2023 Enterprise Projects Updates and Costs

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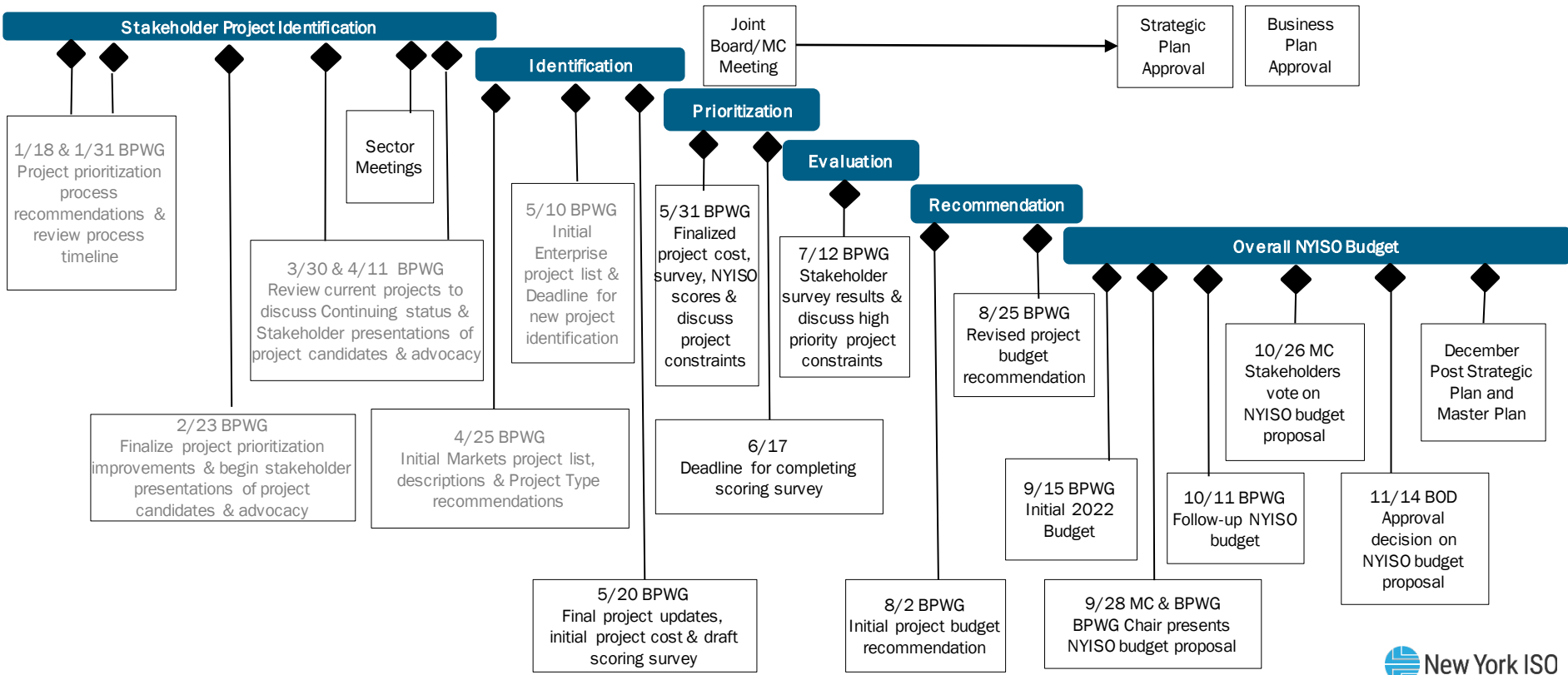May 20, 2022, WebEx

Agenda

- Project Prioritization Timeline

- Project Descriptions

- 2023 Enterprise Project Candidates – Updates, Costs, and Deliverables

- Next Steps

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Project Prioritization Timeline

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2023 Proposed Project Prioritization Timeline

Jan 2022	Feb 2022	Mar 2022	Apr 2022	May 2022	Jun 2022	Jul 2022	Aug 2022	Sep 2022	Oct 2022	Nov 2022	Dec 2022

Stakeholder Project Identification

Identification

Prioritization

Evaluation

Recommendation

Overall NYISO Budget

Joint Board/MC Meeting → Strategic Plan Approval

Business Plan Approval

1/18 & 1/31 BPWG
Project prioritization process recommendations & review process timeline

Sector Meetings

3/30 & 4/11 BPWG
Review current projects to discuss Continuing status & Stakeholder presentations of project candidates & advocacy

5/10 BPWG
Initial Enterprise project list & Deadline for new project identification

5/31 BPWG
Finalized project cost, survey, NYISO scores & discuss project constraints

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

8/25 BPWG
Revised project budget recommendation

10/26 MC
Stakeholders vote on NYISO budget proposal

December Post Strategic Plan and Master Plan

2/23 BPWG
Finalize project prioritization improvements & begin stakeholder presentations of project candidates & advocacy

4/25 BPWG
Initial Markets project list, descriptions & Project Type recommendations

6/17
Deadline for completing scoring survey

9/15 BPWG
Initial 2022 Budget

10/11 BPWG
Follow-up NYISO budget

11/14 BOD
Approval decision on NYISO budget proposal

5/20 BPWG
Final project updates, initial project cost & draft scoring survey

8/2 BPWG
Initial project budget recommendation

9/28 MC & BPWG
BPWG Chair presents NYISO budget proposal

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Project Descriptions

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Project Descriptions

- The NYISO has developed project descriptions for 50 proposed Enterprise projects
  - 7 Business & Finance, 3 Capacity Market, 2 Energy Markets, 22 Enterprise, 2 New Resource, 10 Operations and Reliability, 4 Planning & 0 TCC Market
  - 0 Mandatory, 10 Continuing, 40 Prioritize & 0 Future

- Last year, there were 44 proposed Enterprise projects at this time in the project prioritization process

- Project descriptions are included with today's posted meeting materials

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2023 Enterprise Project Candidates - Updates, Costs, and Deliverables

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Prioritize 2023 Enterprise Projects

Item	Project	Product Area	Project Type	2023 Proposed Deliverable	2022 Deliverable	Estimated Cost (in millions)			
						Labor	Capital	Prof. Serv.	Total
1	Access Management Platform Upgrade	Enterprise	Prioritize	Deployment					
2	Block Storage Refresh	Enterprise	Prioritize	Deployment		0.10	2.29	0.23	2.61
3	BSS and BillSim Upgrade	Enterprise	Prioritize	Deployment		0.23	0.00	0.00	0.23
4	BTM Solar Demand Forecasting Product Enhancements	Planning	Prioritize	Deployment	Functional Requirements	0.19	0.00	0.02	0.21
5	Budgeting Tool	Business & Finance	Prioritize	Functional Requirements		0.15	0.13	0.00	0.28
6	Building Management System (BMS) Controls Upgrade	Enterprise	Prioritize	Deployment					
7	Carman Security Enhancements	Enterprise	Prioritize	Deployment					
8	CMS and ConInvoice Data Integration	Business & Finance	Prioritize	Deployment	Functional Requirements	0.19	0.00	0.00	0.19

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Prioritize 2023 Enterprise Projects

Item	Project	Product Area	Project Type	2023 Proposed Deliverable	2022 Deliverable	Estimated Cost (in millions)			
						Labor	Capital	Prof. Serv.	Total
9	Contingency Analysis Results for Transmission Owner Situational Awareness	Operations & Reliability	Prioritize	Deployment	Functional Requirements	0.08	0.00	0.22	0.30
10	Control Room Logging Replacement	Operations & Reliability	Prioritize	Functional Requirements		0.10	0.00	0.00	0.10
11	Credit Price Spread Updates Virtual and External Transactions	Business & Finance	Prioritize	Deployment	Functional Requirements	0.16	0.00	0.00	0.16
12	Demand Forecasting Operational Reporting Enhancements	Planning	Prioritize	Functional Requirements		0.12	0.00	0.00	0.12
13	DER Operational Enhancements	New Resource	Prioritize	Deployment		0.97	0.00	0.15	1.12
14	Generator Modeling Database Enhancements	Planning	Prioritize	Deployment					
15	GFER Enhancements	Operations & Reliability	Prioritize	Deployment		0.19	0.00	0.00	0.19
16	Grid Operations Web Forms Enhancements	Enterprise	Prioritize	Deployment		0.37	0.00	0.15	0.52

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Prioritize 2023 Enterprise Projects

Item	Project	Product Area	Project Type	2023 Proposed Deliverable	2022 Deliverable	Estimated Cost (in millions)			
						Labor	Capital	Prof. Serv.	Total
17	Gurobi Upgrade	Operations & Reliability	Prioritize	Deployment		0.09	0.00	0.40	0.49
18	ICAP Supplier Status Enhancements	Capacity Market	Prioritize	Functional Requirements		0.03	0.00	0.00	0.03
19	IT Development and Control of Compliance Reports	Operations & Reliability	Prioritize	Deployment		0.11	0.00	0.00	0.11
20	Krey Control Room A/V Replacement	Enterprise	Prioritize	Deployment	Study Complete*				
21	LFDR Upgrade and Enhancements	Planning	Prioritize	Deployment	Functional Requirements	0.26	0.00	0.00	0.26
22	Machine Learning Research and Technology Pilot	Enterprise	Prioritize	Study Complete					
23	Market Validation, Reporting and Penalty Enhancements	Capacity Market	Prioritize	Software Design	Functional Requirements	0.16	0.00	0.00	0.16
24	Meter Services System	Business & Finance	Prioritize	Deployment	Functional Requirements	0.17	0.00	0.00	0.17

* Study Complete designation identified equipment suited for replacement. The next step is to purchase and deploy equipment.

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Prioritize 2023 Enterprise Projects

Item	Project	Product Area	Project Type	2023 Proposed Deliverable	2022 Deliverable	Estimated Cost (in millions)			
						Labor	Capital	Prof. Serv.	Total
25	Modernizing ASIS	Enterprise	Prioritize	Deployment		0.23	0.00	0.13	0.37
26	Natural Gas Notices Enhancement Project	Operations & Reliability	Prioritize	Deployment	Functional Requirements	0.09	0.00	0.14	0.23
27	Network Manager Cisco Refresh	Enterprise	Prioritize	Development Complete		0.13	2.13	0.03	2.29
28	Next Gen Security Architecture	Enterprise	Prioritize	Study Complete					
29	OASIS Reliability Upgrade	Enterprise	Prioritize	Study Complete					
30	OMS Enhancement	Operations & Reliability	Prioritize	Deployment		0.14	0.00	0.10	0.24
31	On-Boarding of New Resources	New Resource	Prioritize	Study Complete	Study Complete	0.17	0.00	0.00	0.17
32	Ongoing TCC Collateral Coverage Assessment Tool	Business & Finance	Prioritize	Deployment		0.09	0.05	0.15	0.29

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Prioritize 2023 Enterprise Projects

Item	Project	Product Area	Project Type	2023 Proposed Deliverable	2022 Deliverable	Estimated Cost (in millions)			
						Labor	Capital	Prof. Serv.	Total
33	Outage States Portal Dashboard	Capacity Market	Prioritize	Functional Requirements		0.04	0.00	0.00	0.04
34	Price Correction Report Modifications	Operations & Reliability	Prioritize	Deployment		0.11	0.00	0.00	0.11
35	Redundant Wind Solar Forecast Feed - Independent Vendor	Operations & Reliability	Prioritize	Issue Discovery		0.03	0.00	0.00	0.03
36	Secure Communication Channel with MPs	Energy Market	Prioritize	Deployment		0.11	0.00	0.00	0.11
37	Settlement Systems Effective Dating and Filtering of Billing Entities	Business & Finance	Prioritize	Software Design		0.11	0.00	0.00	0.11
38	Smart Grid Upgrade	Enterprise	Prioritize	Deployment					
39	Transaction Modifications API	Business & Finance	Prioritize	Functional Requirements		0.16	0.00	0.00	0.16
40	Watchlist for Rest of State Units	Energy Market	Prioritize	Deployment		0.04	0.00	0.00	0.04

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Continuing 2023 Enterprise Projects

Item	Project	Product Area	Project Type	2023 Proposed Deliverable	2022 Deliverable	Estimated Cost (in millions)			
						Labor	Capital	Prof. Serv.	Total
41	Application Platform Upgrade	Enterprise	Continuing	Deployment	Deployment	0.83	0.00	0.00	0.83
42	Database Upgrade	Enterprise	Continuing	Deployment	Deployment	0.11	0.00	0.00	0.11
43	EMS/BMS Operational Enhancements	Operations & Reliability	Continuing	Deployment	Deployment	0.06	0.00	0.72	0.78
44	IT Infrastructure Automation	Enterprise	Continuing	Deployment	Deployment	0.14	0.11	0.20	0.44
45	ITSM Security Enhancements	Enterprise	Continuing	Deployment	Deployment	0.39	0.00	0.63	1.02

Note: Continuing enterprise projects are required to ensure systems are up-to-date and can be properly supported.

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Continuing 2023 Enterprise Projects

Item	Project	Product Area	Project Type	2023 Proposed Deliverable	2022 Deliverable	Estimated Cost (in millions)			
						Labor	Capital	Prof. Serv.	Total
46	Microsoft 365	Enterprise	Continuing	Deployment	Deployment	0.34	0.10	0.30	0.74
47	Network Infrastructure Upgrade	Enterprise	Continuing	Deployment	Deployment	0.28	2.32	0.35	2.96
48	Unified Communications Platform	Enterprise	Continuing	Deployment	Deployment				
49	UPS Replacement	Enterprise	Continuing	Deployment	Study Complete*				
50	Windows System Upgrade	Enterprise	Continuing	Deployment	Deployment	0.17	0.30	0.10	0.57

* Study Complete designation for the 2022 UPS Replacement will complete with an equipment purchase in 2022 for installation in 2023.

Note: Continuing enterprise projects are required to ensure systems are up-to-date and can be properly supported.

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Next Steps

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Next Steps

- Cost review for all projects is scheduled for May 31st BPWG with stakeholder survey distribution after the meeting

- Deadline for completing scoring survey will be June 17th

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

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Our Mission & Vision

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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

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Questions?

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Appendix – Milestones and Project Prioritization Phases

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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 concept such that the proposal can be presented for a vote at the BIC 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.

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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.

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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, 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

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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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