

December 20, 2022

#### By Electronic Delivery

Hon. 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.

#### Dear Secretary Bose:

In accordance with Commission Order No. 697<sup>1</sup> and Commission staff direction, the New York Independent System Operator, Inc. ("NYISO") respectfully submits, for informational purposes, the attached presentation titled "2021 Simultaneous Import Limit Determination." 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 2021, along with the methodology used in developing these limit levels. A draft of this presentation was provided to the New York Transmission Owners to support their filing obligations.

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, Senior Attorney
New York Independent System Operator, Inc.
10 Krey Blvd.
Rensselaer, New York 12144
(518) 356-6000

<sup>&</sup>lt;sup>1</sup> 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).

Honorable Kimberly D. Bose December 20, 2022 Page 2

cc: Janel Burdick

Matthew Christiansen

Robert Fares

Jignasa Gadani

Jette Gebhart

Leanne Khammal

Jaime Knepper

Kurt Longo

David Morenoff

Douglas Roe

Eric Vandenberg

Gary Will

Adria Woods

#### **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 20<sup>th</sup> day of December 2022.

/s/ Mitchell W. Lucas

Mitchell W. Lucas New York Independent System Operator, Inc. 10 Krey Blvd. Rensselaer, NY 12144 (518) 356-6242



## 2021 Simultaneous Import Limit Determination

**Adam Hargrave** 

ENGINEER, OPERATIONS ENGINEERING

**System Operations Advisory Subcommittee** 

November 9th, 2022

# Study Approach and Data Sources



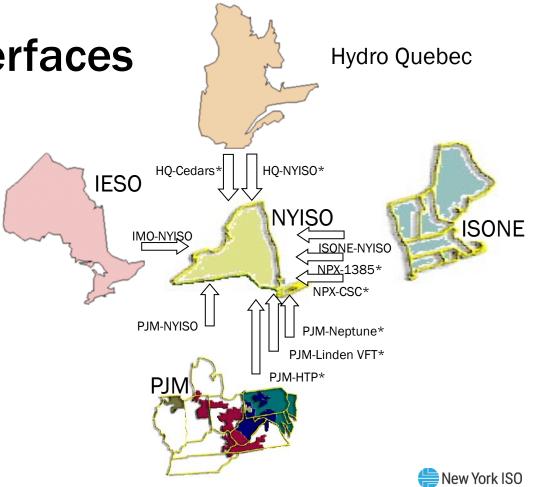
## **Data Utilized for SIL Study**

- Four seasonal historic total NYISO Simultaneous Import Limit (SIL) values for the period of Winter 2020-2021 through Fall 2021
- 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



## **Posted OASIS Interfaces**

- Neighboring BAs are electrically non-contiguous
- Interface names listed are the OASIS identifiers
- Interfaces identified with a \* are controlled interfaces



## 2021 NYISO Simultaneous Import Limits, Adjusted TTC for Controllable Ties Included

2020-2021 Season	NYISO Simultaneous Import Limits	NYISO System Peak Loads
Winter 2020-2021	8,214 MW	22,727 MW
Spring 2021	6,505 MW	22,795 MW
Summer 2021	8,115 MW	30,987 MW
Fall 2021	7,855 MW	24,636 MW

Simultaneous import limit (SIL) values provided are consistent with the TTCs employed in operating the transmission system and posting availability on OASIS during the seasonal peak load periods of 2020-2021.



## 2021 NYISO Simultaneous Import Limits, Adjusted TTC for Controllable Ties Set to Zero\*

2020-2021 Season	NYISO Simultaneous Import Limits	NYISO System Peak Loads
Winter 2020-2021	6,909 MW	22,727 MW
Spring 2021	5,200 MW	22,795 MW
Summer 2021	6,150 MW	30,987 MW
Fall 2021	5,890 MW	24,636 MW

<sup>\*</sup>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 13, 15, 17, and 19.



## **Approach**

#### In accordance with FERC Order 697:

- NYISO accounts for simultaneity in determining the SIL
- The TTC values employed are those used in operating the transmission system and posting 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



## **Approach**

#### 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/HAM markets.
  - Long-term financial scheduling is not available; all scheduling is conducted in the DAM/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



## Required Evidence w/r/t TTCs

#### The TTC values employed:

- Account for simultaneity through the application of significant (400-500 MW)
   Transmission Reliability Margins (TRMs) applied to first-tier areas where transfers to NYISO would result in loop flow through other first-tier entities.
- 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



## **Data Sources**

 NYISO website posting of TTC and ATC: http://mis.nyiso.com/public/P-8list.htm

NYISO website posting of TRM and CBM:

https://www.nyiso.com/documents/20142/2268529/margin\_with\_external\_trm.pdf/aac12007-c39e-fff3-3e75-ccb584453a35

NYISO website posting of load:

http://mis.nyiso.com/public/P-58Clist.htm



## Study Results: NYCA



#### Winter 2020-2021 Peak Load

#### Adjusted TTC for Controllable Ties Included

Load 22,727 MW on 01/29/2021 17:52:00\*

Interface Name	πο	TRM**	СВМ	Adjusted TTC	ATC	Scheduled
HQ-CEDARS	199	0	0	199	199	0
HQ-NYISO	1310	0	0	1310	74	1236
IMO-NYISO	2050	300	0	1750	380	1370
ISONE-NYISO	1400	200	0	1200	1200	0
NPX-1385	200	0	0	200	0	200
NPX-CSC^	330	0	0	330	330	0
PJM-NEPTUNE^	0	0	0	0	0	0
PJM-NYISO	2550	300	0	2250	223	2027
PJM-LINDEN VFT^	315	0	0	315	0	315
PJM-HTP^	660	0	0	660	160	500
TOTAL	9014	800	0	8214	2566	5648

<sup>\*</sup>Data throughout this report reflects actual operating data from the identified time interval



<sup>\*\*</sup>Controllable ties have a TRM of zero since they can be continuously and precisely controlled

#### Winter 2020-2021 Peak Load

Adjusted TTC for Controllable Ties at Zero<sup>^</sup>

Load 22,727 MW on 01/29/2021 17:52:00\*

Interface Name	тс	TRM**	СВМ	Adjusted TTC	ATC	Scheduled
HQ-CEDARS	199	0	0	199	199	0
HQ-NYISO	1310	0	0	1310	74	1236
IMO-NYISO	2050	300	0	1750	380	1370
ISONE-NYISO	1400	200	0	1200	1200	0
NPX-1385	200	0	0	200	0	200
NPX-CSC^	330	0	0	0	0	330
PJM-NEPTUNE^	0	0	0	0	0	0
PJM-NYISO	2550	300	0	2250	223	2027
PJM-LINDEN VFT^	315	0	0	0	0	315
PJM-HTP^	660	0	0	0	0	660
TOTAL	9014	800	0	6909	2076	6138

<sup>^</sup> See slide 6 for reference. Adjusted TTC and ATC are set to zero for NPX-CSC, PJM-NEPTUNE, PJM-LINDEN VFT, and PJM-HTP because the Advanced Reservations process is controlled by ISO-NE or PJM.



<sup>\*</sup>Data throughout this report reflects actual operating data from the identified time interval

<sup>\*\*</sup>Controllable ties have a TRM of zero since they can be continuously and precisely controlled

### **Spring 2021 Peak Load**

**Adjusted TTC for Controllable Ties Included** 

Load 22,795 MW on 05/26/2021 16:51:00\*

Interface Name	ттс	TRM**	СВМ	Adjusted TTC	ATC	Scheduled
HQ-CEDARS	190	0	0	190	110	80
HQ-NYISO	1310	0	0	1310	362	948
IMO-NYISO	900	300	0	600	320	280
ISONE-NYISO	1400	200	0	1200	854	346
NPX-1385	200	0	0	200	115	85
NPX-CSC^	330	0	0	330	0	330
PJM-NEPTUNE^	0	0	0	0	0	0
PJM-NYISO	2000	300	0	1700	1686	14
PJM-LINDEN VFT^	315	0	0	315	140	175
PJM-HTP^	660	0	0	660	660	0
TOTAL	7305	800	0	6505	4247	2258

<sup>\*</sup>Data throughout this report reflects actual operating data from the identified time interval



<sup>\*\*</sup>Controllable ties have a TRM of zero since they can be continuously and precisely controlled

### Spring 2021 Peak Load

Adjusted TTC for Controllable Ties at Zero<sup>^</sup>

Load 22,795 MW on 05/26/2021 16:51:00\*

Interface Name	ттс	TRM**	СВМ	Adjusted TTC	ATC	Scheduled
HQ-CEDARS	190	0	0	190	110	80
HQ-NYISO	1310	0	0	1310	362	948
IMO-NYISO	900	300	0	600	320	280
ISONE-NYISO	1400	200	0	1200	854	346
NPX-1385	200	0	0	200	115	85
NPX-CSC^	330	0	0	0	0	330
PJM-NEPTUNE^	0	0	0	0	0	0
PJM-NYISO	2000	300	0	1700	1686	14
PJM-LINDEN VFT^	315	0	0	0	0	315
PJM-HTP^	660	0	0	0	0	660
TOTAL	7305	800	0	5200	3447	3058

<sup>^</sup> See slide 6 for reference. Adjusted TTC and ATC are set to zero for NPX-CSC, PJM-NEPTUNE, PJM-LINDEN VFT, and PJM-HTP because the Advanced Reservations process is controlled by ISO-NE or PJM.



<sup>\*</sup>Data throughout this report reflects actual operating data from the identified time interval

<sup>\*\*</sup>Controllable ties have a TRM of zero since they can be continuously and precisely controlled

#### **Summer 2021 Peak Load**

#### Adjusted TTC for Controllable Ties Included

Load 30,987 MW on 06/29/2021 17:28:00\*

Interface Name	πο	TRM**	СВМ	Adjusted TTC	ATC	Scheduled
HQ-CEDARS	140	0	0	140	0	140
HQ-NYISO	1310	0	0	1310	64	1246
IMO-NYISO	1900	300	0	1600	755	845
ISONE-NYISO	1400	200	0	1200	1200	0
NPX-1385	200	0	0	200	200	0
NPX-CSC^	330	0	0	330	0	330
PJM-NEPTUNE^	660	0	0	660	285	375
PJM-NYISO	2000	300	0	1700	655	1045
PJM-LINDEN VFT^	315	0	0	315	300	15
PJM-HTP^	660	0	0	660	410	250
TOTAL	8915	800	0	8115	3869	4246

<sup>\*</sup>Data throughout this report reflects actual operating data from the identified time interval



<sup>\*\*</sup>Controllable ties have a TRM of zero since they can be continuously and precisely controlled

#### Summer 2021 Peak Load

Adjusted TTC for Controllable Ties at Zero<sup>^</sup>

Load 30,987 MW on 06/29/2021 17:28:00\*

Interface Name	тс	TRM**	СВМ	Adjusted TTC	ATC	Scheduled
HQ-CEDARS	140	0	0	140	0	140
HQ-NYISO	1310	0	0	1310	64	1246
IMO-NYISO	1900	300	0	1600	755	845
ISONE-NYISO	1400	200	0	1200	1200	0
NPX-1385	200	0	0	200	200	0
NPX-CSC^	330	0	0	0	0	330
PJM-NEPTUNE^	660	0	0	0	0	660
PJM-NYISO	2000	300	0	1700	655	1045
PJM-LINDEN VFT^	315	0	0	0	0	315
PJM-HTP^	660	0	0	0	0	660
TOTAL	8915	800	0	6150	2874	5241

<sup>^</sup> See slide 6 for reference. Adjusted TTC and ATC are set to zero for NPX-CSC, PJM-NEPTUNE, PJM-LINDEN VFT, and PJM-HTP because the Advanced Reservations process is controlled by ISO-NE or PJM.



<sup>\*</sup>Data throughout this report reflects actual operating data from the identified time interval

<sup>\*\*</sup>Controllable ties have a TRM of zero since they can be continuously and precisely controlled

#### Fall 2021 Peak Load

#### **Adjusted TTC for Controllable Ties Included**

Load 24,636 MW on 09/15/2021 16:53:00\*

Interface Name	πο	TRM**	СВМ	Adjusted TTC	ATC	Scheduled
HQ-CEDARS	80	0	0	80	2	78
HQ-NYISO	1310	0	0	1310	166	1144
IMO-NYISO	1700	300	0	1400	874	526
ISONE-NYISO	1400	200	0	1200	1200	0
NPX-1385	200	0	0	200	0	200
NPX-CSC^	330	0	0	330	0	330
PJM-NEPTUNE^	660	0	0	660	285	375
PJM-NYISO	2000	300	0	1700	906	794
PJM-LINDEN VFT^	315	0	0	315	0	315
PJM-HTP^	660	0	0	660	175	485
TOTAL	8655	800	0	7855	3608	4247

<sup>\*</sup>Data throughout this report reflects actual operating data from the identified time interval



<sup>\*\*</sup>Controllable ties have a TRM of zero since they can be continuously and precisely controlled

#### Fall 2021 Peak Load

Adjusted TTC for Controllable Ties at Zero<sup>^</sup>

Load 24,636 MW on 09/15/2021 16:53:00\*

Interface Name	ттс	TRM**	СВМ	Adjusted TTC	ATC	Scheduled
HQ-CEDARS	80	0	0	80	2	78
HQ-NYISO	1310	0	0	1310	166	1144
IMO-NYISO	1700	300	0	1400	874	526
ISONE-NYISO	1400	200	0	1200	1200	0
NPX-1385	200	0	0	200	0	200
NPX-CSC^	330	0	0	0	0	330
PJM-NEPTUNE^	660	0	0	0	0	660
PJM-NYISO	2000	300	0	1700	906	794
PJM-LINDEN VFT^	315	0	0	0	0	315
PJM-HTP^	660	0	0	0	0	660
TOTAL	8655	800	0	5890	3148	4707

<sup>^</sup> See slide 6 for reference. Adjusted TTC and ATC are set to zero for NPX-CSC, PJM-NEPTUNE, PJM-LINDEN VFT, and PJM-HTP because the Advanced Reservations process is controlled by ISO-NE or PJM.



<sup>\*</sup>Data throughout this report reflects actual operating data from the identified time interval

<sup>\*\*</sup>Controllable ties have a TRM of zero since they can be continuously and precisely controlled

## **Seasonal Comparison**

Dealth and AMA	Winter 2020-2021		Spring	2021	Summe	er 2021	r 2021 Fall 2021	
Peak Load (MW)	227	727	227	795	309	987	24636	
Interface Name	TTC	Scheduled	TTC	Scheduled	ттс	Scheduled	ттс	Scheduled
HQ-CEDARS	199	0	190	80	140	140	80	78
HQ-NYISO	1310	1236	1310	948	1310	1246	1310	1144
IMO-NYISO	2050	1370	900	280	1900	845	1700	526
ISONE-NYISO	1400	0	1400	346	1400	0	1400	0
NPX-1385	200	200	200	85	200	0	200	200
NPX-CSC	330	0	330	330	330	330	330	330
PJM-NEPTUNE	0	0	0	0	660	375	660	375
PJM-NYISO	2550	2027	2000	14	2000	1045	2000	794
PJM-LINDEN VFT	315	315	315	175	315	15	315	315
PJM-HTP	660	500	660	0	660	250	660	485
TOTAL	9014	5648	7305	2258	8915	4246	8655	4247

<sup>\*</sup> Data pulled from slides 12, 14, 16, and 18.



## 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.



## 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.
- Scheduled Lines 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.



## **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.



## **Controllable Ties (Scheduled Lines)**

- 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 13, 15, 17, and 19, the NYISO provides zero Adjusted TTC values and zero ATC values for controllable ties pursuant to Paragraph 177 of FERC Order 816.



## 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<sup>[368]</sup> must represent more than interface constraints at the balancing authority area border and must reflect all transmission limitations within first-tier areas.

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



## Approach -

## **Commission Determination**, Order No. 697 pt. 364

- 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.



# Study Results: Sub-Markets



## **Sub-Markets**

- The NYC and Long Island sub-markets are only addressed in the NYISO-Administered Installed Capacity Market.
- The NYISO-Administered energy markets do not address sub-markets and TTCs and ATCs are neither calculated, monitored, nor posted for the NYC and Long Island areas.

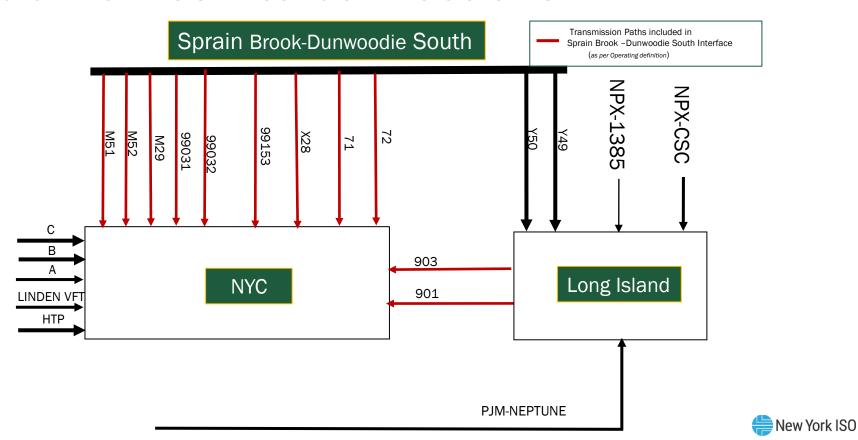


## **Equivalent SIL for Sub-Markets**

- 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 an ATC.



## **Sub-Market Interconnections**



### Winter 2020-2021 Long Island Peak Load

Adjusted TTC for Controllable Ties Included

Load 3,183 MW on 12/16/2020 17:57:00\*

Interface Name	πο	TRM**	СВМ	Adjusted TTC	ATC	Scheduled
NPX-1385	200	0	0	200	120	80
NPX-CSC^	0	0	0	0	0	0
PJM-NEPTUNE^	660	0	0	660	285	375
Spr-Dunw S	4600	2552	0	2048	1039	1009
ConEd-LIPA***	-300	N/A	N/A	-300	-21	-279
TOTAL	5160	2552	0	2608	1423	1185

<sup>\*</sup> Data throughout this report reflects actual operating data from the identified time interval.



<sup>\*\*</sup>Controllable ties have a TRM of zero since they can be continuously and precisely controlled.

<sup>\*\*\*</sup>CONED-LIPA interface has a TTC of -300 due to the wheel agreement between the two entities.

#### Winter 2020-2021 Long Island Peak Load

Adjusted TTC for Controllable Ties at Zero<sup>^</sup>

Load 3,183 MW on 12/16/2020 17:57:00\*

Interface Name	πc	TRM**	СВМ	Adjusted TTC	ATC	Scheduled
NPX-1385	200	0	0	200	120	80
NPX-CSC^	0	0	0	0	0	0
PJM-NEPTUNE^	660	0	0	0	0	660
Spr-Dunw S	4600	2552	0	2048	1039	1009
ConEd-LIPA***	-300	N/A	N/A	-300	-21	-279
TOTAL	5160	2552	0	1948	1138	1470

<sup>^</sup> See slide 6 for reference. Adjusted TTC and ATC are set to zero for NPX-CSC and PJM-NEPTUNE because the Advanced Reservations process is controlled by ISO-NE or PJM.



<sup>\*</sup> Data throughout this report reflects actual operating data from the identified time interval.

<sup>\*\*</sup>Controllable ties have a TRM of zero since they can be continuously and precisely controlled.

<sup>\*\*\*</sup>CONED-LIPA interface has a TTC of -300 due to the wheel agreement between the two entities.

### **Spring 2021 Long Island Peak Load**

Adjusted TTC for Controllable Ties Included

Load 3,755 MW on 05/23/2021 17:22:00\*

Interface Name	πο	TRM**	СВМ	Adjusted TTC	ATC	Scheduled
NPX-1385	0	0	0	0	0	0
NPX-CSC^	330	0	0	330	0	330
PJM-NEPTUNE^	660	0	0	660	285	375
Spr-Dunw S	4600	100	0	4500	2239	2261
ConEd-LIPA***	-300	N/A	N/A	-300	-18	-282
TOTAL	5290	100	0	5190	2506	2684

<sup>\*</sup> Data throughout this report reflects actual operating data from the identified time interval.



<sup>\*\*</sup>Controllable ties have a TRM of zero since they can be continuously and precisely controlled.

<sup>\*\*\*</sup>CONED-LIPA interface has a TTC of -300 due to the wheel agreement between the two entities.

#### Spring 2021 Long Island Peak Load

Adjusted TTC for Controllable Ties at Zero<sup>^</sup>

Load 3,755 MW on 05/23/2021 17:22:00\*

Interface Name	πτ	TRM**	СВМ	Adjusted TTC	ATC	Scheduled
NPX-1385	0	0	0	0	0	0
NPX-CSC^	330	0	0	0	0	330
PJM-NEPTUNE^	660	0	0	0	0	660
Spr-Dunw S	4600	100	0	4500	2239	2261
ConEd-LIPA***	-300	N/A	N/A	-300	-18	-282
TOTAL	5290	100	0	4200	2221	2969

<sup>^</sup> See slide 6 for reference. Adjusted TTC and ATC are set to zero for NPX-CSC and PJM-NEPTUNE because the Advanced Reservations process is controlled by ISO-NE or PJM.



<sup>\*</sup> Data throughout this report reflects actual operating data from the identified time interval.

<sup>\*\*</sup>Controllable ties have a TRM of zero since they can be continuously and precisely controlled.

<sup>\*\*\*</sup>CONED-LIPA interface has a TTC of -300 due to the wheel agreement between the two entities.

#### Summer 2021 Long Island Peak Load

Adjusted TTC for Controllable Ties Included

Load 5,245 MW on 08/27/2021 16:27:00\*

Interface Name	πο	TRM**	СВМ	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	285	375
Spr-Dunw S	4600	100	0	4500	1106	3394
ConEd-LIPA***	-300	N/A	N/A	-300	-369	69
TOTAL	5490	100	0	5390	1022	4368

<sup>\*</sup> Data throughout this report reflects actual operating data from the identified time interval.



<sup>\*\*</sup>Controllable ties have a TRM of zero since they can be continuously and precisely controlled.

<sup>\*\*\*</sup>CONED-LIPA interface has a TTC of -300 due to the wheel agreement between the two entities.

#### Summer 2021 Long Island Peak Load

Adjusted TTC for Controllable Ties at Zero<sup>^</sup>

Load 5,245 MW on 08/27/2021 16:27:00\*

Interface Name	тс	TRM**	СВМ	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	660
Spr-Dunw S	4600	100	0	4500	1106	3394
ConEd-LIPA***	-300	N/A	N/A	-300	-369	69
TOTAL	5490	100	0	4400	737	4653

<sup>^</sup> See slide 6 for reference. Adjusted TTC and ATC are set to zero for NPX-CSC and PJM-NEPTUNE because the Advanced Reservations process is controlled by ISO-NE or PJM.



<sup>\*</sup> Data throughout this report reflects actual operating data from the identified time interval.

<sup>\*\*</sup>Controllable ties have a TRM of zero since they can be continuously and precisely controlled.

<sup>\*\*\*</sup>CONED-LIPA interface has a TTC of -300 due to the wheel agreement between the two entities.

#### Fall 2021 Long Island Peak Load

Adjusted TTC for Controllable Ties Included

Load 4,164 MW on 09/16/2021 16:52:00\*

Interface Name	πο	TRM**	СВМ	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	285	375
Spr-Dunw S	4600	100	0	4500	2186	2314
ConEd-LIPA***	-300	N/A	N/A	-300	-313	13
TOTAL	5490	100	0	5390	2158	3232

<sup>\*</sup> Data throughout this report reflects actual operating data from the identified time interval.



<sup>\*\*</sup>Controllable ties have a TRM of zero since they can be continuously and precisely controlled.

<sup>\*\*\*</sup>CONED-LIPA interface has a TTC of -300 due to the wheel agreement between the two entities.

#### Fall 2021 Long Island Peak Load

Adjusted TTC for Controllable Ties at Zero<sup>^</sup>

Load 4,164 MW on 09/16/2021 16:52:00\*

Interface Name	πο	TRM**	СВМ	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	660
Spr-Dunw S	4600	100	0	4500	2186	2314
ConEd-LIPA***	-300	N/A	N/A	-300	-313	13
TOTAL	5490	100	0	4400	1873	3517

<sup>^</sup> See slide 6 for reference. Adjusted TTC and ATC are set to zero for NPX-CSC and PJM-NEPTUNE because the Advanced Reservations process is controlled by ISO-NE or PJM.



<sup>\*</sup> Data throughout this report reflects actual operating data from the identified time interval.

<sup>\*\*</sup>Controllable ties have a TRM of zero since they can be continuously and precisely controlled.

<sup>\*\*\*</sup>CONED-LIPA interface has a TTC of -300 due to the wheel agreement between the two entities.

## **Summary - Long Island\***

	Winter 20	Winter 2020-2021		Spring 2021		Summer 2021		Fall 2021	
Peak Load (MW)	31	83	37	55	5245		4164		
Interface Name	ттс	Scheduled	ттс	Scheduled	ттс	Scheduled	ттс	Scheduled	
NPX-1385	200	80	0	0	200	200	200	200	
NPX-CSC	0	0	330	330	330	330	330	330	
PJM-NEPTUNE	660	375	660	375	660	375	660	375	
SPR-DUNW S	4600	1009	4600	2261	4600	3394	4600	2314	
CONED-LIPA	-300	-279	-300	-282	-300	69	-300	13	
TOTAL	5160	1185	5290	2684	5490	4368	5490	3232	

<sup>\*</sup> Data pulled from slides 31, 33, 35, and 37.



#### Winter 2020-2021 NYC Peak Load

Adjusted TTC for Controllable Ties Included

Load 6,959 MW on 01/29/2021 17:54:00\*

Interface Name	πc	TRM**	СВМ	Adjusted TTC	ATC	Scheduled
A-B-C***	0	0	0	0	-294	294
PJM - Linden VFT^	315	0	0	315	0	315
PJM-HTP^	660	0	0	660	160	500
Spr-Dunw S	4600	100	0	4500	1411	3089
TOTAL	5575	100	0	5475	1277	4198

<sup>\*</sup> Data throughout this report reflects actual operating data from the identified time interval.



<sup>\*\*</sup>Controllable ties have a TRM of zero since they can be continuously and precisely controlled.

<sup>\*\*\*</sup>A-B-C lines have a TTC of 0 due to the state of the NYISO-PJM Joint Operating agreement. The B and C lines are out of service.

#### Winter 2020-2021 NYC Peak Load

Adjusted TTC for Controllable Ties at Zero<sup>^</sup>

Load 6,959 MW on 01/29/2021 17:54:00\*

Interface Name	πc	TRM**	СВМ	Adjusted TTC	ATC	Scheduled
A-B-C***	0	0	0	0	-294	294
PJM - Linden VFT^	315	0	0	0	0	315
PJM-HTP^	660	0	0	0	0	660
Spr-Dunw S	4600	100	0	4500	1411	3089
TOTAL	5575	100	0	4500	1117	4358

<sup>^</sup> See slide 6 for reference. Adjusted TTC and ATC are set to zero for PJM-LINDEN VFT and PJM-HTP because the Advanced Reservations process is controlled by PJM.



<sup>\*</sup> Data throughout this report reflects actual operating data from the identified time interval.

<sup>\*\*</sup>Controllable ties have a TRM of zero since they can be continuously and precisely controlled.

<sup>\*\*\*</sup>A-B-C lines have a TTC of 0 due to the state of the NYISO-PJM Joint Operating agreement. The B and C lines are out of service.

#### Spring 2021 NYC Peak Load

Adjusted TTC for Controllable Ties Included

Load 3,755 MW on 05/23/2021 17:22:00\*

Interface Name	πο	TRM**	СВМ	Adjusted TTC	ATC	Scheduled
A-B-C***	0	0	0	0	-29	29
PJM - Linden VFT^	315	0	0	315	140	175
PJM-HTP^	660	0	0	660	660	0
Spr-Dunw S	4600	100	0	4500	2959	1541
TOTAL	5575	100	0	5475	3730	1745

<sup>\*</sup> Data throughout this report reflects actual operating data from the identified time interval.



<sup>\*\*</sup>Controllable ties have a TRM of zero since they can be continuously and precisely controlled.

<sup>\*\*\*</sup>A-B-C lines have a TTC of 0 due to the state of the NYISO-PJM Joint Operating agreement. The B and C lines are out of service.

#### Spring 2021 NYC Peak Load

Adjusted TTC for Controllable Ties at Zero<sup>^</sup>

Load 3,755 MW on 05/23/2021 17:22:00\*

Interface Name	πς	TRM**	СВМ	Adjusted TTC	ATC	Scheduled
A-B-C***	0	0	0	0	-29	29
PJM - Linden VFT^	315	0	0	0	0	315
PJM-HTP^	660	0	0	0	0	660
Spr-Dunw S	4600	100	0	4500	2959	1541
TOTAL	5575	100	0	4500	2930	2545

<sup>^</sup> See slide 6 for reference. Adjusted TTC and ATC are set to zero for PJM-LINDEN VFT and PJM-HTP because the Advanced Reservations process is controlled by PJM.



<sup>\*</sup> Data throughout this report reflects actual operating data from the identified time interval.

<sup>\*\*</sup>Controllable ties have a TRM of zero since they can be continuously and precisely controlled.

<sup>\*\*\*</sup>A-B-C lines have a TTC of 0 due to the state of the NYISO-PJM Joint Operating agreement. The B and C lines are out of service.

#### **Summer 2021 NYC Peak Load**

Adjusted TTC for Controllable Ties Included

Load 5,245 MW on 08/27/2021 16:27:00\*

Interface Name	πο	TRM**	СВМ	Adjusted TTC	ATC	Scheduled
A-B-C***	0	0	0	0	-54	54
PJM - Linden VFT^	315	0	0	315	243	72
PJM-HTP^	660	0	0	660	260	400
Spr-Dunw S	4600	100	0	4500	1494	3006
TOTAL	5575	100	0	5475	1943	3532

<sup>\*</sup> Data throughout this report reflects actual operating data from the identified time interval.



<sup>\*\*</sup>Controllable ties have a TRM of zero since they can be continuously and precisely controlled.

<sup>\*\*\*</sup>A-B-C lines have a TTC of 0 due to the state of the NYISO-PJM Joint Operating agreement. The B and C lines are out of service.

#### Summer 2021 NYC Peak Load

Adjusted TTC for Controllable Ties at Zero<sup>^</sup>

Load 5,245 MW on 08/27/2021 16:27:00\*

Interface Name	πο	TRM**	СВМ	Adjusted TTC	ATC	Scheduled
A-B-C***	0	0	0	0	-54	54
PJM - Linden VFT^	315	0	0	0	0	315
PJM-HTP^	660	0	0	0	0	660
Spr-Dunw S	4600	100	0	4500	1494	3006
TOTAL	5575	100	0	4500	1440	4035

<sup>^</sup> See slide 6 for reference. Adjusted TTC and ATC are set to zero for PJM-LINDEN VFT and PJM-HTP because the Advanced Reservations process is controlled by PJM.



<sup>\*</sup> Data throughout this report reflects actual operating data from the identified time interval.

<sup>\*\*</sup>Controllable ties have a TRM of zero since they can be continuously and precisely controlled.

<sup>\*\*\*</sup>A-B-C lines have a TTC of 0 due to the state of the NYISO-PJM Joint Operating agreement. The B and C lines are out of service.

#### Fall 2021 NYC Peak Load

Adjusted TTC for Controllable Ties Included

Load 4,164 MW on 09/16/2021 16:52:00\*

Interface Name	πο	TRM**	СВМ	Adjusted TTC	ATC	Scheduled
A-B-C***	0	0	0	0	-19	19
PJM - Linden VFT^	315	0	0	315	0	315
PJM-HTP^	660	0	0	660	75	585
Spr-Dunw S	4600	100	0	4500	1936	2564
TOTAL	5575	100	0	5475	1992	3483

<sup>\*</sup> Data throughout this report reflects actual operating data from the identified time interval.



<sup>\*\*</sup>Controllable ties have a TRM of zero since they can be continuously and precisely controlled.

<sup>\*\*\*</sup>A-B-C lines have a TTC of 0 due to the state of the NYISO-PJM Joint Operating agreement. The B and C lines are out of service.

#### Fall 2021 NYC Peak Load

Adjusted TTC for Controllable Ties at Zero<sup>^</sup>

Load 4,164 MW on 09/16/2021 16:52:00\*

Interface Name	πο	TRM**	СВМ	Adjusted TTC	ATC	Scheduled
A-B-C***	0	0	0	0	-19	19
PJM - Linden VFT^	315	0	0	0	0	315
PJM-HTP^	660	0	0	0	0	660
Spr-Dunw S	4600	100	0	4500	1936	2564
TOTAL	5575	100	0	4500	1917	3558

<sup>^</sup> See slide 6 for reference. Adjusted TTC and ATC are set to zero for PJM-LINDEN VFT and PJM-HTP because the Advanced Reservations process is controlled by PJM.



<sup>\*</sup> Data throughout this report reflects actual operating data from the identified time interval.

<sup>\*\*</sup>Controllable ties have a TRM of zero since they can be continuously and precisely controlled.

<sup>\*\*\*</sup>A-B-C lines have a TTC of 0 due to the state of the NYISO-PJM Joint Operating agreement. The B and C lines are out of service.

## **Summary - NYC\***

	Winter 20	)20-2021	Spring	2021	Summe	er 2021	Fall 2	2021	
Peak Load (MW)		76		687 104		147	90	9016	
Interface Name	ттс	Scheduled	ттс	Scheduled	ттс	Scheduled	ттс	Scheduled	
A-B-C	0	294	0	29	0	54	0	19	
PJM - Linden VFT	315	315	315	175	315	72	315	315	
PJM-HTP	660	500	660	0	660	400	660	585	
Spr-Dunw S	4600	3089	4600	1541	4600	3006	4600	2564	
TOTAL	5575	4198	5575	1745	5575	3532	5575	3483	

<sup>\*</sup> Data pulled from slides 31, 33, 35, and 37.



# Comparison with 2018 SIL Report



## Comparison with 2018 SIL Report - Winter

	Winter 2017-2018		Winter 2020-2021		
Peak Load (MW)	253	237	22727		
Interface Name	πο	Scheduled	πο	Scheduled	
HQ-CEDARS	199	0	199	0	
HQ-NYISO	800	800	1310	1236	
IMO-NYISO	1750	1214	2050	1370	
ISONE-NYISO	1400	0	1400	0	
NPX-1385	0	0	200	200	
NPX-CSC	330	330	330	0	
PJM-NEPTUNE	660	660	0	0	
PJM-NYISO	2600	287	2550	2027	
PJM-LINDEN VFT	315	0	315	315	
PJM-HTP	660	0	660	500	
TOTAL	8714	3291	9014	5648	

<sup>\*</sup> Data pulled from slides 31, 33, 35, and 37.



## Comparison with 2018 SIL Report - Spring

	Spring 2018		Spring 2021		
Peak Load (MW)	245	545	22795		
Interface Name	TTC Scheduled		πο	Scheduled	
HQ-CEDARS	70	0	190	80	
HQ-NYISO	1310	790	1310	948	
IMO-NYISO	1300	258	900	280	
ISONE-NYISO	1400	1050	1400	346	
NPX-1385	200	200	200	85	
NPX-CSC	330	330	330	330	
PJM-NEPTUNE	660	529	0	0	
PJM-NYISO	1950	0	2000	14	
PJM-LINDEN VFT	315	0	315	175	
PJM-HTP	660	0	660	0	
TOTAL	8195	3157	7305	2258	

<sup>\*</sup> Data pulled from slides 31, 33, 35, and 37.



## Comparison with 2018 SIL Report - Summer

	Summer 2018		Summer 2021		
Peak Load (MW)	319	980	30987		
Interface Name	TTC Scheduled		ттс	Scheduled	
HQ-CEDARS	190	130	140	140	
HQ-NYISO	1310	1310	1310	1246	
IMO-NYISO	600	300	1900	845	
ISONE-NYISO	1400	0	1400	0	
NPX-1385	200	0	200	0	
NPX-CSC	330	330	330	330	
PJM-NEPTUNE	660	660	660	375	
PJM-NYISO	1800	1500	2000	1045	
PJM-LINDEN VFT	315	0	315	15	
PJM-HTP	660	400	660	250	
TOTAL	7465	4630	8915	4246	

<sup>\*</sup> Data pulled from slides 31, 33, 35, and 37.



## Comparison with 2018 SIL Report - Fall

	Fall 2018		Fall 2021		
Peak Load (MW)	315	549	24636		
Interface Name	TTC Scheduled		πο	Scheduled	
HQ-CEDARS	190	190	80	78	
HQ-NYISO	1310	1310	1310	1144	
IMO-NYISO	1250	39	1700	526	
ISONE-NYISO	1400	0	1400	0	
NPX-1385	200	0	200	200	
NPX-CSC	330	265	330	330	
PJM-NEPTUNE	660	660	660	375	
PJM-NYISO	1800	555	2000	794	
PJM-LINDEN VFT	315	315	315	315	
PJM-HTP	660	200	660	485	
TOTAL	8115	3534	8655	4247	

<sup>\*</sup> Data pulled from slides 31, 33, 35, and 37.



## Questions?



### **Our Mission & Vision**



#### **Mission**

Ensure power system reliability and competitive markets for New York in a clean energy future



#### **Vision**

Working together with stakeholders to build the cleanest, most reliable electric system in the nation

