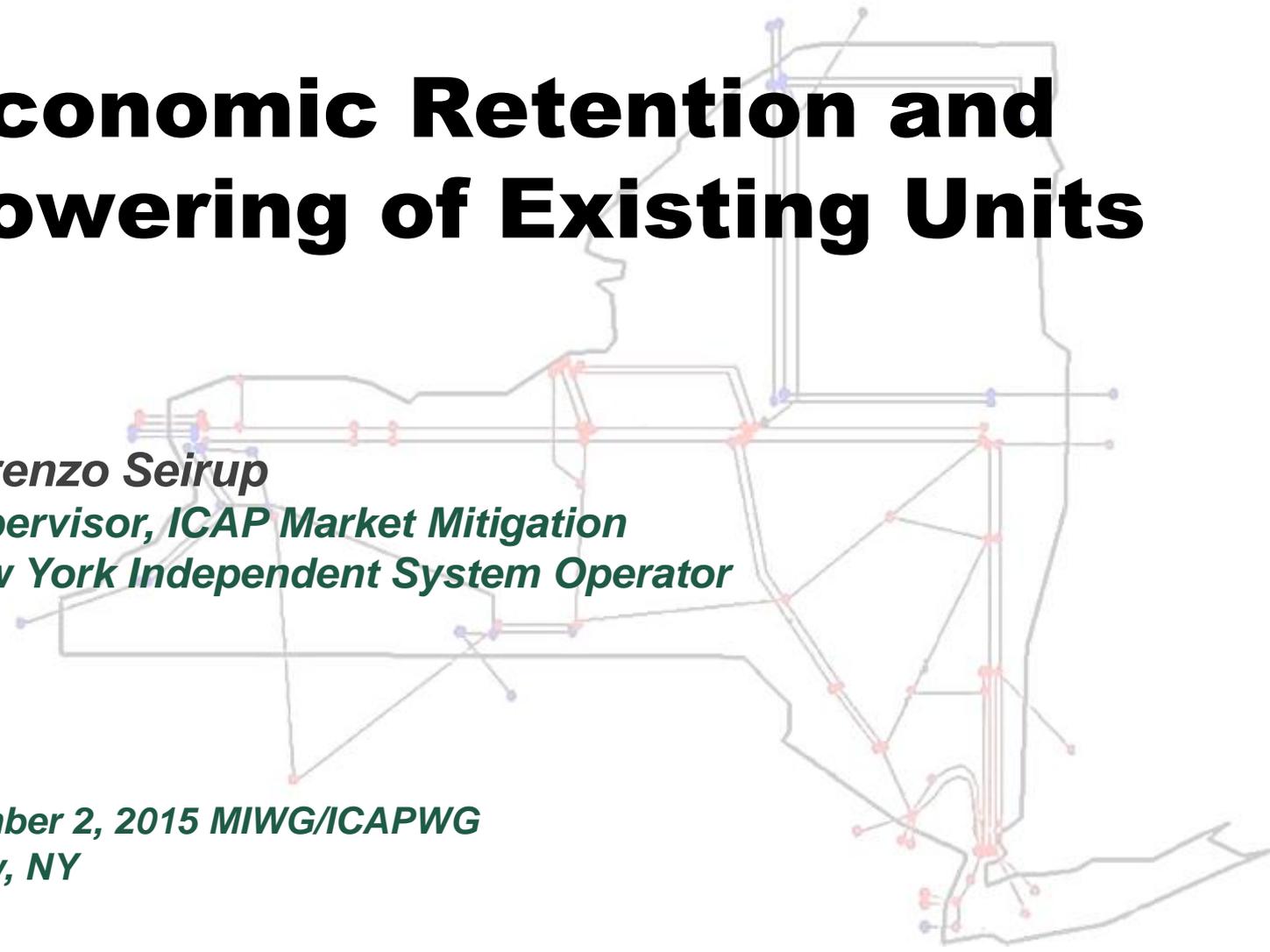


Uneconomic Retention and Repowering of Existing Units



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Albany, NY*

- ◆ On March 19, 2015 the FERC issued an order directing the NYISO to establish, and report on, a stakeholder process
 - *150 FERC ¶ 61,214, FERC Docket No. EL13-62-000*
- ◆ In general, FERC asked that the NYISO look at:
 - *Whether there are circumstances that warrant the adoption of BSM measures in Rest of State (ROS)*
 - *Whether there is a need for, and what mitigation measures would need to be in place to address, repowering agreements with the potential to suppress capacity prices*
- ◆ Stakeholder discussions
 - *The NYISO made three presentations in the Spring and Summer of 2015, primarily focused on assessing the potential need to apply BSM to new entry in ROS*
 - *The NYISO made an additional presentation on November 19, in which it discussed issues surrounding uneconomic retention and repowering of existing units*

- ◆ **The NYISO's filed a report with FERC on June 17, 2015. In its report, the NYISO:**
 - *Described that it did not see a compelling need for BSM rules for new entry in ROS at this time*
 - *Indicated that there may be concerns regarding the potential market effects of uneconomic retention and repowering*
 - *Requested that the Commission allow it to:*
 1. **Propose any necessary measures related to uneconomically retained units and repowering projects that address a reliability need in its October 19 RMR Compliance Filing. The NYISO presented an overview of the measures included in the RMR Compliance Filing on November 19.**
 2. **File a further report 90 days after filing the RMR Compliance Filing addressing further analyses and stakeholder discussion on the uneconomic retention of existing units and repowerings pursuant to agreements that are not principally driven by a reliability need.**

- ◆ **Discuss the NYISO's analysis related to the potential incentives to suppress capacity prices through uneconomic retention and repowering**
 - *Workbook*
 - *Updated ROS GFC Based Supply Curve*

- ◆ **Present and discuss potential approaches to mitigation measures**

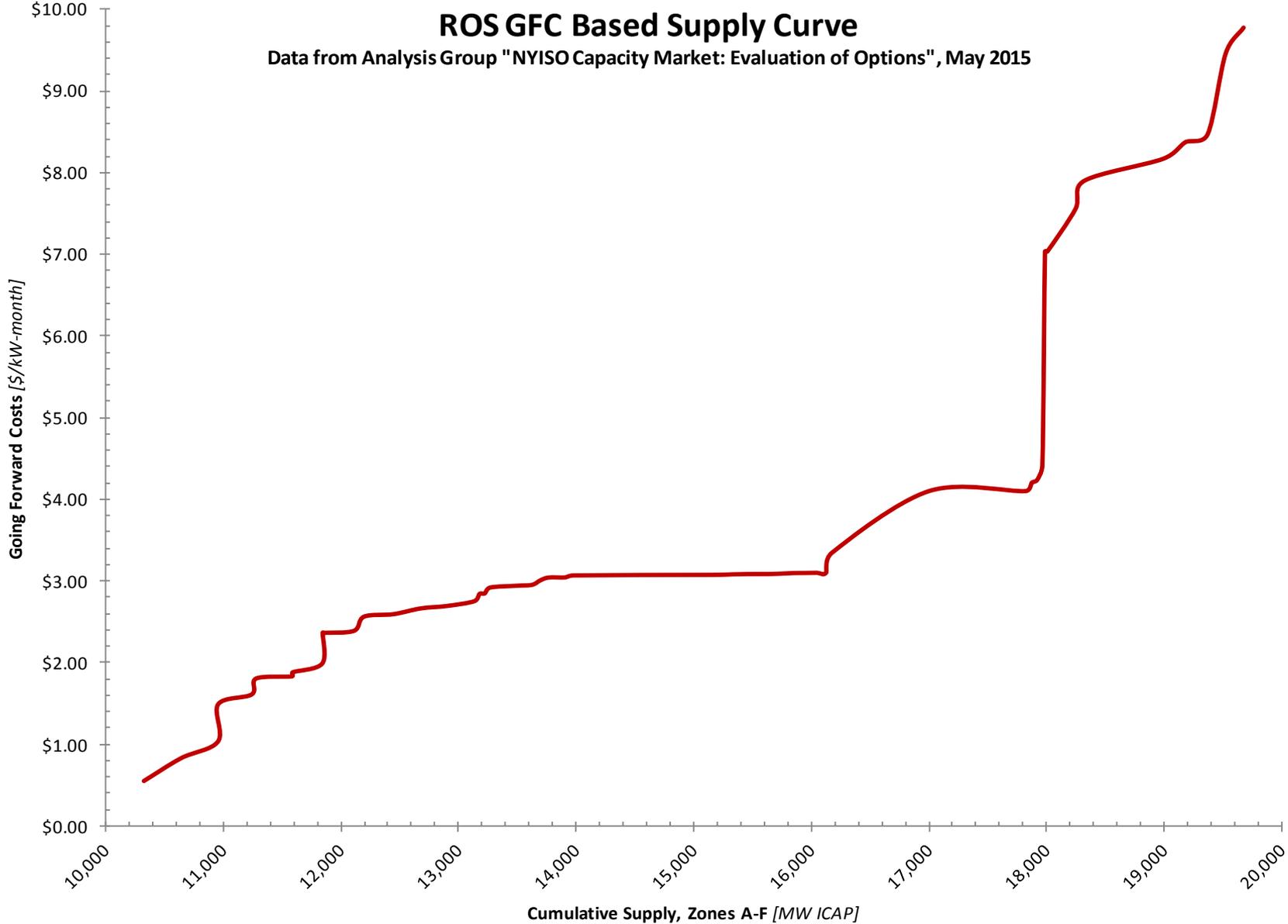
- ◆ **Describe further work and next steps**
 - *Response to FERC due December 16, 2015*

- ◆ **Solicit Stakeholder feedback**

- *The NYISO has posted a workbook to accompany this presentation*
- *The workbook examines hypothetical uneconomic retention scenarios and the financial benefits it could provide the funding entity*
- *As the hypothetical scenarios in the workbook demonstrate, there are circumstances where the costs of retaining or repowering an uneconomic unit may be significantly lower than the cost savings stemming from the unit's impact on the ICAP market*
- *A hypothetical load-side entity intending to exercise market power, with a 30% market share of load in ROS, could theoretically be willing to pay as much as \$12/kW-month above market prices to retain an existing unit*

| Retention and Repowering Scenarios | | | |
|------------------------------------|-------|--------------------|------------------------|
| Strategy | Term | NPV For Generator | NPV w/LSE Cost Savings |
| Retention | 1 yr | \$ (7,210,214.32) | \$ 39,445,173.57 |
| Retention | 3 yr | \$ (21,996,310.21) | \$ 106,013,169.12 |
| Retention | 5 yr | \$ (36,794,179.03) | \$ 158,879,995.08 |
| Repowering | 10 yr | \$ (24,064,113.70) | \$ 136,121,203.87 |

Potential Incentives



- ◆ **Given the concerns surrounding the potential for price suppression from uneconomic retention, the NYISO is considering potential monitoring and mitigation measures**

- ◆ **Potential monitoring approaches fall into two general categories:**
 1. ***Supply Side – Identify ICAP Suppliers for review, examine costs and above-market contracts***
 - Could be implemented in a number of different ways in order to balance the effectiveness and administrative burden (both on the NYISO and on the subject Market Participants) of screening measures
 - Does not differentiate between legitimate hedging and the exercise of market power
 2. ***Buyer-side – Examine load-side entities' power supply contracts***
 - Would require LSEs to submit some or all new contracts for energy & capacity supply to the NYISO for review

◆ Supply Side Approaches

- *Screen for a selection of units that are potential candidates for retirement*
 - The NYISO could develop a defined methodology to determine if there are any units that are potential candidates for retirement
 - The ICAP Suppliers identified by the NYISO's methodology would be subject to a review of costs and any contracts with load-side entities
 - This approach can be adjusted to balance effectiveness and administrative burden

- *Require ICAP Suppliers to submit to the NYISO a copy of their "Annual Report of Lightly Regulated Generation Facilities"*
 - Filed annually with the NYPSC
 - Pertains to Section 66, Subdivision 5 and Section 80, Subdivision 5 of the Public Service Law (CASE 11-M-0294)
 - The NYISO could request and review any contracts with load-side entities of the ICAP Suppliers reporting a negative or near negative cash flow
 - This approach would make use of existing reporting requirements to minimize the administrative burden on Market Participants

◆ Buyer-side Approaches

- ***Require LSEs to submit new contracts with ICAP Suppliers that are not the result of an open and competitive process (RFP) to the NYISO***
 - Furthermore, require LSEs to certify that any contracts with ICAP Suppliers not submitted to the NYISO are the result of an open and competitive process
 - This approach results in some difficulty differentiating between a contract that is part of a legitimate hedging strategy and one that is an inappropriate attempt to exercise market power

- ***Require LSEs to submit all contracts with ICAP Suppliers to the NYISO***
 - The NYISO would be able to evaluate contracts in the context of the LSEs entire electricity supply portfolio, allowing for the use of quantitative methods to more accurately differentiate between legitimate hedging behavior and the exercise of market power
 - This approach theoretically would have greater accuracy at the cost of a higher administrative burden than any other method

◆ Potential Mitigation Approaches

■ *Impose an Offer Floor*

- **Imposition on an existing unit, as opposed to a proposed new project, may be unpredictable and have disruptive effects on the ICAP Market.**
 - *This is because existing capacity would suddenly have a higher price than the price at which it may have been offered at in preceding auctions*
- **May not penalize the appropriate party(ies) – market effects may cause financial harm to blameless third parties**
 - *The causing load-side entity could have taken steps to limit or eliminate financial exposure*
- **Difficult to apply *ex ante*, as it is done for new entry during the Class Year process**
- **Would require the NYISO to (1) expressly define disallowed activities, and (2) be able to objectively identify behavior involved in those activities**

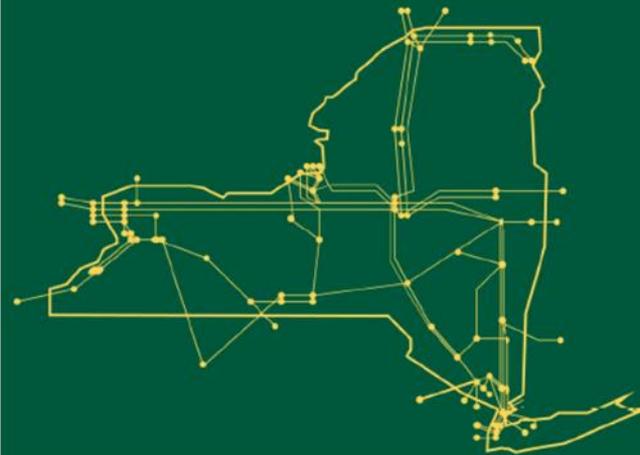
■ *Refer to the FERC Office of Enforcement*

- **Would expressly enable the NYISO to effectively screen for suspicious activity, but not require it to develop an approach that objectively differentiates between legitimate hedging behavior and the inappropriate exercise of market power**

- ◆ **The NYISO's response to FERC is due December 16**
 - *The NYISO will include a summary of stakeholder discussions and feedback on the topics covered in this presentation in its response*
 - *The NYISO will include a description of potential approaches to mitigation, along with a summary of stakeholder discussion on the matter. The NYISO has not yet determined what approach, if any, it would recommend*

- ◆ **Stakeholders are encouraged to provide further comments to deckels@nyiso.com by Wednesday, December 9**

The New York Independent System Operator (NYISO) is a not-for-profit corporation responsible for operating the state's bulk electricity grid, administering New York's competitive wholesale electricity markets, conducting comprehensive long-term planning for the state's electric power system, and advancing the technological infrastructure of the electric system serving the Empire State.



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