

# **Transmission Congestion Contracts Manual Attachments**

Attachment T TCC Market PJM-NYISO Interconnection Scheduling Protocol

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DRAFT - For Discussion Purposes Only



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### Attachment T. TCC Market PJM-NYISO Interconnection Scheduling Protocol

#### Background

Flows over the PJM-NYISO ABC, JK, and Hopatcong-Ramapo (5018) interconnections are scheduled consistent with Schedule D (Market-to-MarketCoordination Process) of the NYISO/PJM Joint Operating Agreement (the "NYISO/PJM JOA") and the Services Tariff. The NYISO/PJM JOA is set forth in Section 35 (Attachment CC to) of the OATT.

The ABC, JK, and Hopatcong-Ramapo Interconnections of the PJM-NYISO Interface are defined as follows:

- ABC Interconnection: the A2253 Linden-Goethals 230 kV, B3402 Hudson-Farragut 345 kV, and C3403 Marion-Farragut 345 kV facilities,
- JK Interconnection: the J3410 and K3411 Waldwick-S. Mahwah 345 kV facilities, and
- Hopatcong-Ramapo Interconnection: the 5018 Hopatcong-Ramapo 500 kV facility.

#### **TCC Market Implementation**

The rules specified herein apply to all TCC auction rounds conducted on or after February 8, 2019.

#### **Interchange Percentages**

The following table defines the percentage of net TCC auction injection at the PJM proxy bus TCC bidding PTID that is directed over the ABC, JK, and Hopatcong-Ramapo Interconnections in the TCC market model based on the number of phase angle regulators ("PARs"), which comprise each of those Interconnections, that are modeled as in service in a TCC auction (or auction round).

Interconnection	PAR Name	Description	% of Net PJM Injection Directed OverInterconnection Based on Number ofIn Service PARs in Interconnection3 PARs2 PARs1 PAR0 PARs			
			in	in	in	in
			Service	Service	Service	Service
Hopatcong- Ramapo	3500	Ramapo 345 kV PAR3500	n/a	32%	16%	0%
	4500	Ramapo 345 kV PAR4500				
јк	Е	Waldwick 230 kV PS4_E2257	15%	10%	5%	0%
	F	Waldwick 230 kV PS2_F2258				
	0	Waldwick 230 kV PS1_02267				
ABC	А	Goethals 345 kV BK_1N	21%	14%	7%	0%
	В	Farragut 345 kV TR11				
	С	Farragut 345 kV TR12				

#### **Operational Base Flow (OBF)**

An OBF, representing equal and opposite MW offset of power flows over the Waldwick (E, F, and O) PARs and ABC PARs, will be utilized in the NYISO's TCC market model with all Waldwick PARs and ABC PARs in service to the extent that an OBF is in effect pursuant to the NYISO/PJM Joint



Operating Agreement set forth in Attachment CC (Section 35) of the OATT. The applicable OBF, if any, used in the TCC market model will be posted in the appropriate year sub-folder of the Information and Announcements section of the TCC section of the NYISO's website, available at the following address: <u>https://www.nyiso.com/transmission-congestion-contracts-tcc-</u>.

If a PAR is modeled as out of service in a TCC auction (or auction round) in which an OBF is applicable, the OBF applied to that PAR's Interconnection will be reduced by the OBF MW value normally distributed to that PAR when it is in service. In order to keep the OBF balanced, a reduction in OBF MW at the ABC Interconnection will also be reflected at the JK Interconnection and vice versa. When PARs are modeled as out of service at both the ABC and JK Interconnections in a TCC auction (or auction round) in which an OBF is applicable, the Interconnection that has the largest reduction in OBF MW will establish the reduced OBF MW value applied to both Interconnections.

Waldwick (E, F, and O) PARs				
Condition	Distribution of the OBF			
3 EFO PARs in service (normal distribution)	33.3% of the full OBF on each of the three in-service Waldwick PARs			
2 EFO PARs in service	50% of the reduced OBF on each of the two in-service Waldwick PARs			
1 EFO PAR in service	100% of the reduced OBF on the one in-service Waldwick PAR			
0 EFO PARs in service	OBF set to zero			

The tables below show the resulting distribution of any reduced OBF value.

ABC PARs			
Condition	Distribution of the OBF		
3 ABC PARs in service	25% of the full OBF on the A PAR, with 37.5% on each		
(normal distribution)	of the B and C PARs		
2 ABC PARs in service	50% of the reduced OBF on each of B and C PARs if the A PAR is out of service OR 60% on the one in-service B or C PAR and 40% on the A PAR		
1 ABC PAR in service	100% of the reduced OBF on the one in-service ABC PAR		
0 ABC PARs in service	OBF set to zero		

#### Additional MW Offsets

A 150 MW offset from PJM to NY will be applied to the Hopatcong-Ramapo Interconnection in the NYISO's TCC market model to represent PJM's service to Rockland Electric Company Load over the Hopatcong-Ramapo Interconnection.

If one of the two Ramapo PARs is modeled as out of service in a TCC auction (or auction round), 100% of the 150 MW offset will be assigned to the remaining in-service PAR. If both Ramapo PARs are modeled as out of service in a TCC auction (or auction round), there will be a 0 (zero) MW offset applied to the Hopatcong-Ramapo Interconnection.