

# **Demand Response in NYISO's Markets**

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Working Groups**

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# Agenda

- ◆ Background
- ◆ What the DC Circuit Court of Appeals decision means for the NYISO
- ◆ NYISO's Plans and Timing
- ◆ Potential Impacts to NYISO's Demand Response Programs
- ◆ Design Considerations for Backstop Model
- ◆ Possible Backstop Models
- ◆ Next Steps

# Background

- ◆ On Sept. 17, the United States Court of Appeals for the DC Circuit denied the FERC’s request for rehearing *en banc* of Order No. 745; FERC petitioned the Court for a Stay of the issuance of the mandate implementing the Court’s decision on Sept. 22
- ◆ Since the Sept. 30 update to stakeholders at the Management Committee meeting:
  - *Oct. 20 – The Court of Appeals announced that it will delay issuing a mandate until at least Dec. 16th to allow FERC to decide whether or not to petition the Supreme Court for review*
  - *Oct. 22 – NYISO submitted comments in the FirstEnergy v. PJM complaint regarding the treatment of demand response in PJM’s capacity market, seeking guidance from the FERC, and requesting an orderly transition if demand response is found to be non-FERC jurisdictional*
  - *Dec. 5 – The Office of the Solicitor General of the United States announced that it will seek review of EPSA by the U.S. Supreme Court, and requested an extension to file its petition until Jan. 15, 2015*
- ◆ Uncertainty remains as to whether the DC Circuit Court’s May 23, 2014 decision applies only to energy markets or to all demand response in wholesale electric markets

# NYISO's Plans and Timing

- ◆ **NYISO is obligated to administer its existing tariffs, including demand response, until there is further direction by FERC**
- ◆ **NYISO recognizes the need to be prepared in the event that its demand response programs are no longer subject to FERC jurisdiction in order to minimize the market and reliability impact**
  - *NYISO intends to develop a backstop model in the stakeholder process, with focus on the Special Case Resources program*
  - *The goal of the plan would be to allow the NYISO to quickly address guidance from FERC while maintaining the benefit of demand response in New York*
- ◆ **NYISO does not intend to make a filing at FERC until it receives guidance from FERC**

# Potential Impacts of the DC Circuit Court Decision

- ◆ If the DC Circuit Court's decision in *EPSA v. FERC* is upheld, demand response programs that include energy payments made through wholesale markets may no longer be permitted
- ◆ If the *EPSA* decision is determined to apply broadly, demand response in the NYISO's Capacity markets and Ancillary Service markets could also be affected

# Potential Impact to NYISO's Economic Demand Response Programs

- ◆ **DADRP – Energy only (37 MW\*)**
  - *There has been no offer activity in DADRP since 2010*
  - *NYISO has not received an order accepting its compliance filings implementing Order No. 745, therefore the NYISO has not made any related changes in its systems*
  - *If DADRP is determined to be non-FERC jurisdictional, the program may be terminated*
  - *No plans to develop a backstop model at this time*
- ◆ **DSASP – Ancillary Services (126 MW\*)**
  - *Unclear whether DC Circuit Court decision impacts ancillary services provided by demand response resources*
  - *No plans to develop a backstop model at this time*

*\* Enrolled MW as reported in NYISO's semi-annual filing to FERC (June 2, 2014: Docket No. ER01-3001).*

# Potential Impact to NYISO's Reliability Demand Response Programs

- ◆ **EDRP – Emergency Energy (76 MW\*)**
  - *If EDRP is determined to be non-FERC jurisdictional, the program may be terminated*
  - *Incentives to demand response resources may be addressed under retail tariffs or retail service agreements*
  - *No plans to develop a backstop model at this time*
  
- ◆ **SCR – Capacity and Energy (1082 MW\*)**
  - *If the SCR program is determined to be non-FERC jurisdictional, the current program is likely to be amended*
    - **Payments from NYISO to Responsible Interface Parties for capacity may be terminated**
    - **Payments for energy are likely to be terminated**
  - *NYISO intends to focus on development of a backstop model for SCRs that meets jurisdictional requirements*

*\*Enrolled MW as reported in NYISO's semi-annual filing to FERC (June 2, 2014: Docket No. ER01-3001).*

# Design Considerations for Backstop Model for SCRs

- ◆ **Reflect the value of demand side participation from both reliability and market perspectives**
  - *Maintain the ability of the NYISO to determine when demand response resource curtailment is required*
  - *Recognize the value of curtailment capability through wholesale entities that serve load, including adaptation to monthly fluctuations in demand response enrollment*
  - *Meet potential new jurisdictional requirements*
- ◆ **Remove ability for demand side resources to be compensated by the wholesale market for capacity or energy**
  - *Evaluate options to treat the curtailment capability of a resource as a credit to a LSE's capacity requirement*
  - *Payment for curtailments may be addressed under retail tariffs or retail service agreements*
- ◆ **Objective of the backstop model is to be able to implement any required changes quickly**



# Design Considerations for Backstop Model for SCRs, continued

- ◆ **Minimize impacts to capacity market, including:**
  - *Tariff changes*
  - *ICAP Event calendar*
  - *Auction process*
- ◆ **Minimize disruption to current processes**
  - *Maintain the prerequisites and rules for demand response resources that the NYISO will recognize as a reduction to a LSE's capacity requirement for the wholesale capacity market in the NYISO's tariff*
  - *Continue NYISO administrative functions for demand response curtailments*
    - Enrollment processing
    - Event Notification
    - Event response reporting
    - Performance factor and shortfall calculations
- ◆ **Minimize software changes for quick implementation**

# Preliminary Backstop Design Options

- ◆ The NYISO has identified two preliminary backstop designs to replace the current ICAP/SCR program that continue to recognize the value of demand response if demand response in capacity markets is no longer FERC-jurisdictional
  - *These are preliminary, high-level designs and are not intended to cover all market rules associated with demand response in NYISO's Capacity market*
  - *Adjustments may be required to reflect the direction provided by FERC*
- ◆ Model diagrams and summary tables on the following slides convey the concepts of the primary interactions between various actors in the Capacity market
- ◆ Overall, both of these designs can be implemented in part using existing software features to recognize demand response curtailment capability to reduce the LSE's capacity requirement

# Model Diagrams

- ◆ **Model 0 – illustrates how demand response is currently recognized in the NYISO’s Capacity market**
- ◆ **Model 1 – LSE receives a credit to its capacity requirement for demand side resources from the LSE’s own load customers**
- ◆ **Model 2 – LSE receives a credit to its capacity requirement for any demand side resources in its Zone, with a maximum credit limited to the LSE’s capacity requirement**
- ◆ **Conventions used in the diagrams**
  - *Shape = Contracting parties*
  - *Color = Load Serving Entity*

# Model 0 – Overview

Actor	Interactions
Transmission Owner	Establishes each LSE’s capacity requirement
LSE	Purchases capacity for its requirement from NYISO Capacity market
RIP	Offers aggregations of SCRs into Capacity market as supply Receives payment from NYISO for capacity sold
SCR	Contracts with RIP (or LSE acting as a RIP) for capacity Reduces load at direction of the NYISO Outside contract for payment from RIP
NYISO	Handles administrative functions of the capacity market and demand response, including enrollment, notification, performance, payments, and penalties

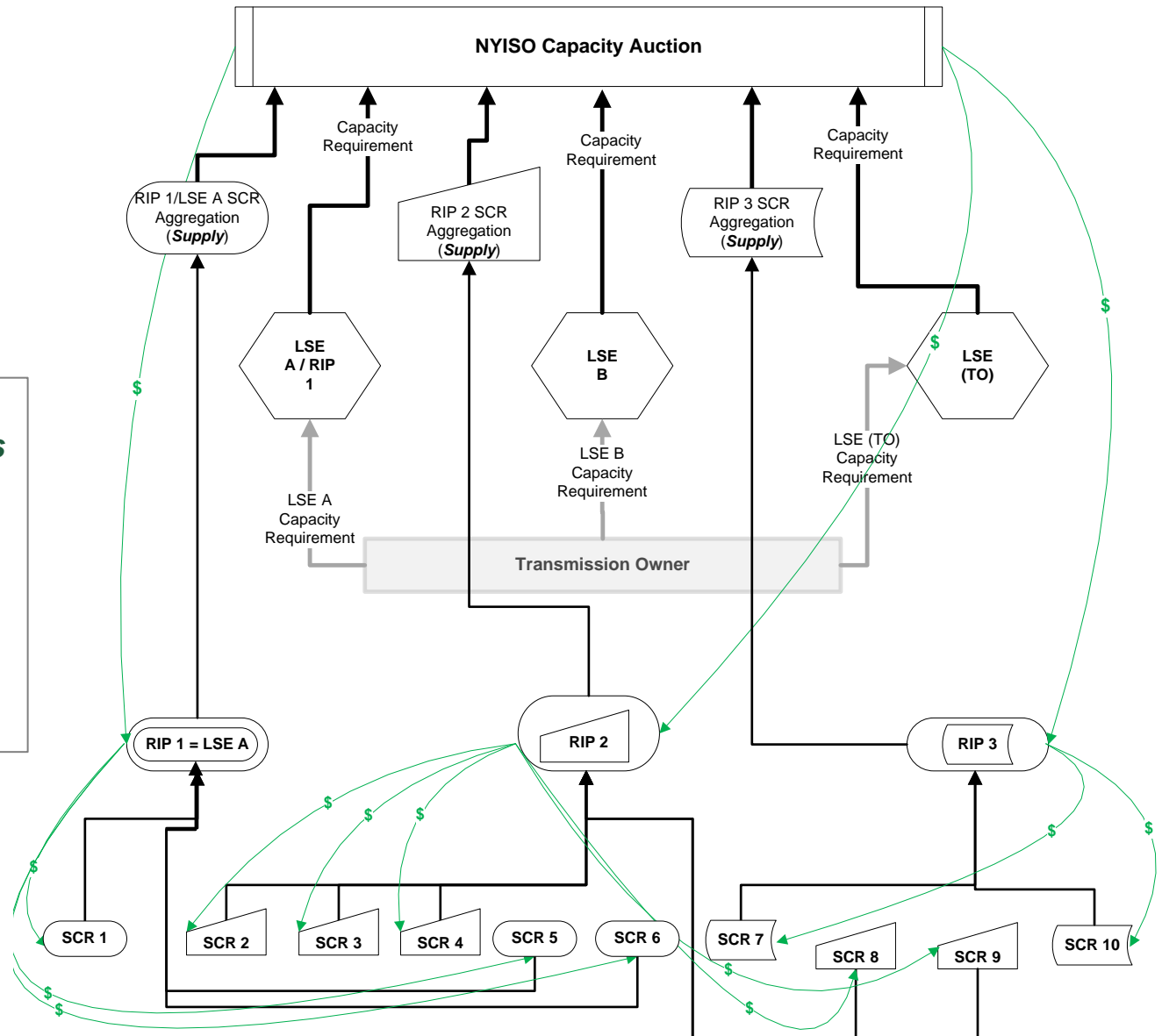
# Model 0 – Current State

SHAPE = Contract for DR

COLOR = LSE serving the load

*NYISO's relationship for demand response in this model is with market participants that include LSEs (including TOs) and RIPs*

*An LSE may act as its own RIP*



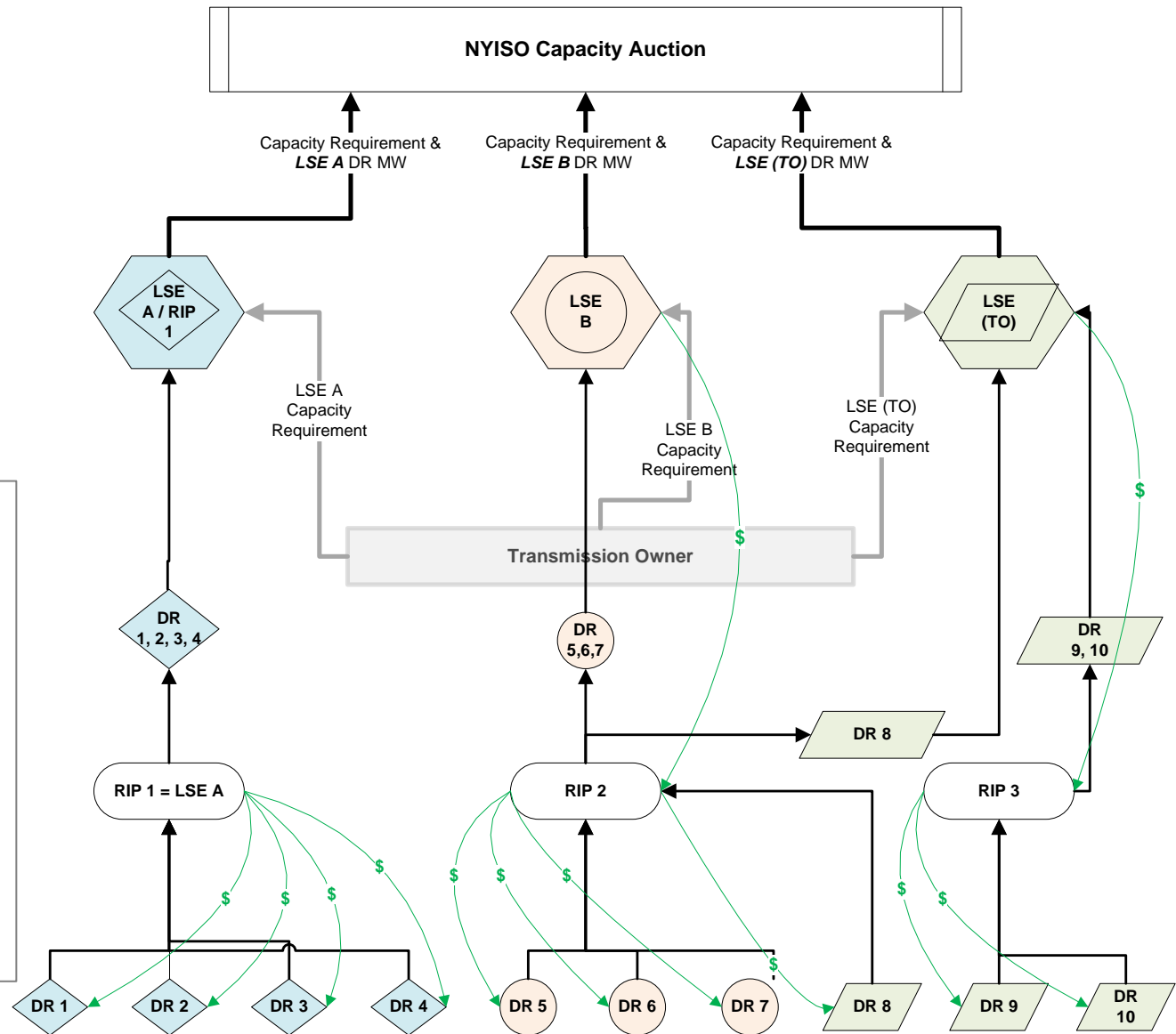
# Model 1 - Overview

Actor	Interactions
Transmission Owner	Establishes each LSE's capacity requirement
LSE	<p>Identifies to the NYISO the demand response it contracted for with <u>its own customers for which it is serving the load</u> in a particular load zone</p> <p>Purchases remaining capacity requirement for its load from NYISO Capacity market</p> <p>Establishes compensation terms with RIPs and/or demand response resources through mechanism outside of NYISO market</p>
RIP	<p>Contracts for aggregations of demand response resources on behalf of an LSE</p> <p>Payment terms with LSE through mechanism outside of NYISO market</p>
Demand Response Resource	<p>Contracts with RIP (or LSE acting as a RIP) for its capacity offset amount</p> <p>Reduces load at direction of the NYISO</p> <p>Payment terms with RIP or LSE through mechanism outside of NYISO market</p>
NYISO	<p>Handles administrative functions of the capacity market and demand response, including enrollment, notification, and performance</p> <p>Provides demand performance information to LSEs that receive the credit to their capacity requirement for demand response curtailment capability</p> <p>Assesses shortfall penalties to the LSE that receives credit for demand response curtailment capability</p>

# Model 1 – LSE receives a credit to its capacity requirement for demand response resources from its own loads

SHAPE = Contract for DR

COLOR = LSE serving the load



*NYISO's relationship for demand response in this model is with LSEs (including TOs)*

*An LSE may act as its own RIP*

*RIPs contract with LSEs (including TOs) to enroll demand response resources*

# Model 2 - Overview

Actor	Interactions
Transmission Owner	Establishes each LSE's capacity requirement
LSE	<p>Identifies to the NYISO <u>any demand response resources</u> in a particular load zone contracted with the LSE and/or RIPS on its behalf</p> <p>The <u>maximum</u> demand response credit to the LSE is limited to its capacity requirement</p> <p>Purchases remaining capacity requirement for its load from NYISO Capacity market</p> <p>Establishes compensation terms with RIPS and/or demand response resources through mechanism outside of NYISO market</p>
RIP	<p>Contracts for aggregations of demand response resources on behalf of an LSE</p> <p>Outside payment mechanism with LSE for demand response performance</p>
Demand Response Resource	<p>Contracts with RIP (or LSE acting as a RIP) for its capacity offset amount</p> <p>Reduces load at direction of the NYISO</p> <p>Outside mechanism for payment from RIP</p>
NYISO	<p>Handles administrative functions of the capacity market and demand response, including enrollment, notification, and performance</p> <p>Provides demand performance information to LSEs that receive the credit to their capacity requirement for demand response curtailment capability</p> <p>Assesses shortfall penalties to the LSE that receives credit for demand response curtailment capability</p>



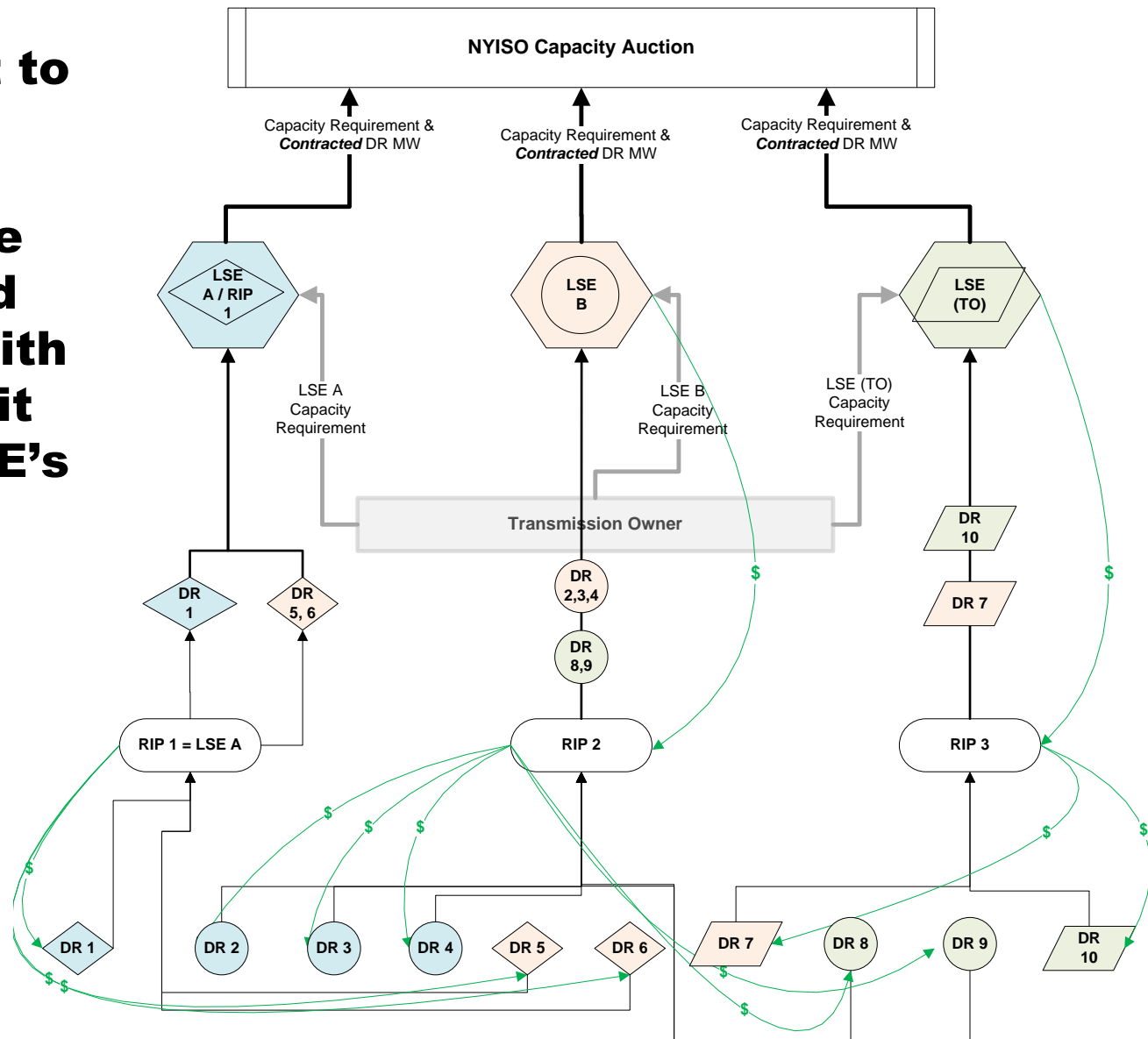
SHAPE = Contract for DR

# Model 2 – LSE receives a credit to its capacity requirement for demand response from any Demand Side Resource with a maximum credit limited to the LSE’s requirement

*NYISO’s relationship for demand response in this model is with LSEs (including TOs)*

*An LSE may act as its own RIP*

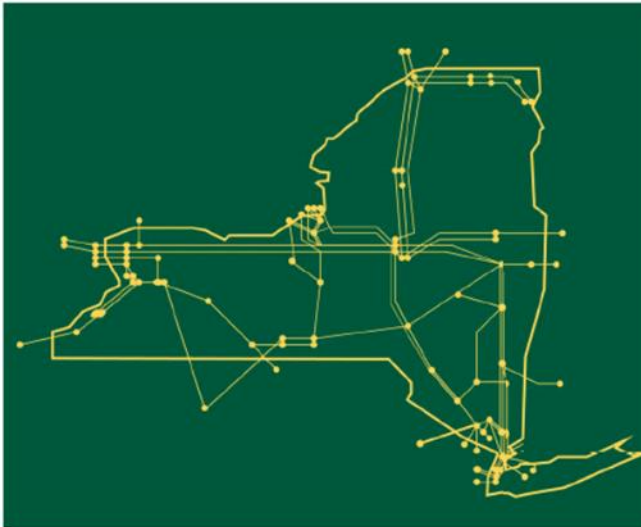
*RIPs contract with LSEs (including TOs) to enroll demand response resources*



# Next Steps

- ◆ **Walk through models in more detail at upcoming joint ICAPWG/PRLWG meetings**
- ◆ **Consider stakeholder feedback to refine the backstop model**
- ◆ **Identify potential tariff changes and estimate software changes required to implement selected backstop solution**

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