2024 Enterprise Projects Updates and Costs

Kevin Pytel

Senior Manager, Product and Project Management

Budget and Priorities Working Group
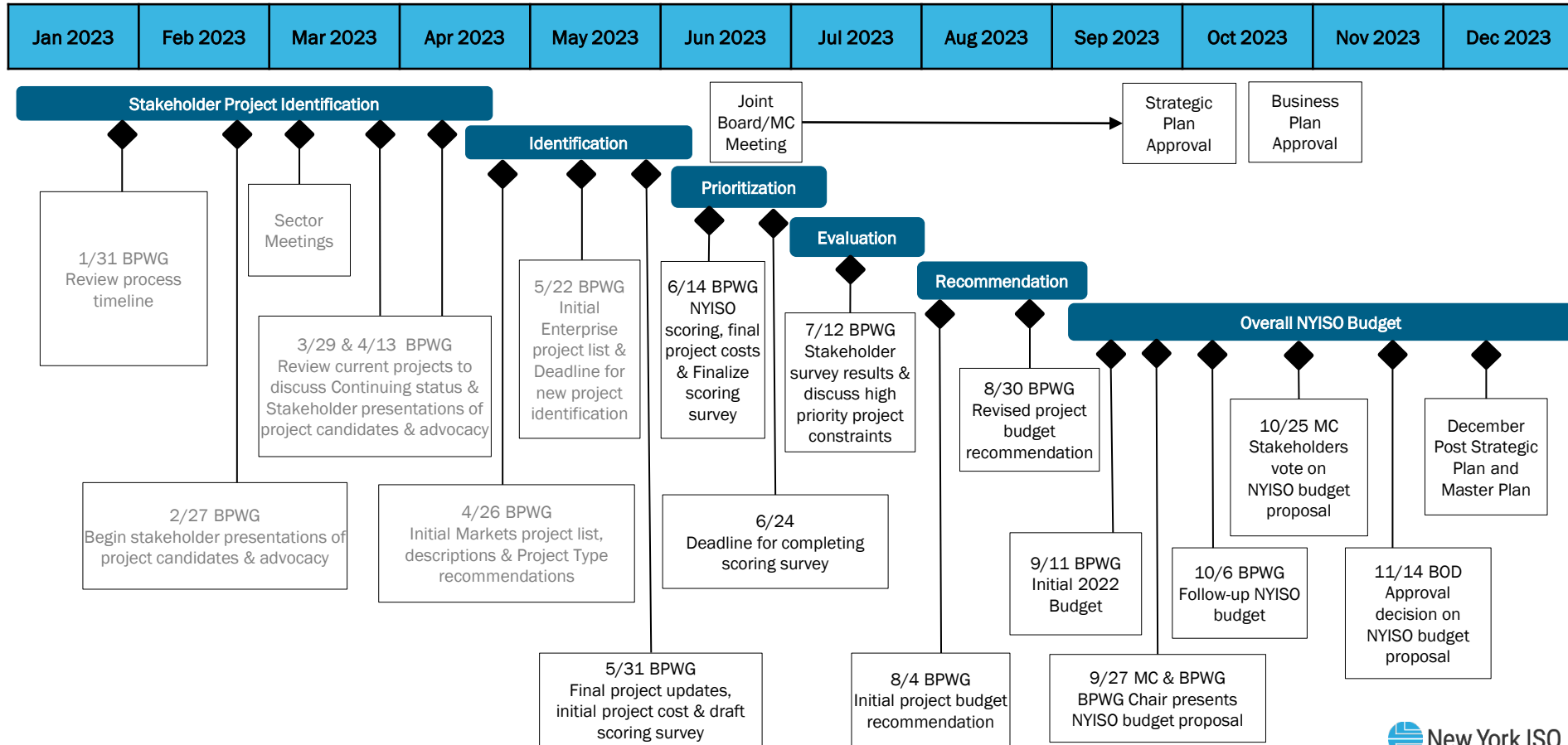
May 31, 2023, KCC

Agenda

- Project Prioritization Timeline

- Project Descriptions

- 2024 Enterprise Project Candidates – Updates, Costs, and Deliverables

- Next Steps

Project Prioritization Timeline

DRAFT – FOR DISCUSSION PURPOSES ONLY

New York ISO

2024 Proposed Project Prioritization Timeline

Jan 2023	Feb 2023	Mar 2023	Apr 2023	May 2023	Jun 2023	Jul 2023	Aug 2023	Sep 2023	Oct 2023	Nov 2023	Dec 2023

Stakeholder Project Identification

Identification

Joint Board/MC Meeting → Strategic Plan Approval

Business Plan Approval

Prioritization

Evaluation

Recommendation

Overall NYISO Budget

1/31 BPWG Review process timeline

Sector Meetings

3/29 & 4/13 BPWG Review current projects to discuss Continuing status & Stakeholder presentations of project candidates & advocacy

5/22 BPWG Initial Enterprise project list & Deadline for new project identification

6/14 BPWG NYISO scoring, final project costs & Finalize scoring survey

7/12 BPWG Stakeholder survey results & discuss high priority project constraints

8/30 BPWG Revised project budget recommendation

10/25 MC Stakeholders vote on NYISO budget proposal

December Post Strategic Plan and Master Plan

2/27 BPWG Begin stakeholder presentations of project candidates & advocacy

4/26 BPWG Initial Markets project list, descriptions & Project Type recommendations

6/24 Deadline for completing scoring survey

9/11 BPWG Initial 2022 Budget

10/6 BPWG Follow-up NYISO budget

11/14 BOD Approval decision on NYISO budget proposal

5/31 BPWG Final project updates, initial project cost & draft scoring survey

8/4 BPWG Initial project budget recommendation

9/27 MC & BPWG BPWG Chair presents NYISO budget proposal

DRAFT – FOR DISCUSSION PURPOSES ONLY

New York ISO

Project Descriptions

New York ISO

Project Descriptions

- The NYISO has developed project descriptions for 51 proposed Enterprise projects
  - 7 Business & Finance, 6 Capacity Market, 2 Energy Markets, 20 Enterprise, 1 New Resource, 10 Operations and Reliability, 5 Planning & 0 TCC Market
  - 1 Mandatory, 0 Continuing, 50 Prioritize & 0 Future
- Last year, there were 50 proposed Enterprise projects at this time in the project prioritization process
- Project descriptions are included with today's posted meeting materials

New York ISO

2024 Enterprise Project Candidates - Updates, Costs, and Deliverables

DRAFT – FOR DISCUSSION PURPOSES ONLY

New York ISO

Prioritize 2024 Enterprise Projects

Item	Project	Product Area	Project Type	2024 Proposed Deliverable	2023 Deliverable	Estimated Cost (in millions)			
						Labor	Capital	Prof. Serv.	Total
1	3rd Floor Data Center Migration (Krey)	Enterprise	Prioritize	Deployment		0.10	0.90	0.00	1.00
2	Access Management Program Enhancements	Enterprise	Prioritize	Deployment		0.63	0.00	0.10	0.73
	Air Handling Units Replacement (Krey)								
3	Application Platform Upgrade	Enterprise	Prioritize	Deployment	Deployment	0.72	0.00	0.00	0.72
4	Automation of DMNC Validation	Operations & Reliability	Prioritize	Deployment					
5	Bidding Upload Download Security Enhancements	Enterprise	Prioritize	Deployment		0.24	0.00	0.00	0.24
6	Block Storage Refresh	Enterprise	Prioritize	Deployment	Deployment	0.11	0.96	0.40	1.46
7	Budgeting Tool	Business & Finance	Prioritize	Deployment					

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

New York ISO

Prioritize 2024 Enterprise Projects

Item	Project	Product Area	Project Type	2024 Proposed Deliverable	2023 Deliverable	Estimated Cost (in millions)			
						Labor	Capital	Prof. Serv.	Total
8	Building Management System (BMS) Controls Upgrade	Enterprise	Prioritize	Deployment	Deployment	0.19	1.00	0.00	1.19
9	Capacity Analysis Commitment Tool (CACT)	Operations & Reliability	Prioritize	Deployment		0.21	0.00	0.75	0.96
10	Cisco Server Refresh - Linux	Enterprise	Prioritize	Deployment	Development Complete	0.12	0.94	0.00	1.06
11	CMS and ConInvoice Data Integration	Business & Finance	Prioritize	Deployment	Deployment	0.39	0.00	0.00	0.39
12	Conference Room Technology Upgrade	Enterprise	Prioritize	Deployment		0.05	0.32	0.06	0.43
13	ConInvoice Testability Improvements	Business & Finance	Prioritize	Deployment					
14	Control Room Logging Replacement	Operations & Reliability	Prioritize	Functional Requirements		0.10	0.00	0.00	0.10

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

New York ISO

Prioritize 2024 Enterprise Projects

Item	Project	Product Area	Project Type	2024 Proposed Deliverable	2023 Deliverable	Estimated Cost (in millions)			
						Labor	Capital	Prof. Serv.	Total
15	Demand Forecasting Operational Reporting Enhancements	Planning	Prioritize	Deployment	Functional Requirements				
16	EMS/BMS Operational Enhancements	Operations & Reliability	Prioritize	Deployment	Deployment	0.09	0.00	0.60	0.69
17	EMS/BMS Technologies Upgrade	Operations & Reliability	Prioritize	Development Complete		0.87	0.00	2.16	3.03
18	Enhanced Exterior Security Profile (Carmen)	Enterprise	Prioritize	Deployment		0.04	1.20	0.00	1.24
19	Enterprise Project Collaboration	Enterprise	Prioritize	Study Complete					
20	Fence Vibration System Replacement (Krey)	Enterprise	Prioritize	Deployment		0.02	0.15	0.15	0.32
21	Generator Data Reporting System	Capacity Market	Prioritize	Study Complete		0.32	0.00	0.25	0.57

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

New York ISO

Prioritize 2024 Enterprise Projects

Item	Project	Product Area	Project Type	2024 Proposed Deliverable	2023 Deliverable	Estimated Cost (in millions)			
						Labor	Capital	Prof. Serv.	Total
22	Krey Control Room A/V Replacement	Enterprise	Prioritize	Deployment	Deployment				
23	ICAP AMS Improved System Integrations, Customer Transitions and Offers Project	Capacity Market	Prioritize	Functional Requirements					
24	ICAP Auction Simulator Enhancements	Capacity Market	Prioritize	Functional Requirements		0.16	0.00	0.00	0.16
25	ICAP Supplier Status Enhancements	Capacity Market	Prioritize	Functional Requirements		0.09	0.00	0.00	0.09
26	IT Development and Control of Compliance Reports	Operations & Reliability	Prioritize	Deployment		0.22	0.00	0.00	0.22
	IT Infrastructure Automation								
27	LDAP Upgrade	Enterprise	Prioritize	Deployment		0.31	0.03	0.00	0.34
28	LFDR Upgrade and Enhancements	Planning	Prioritize	Deployment	Deployment				

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

New York ISO

DRAFT – FOR DISCUSSION PURPOSES ONLY

Prioritize 2024 Enterprise Projects

Item	Project	Product Area	Project Type	2024 Proposed Deliverable	2023 Deliverable	Estimated Cost (in millions)			
						Labor	Capital	Prof. Serv.	Total
29	Market Validation, Reporting and Penalty Enhancements	Capacity Market	Prioritize	Deployment	Software Design	0.29	0.00	0.25	0.54
30	Micro-Segmentation	Enterprise	Prioritize	Deployment	Study Complete	0.24	0.15	0.05	0.44
31	Microsoft 365	Enterprise	Prioritize	Deployment	Deployment	0.33	0.26	0.02	0.61
32	Midrange and Storage Upgrade	Enterprise	Prioritize	Study Complete		0.18	0.00	0.15	0.33
	~~Modernizing ASIS~~								
33	Network Infrastructure Upgrade	Enterprise	Prioritize	Deployment	Deployment	0.30	0.50	0.15	0.95
34	New Ties and Gens Management	Business & Finance	Prioritize	Functional Requirements		0.14	0.00	0.00	0.14
	~~OASIS Reliability Upgrade~~								
35	Office Mechanical Systems (Krey)	Enterprise	Prioritize	Deployment		0.08	1.95	0.00	2.03

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

New York ISO

Prioritize 2024 Enterprise Projects

Item	Project	Product Area	Project Type	2024 Proposed Deliverable	2023 Deliverable	Estimated Cost (in millions)			
						Labor	Capital	Prof. Serv.	Total
36	On-Boarding of New Resources	New Resource	Prioritize	Study Complete	Study Complete	0.07	0.00	0.00	0.07
37	Operations - NERC Audit Preparation	Operations & Reliability	Prioritize	Study Complete		0.11	0.00	0.09	0.20
38	Optimization Solver Upgrade (Gurobi)	Operations & Reliability	Prioritize	Deployment		0.15	0.50	0.32	0.97
39	Outage States Portal Dashboard	Capacity Market	Prioritize	Functional Requirements		0.09	0.00	0.00	0.09
40	Price Correction Report Modifications	Operations & Reliability	Prioritize	Deployment		0.14	0.00	0.00	0.14
41	Procurement and Implementation of PSCAD and E Tran	Planning	Prioritize	Deployment					
42	Production Cost Software Upgrade	Planning	Prioritize	Software Design					

DRAFT – FOR DISCUSSION PURPOSES ONLY

New York ISO

Prioritize 2024 Enterprise Projects

Item	Project	Product Area	Project Type	2024 Proposed Deliverable	2023 Deliverable	Estimated Cost (in millions)			
						Labor	Capital	Prof. Serv.	Total
43	Reliability Compliance Tools Enhancements	Operations & Reliability	Prioritize	Deployment		0.35	0.00	0.38	0.73
44	Renewable Energy Forecast Integration and Reporting Enhs	Planning	Prioritize	Issue Discovery					
45	SDX Replacement	Business & Finance	Prioritize	Deployment		0.18	0.00	0.00	0.18
46	Secure Communication Channel with MPs	Energy Market	Prioritize	Deployment	Deployment				
47	Telemetry Tone Gear Upgrade	Enterprise	Prioritize	Deployment		0.09	0.65	0.25	0.99
48	Thunderstorm Alert	Business & Finance	Prioritize	Functional Requirements		0.13	0.00	0.00	0.13
49	Watchlist for Rest of State Units	Energy Market	Prioritize	Deployment		0.10	0.00	0.00	0.10
50	Windows Server Hardware Upgrade	Enterprise	Prioritize	Deployment	Deployment				

New York ISO

Mandatory 2024 Enterprise Projects

Item	Project	Product Area	Project Type	2024 Proposed Deliverable	2023 Deliverable	Estimated Cost (in millions)			
						Labor	Capital	Prof. Serv.	Total
51	Transmission Project Developer Billing Access	Business & Finance	Mandatory	Deployment		0.24	0.00	0.00	0.24

DRAFT – FOR DISCUSSION PURPOSES ONLY

New York ISO

Next Steps

DRAFT – FOR DISCUSSION PURPOSES ONLY

New York ISO

Next Steps

- Cost review for all projects is scheduled for June 14th BPWG with stakeholder survey distribution after the meeting

- Deadline for completing scoring survey will be June 24th

- Scoring results will be presented at the July 12th BPWG

New York ISO

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

New York ISO

Questions?

DRAFT – FOR DISCUSSION PURPOSES ONLY

New York ISO

Appendix – Milestones and Project Prioritization Phases

DRAFT – FOR DISCUSSION PURPOSES ONLY

New York ISO

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.

New York ISO

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.

New York ISO

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

New York ISO

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

New York ISO

DRAFT – FOR DISCUSSION PURPOSES ONLY

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.

New York ISO