

Proposed 2024 Market Projects

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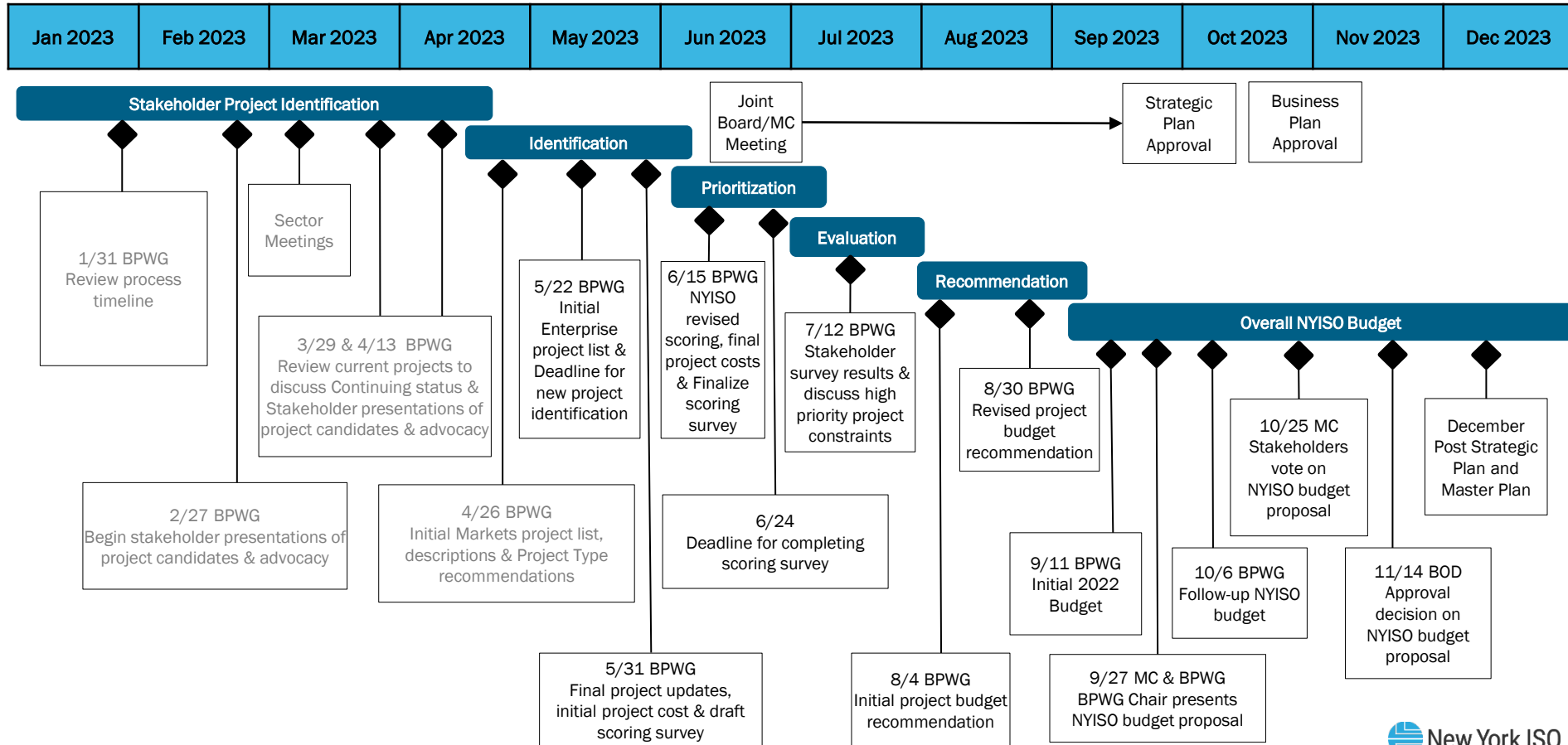
May 22, 2023, KCC

Agenda

- **Project Prioritization Timeline**
- **Project Descriptions**
- **2024 Market Project Candidates**
- **Next Steps**

Project Prioritization Timeline

2024 Proposed Project Prioritization Timeline



Project Descriptions

Project Descriptions

- **The NYISO has developed project descriptions for 50 proposed Market projects**
 - 2 Business & Finance, 13 Capacity Market, 10 New Resource, 21 Energy Markets, 2 Planning & 2 TCC Market
 - 6 Mandatory, 2 Continuing, 31 Prioritize & 11 Future
- **Last year, there were 43 proposed Market projects at this time in the project prioritization process**
- **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.

2024 Market Project Candidates

Prioritize 2024 Market Projects

Item	Project	Product Area	Project Type	2024 Proposed Deliverable	2023 Deliverable
1	5 Minute Transaction Scheduling	Energy Market	Prioritize	Market Design Concept Proposed	
2	Advanced Storage Modeling and Operation	New Resource	Prioritize	Market Design Concept Proposed	
3	Advancing NYISO Transparency - Requested by DC Energy	Energy Market	Prioritize	Deployment	
4	Balancing Intermittency	Energy Market	Prioritize	Market Design Complete	Market Design Concept Proposed
5	Clean Hydrogen - Requested by NextEra	New Resource	Prioritize	Market Design Concept Proposed	
6	Coordinated Grid Planning Process (CGPP) Continuation	Planning	Prioritize	Study Defined	
7	Dynamic Reserves - Phase 1	Energy Market	Prioritize	Functional Requirements	Market Design Complete

Note: Items that are red are changed or new since last BPWG meeting

Prioritize 2024 Market Projects

Item	Project	Product Area	Project Type	2024 Proposed Deliverable	2023 Deliverable
8	Eliminate Offline GT Pricing	Energy Market	Prioritize	Deployment	
9	Emissions Transparency	Energy Market	Prioritize	Deployment	Functional Requirements
10	Engaging the Demand Side	New Resource	Prioritize	Market Design Concept Proposed	Issue Discovery
11	Evolving Resource Adequacy Model	Capacity Market	Prioritize	Study Complete	
12	Expanding Peak Hour Definition - Requested by DPS	Capacity Market	Prioritize	Market Design Complete	
13	Improve Duct-Firing Modeling	Energy Market	Prioritize	Functional Requirements	
14	Integrating Champlain Hudson Power Express (CHPE)	New Resource	Prioritize	Study Complete	

Prioritize 2024 Market Projects

Item	Project	Product Area	Project Type	2024 Proposed Deliverable	2023 Deliverable
15	Internal Controllable Lines	New Resource	Prioritize	Functional Requirements	Market Design Complete
16	LCR Optimizer Enhancements	Capacity Market	Prioritize	Deployment	Market Design Complete
17	Long Island Reserve Constraint Pricing	Energy Market	Prioritize	Market Design Concept Proposed	
18	Market Purchase Hub Transactions - Requested by LIPA	Energy Market	Prioritize	Market Design Concept Proposed	
19	MDIWG Support	New Resource	Prioritize	Issue Discovery	
20	Mitigation Threshold Review	Energy Market	Prioritize	Market Design Concept Proposed	
21	Operating Reserves Performance	Energy Market	Prioritize	Market Design Complete	

Prioritize 2024 Market Projects

Item	Project	Product Area	Project Type	2024 Proposed Deliverable	2023 Deliverable
22	Participation Opportunities for Small DER	New Resource	Prioritize	Market Design Concept Proposed	
23	Pivotal Supplier Calculation Change	Capacity Market	Prioritize	Market Design Concept Proposed	
24	Reference Level Software Cleanup	Energy Market	Prioritize	Deployment	
25	Reserving Capacity for TCC Balance-of-Period (BOP) Auctions	TCC	Prioritize	Software Design	
26	Storage as Transmission	New Resource	Prioritize	Market Design Concept Proposed	Issue Discovery
27	SubAccounts for Reporting (requested by NRG)	Business & Finance	Prioritize	Market Design Complete	
28	Supply Side Mitigation for Controllable Lines	Capacity Market	Prioritize	Market Design Complete	

Note: Items that are red are changed or new since last BPWG meeting

Prioritize 2024 Market Projects

Item	Project	Product Area	Project Type	2024 Proposed Deliverable	2023 Deliverable
29	Time Differentiated TCCs	TCC	Prioritize	Market Design Complete	
30	Valuing Transmission Security	Capacity Market	Prioritize	Issue Discovery	
31	Winter Reliability Capacity Enhancements	Capacity Market	Prioritize	Issue Discovery	

Mandatory 2024 Market Projects

Item	Project	Product Area	Project Type	2024 Proposed Deliverable	2023 Deliverable
32	Ambient Adjusted Transmission Lines Rating	Energy Market	Mandatory	Development Complete	Functional Requirements
33	CRIS Expiration Evaluation	Capacity Market	Mandatory	Development Complete	Functional Requirements
34	Demand Curve Reset	Capacity Market	Mandatory	Study Complete	Study Defined
35	FERC Order 2222 Compliance	New Resource	Mandatory	Functional Requirements	Market Design Concept Proposed
36	Interconnection Process Enhancements	Planning	Mandatory	Deployment	Market Design Complete
37	Modeling Improvements for Capacity Accreditation	Capacity Market	Mandatory	Deployment	Functional Requirements

Continuing 2024 Market Projects

Item	Project	Product Area	Project Type	2024 Proposed Deliverable	2023 Deliverable
38	Evolving Financial Transaction Capabilities - Bilateral Transactions	Energy Market	Continuing	Deployment	Software Design
39	Hybrid Aggregation Model	New Resource	Continuing	Deployment	Software Design

Future 2024 Market Projects

Item	Project	Product Area	Project Type	2024 Proposed Deliverable	2023 Deliverable
40	Capacity Transfer Rights for Internal Transmission Upgrades	Capacity Market	Future		
41	Dynamic Reserves - Phase 2	Energy Market	Future		
42	Eliminate Fees for CTS Transactions with PJM	Energy Market	Future		
43	Granular Capacity Market Pricing	Capacity Market	Future		
44	Locational Marginal Pricing of Capacity	Capacity Market	Future		
45	Long Island PAR Optimization and Financial Rights	Energy Market	Future		
46	M2M West PARs	Energy Market	Future		

Future 2024 Market Projects

Item	Project	Product Area	Project Type	2024 Proposed Deliverable	2023 Deliverable
47	More Granular Operating Reserves	Energy Market	Future		
48	Reserves for Congestion Management	Energy Market	Future		
49	Review of Real-Time Market Structure	Energy Market	Future		
50	Separating Up and Down Regulation Service	Energy Market	Future		

Next Steps

Next Steps

- **Written feedback on project descriptions and project type categorization may be provided up till May 24th for incorporation into May 31st presentation**
 - Send email to Kevin Pytel at kpytel@nyiso.com or call cell at (518) 428-9528 for assistance
- **Updates to Proposed 2023 Market and Enterprise projects to be reviewed at the May 31st BPWG**
- **Stakeholder advocacy and draft scoring survey of Market Projects are scheduled for the May 31st BPWG**
- **NYISO provides its scores for Market and Enterprise projects at the June 15th BPWG**

Our Mission & Vision



Mission

Ensure power system reliability and competitive markets for New York in a clean energy future



Vision

Working together with stakeholders to build the cleanest, most reliable electric system in the nation

Questions?

Appendix – Milestones and Project Prioritization Phases

Milestone Definitions

Milestone	Definition
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.
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.
Study Complete	Scope of work to be performed has been completed; results and recommendations have been presented to the appropriate Business Owners and stakeholders.
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 such that the proposal can be presented for a vote at the BIC, OC, or MC to define further action on the proposal.
Functional Requirements	NYISO has completed documentation of the functional requirements and the Business Owner has approved.
Architectural Design	The architectural design document is complete and software development is ready to begin.
Projects with the following Milestones will generally be proposed as Continuing in future years, subject to Stakeholder input	
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.

Project Prioritization Process

Phase	Description
Stakeholder Project Identification	Stakeholders may present project ideas at stakeholder meetings, sector meetings, get 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 from regulatory obligations, strategic initiatives, State of the Market recommendations, infrastructure enhancements, product plans and stakeholder proposals. These 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 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	Projects that are key to support Strategic Initiatives, FERC Orders, maintain reliable operations, or sustain the operation of the NYISO business. These projects will be included in the budget
Continuing	Approved in a prior year and have progressed to either Software Design, Development Complete, or Deployment. 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.