

# Proposed 2020 Market Project Candidates

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**Budget and Priorities Working Group**

April 24, 2019, Krey Corporate Center

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# Agenda

- Project Prioritization Phases, Milestones, and Timeline
- Project Descriptions
- 2020 Market Project Candidates
- Next Steps

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# Project Prioritization Phases, Milestones, and Timeline

# Project Prioritization Process

Phase	Description
Identification	This phase involves developing the list of project candidates taking into consideration regulatory obligations, strategic initiatives, State of the Market recommendations, necessary infrastructure enhancements, product plans, stakeholder feedback, etc.
Prioritization	The phase involves a stakeholder survey and the NYISO prioritization of projects. The stakeholder survey will facilitate an assessment of the relative priority of the topic within the portfolio and is used to determine stakeholder appeal. The NYISO prioritization incorporates the stakeholder appeal into objective criteria that reflects strategic alignment, expected outcomes, risks, and ability to execute in development of a priority score for each Market project.
Evaluation	This phase involves performing a feasibility assessment based on detailed cost and labor estimates, dependencies, priority scores, and stakeholder feedback.
Recommendation	This phase involves proposing a feasible set of project deliverables and related budget requirements. The proposal is refined as needed based on stakeholder feedback.

# Project Type

Project Type	Description
Mandatory	Strategic Initiatives and FERC Orders. These projects will be included in the budget
Continuing	Approved in a prior year and have progressed to either software design or development complete. Additional projects may be classified as Continuing based on stakeholder feedback. These projects will be included in the budget
Future	Consensus from stakeholder discussions of this projects priority relative to other projects has resulted in these projects NOT being prioritized and initiated in the coming budget year. Resources, time constraints, stakeholder feedback, and other project dependencies have been taken in to consideration
Prioritize	Projects to be prioritized and included in the budget based on a feasibility assessment taking into consideration resources, time constraints, stakeholder feedback, priority score, and other project dependencies. Market projects are included in the stakeholder survey

# Project Category

Project Category	Description
Enterprise	Includes internal-facing technology and back office support projects that have no market rule changes. This list includes projects that may be noticeable to Market Participants. These projects are NOT included in the stakeholder survey
Market	Projects associated with market rule(s) including market design and study projects as well as any project implementing market rule changes. These projects are included in the stakeholder survey unless they are Mandatory, Continuing, or Future

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# Project Scoring

Project Scoring	Description
NYISO Only	Enterprise projects that are not Mandatory, Continuing, or Future types are scored by the NYISO Only during the Prioritization phase. These projects are included in the budget based on a feasibility assessment taking into consideration resources, time constraints, priority score and other project dependencies.
Stakeholder Scored	Market projects that are not Mandatory, Continuing, or Future are included in the stakeholder survey and scored by the NYISO during the Prioritization phase. These projects are included in the budget based on a feasibility assessment taking into consideration resources, time constraints, stakeholder feedback, priority score, and other project dependencies.

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# Survey Appeal Definition \* Same as used in 2018

Criteria	Criteria Weight	HIGH	MEDIUM	LOW	NONE
		10	7	3	0
Appeal	15	Broad Customer Support: Supported by 5 sectors with 25% or more of survey respondents per sector applying points and average across the survey respondents per sector of 5 points or more; or either raw or weighted scores equivalent to 20% of survey respondents applying 25 points or more	Moderate Customer Support: Supported by 4 sectors with 25% or more of survey respondents per sector applying points and average across the survey respondents per sector of 5 points or more; or either raw or weighted scores equivalent to 10% of survey respondents applying 25 points or more	Minimal Customer Support: Supported by 2 sectors with 25% or more of survey respondents per sector applying points and average across the survey respondents per sector of 5 points or more; or either raw or weighted scores equivalent to 5% of survey respondents applying 25 points or more	Little to No Customer Support

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# Project Prioritization Criteria

\* Same as used in 2018

PRIORITIZATION CRITERIA						
Category	Criteria	Criteria Weight	HIGH	MEDIUM	LOW	NONE
			10	7	3	0
Strategy (If we do this project)	Leader in Reliability	10	Significantly improves NYISO ability to maintain NYCA Reliability	Moderately improves NYISO ability to maintain NYCA Reliability	Minimally improves NYISO ability to maintain NYCA Reliability	None
	Leader in Market Design	10	Significantly improves NYISO Market Design	Moderately improves NYISO Market Design	Minimally improves NYISO Market Design	None
	Leader in Technology Innovation	6	Significantly advances the IT strategy or technology improvement	Moderately advances the IT strategy or technology improvement	Minimally advances the IT strategy or technology improvement	None
	Sustain and Enhance Robust Planning Processes	9	Supports tariff, FERC, NPCC, or NYSERC compliance requirements for Planning Process	Supports reliability planning and/or Business Plan objectives	Required for SRP planning study efficiency or continuous improvement initiatives	None
Outcome (If we do this project)	NYISO Annual Cost Reduction	10	>\$500k savings-Direct and soft (labor)	>\$100k, <\$500k savings-Direct and soft (labor)	>\$10k,<\$100k savings - Direct and soft (labor)	<\$10k savings - Direct and soft (labor)
	Appeal	15	Broad Customer Support : Supported by 5 sectors with 25% or more of survey respondents per sector applying points and average across the survey respondents per sector of 5 points or more; or either raw or weighted scores equivalent to 20% of survey respondents applying 25 points or more	Moderate Customer Support: Supported by 4 sectors with 25% or more of survey respondents per sector applying points and average across the survey respondents per sector of 5 points or more; ; or either raw or weighted scores equivalent to 10% of survey respondents applying 25 points or more	Minimal Customer Support: Supported by 2 sectors with 25% or more of survey respondents per sector applying points and average across the survey respondents per sector of 5 points or more; ; or either raw or weighted scores equivalent to 5% of survey respondents applying 25 points or more	Little to No Customer Support
	Market Efficiency	10	Significant improvement	Moderate improvement	Minimal improvement	No impact
	Post Production Sustainability	5	Existing support structure and skills	Support structure exists but needs minimal modifications	Support structure exists but needs major modifications	No skills or support structure in place
Risk (If we do NOT do this project)	Compliance	10	Significant risk of compliance violation	Moderate risk of compliance violation	Minimal risk of compliance violation	None
	Business Process (inclusive of technology impact on business process)	5	Enterprise Wide and/or Bid to Bill Impact. The project impacts processes in most departments	Multiple Department Impact.	Department Wide Impact The project impacts many processes within a department	Only one or two processes impacted
	Reliability and Market	10	Mission-critical systems becoming non operational or above \$1 million market impact	Non mission-critical systems becoming non operational or \$100,000 - \$1 million market impact	Non mission-critical systems affected or \$10,000 - \$100,000 market impact	No or less than 10,000 impact
Execution (If we do this project)	Cost	4	Total project cost (current & future years) estimated <\$100k	Total project cost (current & future years) estimated >\$100k, <\$500k	Total project cost (current & future years) estimated >\$500, <\$1M	Total project cost (current & future years) estimated >\$1M
	Multi-Year Dependency	8	Continuation of a multi-year project - postponement significantly disrupts value of previous investments	Continuation of a multi-year project - postponement moderately disrupts value of previous investments	Continuation of a multi-year project - postponement minimally disrupts value of previous investments	None
	Complexity of Business and Technology	4	One area/technology	Cross-functional < 3 Areas/Technology	Highly Cross-functional/ Re-engineering	Complex, solution and impact unknown
	Compliance	8	Non-appealable, ordered by FERC / desired by NYISO and MP	Ordered by FERC, undesired by NYISO or MP	Potential order identified by FERC	No order identified by FERC

# Milestone Definitions

Milestone	Definition
Market Design Concept Proposed	NYISO has initiated, or furthered discussions with stakeholders that explore potential concepts to address opportunities for market efficiency or administration improvements.
Market Design Complete	NYISO has developed with stakeholders, a market design concept such that the proposal can be presented for a vote at the BIC or MC to define further action on the proposal.
Architectural Design	The architectural design document is complete and software development is ready to begin.
Functional Requirements	NYISO has completed documentation of the functional requirements and the Business Owner has approved.
Software Design	The software design document is complete and software development is ready to begin.
Development Complete	Development has been completed, packaged and approved by the Supervisor.
Deployment	Required software changes to support commitment have been integrated into the production environment.
Study Complete	Scope of work to be performed has been completed; results and recommendations have been presented to the appropriate Business Owners and stakeholders.
Study Defined	The scope of work for the study has been presented to stakeholders, including a discussion on the necessary input(s), assumption(s) and objective(s) of the study.

# Project Descriptions and Grouping

- The NYISO has updated the candidate project description template to separate the problem being addressed from what to do about it
- The NYISO will facilitate stakeholder discussion at BPWG to see if projects addressing the same problem can be grouped together
- Template is attached to March 5, 2019 BPWG meeting materials
- **The NYISO has agreed to provide this same information for the NYISO proposed Market projects**

**Instructions:** Stakeholders should contact Brian Hurysz at (518) 356-6126 or email [bhurysz@nyiso.com](mailto:bhurysz@nyiso.com) (cc Leigh Bullock [bullock@nyiso.com](mailto:bullock@nyiso.com) on any email communications) to discuss any suggestions for new projects. A NYISO staff member will be assigned to work with the stakeholder on each new project request, provide assistance with completing this template as needed, and facilitate internal discussions for the NYISO scoring and costing. Please complete this template with as much information as possible to assist the NYISO in developing an accurate a business case.

## 1 <Title of proposed project candidate>

### 1.1 Problem / Opportunity

*This section describes the business problem to be addressed or opportunity to be studied by the proposed project. Supporting background information, prior work, and analysis to the extent it is available should be included.*

### 1.2 Project Objective(s) & Anticipated Deliverable(s)

*This section describes what the project should do to address the business problem or opportunity. It summarizes the approach and desired outcome, and may build on project work in a prior year. It includes the expected deliverables to satisfy the project objective and is tied to the proposed project milestone. The NYISO will work with the stakeholder(s) proposing a project to formulate what may be feasibly delivered in a particular time frame based on resourcing estimated for the effort.*

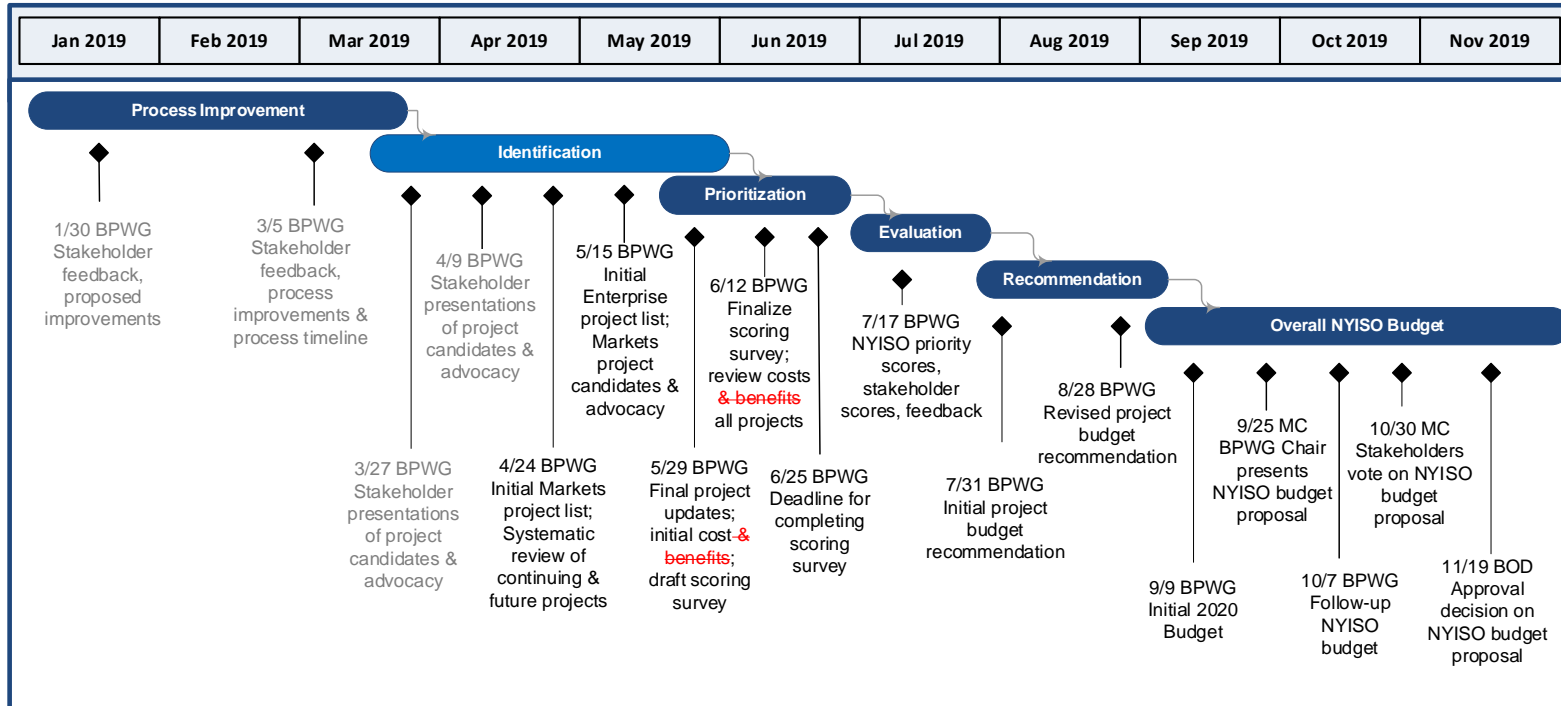
### 1.3 Project Justification

*This section provides reason(s) why the candidate project should be considered. Examples would include addressing a FERC Order, Tariff requirements, automate manual processes, mitigate risk, market enhancements, State of the Market recommendations.*

# Review of Recommended Project Type

- For 2020 proposed projects that were approved in the 2019 budget, the NYISO will review its recommendations for projects to be categorized as Continuing and Future
- **The NYISO will consider today's stakeholder feedback on whether the priority of the project has changed in making its decision on appropriate Project Type**
  - Market projects categorized as Continuing will be included in the 2020 budget and NOT included in the stakeholder survey
  - Market projects categorized as Future will NOT be included in the 2020 budget and NOT included in the stakeholder survey
  - However, when projects are excluded from the stakeholder survey, there is a missed opportunity to obtain an updated view from stakeholders on the priority of the item

# Project Prioritization Timeline



\* Project benefits are now included in the more detailed project descriptions

# Project Descriptions

# Project Descriptions

- **The NYISO has developed project descriptions for 38 proposed Market projects**
  - 1 Business & Finance, 12 Capacity Market, 5 DER, 17 Energy Markets, 1 Planning & 2 TCC Market
  - 8 Mandatory, 4 Continuing, 17 Prioritize & 9 future
- **Project descriptions included with today's posted meeting materials**

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# Systematic Review of Projects

- For 2020 proposed projects that were approved in the 2019 budget, the NYISO will facilitate a systematic review of each project with recommendations for Continuing category or not
- A systematic review will also be performed for projects the NYISO recommends for the Future category
- The NYISO will consider stakeholder feedback on the proposed project and assess any changes in the expected stakeholder priority of an initiative in making its decision on appropriate project categorization
  - Projects categorized as Continuing will be included in the 2020 budget and NOT included in the stakeholder survey
  - Projects categorized as Future will NOT be included in the 2020 budget and NOT included in the stakeholder survey
  - However, when projects are excluded from the stakeholder survey, there is a missed opportunity to obtain an updated view from stakeholders on the priority of the item

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# 2020 Market Project Candidates

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Project Name	Product Area	Project Type
NYISO Budget (Rate Schedule 1) Cost Recovery Update	Business and Finance Products	Continuing
BSM Evaluation for Small Resources Outside of the Class Year	Capacity Market Products	Prioritize
BSM Renewables Exemption Study	Capacity Market Products	Mandatory
Capacity Transfer Rights for Internal Transmission Upgrades (SOM)	Capacity Market Products	Future
Competitive Entry Exemption Non-Qualifying Contract Rule Review (SOM)	Capacity Market Products	Prioritize
Comprehensive Mitigation Review	Capacity Market Products	Prioritize
Demand Curve Reset	Capacity Market Products	Mandatory
Dynamic Creation of Zones (SOM)	Capacity Market Products	Future

# 2020 Market Project Candidates

Project Name	Product Area	Project Type
Enhanced BSM Forecasts Assumptions (SOM)	Capacity Market Products	Prioritize
Enhanced BSM Mitigation Study Period	Capacity Market Products	Prioritize
Enhancing Fuel and Energy Security	Capacity Market Products	Prioritize
Locational Marginal Pricing of Capacity (SOM)	Capacity Market Products	Prioritize
Tailored Availability Metric	Capacity Market Products	Prioritize
DER Participation Model	DER Products	Mandatory
Dual Participation	DER Products	Mandatory
Expanding Capacity Eligibility	DER Products	Mandatory
Meter Service Entity for DER	DER Products	Mandatory
NYISO Pilot Framework	DER Products	Continuing

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# 2020 Market Project Candidates

Project Name	Product Area	Project Type
5 minute Transaction Scheduling with HQ	Energy Market Products	Prioritize
Ancillary Services Shortage Pricing (SOM)	Energy Market Products	Prioritize
Carbon Pricing	Energy Market Products	Continuing
Constraint Specific Transmission Shortage Pricing (SOM)	Energy Market Products	Prioritize
Dynamic Reserve Requirements (SOM)	Energy Market Products	Prioritize
Eliminate Fees for CTS Transactions with PJM (SOM)	Energy Market Products	Future
Enhanced Fast Start Pricing	Energy Market Products	Mandatory
Enhanced PAR Modeling (SOM)	Energy Market Products	Future
ESR Participation Model (SOM)	Energy Market Products	Mandatory
Hybrid Storage Model	Energy Market Products	Prioritize

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# 2020 Market Project Candidates

Project Name	Product Area	Project Type
Linked Virtual Trading	Energy Market Products	Prioritize
Long Island PAR Optimization and Financial Rights (SOM)	Energy Market Products	Future
Mitigation Thresholds Review	Energy Market Products	Prioritize
More Granular Operating Reserves (SOM)	Energy Market Products	Prioritize
Pricing Reserves for Congestion Management (SOM)	Energy Market Products	Future
Reserves for Resource Flexibility	Energy Market Products	Prioritize
RTC-RTD Convergence Improvements (SOM)	Energy Market Products	Future
Climate Change Impact and Resilience Study	Planning Products	Continuing
On-Peak/Off-Peak TCC's	TCC Products	Future
Reserving Capacity for TCC Balance-of-Period Auctions	TCC Products	Prioritize

# 2020 Proposed Mandatory Market Projects

Project Name	Product Area	Project Type
BSM Renewables Exemption Study	Capacity Market Products	Mandatory
Demand Curve Reset	Capacity Market Products	Mandatory
DER Participation Model	DER Products	Mandatory
Dual Participation	DER Products	Mandatory
Expanding Capacity Eligibility	DER Products	Mandatory
Meter Service Entity for DER	DER Products	Mandatory
Enhanced Fast Start Pricing	Energy Market Products	Mandatory
ESR Participation Model (SOM)	Energy Market Products	Mandatory

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# 2020 Proposed Continuing Market Projects

Project Name	Product Area	Project Type
NYISO Budget (Rate Schedule 1) Cost Recovery Update <sup>*1</sup>	Business and Finance Products	Continuing
NYISO Pilot Framework <sup>*2</sup>	DER Products	Continuing
Carbon Pricing <sup>*3</sup>	Energy Market Products	Continuing
Climate Change Impact and Resilience Study <sup>*4</sup>	Planning Products	Continuing

<sup>\*1</sup> Assuming the Rate Schedule 1 study is approved by the Management Committee this year, this project would be Continuing next year. If study is not approved, project will be eliminated from NYISO recommendation.

<sup>\*2</sup> This is an ongoing study the NYISO expects to continue in 2020

<sup>\*3</sup> High stakeholder appeal in 2018 stakeholder survey, Market Design Complete commitment in 2019, the NYISO recommends this project be continuing in 2020

<sup>\*4</sup> High stakeholder appeal in 2018 stakeholder survey, project scope scored in the survey was split across 2 years, the NYISO recommends this project be continuing in 2020

# 2020 Proposed Future Market Projects

Project Name	Product Area	Project Type
Capacity Transfer Rights for Internal Transmission Upgrades (SOM) <sup>*1</sup>	Capacity Market Products	Future
Dynamic Creation of Zones (SOM) <sup>*1</sup>	Capacity Market Products	Future
Eliminate Fees for CTS Transactions with PJM (SOM) <sup>*1</sup>	Energy Market Products	Future
Enhanced PAR Modeling (SOM) <sup>*1</sup>	Energy Market Products	Future
Long Island PAR Optimization and Financial Rights (SOM) <sup>*1</sup>	Energy Market Products	Future
Pricing Reserves for Congestion Management (SOM) <sup>*1</sup>	Energy Market Products	Future
RTC-RTD Convergence Improvements (SOM) <sup>*1</sup>	Energy Market Products	Future
On-Peak/Off-Peak TCC's <sup>*2</sup>	TCC Products	Future

<sup>\*1</sup> Project was categorized Future in 2018, the NYISO continues to believe this project is a low stakeholder priority and recommends classified as Future for 2019

<sup>\*2</sup> Project was included in the 2018 stakeholder survey, the NYISO has received no feedback to indicate the priority of the item has changed for stakeholders and recommends classified as Future for 2019

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# 2020 Proposed Prioritize Market Projects

Project Name	Product Area	Project Type
BSM Evaluation for Small Resources Outside of the Class Year	Capacity Market Products	Prioritize
Competitive Entry Exemption Non-Qualifying Contract Rule Review (SOM)	Capacity Market Products	Prioritize
Comprehensive Mitigation Review	Capacity Market Products	Prioritize
Enhanced BSM Forecasts Assumptions (SOM)	Capacity Market Products	Prioritize
Enhanced BSM Mitigation Study Period	Capacity Market Products	Prioritize
Enhancing Fuel and Energy Security	Capacity Market Products	Prioritize
Locational Marginal Pricing of Capacity (SOM)	Capacity Market Products	Prioritize
Tailored Availability Metric	Capacity Market Products	Prioritize

\* Prioritized Market projects are included in stakeholder survey

# 2020 Proposed Prioritize Market Projects

Project Name	Product Area	Project Type
5 minute Transaction Scheduling with HQ	Energy Market Products	Prioritize
Ancillary Services Shortage Pricing (SOM)	Energy Market Products	Prioritize
Constraint Specific Transmission Shortage Pricing (SOM)	Energy Market Products	Prioritize
Dynamic Reserve Requirements (SOM)	Energy Market Products	Prioritize
Hybrid Storage Model	Energy Market Products	Prioritize
Linked Virtual Trading	Energy Market Products	Prioritize
Mitigation Thresholds Review	Energy Market Products	Prioritize
More Granular Operating Reserves (SOM)	Energy Market Products	Prioritize
Reserves for Resource Flexibility	Energy Market Products	Prioritize
Reserving Capacity for TCC Balance-of-Period Auctions	TCC Products	Prioritize

\* Prioritized Market projects are included in stakeholder survey

# Next Steps

# Next Steps

- Written feedback may be provided until May 8<sup>th</sup>
  - Send to Brian Hurysz at [bhurysz@nyiso.com](mailto:bhurysz@nyiso.com) or (518) 356-6126
- Additional project identification and advocacy meeting is scheduled for May 15<sup>th</sup>
- Proposed 2020 Enterprise project candidates to be reviewed at May 15<sup>th</sup> BPWG
- May 15<sup>th</sup> BPWG is the deadline for stakeholders to identify projects and have them included in the scoring survey
- Stakeholder advocacy and draft scoring survey are scheduled for May 29<sup>th</sup> BPWG

# Questions?

# 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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