

Proposed 2022 Market Projects

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Budget and Priorities Working Group

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Agenda

- Project Prioritization Phases, Milestones, and Timeline
- Project Descriptions
- 2022 Market Project Candidates
- Next Steps



Project Prioritization Phases, Milestones, and Timeline



Project Prioritization Process

| Phase | Description |
|---------------------------------------|---|
| Stakeholder Project Identification | Stakeholders may present project ideas at stakeholder meetings and sector meetings, receive feedback, and refine their proposal during this phase before the NYISO provides a comprehensive list of candidate projects for consideration. |
| Identification | The NYISO develops a Markets and Enterprise project candidate lists based on regulatory obligations, strategic initiatives, State of the Market recommendations, infrastructure enhancements, product plans, and stakeholder proposals. These project candidates are presented and further refined with stakeholder input during this phase. |
| Prioritization | This 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 reflect 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 into 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. |

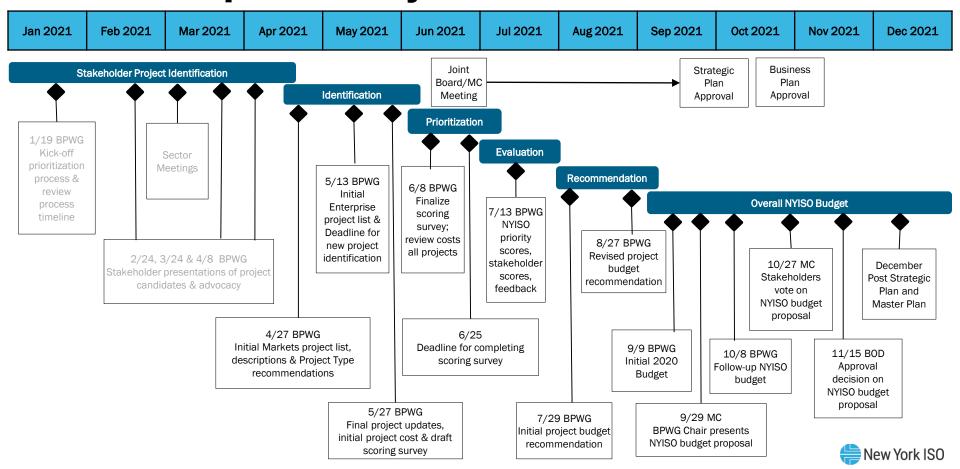


Milestone Definitions

| 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. |
| Issue Discovery | NYISO has facilitated education session(s) for stakeholder knowledge development of problem/issue, conducted stakeholder solicitation of potential solutions to address problem/issue, and summarized findings at a working group meeting for potential ranking and future project identification. |



2022 Proposed Project Prioritization Timeline



Project Descriptions



Project Descriptions

- The NYISO has developed project descriptions for 31 proposed Market projects
 - O Business & Finance, 11 Capacity Market, 6 New Resource, 12 Energy Markets, 1 Planning & 1 TCC Market
 - 4 Mandatory, 2 Continuing, 20 Prioritize & 5 Future
- Project descriptions are included with today's posted meeting materials



Market Project Descriptions

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.

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.

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.





| Item | Project | Product Area | Project Type |
|------|---|--------------------------|--------------|
| 1 | CRIS Tracking | Capacity Market Products | Mandatory |
| 2 | Comprehensive Mitigation Review | Capacity Market Products | Continuing |
| 3 | CRIS Expiration Evaluation | Capacity Market Products | Prioritize |
| 4 | Capacity Transfer Rights for Internal Transmission Upgrades (SOM) | Capacity Market Products | Future |
| 5 | Locational Marginal Pricing of Capacity (SOM) | Capacity Market Products | Prioritize |
| 6 | Demand Curve Translation Enhancement (SOM) | Capacity Market Products | Prioritize |
| 7 | Monthly Demand Curves (SOM) | Capacity Market Products | Prioritize |



| Item | Project | Product Area | Project Type |
|------|---|--------------------------|--------------|
| 8 | Capacity Demand Curve Adjustments | Capacity Market Products | Prioritize |
| 9 | Enhanced BSM Forecasts Assumptions (SOM) | Capacity Market Products | Prioritize |
| 10 | Capacity Value Study | Capacity Market Products | Mandatory |
| 11 | Transmission Security in the ICAP Market | Capacity Market Products | Prioritize |
| 12 | Carbon Pricing | Energy Market Products | Future |
| 13 | Constraint Specific Transmission Shortage Pricing (SOM) | Energy Market Products | Prioritize |
| 14 | Dynamic Reserves (SOM) | Energy Market Products | Prioritize |

Note: As discussed at 4/20/2021 ICAPWG, the NYISO will include a separate project to evaluate improvements to capacity accreditation.



| Item | Project | Product Area | Project Type |
|------|---|------------------------|--------------|
| 15 | Grid Services from Renewable Generators | Energy Market Products | Prioritize |
| 16 | Long Island Reserve Constraint Pricing (SOM) | Energy Market Products | Prioritize |
| 17 | Eliminate Fees for CTS Transactions with PJM (SOM) | Energy Market Products | Future |
| 18 | Enhanced PAR Modeling (SOM) | Energy Market Products | Future |
| 19 | Long Island PAR Optimization and Financial Rights (SOM) | Energy Market Products | Future |
| 20 | More Granular Operating Reserves (SOM) | Energy Market Products | Prioritize |
| 21 | Multi-Level References | Energy Market Products | Prioritize |



| Item | Project | Product Area | Project Type |
|------|--|------------------------|--------------|
| 22 | Adjustment of Energy Offer/Bid Floor (SOM) | Energy Market Products | Prioritize |
| 23 | Lines in Series Constraint Pricing | Energy Market Products | Prioritize |
| 24 | DER Participation Model | New Resource Products | Mandatory |
| 25 | Engaging the Demand Side | New Resource Products | Prioritize |
| 26 | Grid in Transition | New Resource Products | Continuing |
| 27 | Hybrid Aggregation Model | New Resource Products | Prioritize |
| 28 | Internal Controllable Lines | New Resource Products | Prioritize |



| Item | Project | Product Area | Project Type |
|------|--|-----------------------|--------------|
| 29 | Support TSO and DSO Coordination Efforts | New Resource Products | Mandatory |
| 30 | Coordination of Interconnection and Transmission Expansion Study | Planning Products | Prioritize |
| 31 | Reserving Capacity for TCC Balance-of-Period (BOP) Auctions | TCC Products | Prioritize |



Next Steps



Next Steps

- Written feedback on project descriptions and project type categorization may be provided up till May 4th for incorporation into May 13th presentation
 - Send to Brian Hurysz at <u>bhurysz@nyiso.com</u> or cell (518) 461-6405 for assistance
- May 13th BPWG is the deadline for stakeholders to identify new projects and still have them included in the scoring survey
- Proposed 2021 Enterprise projects to be reviewed at May 13th BPWG along with any updates to proposed Market projects
- Stakeholder advocacy and draft scoring survey are scheduled for May 27th BPWG



Our mission, in collaboration with our stakeholders, is to serve the public interest and provide benefit 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 policymakers, stakeholders and investors in the power system





Questions?

