

Consumer Impact Analysis: 2018 Project List

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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
- Creates a mechanism for out-of-market payments for reliability

Identification of 2018 Projects

- **Projects Identified in this Analysis**
 - Significant market design concepts identified in the 2018 project prioritization process
- **Additional Projects that May Be Analyzed**
 - FERC directives where the NYISO has implementation flexibility
 - Emergent stakeholder issues

2018 Proposed Projects

- **BSM Repowering**
- **DER Participation Model**
- **Energy Storage Integration and Optimization**
- **Constraint Specific Transmission Demand Curves**
- **Integrating Public Policy**

BSM Repowering

- *Description:* A focused BSM repowering exemption may be appropriate in order to revise market rules so that they do not discourage or prevent replacements, while adequately protecting the integrity of the wholesale markets. This project would seek to evaluate and develop a proposal for a buyer-side mitigation exemption that specifically addresses the concerns with replacement (repowered) generation projects and encourages private investment.
- *Expected Benefit:* A specially-tailored BSM evaluation process may be able to reduce the potential for over-mitigation of repowering projects
- *Screen:* Emergent stakeholder issue

DER Participation Model

- *Description:* The NYISO released its Distributed Energy Resource (DER) Roadmap in February 2017, as a first step to enhancing its market rules for DER participation in the NYISO's energy, ancillary services, and capacity markets. The NYISO is also currently evaluating potential modifications to its existing Demand Response programs as part of this effort. This project will include the design of DER performance obligations, metering and telemetry requirements, baseline and performance measurement and verification rules, resource modeling, and the development of an understanding of how to balance the simultaneous participation of DER in retail -level programs, as well as the NYISO's wholesale markets
- *Expected Benefit:* Provide opportunities for Distributed Energy Resource Participation in Wholesale Markets. Alignment with NYS PSC's REV initiative
- *Screen:* Allows or encourages a new type or category of market product

Energy Storage Integration and Optimization

- *Description:* The NYISO would more fully develop the energy storage participation model, associated market rules, and tariff language. Additionally, the NYISO would consider ways to improve the optimization of energy storage resources on a least cost basis by leveraging Energy Storage Resources' flexibility through more sophisticated energy constraint modeling.
- *Expected Benefit:* Improve modeling of resources that can inject and withdraw energy from the grid in response to NYISO dispatch signals. Increase market efficiency through more economic utilization of storage resources
- *Screen:* Incorporates new technology into NYISO markets for first time

Constraint Specific Transmission Demand Curves

- *Description:* Some transmission shortages are still resolved by relaxation instead of by setting prices through use of a transmission demand curve. This project would study replacing the NYISO's current transmission constraint pricing methodology with multiple transmission demand curves that can vary according to the importance, severity, and/or duration of the transmission constraint violation.
- *Expected Benefit:* More efficient pricing of transmission constraints should potentially result in reduced price volatility and more efficient resource scheduling
- *Screen:* Emergent stakeholder issues

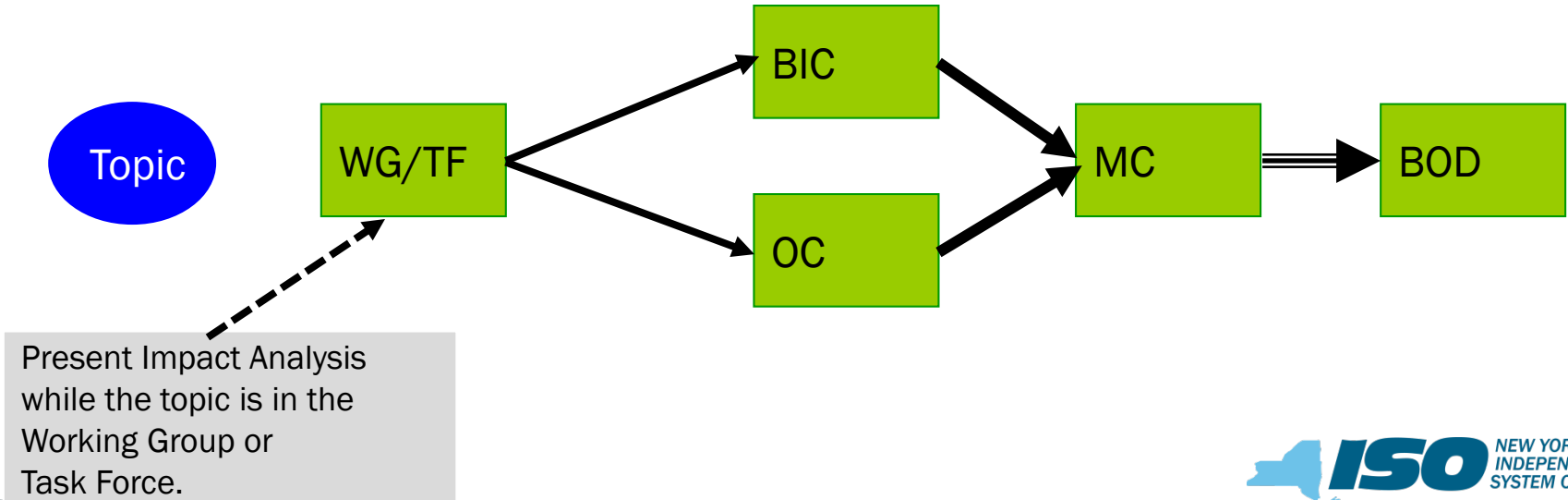
Integrating Public Policy

- ***Description:*** This project will continue the vetting of wholesale market concepts with stakeholders to harmonize the State's decarbonization goals with the wholesale energy and capacity market design. The effort will include consideration of market design changes as well as market products for energy and capacity markets that support viable and efficient wholesale markets for maintaining needed existing and incenting new resources necessary to sustain reliable grid operations over the long run. As part of the evaluation, a comprehensive review of the impacts that may result from a major incremental influx of renewable energy resources and associated market design changes to account for these impacts will be studied. This effort will also include, as necessary, responding to actions taken by FERC in its State Public Policy Proceeding
- ***Expected Benefit:*** Harmonize state decarbonization policies with New York's wholesale market design. Evolve wholesale market incentives to maintain grid reliability
- **Screen:** Significant Market Design Concept

Impact Analysis - Process Map

NYISO SHARED GOVERNANCE PROCESS

IA prepared prior to BIC/OC Vote.



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Next Steps

- Present the 2018 Consumer Impact Analysis Project List incorporating stakeholder feedback at the next BIC meeting

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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