Updates for 2020 Market Project Candidates

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Budget and Priorities Working Group

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Agenda

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



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



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.



Survey Appeal Definition* Same as used in 2018

Criteria	Criteria	HIGH	MEDIUM	LOW	NONE
Criteria	Weight	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	respondents per sector applying points and average across the survey respondents per sector of 5	Little to No Customer Support



Project Prioritization Criteria

* Same as used in 2018

	PRIORITIZATION CRITERIA					
Ontoroni	Outtouto	Criteria	HIGH	MEDIUM	LOW	NONE
Category	Criteria	Weight	10	7	3	0
	Leader in Reliability			Moderately improves NYISO ability to maintain NYCA Reliability	Minimally improves NYISO ability to maintain NYCA Reliability	None
Strategy	Leader in Market Design	10	Significantly improves NYISO Market Design	Moderately improves NYISO Market Design	Minimally improves NYISO Market Design	None
(If we do this project)	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			Supports reliability planning and/or Business Plan objectives	Required for SRP planning study efficiency or continuous improvement initiatives	None
	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)
Outcome (If we do this project)	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	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	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
	Compliance	10	Significant risk of compliance violation	Moderate risk of compliance violation	Minimal risk of compliance violation	None
Risk (If we do NOT do this	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
project)	Reliability and Market				Non mission-critical systems affected or \$10,000 - \$100,000 market impact	No or less than 10,000 impact
	Cost	4		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
Execution (If we do this project)	Multi-Year Dependency			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

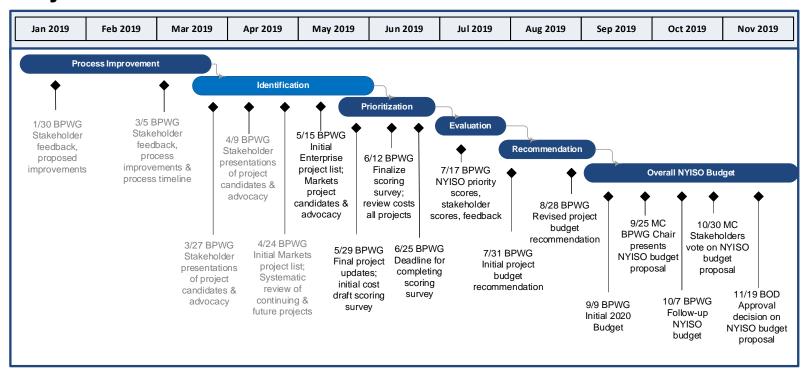


Milestone Definitions

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 Prioritization Timeline





2020 Market Project Candidates - Updates



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 (SOM)	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

^{*} Prioritized Market projects are included in stakeholder survey



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
NYC Part A Test Exemption (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

^{*} Prioritized Market projects are included in stakeholder survey



Project Name	Product Area	Project Type
NYISO Pilot Framework	DER Products	Continuing
5 Minute Transaction Scheduling	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

^{*} Prioritized Market projects are included in stakeholder survey



Project Name	Product Area	Project Type
ESR Participation Model	Energy Market Products	Mandatory
Grid in Transition Enhancements	Energy Market Products	Prioritize
Hybrid Storage Model	Energy Market Products	Prioritize
Linked Virtual Transactions	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	<u>Prioritize</u>
Pricing Reserves for Congestion Management (SOM)	Energy Market Products	<u>Prioritize</u>
Relocating the IESO Proxy Bus	Energy Market Products	Prioritize
Reserve Enhancement for Constrained Areas (SOM)	Energy Market Products	Prioritize

^{*} Prioritized Market projects are included in stakeholder survey



Project Name	Product Area	Project Type
Reserves for Resource Flexibility	Energy Market Products	Prioritize
RTC-RTD Convergence Improvements (SOM)	Energy Market Products	Future
WEELR Participation Model	Energy Market Products	Prioritize
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 (BOP) Auctions	TCC Products	Prioritize

^{*} Prioritized Market projects are included in stakeholder survey



Next Steps



Next Steps

- Deadline for new project identification is today, May 15th
- Written feedback may be provided until May 20th
 - Send to Robb Pike at rpike@nyiso.com or (518) 356-6156
- Project updates, stakeholder advocacy, initial project costs, and draft scoring survey are scheduled for May 29th BPWG
- Cost review for all projects is scheduled for June 12th BPWG with stakeholder survey distribution after the meeting
- Deadline for completing scoring survey will be June 25th



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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