

# 2022 Enterprise Projects Updates and Costs

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**Budget and Priorities Working Group**

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# Agenda

- **Project Prioritization Phases, Milestones, and Timeline**
- **Project Descriptions**
- **2022 Enterprise Project Candidates – Updates, Costs, and Deliverables**
- **Next Steps**

# Project Prioritization Phases, Milestones, and Timeline

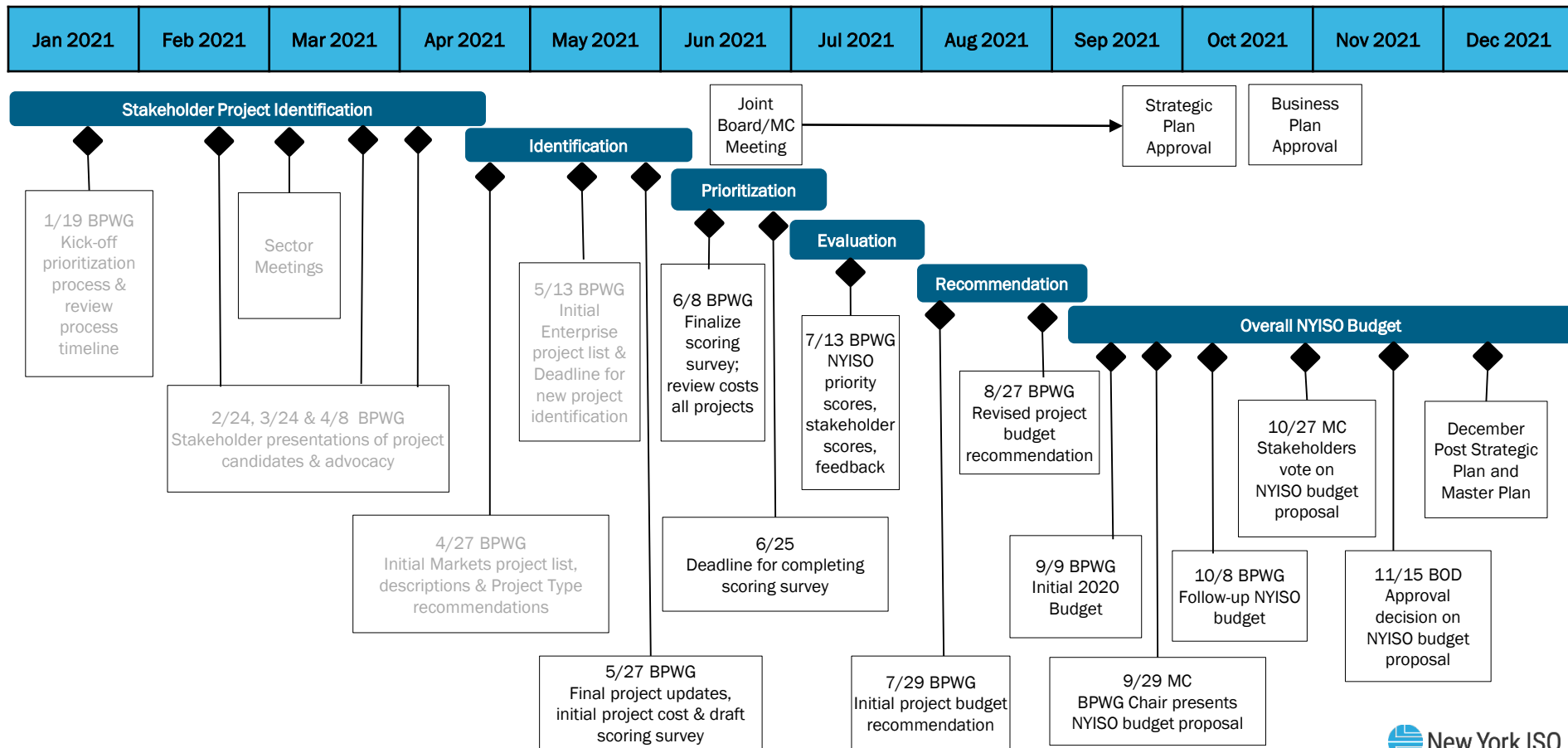
# Project Prioritization Process

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 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 scored by the NYISO depending on their Project Type, 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 scored by the NYISO and included in the stakeholder survey depending on their Project Type.

# 2022 Proposed Project Prioritization Timeline



# Project Type

Project Type	Description
Mandatory	Strategic Initiatives and FERC Orders. These projects will be included in the budget
Continuing	Projects approved in a prior year and that have progressed to either Software Design, Development Complete, or Deployment will generally be proposed as Continuing. 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.

# Project Prioritization Criteria \* Same as used in 2019

PRIORITIZATION CRITERIA						
Category	Criteria	Criteria Weight	HIGH	MEDIUM	LOW	NONE
			10	7	3	0
Strategy (If we do this project)	Leader in Reliability	10	Significantly improves NYISO ability to maintain NYCA Reliability	Moderately improves NYISO ability to maintain NYCA Reliability	Minimally improves NYISO ability to maintain NYCA Reliability	None
	Leader in Market Design	10	Significantly improves NYISO Market Design	Moderately improves NYISO Market Design	Minimally improves NYISO Market Design	None
	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	9	Supports tariff, FERC, NPCC, or NYSERC compliance requirements for Planning Process	Supports reliability planning and/or Business Plan objectives	Required for SRP planning study efficiency or continuous improvement initiatives	None
Outcome (If we do this project)	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)
	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	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
Risk (If we do NOT do this project)	Compliance	10	Significant risk of compliance violation	Moderate risk of compliance violation	Minimal risk of compliance violation	None
	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
	Reliability and Market	10	Mission-critical systems becoming non operational or above \$1 million market impact	Non mission-critical systems becoming non operational or \$100,000 - \$1 million market impact	Non mission-critical systems affected or \$10,000 - \$100,000 market impact	No or less than 10,000 impact
Execution (If we do this project)	Cost	4	Total project cost (current & future years) estimated <\$100k	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
	Multi-Year Dependency	8	Continuation of a multi-year project - postponement significantly disrupts value of previous investments	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



# Project Descriptions

# 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.
<b>Projects with the following Milestones will generally be proposed as Continuing in future years, subject to Stakeholder input</b>	
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 Descriptions

- **The NYISO has developed project descriptions for 44 proposed Enterprise projects**
  - 7 Business & Finance, 3 Capacity Market, 7~~8~~ Operations & Reliability, 19 Enterprise, 1 New Resource, 1 Energy Markets, 6~~5~~ Planning & 0 TCC Market
  - 0 Mandatory, 10 Continuing, 34 Prioritize & 0 Future
- **Project descriptions are provided with today's posted meeting materials**

# 2022 Enterprise Project Candidates- Updates, Costs, and Deliverables

# Continuing 2022 Enterprise Projects

Item	Project	Product Area	Project Type	2022 Proposed Deliverable	2021 Deliverable	Estimated Cost (in millions)			
						Labor	Capital	Prof. Serv.	Total
1	ACC Control Room Renovations	Enterprise	Continuing	Deployment		0.49	5.66	0.00	6.15
2	Application Platform Upgrade	Enterprise	Continuing	Deployment	Deployment	0.49	0.00	0.00	0.49
3	Database Upgrade	Enterprise	Continuing	Deployment	Deployment	0.26	0.00	0.00	0.26
4	EMS/BMS Operational Enhancements	Operations & Reliability	Continuing	Deployment	Deployment	0.09	0.00	1.21	1.29
5	IT Infrastructure Automation	Enterprise	Continuing	Deployment	Deployment	0.19	0.10	0.22	0.51
6	ITSM Security Enhancements	Enterprise	Continuing	Deployment	Deployment	0.43	0.34	0.31	1.07
7	Network Infrastructure Upgrade	Enterprise	Continuing	Deployment	Deployment	0.19	1.56	0.00	1.75

# Continuing 2022 Enterprise Projects

Item	Project	Product Area	Project Type	2022 Proposed Deliverable	2021 Deliverable	Estimated Cost (in millions)			
						Labor	Capital	Prof. Serv.	Total
8	Outage Management System (OMS)	Operations & Reliability	Continuing	Deployment	Development Complete	0.62	0.00	0.86	1.48
9	UPS Replacement	Enterprise	Continuing	Study Complete		0.09	0.65	0.00	0.74
10	Windows System Upgrade	Enterprise	Continuing	Deployment	Deployment	0.23	1.66	0.15	2.04

# Prioritize 2022 Enterprise Projects

Item	Project	Product Area	Project Type	2022 Proposed Deliverable	2021 Deliverable	Estimated Cost (in millions)			
						Labor	Capital	Prof. Serv.	Total
11	ASIS Rule for Re-write - Validating Exports	Energy Market	Prioritize	Deployment		0.08	0.00	0.00	0.08
12	BMS Performance Certification	Enterprise	Prioritize	Study Complete		0.05	0.00	1.00	1.05
13	BTM Solar Demand Forecasting Product Enhancements	Planning	Prioritize	Functional Requirements					
14	Business Entity and Credit Questionnaire Enhancements	Business & Finance	Prioritize	Deployment		0.18	0.00	0.00	0.18
15	CMS and ConInvoice Data Integration	Business & Finance	Prioritize	Functional Requirements		0.08	0.00	0.00	0.08
16	Content Management and Collaboration Solution	Enterprise	Prioritize	Deployment		0.13	0.03	0.00	0.15
17	Contingency Analysis Results for Transmission Owner Situational Awareness	Operations & Reliability	Prioritize	Functional Requirements		0.09	0.00	0.00	0.09

# Prioritize 2022 Enterprise Projects

Item	Project	Product Area	Project Type	2022 Proposed Deliverable	2021 Deliverable	Estimated Cost (in millions)			
						Labor	Capital	Prof. Serv.	Total
18	Control Room Logging Replacement	Operations & Reliability	Prioritize	Study Complete		0.14	0.21	0.00	0.35
19	Credit Price Spread Updates Virtual and External Transactions	Business & Finance	Prioritize	Functional Requirements		0.07	0.09	0.00	0.16
20	Demand Forecasting Operational Reporting Enhancements	Planning	Prioritize	Functional Requirements		0.04	0.00	0.00	0.04
21	Finance Systems Technology Upgrades	Enterprise	Prioritize	Deployment		0.14	0.00	0.00	0.13
	<del>Grid Guardian Network Topology Feature Implementation</del>	<del>Operations &amp; Reliability</del>	<del>Prioritize</del>	<del>Deployment</del>					
22	ICAP Supplier Status Enhancements	Capacity Market	Prioritize	Functional Requirements					
23	IT Development and Control of Compliance Reports	Operations & Reliability	Prioritize	Deployment					



# Prioritize 2022 Enterprise Projects

Item	Project	Product Area	Project Type	2022 Proposed Deliverable	2021 Deliverable	Estimated Cost (in millions)			
						Labor	Capital	Prof. Serv.	Total
24	Krey Control Room A/V Replacement	Enterprise	Prioritize	Study Complete		0.03	0.00	0.05	0.08
25	LFDR Upgrade and Enhancements	Planning	Prioritize	Functional Requirements		0.05	0.00	0.00	0.05
26	Market Validation, Reporting and Penalty Enhancements	Capacity Market	Prioritize	Functional Requirements					
27	Meter Services System	Business & Finance	Prioritize	Functional Requirements		0.08	0.00	0.00	0.08
28	Microsoft 365	Enterprise	Prioritize	Deployment		0.47	0.28	0.55	1.30
29	Minimum Oil Burn Enhancements	Business & Finance	Prioritize	Deployment		0.18	0.00	0.00	0.18
30	Natural Gas Notices Enhancement Project	Operations & Reliability	Prioritize	Functional Requirements		0.06	0.00	0.14	0.20

# Prioritize 2022 Enterprise Projects

Item	Project	Product Area	Project Type	2022 Proposed Deliverable	2021 Deliverable	Estimated Cost (in millions)			
						Labor	Capital	Prof. Serv.	Total
31	NetBackup Appliance Refresh	Enterprise	Prioritize	Deployment		0.10	1.39	0.25	1.73
32	Next Generation Test Environment Study	Enterprise	Prioritize	Study Complete					
33	NYISO Hosted Siemens Cloud	Planning	Prioritize	Deployment		0.03	0.18	0.00	0.21
34	On-Boarding of New Resources	New Resource	Prioritize	Study Complete		0.16	0.00	0.00	0.16
35	Outage States Portal/Dashboard	Capacity Market	Prioritize	Functional Requirements					
36	PI Tools Upgrade	Operations & Reliability	Prioritize	Deployment		0.16	0.00	0.11	0.27
37	Price Validation Technology Upgrades	Enterprise	Prioritize	Software Design		0.16	0.00	0.15	0.31

# Prioritize 2022 Enterprise Projects

Item	Project	Product Area	Project Type	2022 Proposed Deliverable	2021 Deliverable	Estimated Cost (in millions)			
						Labor	Capital	Prof. Serv.	Total
38	Privilege Access Management Upgrade and Enhancements	Enterprise	Prioritize	Deployment					
39	Salesforce CRM Optimization	Business & Finance	Prioritize	Deployment		0.19	0.08	0.23	0.49
40	SDDB Steady State Dynamics Database MP Portal	Planning	Prioritize	Deployment		0.18	0.00	0.04	0.22
41	System Demand End Use and Electrification Forecasting Enhancements	Planning	Prioritize	Study Complete					
42	Transactions Modifications and Confirmation Tool	Business & Finance	Prioritize	Deployment		0.12	0.00	0.00	0.12
43	Unified Communications Platform	Enterprise	Prioritize	Deployment		0.07	0.35	0.00	0.41
44	Web Content Management System Upgrade	Enterprise	Prioritize	Deployment		0.10	0.00	0.13	0.23

# Next Steps

# Next Steps

- **Written feedback on project descriptions and project type categorization may be provided up till May 31<sup>st</sup> for incorporation into June 8<sup>th</sup> presentation**
  - Send to Brian Hurysz at [bhurysz@nyiso.com](mailto:bhurysz@nyiso.com) or cell (518) 461-6405 for assistance
- **Cost review for all projects is scheduled for June 8<sup>th</sup> BPWG with stakeholder survey distribution after the meeting**
- **Deadline for completing scoring survey will be June 25<sup>th</sup>**
- **Scoring results will be presented at the July 13<sup>th</sup> 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?