

Consumer Impact Analysis: 2022 Project List

Tariq N. Niazi

Senior Manager, Consumer Interest Liaison

Budget and Priorities Working Group

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Analysis Guidelines

- Anticipated net production cost impact of \$5 million or more per year;
- Expected consumer impact from changes in energy or capacity market prices is greater than \$50 million per year;
- Incorporates new technology into NYISO markets for first time;
- Allows or encourages a new type or category of market product; or
- Creates a mechanism for out-of-market payments for reliability

Identification of 2022 Projects

- **Projects Identified in this Analysis**
 - Significant market design concepts identified in the 2022 project prioritization process
- **Additional Projects that May Be Analyzed**
 - FERC directives where the NYISO has implementation flexibility
 - Emergent stakeholder issues

2022 Proposed Projects

- Improving Duct Firing Modelling
- Improving Capacity Accreditation
- Internal Controllable Lines

Improving Duct Firing Modeling

- *Description:* Generators providing reserves and regulation are currently required to achieve their emergency response rate over the entire range of their operation. This can be problematic for combined-cycle gas turbines (“CCGTs”) since they cannot achieve the emergency response rate for their entire output as their response rate during the duct-firing portion (the upper 10-20% of capability) is typically slower than the baseload portion, hence limiting their availability to provide reserves and regulation.

This project would seek to evaluate enhancements to the scheduling of a generator’s capacity that would provide more flexibility to participate in the reserves and regulation markets. Consideration would be given to alternatives, such as: (1) testing response rates for each MW block and not just the emergency rate for the entire output of the plant or (2) allowing reserves and regulation to be provided for just the baseload output of the plant.

- *Expected Benefit:* Gaining access to CCGTs full dispatchable capability will become increasingly important as generation from intermittent resources grows over the coming years. Enabling the participation of CCGTs, majority of which are duct firing and constitute a large portion of dispatchable resources, will provide consumer benefits as increased competition could result in lower market prices and greater availability of resource capability to provide various ancillary services.

- *Screen:* Emergent stakeholder issue

Improving Capacity Accreditation

- *Description:* The increased participation of renewables in New York's electric generation market is leading to a rapid change in New York's resource mix. As the resource mix transitions to one more dependent on resources that rely on the sun or wind to produce energy and/or resources with energy limitations, each resources' contribution to reliability also evolves. The resource adequacy contribution of all resources, including the determination of capacity requirements as well as resources' contribution to reliability must be reviewed and accurately reflected in the Installed Capacity market and its processes.
- *Expected Benefit:* Properly valuing the contribution of all resources in maintaining grid reliability, known as capacity accreditation, will provide the signals necessary to maintain a diverse resource mix. Enhancing these capacity accreditation measures will allow the Installed Capacity market to continue to support grid reliability as the transition of the resource mix unfolds.
- *Screen:* Emergent stakeholder issue

Internal Controllable Lines

- ***Description:*** Currently, there are no internal controllable lines in operation within the NYCA and hence market rules for the scheduling and pricing of internal controllable lines within the Energy Market do not exist. However, the development of market rules for internal controllable lines that will support outcomes in the best interests of all stakeholders is needed. State and local initiatives such as Tier 4 REC procurements and NYC Local Law 97 provide incentives for developers to deliver renewable generation into congested areas using HVDC lines.

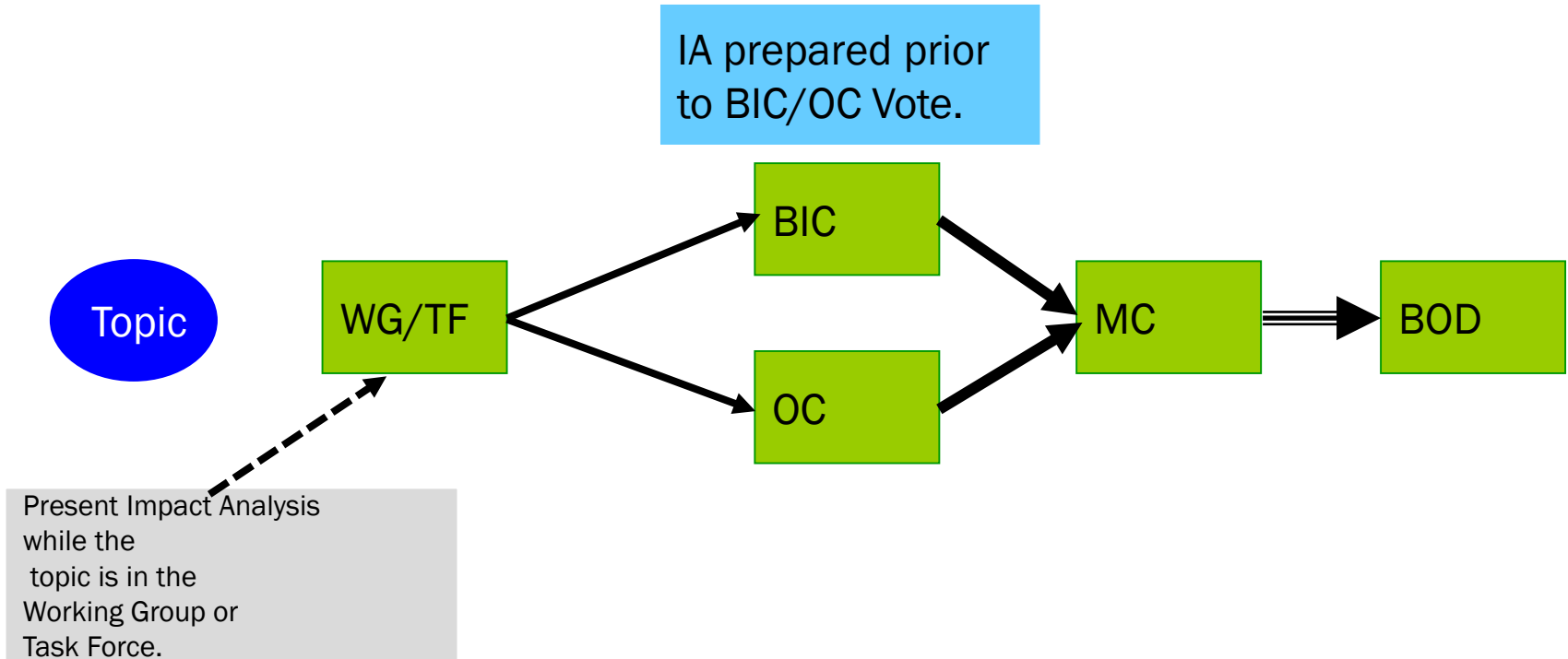
This project would begin with developing market rules for the scheduling and pricing of internal controllable lines within the Energy Market. Based on these newly developed rules, the NYISO would evaluate, and if necessary revise, the existing ICAP market rules for Internal UDRs to ensure compatibility with the expected operation of internal controllable lines in the Energy Market.

- ***Expected Benefit:*** Developing market rules for the scheduling and pricing of internal controllable lines would support state and local programs in delivering renewable generation to congested areas using HVDC lines.
- ***Screen:*** Allows or encourages a new type or category of market product

Impact Analysis - Process Map

NYISO SHARED GOVERNANCE PROCESS

IA prepared prior to BIC/OC Vote.



Present Impact Analysis while the topic is in the Working Group or Task Force.

Feedback?

Email additional feedback to:
deckels@nyiso.com

Questions?

We are here to help. Let us know if we can add anything.

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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