	0	0	0	0	0
PJM-NEPTUNE	660	0	0	660	235	425
PJM-NYISO	2450	300	0	2150	624	1526
PJM-LINDEN VFT	315	0	0	315	25	290
PJM -HTP	660	0	0	660	400	260
Total	**9094**	**800**	**0**	**8294**	**4176**	**4118**

**Data throughout this report reflects actual operating data from the identified time interval*
***HQ-NYISO interface is restricted to 1310 MW sinking into NY. The posted value of 1500 MW accounts for the potential to wheel from Hydro Quebec through New York.*
****Controllable ties have a TRM of zero since they can be continuously and precisely controlled*

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Winter Peak Load with Adjusted TTC for Controllable Ties Set to Zero^

Load 24,893 MW on 01/07/2015 17:56:00*

Interface Name	TTC	TRM***	CBM	Adjusted TTC	ATC	Scheduled
HQ-CEDARS	199	0	0	199	199	0
HQ-NYISO**	1310	0	0	1310	1200	110
IMO-NYISO	1900	300	0	1600	198	1402
ISONE-NYISO	1400	200	0	1200	1200	0
NPX-1385	200	0	0	200	95	105
NPX-CSC	0	0	0	0	0	0
PJM-NEPTUNE	660	0	0	0	0	425
PJM-NYISO	2450	300	0	2150	624	1526
PJM-LINDEN VFT	315	0	0	0	0	290
PJM -HTP	660	0	0	0	0	260
Total	**9094**	**800**	**0**	**6659**	**3516**	**4118**

^See slide 5 for reference, Adjusted TTC and ATC are set zero for NPX-CSC, PJM-Neptune, PJM-Linden VFT, and PJM-HTP because the Advanced Reservations process is controlled by ISO-NE or PJM.

**Data throughout this report reflects actual operating data from the identified time interval*

***HQ-NYISO interface is restricted to 1310 MW sinking into NY. The posted value of 1500 MW accounts for the potential to wheel from Hydro Quebec through New York.*

****Controllable ties have a TRM of zero since they can be continuously and precisely controlled*

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Spring Peak Load

Load 24,418 MW on 05/26/2015 16:47:00*

Interface Name	TTC	TRM***	CBM	Adjusted TTC	ATC	Scheduled
HQ-CEDARS	95	0	0	95	95	0
HQ-NYISO**	1310	0	0	1310	128	1182
IMO-NYISO	1500	300	0	1200	0	1200
ISONE-NYISO	1150	200	0	950	768	182
NPX-1385	200	0	0	200	0	200
NPX-CSC	330	0	0	330	330	0
PJM-NEPTUNE	660	0	0	660	0	660
PJM-NYISO	2200	300	0	1900	1177	723
PJM-LINDEN VFT	315	0	0	315	315	0
PJM -HTP	660	0	0	660	660	0
Total	**8420**	**800**	**0**	**7620**	**3473**	**4147**

**Data throughout this report reflects actual operating data from the identified time interval*

***HQ-NYISO interface is restricted to 1310 MW sinking into NY. The posted value of 1500 MW accounts for the potential to wheel from Hydro Quebec through New York.*

****Controllable ties have a TRM of zero since they can be continuously and precisely controlled*

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Spring Peak Load with Adjusted TTC for Controllable Ties Set to Zero^

Load 24,418 MW on 05/26/2015 16:47:00*

Interface Name	TTC	TRM***	CBM	Adjusted TTC	ATC	Scheduled
HQ-CEDARS	95	0	0	95	95	0
HQ-NYISO**	1310	0	0	1310	128	1182
IMO-NYISO	1500	300	0	1200	0	1200
ISONE-NYISO	1150	200	0	950	768	182
NPX-1385	200	0	0	200	0	200
NPX-CSC	330	0	0	0	0	0
PJM-NEPTUNE	660	0	0	0	0	660
PJM-NYISO	2200	300	0	1900	1177	723
PJM-LINDEN VFT	315	0	0	0	0	0
PJM -HTP	660	0	0	0	0	0
Total	**8420**	**800**	**0**	**5655**	**2168**	**4147**

^See slide 5 for reference, Adjusted TTC and ATC are set zero for NPX-CSC, PJM-Neptune, PJM-Linden VFT, and PJM-HTP because the Advanced Reservations process is controlled by ISO-NE or PJM.

**Data throughout this report reflects actual operating data from the identified time interval*

***HQ-NYISO interface is restricted to 1310 MW sinking into NY. The posted value of 1500 MW accounts for the potential to wheel from Hydro Quebec through New York.*

****Controllable ties have a TRM of zero since they can be continuously and precisely controlled*

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Summer Peak Load

Load 31,266 MW on 07/29/2015 16:30:00*

Interface Name	TTC	TRM***	CBM	Adjusted TTC	ATC	Scheduled
HQ-CEDARS	190	0	0	190	60	130
HQ-NYISO**	1310	0	0	1310	0	1310
IMO-NYISO	1900	300	0	1600	1136	464
ISONE-NYISO	1400	200	0	1200	840	360
NPX-1385	200	0	0	200	155	45
NPX-CSC	330	0	0	330	0	330
PJM-NEPTUNE	660	0	0	660	0	660
PJM-NYISO	2300	300	0	2000	1613	387
PJM-LINDEN VFT	315	0	0	315	315	0
PJM -HTP	660	0	0	660	660	0
Total	**9265**	**800**	**0**	**8465**	**4779**	**3686**

**Data throughout this report reflects actual operating data from the identified time interval*

***HQ-NYISO interface is restricted to 1310 MW sinking into NY. The posted value of 1500 MW accounts for the potential to wheel from Hydro Quebec through New York.*

****Controllable ties have a TRM of zero since they can be continuously and precisely controlled*

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Summer Peak Load with Adjusted TTC for Controllable Ties Set to Zero^

Load 31,266 MW on 07/29/2015 16:30:00*

Interface Name	TTC	TRM***	CBM	Adjusted TTC	ATC	Scheduled
HQ-CEDARS	190	0	0	190	60	130
HQ-NYISO**	1310	0	0	1310	0	1310
IMO-NYISO	1900	300	0	1600	1136	464
ISONE-NYISO	1400	200	0	1200	840	360
NPX-1385	200	0	0	200	155	45
NPX-CSC	330	0	0	0	0	330
PJM-NEPTUNE	660	0	0	0	0	660
PJM-NYISO	2300	300	0	2000	1613	387
PJM-LINDEN VFT	315	0	0	0	0	0
PJM -HTP	660	0	0	0	0	0
Total	**9265**	**800**	**0**	**6500**	**3804**	**3686**

^See slide 5 for reference, Adjusted TTC and ATC are set zero for NPX-CSC, PJM-Neptune, PJM-Linden VFT, and PJM-HTP because the Advanced Reservations process is controlled by ISO-NE or PJM.

**Data throughout this report reflects actual operating data from the identified time interval*

***HQ-NYISO interface is restricted to 1310 MW sinking into NY. The posted value of 1500 MW accounts for the potential to wheel from Hydro Quebec through New York.*

****Controllable ties have a TRM of zero since they can be continuously and precisely controlled*

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Fall Peak Load

Load 31,179 MW on 09/08/2015 15:56:00*

Interface Name	TTC	TRM***	CBM	Adjusted TTC	ATC	Scheduled
HQ-CEDARS	130	0	0	130	50	80
HQ-NYISO**	1310	0	0	1310	44	1266
IMO-NYISO	1900	300	0	1600	765	835
ISONE-NYISO	1400	200	0	1200	1200	0
NPX-1385	200	0	0	200	95	105
NPX-CSC	330	0	0	330	0	330
PJM-NEPTUNE	660	0	0	660	0	660
PJM-NYISO	2300	300	0	2000	1184	816
PJM-LINDEN VFT	315	0	0	315	315	0
PJM -HTP	660	0	0	660	600	60
Total	**9205**	**800**	**0**	**8405**	**4253**	**4152**

**Data throughout this report reflects actual operating data from the identified time interval*
***HQ-NYISO interface is restricted to 1310 MW sinking into NY. The posted value of 1500 MW accounts for the potential to wheel from Hydro Quebec through New York.*
****Controllable ties have a TRM of zero since they can be continuously and precisely controlled*

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Fall Peak Load with Adjusted TTC for Controllable Ties Set to Zero^

Load 31,179 MW on 09/08/2015 15:56:00*

Interface Name	TTC	TRM***	CBM	Adjusted TTC	ATC	Scheduled
HQ-CEDARS	130	0	0	130	50	80
HQ-NYISO**	1310	0	0	1310	44	1266
IMO-NYISO	1900	300	0	1600	765	835
ISONE-NYISO	1400	200	0	1200	1200	0
NPX-1385	200	0	0	200	95	105
NPX-CSC	330	0	0	0	0	330
PJM-NEPTUNE	660	0	0	0	0	660
PJM-NYISO	2300	300	0	2000	1184	816
PJM-LINDEN VFT	315	0	0	0	0	0
PJM -HTP	660	0	0	0	0	60
Total	**9205**	**800**	**0**	**6440**	**3338**	**4152**

^See slide 5 for reference, Adjusted TTC and ATC are set zero for NPX-CSC, PJM-Neptune, PJM-Linden VFT, and PJM-HTP because the Advanced Reservations process is controlled by ISO-NE or PJM.

**Data throughout this report reflects actual operating data from the identified time interval*

***HQ-NYISO interface is restricted to 1310 MW sinking into NY. The posted value of 1500 MW accounts for the potential to wheel from Hydro Quebec through New York.*

****Controllable ties have a TRM of zero since they can be continuously and precisely controlled*

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Seasonal Comparison*

Peak Load (MW)	Winter		Spring		Summer		Fall	
	24,893		24,418		31,266		31,179	
Interface Name	**TTC**	**Scheduled**	**TTC**	**Scheduled**	**TTC**	**Scheduled**	**TTC**	**Scheduled**
HQ-CEDARS	199	0	95	0	190	130	130	80
HQ-NYISO	1310	110	1310	1182	1310	1310	1310	1266
IMO-NYISO	1900	1402	1500	1200	1900	464	1900	835
ISONE-NYISO	1400	0	1150	182	1400	360	1400	0
NPX-1385	200	105	200	200	200	45	200	105
NPX-CSC	0	0	330	0	330	330	330	330
PJM-NEPTUNE	660	425	660	660	660	660	660	660
PJM-NYISO	2450	1526	2200	723	2300	387	2300	816
PJM-LINDEN VFT	315	290	315	0	315	0	315	0
PJM -HTP	660	260	660	0	660	0	660	60
Total	**9094**	**4118**	**8420**	**4147**	**9265**	**3686**	**9205**	**4152**

**Data pulled from slides 10, 12, 14, and 16.*

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NYISO Tariffs OATT 2-Common Service Provisions

- **2.2.1 Initial Allocation of Available Transfer Capability:**
  - ***Firm Transmission Service under this Tariff is obtained when the Transmission Customer agrees to pay the Congestion associated with its service.***

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NYISO Tariffs – OATT Attachment C 9.1 Overview

- The ISO shall calculate and post ATC values for its Internal and External Interfaces and for Scheduled Lines.
- The ISO's Interfaces represent a defined set of transmission facilities that separate Locational Based Marginal Pricing (LBMP) Load Zones within the New York Control Area and that separate the New York Control Area from adjacent Control Areas.
- External Interfaces may be represented by one or more Proxy Generator Buses for scheduling and dispatching purposes. Each Proxy Generator Bus may be associated with distinct, posted ATC values.
- Controllable ties, referred to as Scheduled Lines in the NYISO OATT, represent a transmission facility or set of transmission facilities that provide a separate scheduling path interconnecting the ISO to an adjacent Control Area. Each Scheduled Line is associated with a distinct Proxy Generator bus for which the ISO separately posts ATC.

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Controllable Ties (Scheduled Lines)

- The NYISO's Market Information System ("MIS") allows Market Participants that hold long-term firm Advance Reservations over scheduled lines to schedule transactions, while at the same time allowing third-parties to schedule transactions over scheduled lines using capacity that has been released.
- Market Participants desiring to submit bids in the NYISO's markets to schedule External Transactions over scheduled lines are required to have: (a) an Advance Reservation on the relevant external OASIS; (b) a valid NERC E-Tag that specifically identifies the Advance Reservation that is supporting the proposed External Transaction; and (c) a bid submitted to the NYISO's MIS by 4:50 a.m. (instead of 5:00 a.m.) of the day prior to the Dispatch Day in question.
  - *Similar requirements apply to bids seeking to schedule Real-Time External Transactions, which must be submitted at least eighty five minutes prior (instead of seventy five minutes prior) to the relevant dispatch hour.*
- The NYISO's MIS confirms the Advance Reservation during the ten-minute window between 4:50 a.m. and 5:00 a.m. (or between 85 minutes and 75 minutes prior to the relevant dispatch hour in real-time.
  - *The NYISO's MIS does not track (or have visibility to) Advance Reservations outside this confirmation process.*
- On slides 11, 13, 15, and 17, the NYISO provides zero Adjusted TTC values and zero ATC values for controllable ties pursuant to Paragraph 177 of FERC Order 816.

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Approach

Commission Determination * – Order No. 697 pt. 364

- *Southern's suggestion that the Commission allow the use of simultaneous TTC values is consistent with the SIL study provided that these TTCs are the values that are used in operating the transmission system and posting availability on OASIS*

- *The simultaneous TTCs[368] must represent more than interface constraints at the balancing authority area border and must reflect all transmission limitations within the study area and limitations within first-tier areas*

[368] The simultaneous TTCs include seller's balancing authority area and aggregated first-tier areas.

*** https://www.ferc.gov/whats-new/comm-meet/2007/062107/E-1.pdf**

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Approach (continued)

- The source (first-tier remote resources) can only deliver power to load in the seller's balancing authority area if adequate transmission is available out of its first-tier area, adequate transmission is available at the seller’s balancing authority area interface, and transmission is internally available
- Thus, the TTC must be appropriately adjusted for all applicable (as discussed below) firm transmission commitments held by affiliated companies that represent transfer capability not available to first-tier supply
- Sellers submitting simultaneous TTC values must provide evidence that these values account for simultaneity, account for all internal transmission limitations, account for all external transmission limitations existing in first-tier areas, account for all transmission reliability margins, and are used in operating the transmission system and posting availability on OASIS

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Sub-Markets

- The NYISO tariffs address sub markets (NYC and Long Island) in the area of capacity markets only

- The NYISO energy markets do not address sub-markets and TTCs and ATCs are neither calculated, monitored, nor posted for capacity market defined areas NYC and Long Island

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Equivalent SIL for Sub- Markets

- An approximation of the transfer capability into the capacity sub-markets of Con Ed and Long Island can be calculated by summing the tie capability of the into those areas and assuming that the contract wheel of 300 MW through LIPA into Con Ed.

- The net scheduled interchange into the Con Ed and Long Island resulting from the statewide security constrained commitment and dispatch is calculated and can be regarded as the equivalent scheduled transfer into the areas.

- The difference between the approximated transfer capability into the capacity sub-markets and the net scheduled interchange within those areas can be regarded as a ATC.

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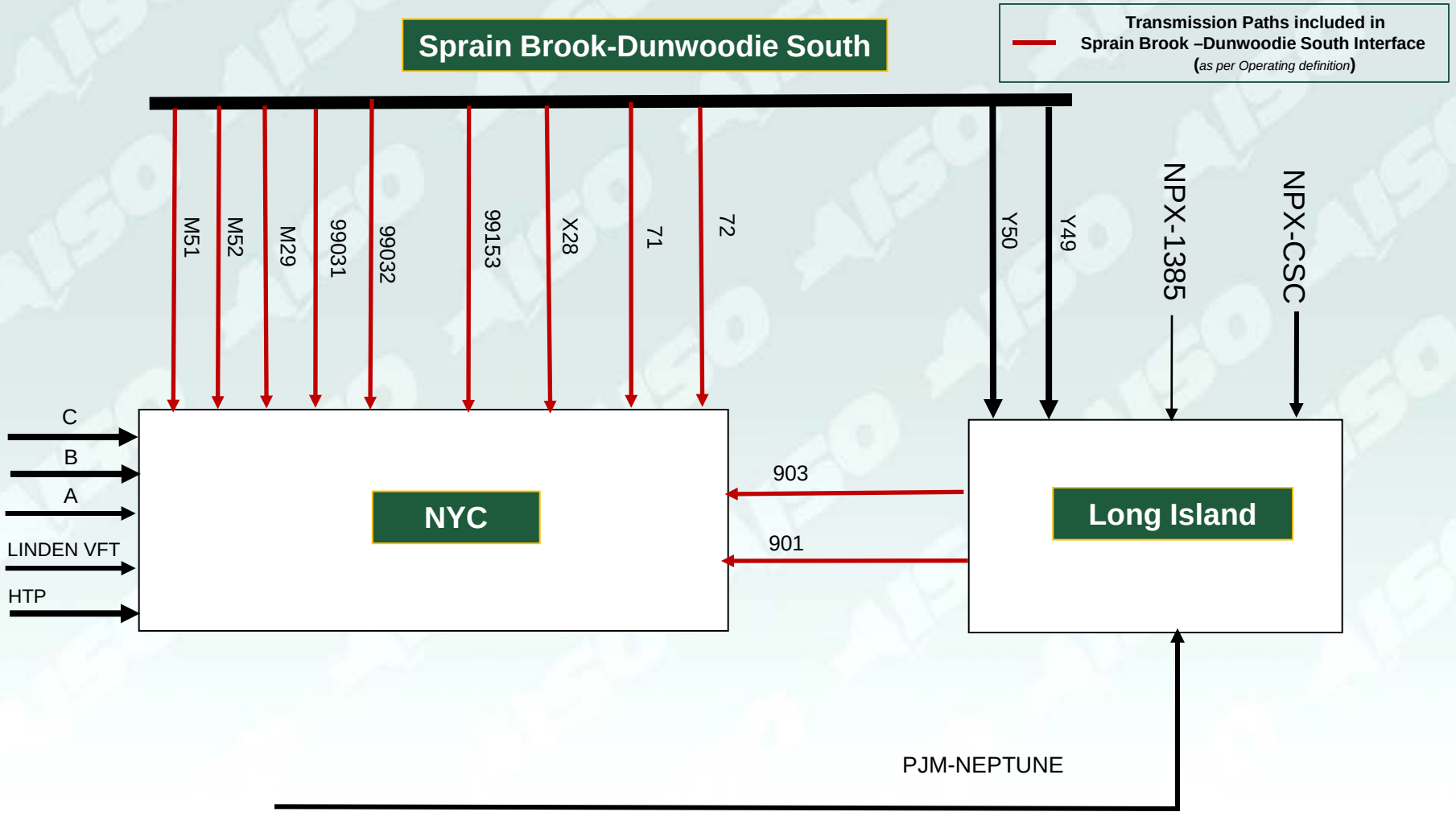
Sub- Market Interconnections



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Winter Peak Load - Long Island

Load 3,398 MW on 01/07/2015 18:19:00*

Interface Name	TTC	TRM**	CBM	Adjusted TTC	ATC	Scheduled
NPX-1385	200	0	0	200	95	105
NPX-CSC	0	0	0	0	0	0
PJM-NEPTUNE	660	0	0	660	235	425
Spr-Dunw S (Y50 & Y49)	1200	N/A	N/A	1200	152	1048
Con Ed-LIPA***	-300	N/A	N/A	-300	-63	-237
Total	**1760**	**0**	**0**	**1760**	**419**	**1341**

**Data throughout this report reflects actual operating data from the identified time interval*
*** Controllable ties have a TRM of zero since they can be continuously and precisely controlled*
*** Wheel agreement between LIPA and Con Ed allows for up to 300MW to be wheeled through LIPA to Con Ed

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Winter Peak Load with Adjusted TTC for Controllable Ties Set to Zero^ - Long Island

Load 3,398 MW on 01/07/2015 18:19:00*

Interface Name	TTC	TRM**	CBM	Adjusted TTC	ATC	Scheduled
NPX-1385	200	0	0	200	95	105
NPX-CSC****	0	0	0	0	0	0
PJM-NEPTUNE****	660	0	0	0	0	425
Spr-Dunw S (Y50 & Y49)	1200	N/A	N/A	1200	152	1048
Con Ed-LIPA***	-300	N/A	N/A	-300	-63	-237
Total	**1760**	**0**	**0**	**1100**	**184**	**1341**

^See slide 5 for reference, Adjusted TTC and ATC are set zero for NPX-CSC and PJM-Neptune because the Advanced Reservations process is controlled by ISO-NE or PJM.

**Data throughout this report reflects actual operating data from the identified time interval*

*** Controllable ties have a TRM of zero since they can be continuously and precisely controlled*

*** Wheel agreement between LIPA and Con Ed allows for up to 300MW to be wheeled through LIPA to Con Ed

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Spring Peak Load - Long Island

Load 3,373 MW on 05/29/2015 16:23:00*

Interface Name	TTC	TRM**	CBM	Adjusted TTC	ATC	Scheduled
NPX-1385	200	0	0	200	0	200
NPX-CSC	330	0	0	330	0	330
PJM-NEPTUNE	660	0	0	660	383	277
Spr-Dunw S (Y50 & Y49)	1200	N/A	N/A	1200	802	398
Con Ed-LIPA***	-300	N/A	N/A	-300	-39	-261
Total	**2090**	**0**	**0**	**2090**	**1146**	**944**

**Data throughout this report reflects actual operating data from the identified time interval*
*** Controllable ties have a TRM of zero since they can be continuously and precisely controlled*
*** Wheel agreement between LIPA and Con Ed allows for up to 300MW to be wheeled through LIPA to Con Ed

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Spring Peak Load with Adjusted TTC for Controllable Ties Set to Zero^ - Long Island

Load 3,373 MW on 05/29/2015 16:23:00*

Interface Name	TTC	TRM**	CBM	Adjusted TTC	ATC	Scheduled
NPX-1385	200	0	0	200	0	200
NPX-CSC****	330	0	0	0	0	330
PJM-NEPTUNE****	660	0	0	0	0	277
Spr-Dunw S (Y50 & Y49)	1200	N/A	N/A	1200	802	398
Con Ed-LIPA***	-300	N/A	N/A	-300	-39	-261
Total	**2090**	**0**	**0**	**1100**	**763**	**944**

^See slide 5 for reference, Adjusted TTC and ATC are set zero for NPX-CSC and PJM-Neptune because the Advanced Reservations process is controlled by ISO-NE or PJM.

**Data throughout this report reflects actual operating data from the identified time interval*

*** Controllable ties have a TRM of zero since they can be continuously and precisely controlled*

*** Wheel agreement between LIPA and Con Ed allows for up to 300MW to be wheeled through LIPA to Con Ed

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Summer Peak Load - Long Island

Load 5,208 MW on 07/20/2015 16:15:00*

Interface Name	TTC	TRM**	CBM	Adjusted TTC	ATC	Scheduled
NPX-1385	200	0	0	200	0	200
NPX-CSC	330	0	0	330	0	330
PJM-NEPTUNE	660	0	0	660	137	523
Spr-Dunw S (Y50 & Y49)	1200	N/A	N/A	1200	721	479
Con Ed-LIPA***	-300	N/A	N/A	-300	-327	27
Total	**2090**	**0**	**0**	**2090**	**531**	**1559**

**Data throughout this report reflects actual operating data from the identified time interval*
*** Controllable ties have a TRM of zero since they can be continuously and precisely controlled*
*** Wheel agreement between LIPA and Con Ed allows for up to 300MW to be wheeled through LIPA to Con Ed

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Summer Peak Load with Adjusted TTC for Controllable Ties Set to Zero^ - Long Island

Load 5,208 MW on 07/20/2015 16:15:00*

Interface Name	TTC	TRM**	CBM	Adjusted TTC	ATC	Scheduled
NPX-1385	200	0	0	200	0	200
NPX-CSC****	330	0	0	0	0	330
PJM-NEPTUNE****	660	0	0	0	0	523
Spr-Dunw S (Y50 & Y49)	1200	N/A	N/A	1200	721	479
Con Ed-LIPA***	-300	N/A	N/A	-300	-327	27
Total	**2090**	**0**	**0**	**1100**	**394**	**1559**

^See slide 5 for reference, Adjusted TTC and ATC are set zero for NPX-CSC and PJM-Neptune because the Advanced Reservations process is controlled by ISO-NE or PJM.

**Data throughout this report reflects actual operating data from the identified time interval*

*** Controllable ties have a TRM of zero since they can be continuously and precisely controlled*

*** Wheel agreement between LIPA and Con Ed allows for up to 300MW to be wheeled through LIPA to Con Ed

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Fall Peak Load - Long Island

Load 4,887 MW on 09/08/2015 16:18:00*

Interface Name	TTC	TRM**	CBM	Adjusted TTC	ATC	Scheduled
NPX-1385	200	0	0	200	95	105
NPX-CSC	330	0	0	330	0	330
PJM-NEPTUNE	660	0	0	660	0	660
Spr-Dunw S (Y50 & Y49)	1200	N/A	N/A	1200	150	1050
Con Ed-LIPA***	-300	N/A	N/A	-300	-16	-284
Total	**2090**	**0**	**0**	**2090**	**229**	**1861**

**Data throughout this report reflects actual operating data from the identified time interval*
*** Controllable ties have a TRM of zero since they can be continuously and precisely controlled*
*** Wheel agreement between LIPA and Con Ed allows for up to 300MW to be wheeled through LIPA to Con Ed

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Fall Peak Load with Adjusted TTC for Controllable Ties Set to Zero^ - Long Island

Load 4,887 MW on 09/08/2015 16:18:00*

Interface Name	TTC	TRM**	CBM	Adjusted TTC	ATC	Scheduled
NPX-1385	200	0	0	200	95	105
NPX-CSC****	330	0	0	0	0	330
PJM-NEPTUNE****	660	0	0	0	0	660
Spr-Dunw S (Y50 & Y49)	1200	N/A	N/A	1200	150	1050
Con Ed-LIPA***	-300	N/A	N/A	-300	-16	-284
Total	**2090**	**0**	**0**	**1100**	**229**	**1861**

^See slide 5 for reference, Adjusted TTC and ATC are set zero for NPX-CSC and PJM-Neptune because the Advanced Reservations process is controlled by ISO-NE or PJM.

**Data throughout this report reflects actual operating data from the identified time interval*

*** Controllable ties have a TRM of zero since they can be continuously and precisely controlled*

*** Wheel agreement between LIPA and Con Ed allows for up to 300MW to be wheeled through LIPA to Con Ed

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Summary- Long Island*

Interface Name	Winter Peak		Spring Peak		Summer Peak		Fall Peak	
	TTC	Scheduled	TTC	Scheduled	TTC	Scheduled	TTC	Scheduled
NPX-1385	200	105	200	200	200	200	200	105
NPX-CSC	0	0	330	330	330	330	330	330
PJM-NEPTUNE	660	425	660	277	660	523	660	660
Spr-Dunw S (Y50 & Y49)	1200	1048	1200	398	1200	479	1200	1050
Con Ed-LIPA	-300	-237	-300	-261	-300	27	-300	-284
Total	**1760**	**1341**	**2090**	**944**	**2090**	**1559**	**2090**	**1861**

**Data pulled from slides 21 through 24.*

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Winter Peak Load - NYC

Load 7,645 MW on 01/08/2015 17:40:00*

Interface Name	TTC	TRM**	CBM	Adjusted TTC	ATC	Scheduled
A-B-C	1000	0	0	1000	-19	1019
Linden VFT	315	0	0	315	25	290
PJM -HTP	660	0	0	660	355	305
Spr- Dunw S	4600	100	0	4500	1065	3435
Total	**6575**	**100**	**0**	**6475**	**1426**	**5049**

**Data throughout this report reflects actual operating data from the identified time interval*
*** Controllable ties have a TRM of zero since they can be continuously and precisely controlled*

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Winter Peak Load with Adjusted TTC for Controllable Ties Set to Zero^ - NYC

Load 7,645 MW on 01/08/2015 17:40:00*

Interface Name	TTC	TRM**	CBM	Adjusted TTC	ATC	Scheduled
A-B-C	1000	0	0	1000	-19	1019
Linden VFT***	315	0	0	0	0	290
PJM –HTP***	660	0	0	0	0	305
Spr- Dunw S	4600	100	0	4500	1065	3435
Total	**6575**	**100**	**0**	**5500**	**1046**	**5049**

^ See slide 5 for reference, Adjusted TTC and ATC are set zero for PJM-Linden VFT and PJM-HTP because the Advanced Reservations process is controlled by PJM.
**Data throughout this report reflects actual operating data from the identified time interval*
*** Controllable ties have a TRM of zero since they can be continuously and precisely controlled*

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Spring Peak Load – NYC

Load 8,563 MW on 05/28/2015 16:24:00*

Interface Name	TTC	TRM**	CBM	Adjusted TTC	ATC	Scheduled
A-B-C	1000	0	0	1000	173	827
Linden VFT	315	0	0	315	0	315
PJM –HTP	660	0	0	660	600	60
Spr-Dunw S	4350	100	0	4250	2380	1870
Total	**6325**	**100**	**0**	**6225**	**3153**	**3072**

**Data throughout this report reflects actual operating data from the identified time interval*
*** Controllable ties have a TRM of zero since they can be continuously and precisely controlled*

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Spring Peak Load with Adjusted TTC for Controllable Ties Set to Zero^ – NYC

Load 8,563 MW on 05/28/2015 16:24:00*

Interface Name	TTC	TRM**	CBM	Adjusted TTC	ATC	Scheduled
A-B-C	1000	0	0	1000	173	827
Linden VFT***	315	0	0	0	0	315
PJM –HTP***	660	0	0	0	0	60
Spr-Dunw S	4350	100	0	4250	2380	1870
Total	**6325**	**100**	**0**	**5250**	**2553**	**3072**

^See slide 5 for reference, Adjusted TTC and ATC are set zero for PJM-Linden VFT and PJM-HTP because the Advanced Reservations process is controlled by PJM.
**Data throughout this report reflects actual operating data from the identified time interval*
*** Controllable ties have a TRM of zero since they can be continuously and precisely controlled*

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Summer Peak Load - NYC

Load 10,635 MW on 07/20/2015 15:49:00*

Interface Name	TTC	TRM**	CBM	Adjusted TTC	ATC	Scheduled
A-B-C	1000	0	0	1000	80	920
Linden VFT	315	0	0	315	315	0
PJM –HTP	660	0	0	660	660	0
Spr-Dunw S	4350	100	0	4250	1512	2738
Total	**6325**	**100**	**0**	**6225**	**2567**	**3658**

**Data throughout this report reflects actual operating data from the identified time interval*

*** Controllable ties have a TRM of zero since they can be continuously and precisely controlled*

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Summer Peak Load with Adjusted TTC for Controllable Ties Set to Zero^ - NYC

Load 10,635 MW on 07/20/2015 15:49:00*

Interface Name	TTC	TRM**	CBM	Adjusted TTC	ATC	Scheduled
A-B-C	1000	0	0	1000	80	920
Linden VFT***	315	0	0	0	0	0
PJM –HTP***	660	0	0	0	0	0
Spr-Dunw S	4350	100	0	4250	1512	2738
Total	**6325**	**100**	**0**	**5250**	**1592**	**3658**

^See slide 5 for reference, Adjusted TTC and ATC are set zero for PJM-Linden VFT and PJM-HTP because the Advanced Reservations process is controlled by PJM.
**Data throughout this report reflects actual operating data from the identified time interval*
*** Controllable ties have a TRM of zero since they can be continuously and precisely controlled*

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Fall Peak Load - NYC*

Load 10,410 MW on 09/08/2015 16:26:00

Interface Name	TTC	TRM**	CBM	Adjusted TTC	ATC	Scheduled
A-B-C	1000	0	0	1000	-101	1101
Linden VFT	315	0	0	315	315	0
PJM –HTP	660	0	0	660	600	60
Spr-Dunw S	4350	100	0	4250	2205	2987
Total	**6325**	**100**	**0**	**6225**	**3019**	**4148**

**Data throughout this report reflects actual operating data from the identified time interval*

*** Controllable ties have a TRM of zero since they can be continuously and precisely controlled*

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Fall Peak Load with Adjusted TTC for Controllable Ties Set to Zero^ - NYC*

Load 10,410 MW on 09/08/2015 16:26:00

Interface Name	TTC	TRM**	CBM	Adjusted TTC	ATC	Scheduled
A-B-C	1000	0	0	1000	-101	1101
Linden VFT***	315	0	0	0	0	0
PJM –HTP***	660	0	0	0	0	60
Spr-Dunw S	4350	100	0	4250	2205	2987
Total	**6325**	**100**	**0**	**5250**	**2104**	**4148**

^See slide 5 for reference, Adjusted TTC and ATC are set zero for PJM-Linden VFT and PJM-HTP because the Advanced Reservations process is controlled by PJM.
**Data throughout this report reflects actual operating data from the identified time interval*
*** Controllable ties have a TRM of zero since they can be continuously and precisely controlled*

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Summary- NYC*

Interface Name	Winter Peak		Spring Peak		Summer Peak		Fall Peak	
	TTC	Scheduled	TTC	Scheduled	TTC	Scheduled	TTC	Scheduled
A-B-C	1000	1019	1000	827	1000	920	1000	1101
Linden VFT	315	290	315	315	315	0	315	0
PJM –HTP	660	305	660	60	660	0	660	60
Spr-Dunw S	4600	3435	4350	1870	4350	2738	4350	2987
Total	**6575**	**5049**	**6325**	**3072**	**6325**	**3658**	**6325**	**4148**

**Data pulled from slides 26 through 29.*

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Comparison with 2012 SIL report

Winter				
Peak Load (MW)	**2012**		**2015**	
	24,137		24,893	
Interface Name	**2012**		**2015**	
	TTC	**Scheduled**	**TTC**	**Scheduled**
HQ-CEDARS	199	0	199	0
HQ-NYISO	1200	528	1310	110
IMO-NYISO	2000	502	1900	1402
ISONE-NYISO	1300	0	1400	0
NPX-1385	200	200	200	105
NPX-CSC	340	330	0	0
PJM-NEPTUNE	660	660	660	425
PJM-NYISO	2700	776	2450	1526
PJM-LINDEN VFT	300	75	315	290
PJM-HTP	N/A	N/A	660	260
Total	**8899**	**3071**	**9094**	**4118**

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Comparison with 2012 SIL report

Spring				
Peak Load (MW)	**2012**		**2015**	
	28,470		24,418	
Interface Name	**2012**		**2015**	
	TTC	**Scheduled**	**TTC**	**Scheduled**
HQ-CEDARS	80	80	95	0
HQ-NYISO	1200	1199	1310	1182
IMO-NYISO	1900	1600	1500	1200
ISONE-NYISO	1500	1127	1150	182
NPX-1385	200	187	200	200
NPX-CSC	330	330	330	0
PJM-NEPTUNE	0	0	660	660
PJM-NYISO	2650	1716	2200	723
PJM-LINDEN VFT	300	100	315	0
PJM-HTP	N/A	N/A	660	0
Total	**8160**	**6339**	**8420**	**4147**

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Comparison with 2012 SIL report

Summer				
Peak Load (MW)	2012		2015	
	32,587		31,266	
Interface Name	2012		2015	
	TTC	Scheduled	TTC	Scheduled
HQ-CEDARS	190	190	190	130
HQ-NYISO	1200	1200	1310	1310
IMO-NYISO	1900	234	1900	464
ISONE-NYISO	1500	100	1400	360
NPX-1385	200	200	200	45
NPX-CSC	330	330	330	330
PJM-NEPTUNE	0	0	660	660
PJM-NYISO	3000	50	2300	387
PJM-LINDEN VFT	300	0	315	0
PJM-HTP	N/A	N/A	660	0
Total	**8620**	**2304**	**9265**	**3686**

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Comparison with 2012 SIL report

Fall				
Peak Load (MW)	2012		2015	
	28,296		31,179	
Interface Name	2012		2015	
	TTC	Scheduled	TTC	Scheduled
HQ-CEDARS	190	0	130	80
HQ-NYISO	1200	1200	1310	1266
IMO-NYISO	1650	592	1900	835
ISONE-NYISO	1400	419	1400	0
NPX-1385	200	175	200	105
NPX-CSC	330	330	330	330
PJM-NEPTUNE	660	375	660	660
PJM-NYISO	3000	50	2300	816
PJM-LINDEN VFT	300	0	315	0
PJM-HTP	N/A	N/A	660	60
Total	**8930**	**3141**	**9205**	**4152**

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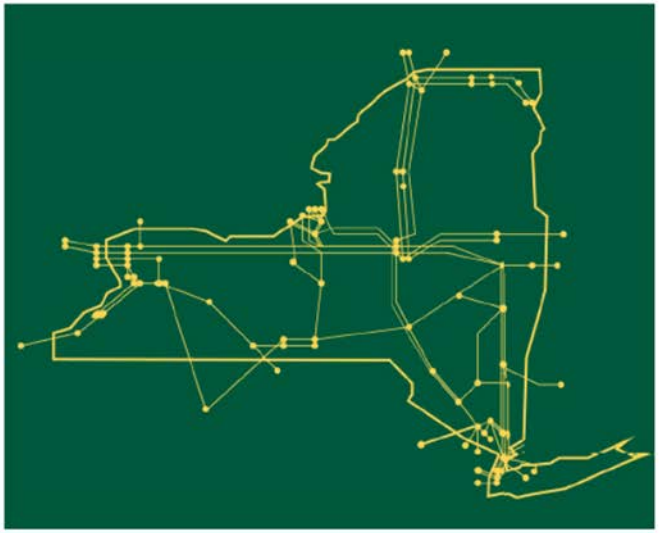
The New York Independent System Operator (NYISO) is a not-for-profit corporation responsible for operating the state's bulk electricity grid, administering New York's competitive wholesale electricity markets, conducting comprehensive long-term planning for the state's electric power system, and advancing the technological infrastructure of the electric system serving the Empire State.



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UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

New York Independent System Operator, Inc.	**)**	**Docket No. AD10-2-008**

Affidavit of Allen Hargrave

1. My name is Allen Hargrave. My business address is 10 Krey Boulevard, Rensselaer, NY 12144. I serve as the Senior Manager of Energy Market Operations for the New York Independent System Operator, Inc.'s ("NYISO's"). I have served as the Manager/Senior Manager of Energy Market Operations since 2007.

2. As the NYISO's Senior Manager of Energy Market Operations, I am responsible for overseeing the NYISO's calculations of Total Transfer Capability, Transmission Reliability Margin, and Available Transfer Capability for External Interfaces and Scheduled Lines.

3. The purpose of my affidavit is to describe how the NYISO develops Total Transfer Capability ("TTC") values, Transmission Reliability Margin ("TRM") values, and Available Transfer Capability ("ATC") values for External Interfaces and Scheduled Lines. My affidavit also describes how the NYISO accounts for simultaneity of transfers in the TRM value calculations.

Total Transfer Capability

4. The NYISO develops TTC values for each External Interface and Scheduled Line in conformance with all applicable requirements of NERC MOD-001-1a and MOD-029-2a. External Interfaces may be represented by one or more Proxy Generator Buses for scheduling and dispatching purposes. Each Proxy Generator Bus associated with an External Interface may be associated with distinct, posted TTC values. Each Scheduled Line is associated with a distinct Proxy Bus for which the ISO separately posts a TTC value.

5. The TTC value for each External Interface and Scheduled Line represents the maximum amount of electric power that can be reliably transferred over the New York State Transmission System.

6. When calculating TTC values, the NYISO uses assumptions that are similar to, and not more limiting than, those used in the planning of operations for the corresponding time period studied.

7. The normal maximum External Interface and Scheduled Line TTC values correspond to TTC assessments that assume: (1) all significant Bulk Power System transmission facilities are in service, (2) Capability Period forecast peak-load conditions, (3) no significant generation outages with generation output levels consistent with typical operation for Capability Period forecast peak-load conditions, and (4) coordination with neighboring Control Area transfer capability assessments.

Transmission Reliability Margin

8. The NYISO's TRM is the amount of transmission transfer capability necessary to ensure that the interconnected transmission network remains secure under a reasonable range of system conditions. TRM accounts for the inherent uncertainty in system conditions and the need for operating flexibility to ensure reliable system operation as system conditions change.

9. The NYISO calculates TRM in accordance with Section 9.6 of its Open Access Transmission Tariff ("OATT") and maintains a TRM Implementation Document ("TRMID") in compliance with the requirements of MOD-008-1.

10. A TRM value is determined for each External Interface and Scheduled Line to address unexpected system conditions.

11. The TRM used for External Interfaces for the Day-Ahead Market and the Real-Time Market addresses unexpected system conditions and is equal to the sum of the following components: (1) uncertainty in unscheduled loop or parallel flows ranging in value from zero (0) to five hundred (500) MW based on the greater of the average of the last three months of historical parallel flows observed for each External Interface or the average of the deviation in parallel flows observed over the last three months for each External Interface, (2) load forecast uncertainty, normally of value zero (0) MW, and (3) uncertainty in external system conditions, normally of value zero (0) MW.

12. The TRM used for Scheduled Lines for the Day-Ahead Market and the Real-Time Market is normally equal to the sum of the following components, which ordinarily have a combined value of zero (0) MW: (1) unscheduled loop or parallel flows ranging based on the average of the last three months of historical parallel flows observed for each associated External Proxy Generator Bus, normally of value zero (0) MW, (2) load forecast uncertainty, normally of value zero (0) MW, and (3) uncertainty in external system conditions, normally of value zero (0) MW.

13. The TRM values for Scheduled Lines are normally set to zero (0) MW because the controllable nature of Scheduled Lines reduces or eliminates the uncertainty that could arise from simultaneous path interactions, such as unscheduled loop or parallel flows, or from the other conditions identified above.

14. Non-zero TRM values are then used to decrement TTC from External Interfaces when calculating ATC.

15. NYISO's TRM values account for simultaneous path interactions by including historical unscheduled loop flows, parallel flows or average deviation in parallel flows.

16. Unscheduled loop flows and parallel flows are the only impacts NYISO observes from simultaneous path interactions. Therefore, the NYISO does not separately account for additional simultaneity in its TRM calculations.

17. The specific TTC and TRM values used for each External Interface and Scheduled Line are included in the NYISO's 2015 Simultaneous Import Limit Determination report.

Available Transfer Capability

18. The NYISO uses a "financial reservation" model based on Locational Based Marginal Prices rather than a "physical reservation" model contemplated by Order Nos. 888 and 890.[1] Therefore, ATC has a different meaning under the NYISO system, and is calculated differently, than in other systems. ATC calculations are based substantially on "Transmission Flow Utilization," a value that reflects the actual usage of the NYISO's interfaces as calculated by its resource commitment and scheduling software. The methodology used by the NYISO is a variation on the Rated System Path Method reflected in MOD-029-02a.

19. Transmission service within the NYISO is scheduled "implicitly" when customers submit spot market energy schedules or arrange for bilateral transactions. There are no express reservations of physical transmission service within the NYISO control area, and customers may schedule transactions between any two points so long as doing so is not inconsistent with a security-constrained economic dispatch. All desired uses of the transmission system are scheduled to the extent that customers are willing to pay congestion charges (which can be hedged using financial rights).

[1] *See New York Independent System Operator, Inc.*, Compliance Filing to Revise Attachment C to the NYISO OATT, Docket No. ER11-2048 (November 8, 2010); and *New York Independent System Operator, Inc., Letter Order,* Docket No. ER11-2048 (June 6, 2011).

20. NYISO customers' ability to schedule transactions is, with certain limited exceptions,[2] not limited by a pre-defined amount of ATC as under the *pro forma* OATT. Instead, the entire capacity of the New York State Transmission System is made available prior to the start of each Day-Ahead Market cycle. ATC is calculated and posted based on the transactions scheduled in the Day-Ahead Market.

21. If a posted ATC value is zero, that value indicates that an interface is congested and that additional transmission capacity would not be available in the Real-Time Market absent redispatch. It may still be possible, however, for the NYISO to schedule additional transactions for customers that are willing to pay congestion charges.[3]

22. The information conveyed by NYISO ATC postings is different from the information conveyed by such postings in physical reservation regimes. As the Commission has recognized, the NYISO's ATC postings are really advisory "projections."[4] ATC within the NYISO represents the transmission capacity that is left over after all scheduled transactions have been accommodated.

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[2] The NYISO supports "Advance Reservations" on specific designated controllable "Scheduled Lines" between the NYISO and certain neighboring entities. Scheduled Lines, listed in the NYISO's 2015 Simultaneous Import Limit Determination report, allow for Advanced Reservations on a basis that would be limited by a pre-defined amount of ATC.

[3] *See, e.g., Request for Limited OASIS Waivers*, Docket EL99-77-000 at 5-6 (July 9, 1999).

[4] *See Central Hudson Gas & Electric Corp., et al.*, 88 FERC ¶ 61,253 at 61,803 (1999).

23. In other words, "ATC is used only as an instantaneous indication of the existence of uncongested transmission paths and not as a determinant as to whether additional requests for transmission service can be satisfied."[5]

24. The different nature of ATC in the NYISO's system is reflected in a number of waivers from the Commission's OASIS posting regulations,[6] and from related North American Energy Standards Board ("NAESB") standards,[7] that the NYISO has obtained since its inception in 1999.

25. These differences were also reflected in the NYISO's Order No. 890 compliance filings, which revised the NYISO OATT's Attachment C to more accurately describe the NYISO's existing methodology for calculating ATC. The actual usage of the NYISO's transmission system is determined through the continuous security-constrained economic dispatching performed by the NYISO's market software. The output of these market software systems is represented in the NYISO's ATC calculations through a "Transmission Flow Utilization" variable. The NYISO's Attachment C revisions,

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[5] *Request for Limited OASIS Waivers,* Docket EL99-77-000 at 5-6 (July 9, 1999).

[6] *See, e.g., Central Hudson Gas & Electric Corp.*, 88 FERC ¶ 61,253 (1999) ("1999 Waiver Order"); *New York Independent System Operator, Inc.*, 94 FERC ¶ 61,215 at 61,794 (2001) ("2001 Waiver Order").

[7] *See New York Independent System Operator, Inc.*, 127 FERC ¶ 61,005 at P 7 (2009) (granting the NYISO's request for waiver of certain OASIS-related North American Energy Standards Board ("NAESB") Wholesale Electric Quadrant ("WEQ") standards adopted in Order No. 676-C governing resales and transfers of traditional Point-to-Point transmission reservations); *New York Independent System Operator, Inc.*, 125 FERC ¶ 61,275 at P 15 (2008) (granting NYISO's request for waiver of various WEQ OASIS standards that had been modified by Order No. 676-C, and from which the NYISO had previously been granted waiver); *New York Independent System Operator, Inc.*, 117 FERC ¶ 61,197 at PP 15-17 (2006) (granting the NYISO's request for waiver of certain WEQ OASIS standards); *New York Independent System Operator, Inc.*, 133 FERC ¶ 61,246 at P 25 (2010) (granting the NYISO's request for waiver of certain WEQ business practice standards, principally because of the fact that NYISO does not have physical reservations).

including the provisions specifically providing for the use of Transmission Flow Utilization, were accepted by the Commission in 2008.[8]

26. The Commission accepted a NERC interpretation of MOD-029 that the NYISO had sought in order to clarify that its financial reservation model was compatible with MOD-029's requirements.[9] This order confirmed that the NYISO's incorporation of Transmission Flow Utilization into its ATC calculations was consistent with the approved MOD-029 calculation methodology.

27. This concludes my affidavit.

Dated: June 19, 2017

[8] *See New York Independent System Operator, Inc.* 123 FERC ¶ 61,134 (2008); *New York Independent System Operator, Inc., Letter Order,* Docket No. OA08-13-003 (November 12, 2008).

[9] *North American Electric Reliability Corp*., 132 FERC ¶ 61,239 (2010).

ATTESTATION

I am the witness identified in the foregoing Affidavit of Allen Hargrave dated June 19, 2017 (the "Affidavit"). I have read the Affidavit and am familiar with its contents. The facts set forth therein are true to the best of my knowledge, information, and belief.

Allen Hargrave

June 19, 2017

Subscribed and sworn to before me

this 19th day of June, 2017

Thomasine DeShaw

Thomasine DeShaw
Notary Public

THOMASINE DeSHAW
NOTARY PUBLIC-STATE OF NEW YORK
No. 01DE4513447
Qualified in Rensselaer County
My Commission Expires May 31, 19

My commission expires: 5/31/19