17.3 Bilateral Transaction Bidding, Scheduling and Curtailment

All Transmission Customers and interested entities should refer to Attachment J, Section 16.3 of the ISO OATT for all information related to Transmission Service, Schedules and Curtailment

17.3.1 Pre-Scheduled Transaction Requests

Pre Scheduled Transaction Requests shall include the following information that shall be submitted to the ISO no earlier than eighteen (18) months prior to the Dispatch Day:

- 1)Point of Injection location;
- 2)Point of Withdrawal location;
- 3) Desired Dispatch Days;
- 4)Hourly MW schedules;
- 5)Other data as required by the ISO.

Pre Scheduled Transaction Requests accepted for scheduling may be withdrawn only with the approval of the ISO, pursuant to ISO Procedures.

17.3.2 Requests for Bilateral Transaction Schedules

Transmission Customers scheduling Transmission Service or to support a Bilateral

Transaction with Energy supplied by an External Generator or Internal Generator shall submit the following information to the ISO:

17.3.2.1 Point of Injection location. For Transactions with Internal sources, the

Point of Injection is the LBMP bus; for Transactions with Trading Hubs as their

sources, the Point of Injection is the Trading Hub Generator bus; for Transactions

with External sources, the Point of Injection is the Proxy Generator Bus; however,

based upon such an advance notification to the ISO, an External Supplier will have the additional option of being modeled at a specific External LBMP bus

The Balance of this Section, 17.3 is proposed for deletion

19 Attachment D – Data Requirements For LBMP Bidders

This Attachment is proposed for deletion in its entirety. For ease of reference, the material is not sticken.

Data Item	Cat.	Bid Parameters	Variability	Comments
Company Name	G		Static Required	Parent organization.
Generator Name/No.	G		Static Required	
Generator Unit Code/ID	G		Static Required	Unique code which identifies the Generator to the ISO.
Bus	G	Bus No.	Static Required	Specific location of Generator within the NYCA.
Submitted By	G	Name	May vary Required	Organization submitting Bid. Multiple organization can be authorized to submit Bids with the ISO accepting the most recent. A single organization must be specified to receive invoices from the ISO.
DMNC (Summer & Winter)	P/G	MW	Static Required	Dependable Maximum Net Capability. Confirmed by test for Generator's with Installed Capacity contracts, or historical production data.
Power Factor	P/G	MW/MVA	Static Optional	Generator's tested Power Factor for producing Reactive Power (MVArs) at normal high operating limit MW output level, provided it is at least 90% of DMNC. This is required for Generators receiving Voltage Support Payments.
Installed Capacity Contracts	G	MW	May vary Required	Installed Capacity contracts in effect with LSEs within the NYCA. The ISO may limit maximum and/or minimum amounts of Installed Capacity by location due to reliability Constraints.
Normal Upper Operating Limit	C/D	MW	May change Required by hour for Day-Ahead	Maximum output of a Generator that could be expected in any hour of the following operating day. The ISO must be informed of a limit change that results in less Capability.
Emergency Upper Operating Limit	C/D	MW	May change Required by hour for Day- Ahead	Maximum output that a Generator's owner expects it can reach during extraordinary conditions. A Generator's Emergency Upper Operating Limit may be no less than its Normal Upper Operating Limit.
Normal Response Rate (NRR)	P/C/D	MW/min.	May vary Required	To be provided as an expected response rate. Generators may specify up to three NRRs. The minimum acceptable response rate is 1% of a Generator's gross output per minute.
Regulation Response Rate (RRR)	P/C/D	MW/Min.	Same as Optional NRR	To be provided as an expected response for Regulation Service. If RRR differs from NRR, the total expected response rate is restricted to the maximum of the two rates.
Emergency Response Rate (ERR)	P/C/D	MW/Min.	Same as NRR	To be provided as expected response for reserve pickups; A Generator's ERR must be greater than or equal to the capacity-weighted average of its NRRs.
Reactive Power Capability	P/G	Piecewise linear curve with MW as independent variable and +/- MVArs as dependent variable	Static Optional	Update as changed.
Physical Minimum Generation Limit	P/G	MW	Static Required	

Internal Generators LBMP bidders are located within the NYCA.

 $Cat. = Data\ Categories:\ \textbf{G} = General;\ \textbf{P} = Pre-Qualification;\ \textbf{C} = Commitment;\ \textbf{B} = Balancing;\ \textbf{D} = Dispatch;\ \textbf{I} = Installed\ Capacity.$ Static Data remains relatively constant over the lifetime of Bids but can be changed.

General Data may be provided electronically or by mail, but requires a confirmation or Pre-Qualification process by the ISO. Some data will require substantiation by a test; actual data Bid may be subject to validation checking against Pre-Qualification data. Optional = Required only when providing or bidding to provide the associated service.

	Tabl	e 19.2 Data	a Requiremen	ts for Demand Side Resources
Data Item	Cat.	Bid Parameters	Variability	Comments
Company Name			Static Required	Parent organization.
Generator Name/No. Generator Unit Code/ID	G G		Static Required Static Required	Unique code which identifies the Demand Side Resource to the ISO
Bus	G	Bus No.	Static Required	Specific location of Demand Side Resource within the NYCA
Submitted By	G	Name	May vary Required	Organization submitting Bid. Multiple organization can be authorized to submit Bids with the ISO accepting the most recent. A single organization must be specified to receive invoices from the ISO.
DMNC (Summer & Winter)	P/G	MW	Static Required	Specify maximum, megawatt Curtailment Bid.
Power Factor	P/G	MW/MVA	Static Optional	Values to be initialized pursuant to ISO requirements.
Installed Capacity Contracts	G	MW	May vary Required	Installed Capacity contracts in effect between Special Case Resources that are Demand Side Resources and LSEs within the NYCA. The ISO may limit maximum and/or minimum amounts of Installed Capacity by location due to reliability Constraints.
Normal Upper Operating Limit	C/D	MW	May vary Required by hour for Day-Ahead	Maximum output of a Demand Side Resource that could be expected in any hour of the following operating day. The ISO must be informed of a limit change that results in less Capability.
Emergency Upper Operating Limit	C/D	MW	May vary Required by hour for Day- Ahead	Maximum output that a Demand Side Resource expects to be able to reach during extraordinary conditions. A Demand Side Resource's Emergency Upper Operating Limit may be no lower than its Normal Upper Operating Limit.
Normal Response Rate (NRR)	P/C/D	MW/min.	May vary Required	To be provided as an expected response rate for RTD. Demand Side Resources may specify up to three NRRs. The minimum acceptable response rate is 1% of the quantity of Demand Reductions that the Demand Side Resource produces per minute.
Emergency Response Rate (ERR)	P/C/D	MW/Min.	Same as NRR	To be provided as expected response for reserve pickups. A Demand Side Resource's ERR must be greater than or equal to the capacity-weighted average of its NRRs.
Physical Minimum Demand Reduction Limit	P/G	MW	Static Required	

Demand Side Resource LBMP bidders are located within the NYCA.

 $\label{eq:Catalign} \begin{aligned} &\text{Cat.} = \text{Data Categories: } \textbf{G} = \text{General; } \textbf{P} = \text{Pre-Qualification; } \textbf{C} = \text{Commitment; } \textbf{B} = \text{Balancing; } \textbf{D} = \text{Dispatch; } \textbf{I} = \text{Installed Capacity.} \\ &\text{Static Data remains relatively constant over the lifetime of Bids but can be changed.} \end{aligned}$

General Data may be provided electronically or by mail, but requires a confirmation or Pre-Qualification process by the ISO. Some data will require substantiation by a test; actual data Bid may be subject to validation checking against Pre-Qualification data. Optional = Required only when providing or bidding to provide the associated service.

	Ta	ble 19.3 Da	ta Requireme	nts for External Generators
Data Item	Cat.	Bid Parameters	Variability	Comments
Company Name	G		Static Required	Parent organization.
Generator Name/No.	G		Static Required	
Generator Unit Code/ID	G		Static Required	Unique code which identifies the Generator to the ISO.
Submitted By	G	Name	May vary Required	Organization submitting Bid. Multiple organizations can be authorized to submit Bids with the ISO accepting the most recent. A single organization must be specified to receive invoices from the ISO.
Dependable Maximum Net Capability	P/G	MW	Static Required	Confirmed by test for Generators with Installed Capacity contracts.
Installed Capacity Contracts	P/G	MW	Variable (not within a Bid) Optional	Installed Capacity contracts in effect with LSEs within the NYCA. The ISO may limit maximum and/or minimum amounts of Installed Capacity by location due to reliability Constraints.
Normal Upper Operating Limit	C/D	MW	May change by hour for Day- Ahead Required	Maximum output of a Generator that could be expected in any hour of the following operating day. The ISO must be informed of a limit change that results in less Capability.
Emergency Upper Operating Limit	C/D	MW	May vary Required by hour for Day- Ahead	Maximum output that a Generator's owner expects it can reach during extraordinary conditions. A Generator's Emergency Upper Operating Limit may be no lower than its Normal Upper Operating Limit.
Physical Minimum Generation Limit	P/G	MW	Static Required	

External Generators LBMP bidders are located outside the NYCA.

Cat. = Data Categories: G = General; P = Pre-Qualification; C = Commitment; B = Balancing; D = Dispatch; I = Installed Capacity. Static Data remains relatively constant over the lifetime of Bids but can be changed.

General Data may be provided electronically or by mail, but requires a confirmation or Pre-Qualification process by the ISO.

Some data will require substantiation by a test; actual data Bid may be subject to validation checking against Pre-Qualification data.

Optional = Required only when providing or bidding to provide the associated service.

Ta	able 19	.4 Data Requ	irements for G	enerator Commitment Bids
Data Item	Cat.	Bid Parameters	Variability	Comments
Startup Time	C/B	Hours: Minutes or Piecewise linear curve with Hours Off- Line as independent variable and Hours to Start as dependent variable	May be changed for any Day-Ahead or Real-Time Commitment Required	Length of time needed to startup an off-line Generator, synchronize it to the power grid and stabilize at minimum.
Startup Bid Price	C/B	\$\$ to Start specified hourly or Piecewise linear curve with hours off-line as an independent variable and \$ to Start as a dependent variable	May be changed hourly for any Day-Ahead Commitment. May only be lowered in the Real-Time Commitment in any hour in which the Generator has a Day-Ahead schedule. Required	
Minimum Run Time	C/B	Hours:Minutes	May be changed for any Day-Ahead Commitment but may not be changed once a Generator is online. May be changed in Real-Time if the Generator is not currently online. Required	Duration of time that a Generator must run once started before it can subsequently be decommitted. Minimum Run Time cannot be honored past the end of the Dispatch Day. The longest Minimum Run Time allowed for Generators that are economically committed by RTC or RTD in the Real-Time Market shall be one hour, unless the Generator is a Real-Time Minimum Run Qualified Gas Turbine. For Real-Time Minimum Run Qualified Gas Turbines, the Minimum Run Time that shall be assigned by RTC for economic commitment shall be two hours.
Minimum Down Time	C/B	Hours:Minutes	May be changed for any Day-Ahead or Real-Time Commitment	Duration of time that a Generator must remain off-line following decommission before it can be re-started. SCUC shall honor Minimum Down Time within a twenty four hour Dispatch Day. RTC will honor Minimum Down Times in the Real-Time Market unless the Generator has a Day-Ahead Schedule for any portion of the RTC optimization period.
Maximum Number of Startups per Day	C/B	No	Static Required	RTC will monitor but will not honor this parameter.

Notes:
Cat. = Data Categories: **G** = General; **P** = Pre-Qualification; **B** = Balancing; **D** = Dispatch; **I** = Installed Capacity. Static Data remains relatively constant over the lifetime of bids but can be changed.

Data Item	Cat.	Bid Parameters	Variability	Comments
Startup Time	C/B	Hours: Minutes	May be changed for any Day-Ahead or Real-Time Commitment	ISO will provide assumed value.
Startup Bid Price	C/B	\$\$ to Start specified hourly	Required May be changed hourly for any Day-Ahead Commitment and, for any Real-Time Commitment in an hour in which the Demand Side Resource does not have a Day-Ahead schedule.	The Curtailment Initiation Cost should be entered here
Minimum Run Time	C/B	Hours:Minutes	Required May be changed for any Day-Ahead or Real-Time Commitment; may not be changed once Resource is on-line Required	Duration of time that the Demand Side Resource must reduce its demand once started before it can subsequently be decommitted. Minimum Run Time cannot be for more than 8 hours and cannot be honored past the end of the Dispatch Day.
Minimum Down Time	C/B	Hours:Minutes	May be changed for any Day-Ahead or Real-Time Commitment Required.	Duration of time that the Demand Side Resource must remain off-line following decommission before it can be re-started. SCUC shall honor Minimum Down Time within a twenty four hour Dispatch Day. RTC will honor Minimum Down Times in the Real-Time Market unless the Demand Side Resource has a Day-Ahead Schedule for any portion of RTC's optimization period.
Maximum Number of Startups per Day	C/B	No	Static (but may be changed in Real-Time Bids.)	RTC will monitor but will not honor this parameter.

Cat. = Data Categories: G = General; P = Pre-Qualification; B = Balancing; D = Dispatch; I = Installed Capacity. Static Data remains relatively constant over the lifetime of bids but can be changed.

Data Item	Cat.	Bid Parameters	Variability	Comments
Minimum Generation Energy Block and Bid Price	C/B	MW and \$/hour	May vary by hour.	Must be provided for commitment.
вій Рпсе				Gas turbine units that fully load on startup can use this form or bid in lieu of a Dispatchable Energy Bid, but will set LBMP when economic.
Dispatchable Energy Bids	C/B	No. of steps \$/MWh, and MWs of each step	May vary by hour.	Bids may consist of up to eleven constant cost incremental Energy steps. The cost of each step must exceed the cost of the preceding step.
Dispatch Status	С/В	ISO-Committed Flexible, ISO- Committed Fixed, Self-Committed Flexible, or Self- Committed Fixed	May vary. ISO-Committed Flexible or Self- Committed Flexible Resources that are scheduled Day-Ahead may not be ISO- Committed Fixed in real-time, unless a physical operating problem makes it impossible for them to be flexible.	ISO-Committed Fixed Generators are eligible to receive a Day-Ahead schedule on request.

Notes:
Cat. = Data Categories: **G** = General; **P** = Pre-Qualification; **C** = Commitment; **B** = Balancing; **D** = Dispatch; **I** = Installed Capacity.

Data Item	Cat.	Bid Parameters	Variability	Comments
Minimum Generation Energy Block and Bid Price	C/B	MW and \$/hour	May vary by hour.	Enter Demand Side Resources' minimum reduction and Bid price. Must be provided for commitment.
Dispatchable Energy Bids	C/B	No. of steps \$/MWh, and MWs of each step	May vary by hour.	Bids may consist of up to eleven constant cost incremental Energy steps. The cost of each step must exceed the cost of the preceding step.
Bidding Mode	C/B	ISO-Committed Fixed if participating in DADRP.	May vary by hour.	
		ISO-Committed Flexible if providing non- synchronized reserves in real-		
		time (to the extent that ISO's software can support such participation.)		

Cat. = Data Categories: \mathbf{G} = General; \mathbf{P} = Pre-Qualification; \mathbf{C} = Commitment; \mathbf{B} = Balancing; \mathbf{D} = Dispatch; \mathbf{I} = Installed Capacity.

7	Table 1	9.8 Data l	Requirements	s for Generator Regulation Service Bids
Data Item	Cat.	Bid	Variability	Comments
		Parameters		
Regulation Capacity Availability Bid	C/B	Table D-4 is required MW	May vary by hour Required	Generator must be able to respond to AGC Base Point Signals from the ISO. The Regulation Capacity Availability Bid along with the submitted Regulation Response Rate (from Table 19.1) represent the maximum response range in MW and change Rate in MW/Min.
Regulation Capacity Price Bid	C/B	\$/MW	May vary by hour Required	

Regulation Service Bids made for the Day-Ahead Market which are accepted are binding for the next 24 hour operating day. Regulation Service not scheduled for use by the ISO may be marketed by the bidder providing no other terms or forward contracts are violated.

Unscheduled Regulation Service may be bid into the Real-Time Market, and may have a different Bid price than the Day-Ahead Bid. Optional = Required only when providing or bidding to provide the associated service.

	Tabl	e 19.9 Data	Requirements	for Operating Reserve Bids
Data Item	Cat.	Bid Parameters	Variability	Comments
Spinning Reserve Bid	C/B/D	Same as in Table D-4 Day-Ahead only \$/MW Availability Price Bid	Required Day-Ahead, may vary hourly Real-Time Availability Bids will not be accepted. All Generators accepted to provide Energy will be treated as offering Reserves at a price of \$0/MW.	MW available is not separately bid but is a function of the bidder's ERR and UOL. If no Day-Ahead Availability price is bid, the relevant Day-Ahead Bid shall be rejected in its entirety (without prejudice to its being resubmitted in a timely manner).
10-Minute Non- Synchronized Reserve Bid	C/B/D	Day-Ahead only \$/MW Availability Price Bid	Required Day- Ahead, may vary hourly. Real-Time Availability Bids will not be accepted. All Generators accepted to provide Energy will be treated as offering Reserves at a price of \$0/MW.	MW available is not separately Bid but is a function of the Bidder's UOL. If no Day-Ahead Availability price is bid, the relevant Day-Ahead Bid shall be rejected in its entirety (without prejudice to its being resubmitted in a timely manner).
30-Minute Operating Reserve Spinning or Non-Synchronized	C/B/D	Day-Ahead only \$/MW Availability Price Bid	Required Day-Ahead, may vary hourly. Real-Time Availability Bids will not be accepted. All Generators and Demand Side Resources accepted to provide Energy will be treated as offering Reserves at a price of \$0/MW.	MW available is not separately Bid but is a function of the Bidder's ERR if synchronized, and its UOL. If no Day-Ahead Availability price is bid, the relevant Day-Ahead Bid shall be rejected in its entirety (without prejudice to its being resubmitted in a timely manner).

Notes:
Cat. = Data Categories: **G** = General; **P** = Pre-Qualification; **C** = Commitment; **B** = Balancing; **D** = Dispatch; **I** = Installed Capacity. Operating Reserve Bids made for the Day-Ahead Market which are accepted are binding for the next 24 hour operating day. Operating Reserves not scheduled for use by the ISO may be marketed by the bidder providing no other terms or forward contracts are violated.

Optional = Required only when providing or bidding to provide the associated service.

Table 19	.10 Г	ata Requirem	ents for Virtu	al Transaction Bids to Purchase Energy
Data Item	Cat.	Bid Parameters	Variability	Comments
Company Name	G		Static	LSE, Energy Service Co. or other Transmission/Distribution Co. providing Load forecast.
Point of Withdrawal (Sink) Location	G	For Internal Loads: LBMP Zone or Zone and Bus or For External Loads: Control Area or Control Area and Proxy Bus	Static	
Submitted By	G	Name	May Vary	Organization submitting Bid.
Energy Forecast	C/B/D	MWh/hr	Variable by Hour	Total Estimate for Bid and non-Bid Load; ISO will rely on <i>its</i> own composite Load forecast as a reliability commitment to ensure that all Load is served. May be updated after DAM and/or Real Time to indicate adjusted Load served
Energy Commit Bid	C/B/D	MW that will be committed for Day- Ahead Forward Contract	Variable by hour	Bidding is limited to the Day-Ahead Market.
Price Capped Energy Block Bids	C/B/D	No. of Blocks, MW/Block, and \$/MW/Block	Variable by hour	Bidding is limited to the Day-Ahead Market.

 $\frac{\textbf{Notes:}}{\textbf{Cat.}} = \textbf{Data Categories: } \textbf{G} = \textbf{General; } \textbf{P} = \textbf{Pre-Qualification; } \textbf{C} = \textbf{Commitment; } \textbf{B} = \textbf{Balancing; } \textbf{D} = \textbf{Dispatch; } \textbf{I} = \textbf{Installed Capacity.}$ Energy Bids made for the Day-Ahead Market which are accepted are binding for the next 24 hour operating day.

Data Requirements for Virtual Transaction Bids to Supply Energy

Data Item	Cat.	Bid Parameters	Variability	Comments
Company Name	G		Static	LSE, Energy Service Co. or other Transmission/Distribution Co. providing Load forecast.
Point of Injection (Source) Location	G	LBMP Zone	Static	
Submitted By	G	Name	May Vary	Organization submitting Bid.
Price Capped Energy Block Bids	C/B/D	No. of Blocks, MW/Block, and \$/MW/Block	Variable by hour	Bidding is limited to the Day-Ahead Market.

 $\label{eq:Cat.} \textbf{Cat.} = \textbf{Data Categories: } \textbf{G} = \textbf{General; } \textbf{P} = \textbf{Pre-Qualification; } \textbf{C} = \textbf{Commitment; } \textbf{B} = \textbf{Balancing; } \textbf{D} = \textbf{Dispatch; } \textbf{I} = \textbf{Installed Capacity.} \\ \textbf{Energy Bids made for the Day-Ahead Market which are accepted are binding for the next 24 hour operating day.} \\$

21.1 Definitions

Except as noted below, all capitalized terms used in Attachment F shall have the meanings specified in Article 2 of the ISO Services Tariff, or in Section 1 of the ISO OATT. In addition, the following terms, which are not defined in the ISO Tariffs, shall have the meanings specified below.

"Bid-CapRestriction" shall mean the maximum <u>or minimum</u> Bid Price that may be submitted in connection with certain Bids, as specified in Sections 21.5 and 21.6 of this Attachment F.

"Emergency External Purchases" shall mean the purchase, by the ISO, of Capability or Energy from External Suppliers for the purpose of eliminating an Operating Reserve deficiency, as described in the ISO Procedures.

'Price Cap Load Bid' a Bid identifying the maximum price above which an Internal Load is not willing to be scheduled in the Day-Ahead Market.

21.2 Supremacy of Attachment F

During the period that this Attachment F is in effect, the provisions set forth herein shall be deemed incorporated by reference into every provision of the ISO Services Tariff affected by this Attachment F, including each of the ISO Services Tariff's Rate Schedules and Attachments. In the event of a conflict between the terms of this Attachment F and the terms of any other provision of the ISO Services Tariff, the terms of Attachment F shall prevail.

21.3 Effective Date

Attachment F shall become effective on July 25, 2000 for Suppliers submitting Day-Ahead Bids to sell Energy in the July 26, 2000 Day-Ahead Market, and on July 26, 2000 for all other Suppliers and for any Demand Reduction Providers that submit Bids which are subject to Sections 21.5 and 21.6 below.

21.4 Expiration Date

Attachment F shall remain in effect until a Northeastern RTO is in place and operating pursuant to market rules established pursuant to the Commission's RTO market design and market structure rulemaking.

21.5 Establishment of Temporary-Bid Caps Restrictions

During the period that Attachment F is in effect, the Bid Cap Restriction for all Bids referenced in Section 21.6.1 below shall be \$1,000\\$999.99/MWh. If a Bid exceeds an applicable Bid Cap Restriction, the Bid shall be automatically rejected by the ISO. In addition, any Bid for a date during the effectiveness of this Attachment F that is submitted prior to the incorporation of Bid Cap logic into the ISO software that exceeds an applicable Bid Cap will be rejected, and the bidding entity will be required to submit a new Bid that conforms to the Bid Cap.

21.6 Applicability of Temporary-Bid Caps Restrictions

- 21.6.1 The Bid Cap Restriction established in Section 21.5 shall apply to Day-Ahead and real-time Energy Bids, Minimum Generation Bids, Decremental Bids, Price Cap Load Bids, and real-time Sink Price Cap Bids, as applicable, except with respect to the bid pricing rules for Sink Price Cap Bids and Decremental Bids submitted for External Transactions and Wheels Through at Proxy Generator Buses including Sink Price Cap Bids and Decremental Bids submitted for External Transactions and Wheels Through at Proxy Generator Buses, that are set forth in Section 17.3.2 of Attachment B to this ISO Services Tariff. But for this exception, a All Suppliers and Demand Side Resources, whether External or Internal to the NYCA, shall be subject to a Bid Cap Restriction for all Bids specified herein.
- 21.6.2. The Bid Cap-Restriction shall not apply to Ancillary Services Bids, Start-Up Bids or to any other Bid that is not specified in Section 21.6.1. This Attachment F does not supercede the reference level calculation rule or special mitigation procedures applicable to 10-Minute Non-Synchronized Reserve Bids under Sections 23.3.1.4.4 and 23.5.3 (until its expiration-twelve months after July 8, 2003) of Attachment H to this ISO Services Tariff.
- 21.6.3 Bid <u>Caps Restrictions</u> shall not apply to Emergency External Purchases. Bids or Offers made in connection with External Emergency Purchases shall not establish market-clearing prices.