

External Resource Performance & Eligibility

SRE Process Improvements for External Capacity Resources

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Agenda

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- **Background**
- **The Supplemental Resource Evaluation (SRE) Process**
- **Proposal: SRE Process Improvements for External Capacity Resources**
- **Next Steps**
- **Appendix I: Existing Consequences for External ICAP Supplier Non-Performance**

Challenge

Challenge

- SRE calls on external ICAP suppliers should be more comparable to internal (NYCA) ICAP suppliers than they are at present.
- The NYISO should be able to rely on the delivery of energy by external capacity resources to meet reliability.
 - External capacity suppliers are currently able to receive capacity payments and avoid providing energy, even when called upon by NYISO Operations during critical system conditions.
 - Internal capacity resources selected for SRE are notified by NYISO Operations.
 - SRE'd internal capacity resources are then considered “must run,” scheduled on at minimum generation, and available for further dispatch.
 - External capacity resources selected for SRE are notified through a posting to the NYISO website.
 - Such resources are then responsible to submit a bid for evaluation by the market software.
 - These resources are not considered “must run,” but are instead evaluated economically.
 - If SRE'd, external capacity suppliers have the ability to submit a bid for energy (e.g., \$999/MWh) that is often not economic, and thus no energy would be provided in response to the SRE.

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Objective

- **The NYISO's objective is to develop SRE process improvements for external capacity, while:**
 - Making external ICAP supplier SREs more comparable to internal (NYCA) ICAP suppliers than they are at present.
 - Minimizing the impact to current software systems, operational processes, and market rules, allowing for a faster implementation.
 - Increasing the likelihood that external capacity resources deliver energy when called upon for reliability needs.
- **The NYISO encourages stakeholder feedback that will help to accomplish this objective.**

Background

Background

- **External capacity resources should be expected to perform and deliver energy at a level comparable with internal resources.**
 - The NYISO and its stakeholders have been discussing deliverability to the New York Control Area (NYCA) border for resources that sell capacity into the NYCA.*
 - The Management Response to the Analysis Group (AG) Performance Assurance Report recommended that the NYISO and its stakeholders consider improving requirements for external capacity resources.^

*See, e.g., Business Issues Committee Presentation: Proposed ICAP Manual Revisions Regarding Deliverability Requirements for Capacity Imports from PJM:
http://www.nyiso.com/public/webdocs/markets_operations/committees/bic/meeting_materials/2018-01-17/5%20Import%20Right%20Deliverability%20Requirements%20final.pdf

^Management Response to AG Performance Assurance Report: http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_miwg/meeting_materials/2018-02-21/Performance%20Assurance%20Management%20Response%20Feb%202021%20MIWG%20FINAL.PDF



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Background

- The NYISO is considering the following project scope and welcomes stakeholder feedback.
- Performance
 - Improve requirements for external capacity resources to ensure these resources are providing comparable reliability value for consumers as is expected of internal resources.
 - Targeting a Market Design Concept Proposal (MDCP) for June 2018: Build upon the process used to perform a Supplemental Resource Evaluation (SRE) on external resources.
- Eligibility
 - Continue to evaluate what, if any, additional performance requirements are needed to demonstrate deliverability to the NYCA border when deciding which resources are qualified to offer capacity into the NYISO.
 - Consider requiring external ICAP resources to demonstrate deliverability to the NYCA at the time they submit their DMNC test results.

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The Supplemental Resource Evaluation (SRE) Process*

Further information regarding the NYISO SRE process is included in the NYISO Market Services Tariff (MST), and in the Transmission & Dispatching Operations Manual at the following link:

www.nyiso.com/public/webdocs/markets_operations/documents/Manuals_and_Guides/Manuals/Operations/trans_disp.pdf



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SRE Process

- SRE commitment refers to the NYISO scheduling a generator to start-up to run at, or above its minimum generation level.
- The NYISO SRE process varies slightly depending on the timing of the SRE (*e.g.*, before Day-Ahead, after Day-Ahead/before real time, and during real time); generally, for the SRE process:
 - If time permits, a notice is posted that an SRE is planned, and that additional resource bids are being solicited.
 - The amount, location and need (energy, regulation, or reserve) are identified, as well as the duration of the SRE.
 - The resource ability to resolve the reliability issue is considered.
 - Resources are selected for SRE on a least cost basis where least cost equals the composite availability, start-up costs, and minimum generation costs.
 - If these factors are equal, then bid energy cost is used as the tie breaker.

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SRE Guarantee Payments

- **Costs incurred by the resource in responding to the SRE, such as start-up, minimum generation, and incremental costs are guaranteed by the NYISO.**
 - Resources that have been SRE'd by the NYISO may lower but cannot raise accepted bid costs for the duration of the time that the resource is committed as an SRE.

Proposal: SRE Process Improvements for External Capacity Resources

Proposal Summary Comparison

| Action | Internal Capacity Resources | External Capacity Resources (Current) | External Capacity Resources (Proposed) |
|---|--|---------------------------------------|--|
| Need identified, resources evaluated | Evaluated | Evaluated | Evaluated |
| Resources selected for SRE, notified | Yes | Yes | Yes |
| Bid evaluation | Resource is scheduled on at min gen by NYISO | High energy bids can avoid scheduling | Resources responsible to flow energy in RT using energy bids |
| Resource provides energy | Yes | Only if scheduled | Yes |
| Resource receives guarantee payments if applicable | Yes | Yes | Yes |
| Resource subject to applicable penalties for non-performance during SRE | Yes | Only if scheduled | Yes |

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External Capacity Resource SRE - Notification

- Operations would evaluate internal and external capacity suppliers when deciding which resources to SRE.
- If selected, the NYISO proposes that specific external ICAP-backed transaction(s) able to resolve the reliability need would receive an email notice.
 - The external capacity resource will be responsible to receive a schedule to flow into the NYCA in the Real-Time Market for amount of MW associated with the transaction.

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External Capacity Resource SRE - Payment

- If SRE'd, the NYISO proposes that an external capacity resource would settle at the LBMP at their proxy bus.
 - An external capacity resource that is SRE'd could incur costs in delivering energy which are not covered by the applicable proxy bus LBMP.
 - Under this circumstance, the resource will be able to request verification of its costs and seek reimbursement from the NYISO.

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External Capacity Resource SRE – Non-Performance Penalties

- The NYISO proposes that after receiving an SRE notice, an external capacity resource will have successfully responded to the NYISO's SRE if the resource:
 - 1) is online,
 - 2) is available for the amount of capacity sold, and
 - 3) flows a capacity backed transaction from its control area to the NYCA border
- If an external capacity resource is unable to demonstrate all applicable requirements, then the resource will be assessed the existing penalty outlined in Appendix I.

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Next Steps

Timeline

- **June 13, 2018**
 - Market Design Concept Proposal: SRE Process Improvements for External Capacity Resources
- **July 26, 2018**
 - Continue stakeholder discussions

Appendix I: Existing Consequences for External Capacity Supplier Energy Delivery Shortfalls

Determining Energy Delivery UCAP Shortfall

- **Currently, if an External ICAP Supplier fails to deliver Energy to the NYCA due to a failure to obtain appropriate transmission service or rights (or due to a forced outage), then:**
 - There is a shortfall starting from the later of 1) the beginning of the period for which the UCAP was certified or 2) the last demonstrated delivery of the Installed Capacity Equivalent
 - The shortfall extends to the earlier of either 1) the time at which the entity demonstrates delivery, or 2) the end of the term for which the block of UCAP was certified.

Determining Deficiency Charge

- **The deficiency charge is equal to 1.5 times the applicable Market-Clearing price for UCAP determined in the ICAP Spot Market Auction for the applicable month**
 - This value is prorated for the number of hours in the month that the External ICAP supplier is deemed to have a shortfall.
 - The value is then multiplied by the number of MW of shortfall.

The Mission of the New York Independent System Operator, in collaboration with its stakeholders, is to serve the public interest and provide benefits to consumers by:

- Maintaining and enhancing regional reliability
- Operating open, fair and competitive wholesale electricity markets
- Planning the power system for the future
- Providing factual information to policy makers, stakeholders and investors in the power system



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