

2021 Initial Project Budget Recommendation - Revised

Brian Hurysz

Manager, Enterprise Infrastructure Products

Budget and Priorities Working Group

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Agenda

- **Project Prioritization Phases, Milestones, and Timeline**
- **Historic Budgets**
- **Project Updates**
- **Stakeholder Scored Projects**
- **Initial Market Project Budget Recommendation**
- **Initial Enterprise Project Budget Recommendation**
- **Next Steps**

Project Prioritization Phases, Milestones, and Timeline

Project Prioritization Process

Phase	Description
Identification	This phase involves developing the list of project candidates taking into consideration regulatory obligations, strategic initiatives, State of the Market recommendations, necessary infrastructure enhancements, product plans, stakeholder feedback, etc.
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	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.

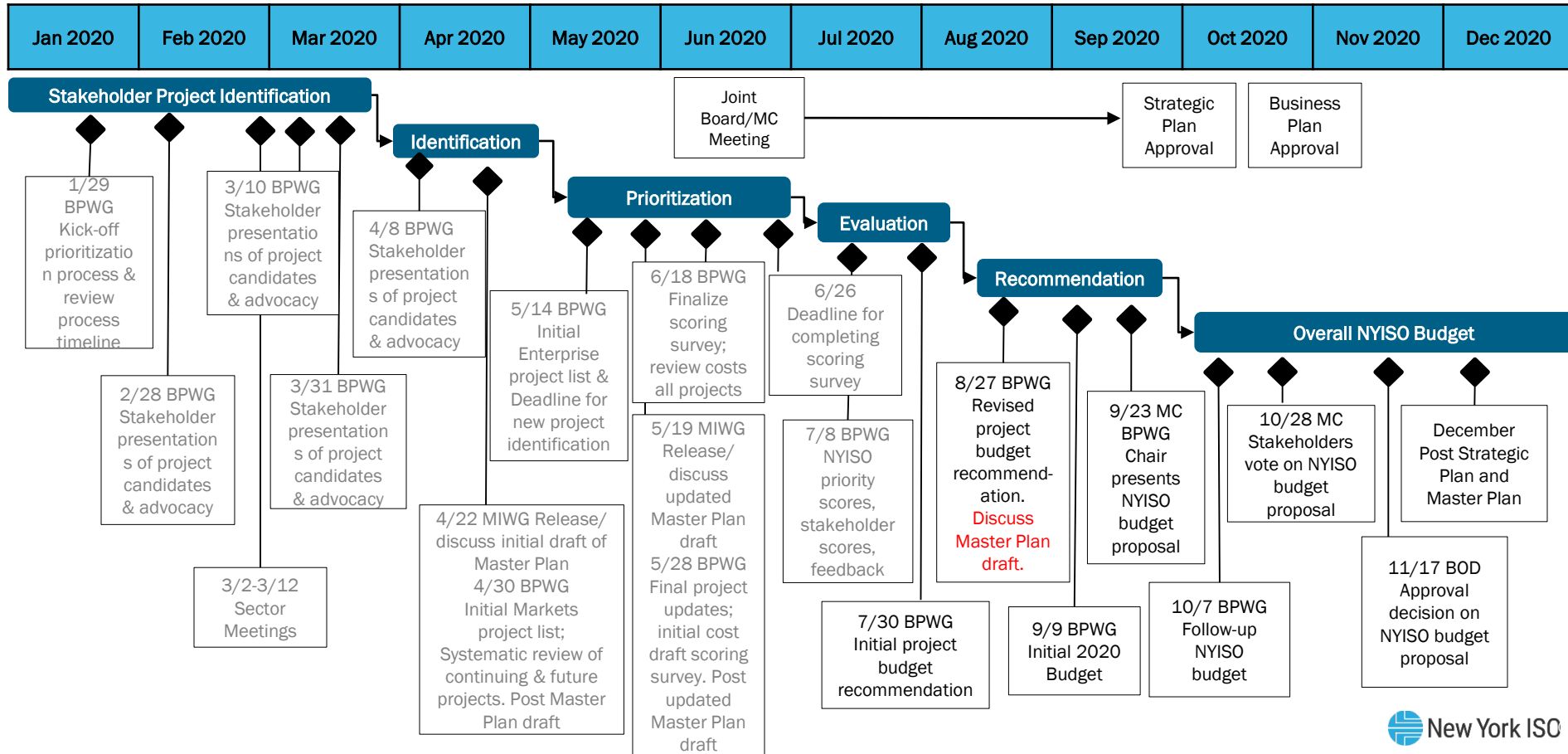
Milestone Definitions

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.

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

2021 Proposed Project Prioritization Timeline



Evaluation and Recommendation Phase

- **During the evaluation process, the NYISO evaluates whether a project should be included in the budget and the appropriate scope for the project in following year**
 - The NYISO considers feasibility of completing the set of projects based upon resource constraints and funding requirements
 - The NYISO seeks to select a set of projects that maximizes value to the markets
 - The NYISO will continue to pay special attention to the high appeal projects in recognition of the strong stakeholder support and prioritize resources to these initiatives
- **NYISO proposes an initial and, after consideration of feedback, a final set of projects to be included in 2021 budget**

High Appeal Projects Not Selected

- **The NYISO carefully reviewed all projects identified as high appeal and attempted to include as many as those projects as possible in the 2021 project budget recommendation**
 - The NYISO seeks stakeholder feedback on high appeal projects not included in the recommendation, and suggestions on projects to displace
 - Stakeholders can provide verbal feedback at BPWG and written feedback
 - Feedback will be provided to and discussed with NYISO executives
 - If desired, stakeholders may present to the NYISO CEO or his Senior delegate to communicate the value and stakeholder support for a high appeal project
 - The NYISO will present a final list of recommended projects at the BPWG on August 27

Historic Budgets

Historic Project Budget Comparison

Project Budget*	Estimated Cost (in millions)				Mandatory	Continuing
	Labor	Capital	Prof. Serv.	Total		
2021 Candidate Projects	16.41	14.50	13.82	44.73	11.73	19.64
2021 Initial Recommendation	13.30	8.92	9.12	31.35	7.48	17.37
2020 Approved	13.57	5.73	12.40	31.69	10.48	10.74
2019 Approved	11.47	4.65	12.82	28.95	9.40	14.82
2018 Approved	11.01	7.96	4.64	23.61	2.15	8.80
2017 Approved	11.10	6.18	4.59	21.87	1.01	9.10
2016 Approved	11.50	6.32	3.78	21.60	4.17	12.06
2015 Approved	11.63	5.29	5.63	22.55	5.67	NA

* 2015-2019 exclude EMS/BMS Upgrade project as it had separate financing

Historic Project Budget Comparison

	Markets Estimated Cost (in millions)					
Project Budget*	Labor	Capital	Prof. Serv.	Total	Mandatory	Continuing
2021 Initial Recommendation	6.64	0.10	5.64	12.38	5.80	4.36
2020 Approved	6.89	0.27	5.85	13.01	10.10	0.77

	Enterprise Estimated Cost (in millions)					
Project Budget*	Labor	Capital	Prof. Serv.	Total	Mandatory	Continuing
2021 Initial Recommendation	6.66	8.82	3.49	18.97	1.67	13.11
2020 Approved	6.67	5.46	6.55	18.68	9.97	10.74

* The NYISO did not have separate Market and Enterprise categories prior to 2020

Project Updates

Proposed Market Project Updates

- As resourcing was evaluated for DER Participation Model, it became apparent as a result of the increased size, complexity and cost of the project, it would not be possible to achieve a deployment in 2021
- The NYISO requires an additional year for DER development and is proposing Development Complete for Q1 in 2022 followed by Deployment in Q4 of 2022, splitting the 2021 proposed budget and effort across two years
- Accelerate Reserves for Resource Flexibility project efforts, change commitment from Development Complete to Deployment
- Accelerate Ancillary Service Shortage Pricing project efforts, change commitment from Development Complete to Deployment
- Accelerate Hybrid Storage project efforts, change commitment from Development Complete to Deployment

Proposed Market Project Updates, Cont'd

- **Plan for Constraint Specific Transmission Shortage Pricing to follow Hybrid Storage with goal of early 2022 deployment, change 2021 commitment from Development Complete to Software Design**
- **For Climate Change Impact and Resilience Study and Grid in Transition, these two projects are included in the budget recommendation, with a plan to merge into one project**
- **For CRIS Expiration Evaluation – Requested by NYS Utility Intervention Unit project, change commitment from Market Design Complete to Market Design Concept Proposed**

Proposed Enterprise Project Updates



- **Extend the ACC Control Room Renovations project across two years**
- **For Minimum Oil Burn Enhancement project, change commitment from Deployment to Development Complete**
- **Defer some of the scope associated with Network Infrastructure Upgrade into 2022**
- **Defer some of the scope associated with Linux and Storage Infrastructure upgrade into a future year**
- **Reduced scope of the TCC Auction Billing project to address resource constraints**
- **Extend the Windows Systems Upgrade project across two years**

Stakeholder Scored Projects

Budget Recommendations for Stakeholder Scored Projects

Projects excluded from initial recommendation are shown as strikethrough





Proposed Projects	Raw Score (Avg.)	Weighted Score	Sector Count	Sum of Scores	Appeal Score
Time Differentiated TCCs – Requested by Calpine & Vitol	13.2	19.5	3.0	35.7	10
Engaging the Demand Side	10.1	8.5	4.0	22.6	10
Expanding Peak Hour Forecasts	9.6	7.7	3.0	20.2	10
Grid Services from Renewable Generators - Requested by NYSEERDA	8.7	7.4	4.0	20.1	10
Tailored Availability Metric Enhancements – Requested by Central Hudson, Con Edison, National Grid, New York Power Authority, and O&R	8.2	7.2	3.0	18.4	10
Constraint Specific Transmission Shortage Pricing (SOM)	5.6	5.1	4.0	14.7	10
CRIS Expiration Evaluation – Requested by NYS Utility Intervention Unit	5.4	5.6	2.0	13.0	10
More Granular Operating Reserves (SOM)	5.8	5.2	2.0	13.0	10
Demand Curve Translation Enhancement (SOM)	6.4	4.3	2.0	12.7	10
5 Minute Transaction Scheduling – Requested by HQUS	5.5	5.1	2.0	12.7	10

	= 10, High Stakeholder Appeal
	= 7, Medium Stakeholder Appeal
	= 3, Low Stakeholder Appeal
	= 0, Little to None Stakeholder Appeal

Budget Recommendations for Stakeholder Scored Projects

Projects excluded from initial recommendation are shown as strikethrough

Proposed Projects	Raw Score (Avg.)	Weighted Score	Sector Count	Sum of Scores	Appeal Score
Reserve Enhancement for Constrained Areas (SOM)	3.4	7.2	2.0	12.6	10
Large Scale Solar on Dispatch	4.6	4.5	2.0	11.1	7
Reserving Capacity for TCC Balance-of-Period (BOP) Auctions	5.2	3.8	1.0	10.1	10
Enhanced BSM Forecasts Assumptions (SOM)	2.1	1.8	0.0	3.9	3
Mitigation Thresholds Review	1.1	1.7	1.0	3.8	3
Capacity Demand Curve Adjustments	2.2	0.9	0.0	3.2	3
Multi-Level References	1.2	1.6	0.0	2.8	3
Adjustment of Energy Offer/Bid Floor (SOM)	1.0	1.2	0.0	2.2	0
TCC Credit Enhancements	0.5	0.8	0.0	1.3	0
Long Island Reserve Constraint Pricing (SOM)	0.2	0.7	0.0	0.9	0

	= 10, High Stakeholder Appeal
	= 7, Medium Stakeholder Appeal
	= 3, Low Stakeholder Appeal
	= 0, Little to None Stakeholder Appeal

Initial Market Project Budget Recommendation

2021 Market Project Candidates

Item	Project Name	Product Area	Project Type	Proposed Deliverable	Estimated Cost (in millions)			
					Labor	Capital	Prof. Serv.	Total
1	TCC Credit Enhancements	Business and Finance Products	Prioritize	Deployment	0.14	0.00	0.00	0.14
2	BSM Renewables Exemption Study	Capacity Market Products	Mandatory	Deployment	0.03	0.00	0.03	0.06
3	CRIS Tracking	Capacity Market Products	Mandatory	Software Design	0.12	0.00	0.00	0.12
4	Demand Curve Reset	Capacity Market Products	Mandatory	Deployment	0.09	0.00	0.10	0.19
5	Tailored Availability Metric	Capacity Market Products	Continuing	Deployment	0.05	0.00	0.00	0.05
6	Enhanced BSM Forecasts Assumptions (SOM)	Capacity Market Products	Prioritize	Market Design Concept Proposed	0.07	0.00	0.00	0.07
7	Comprehensive Mitigation Review	Capacity Market Products	Continuing	Market Design Complete	0.22	0.00	0.10 0.25	0.32 0.47

2021 Market Project Candidates

Item	Project Name	Product Area	Project Type	Proposed Deliverable	Estimated Cost (in millions)			
					Labor	Capital	Prof. Serv.	Total
8	Capacity Demand Curve Adjustments	Capacity Market Products	Prioritize	Study Complete	0.18	0.00	0.25	0.43
9	Capacity Transfer Rights for Internal Transmission Upgrades (SOM)	Capacity Market Products	Future					
10	Locational Marginal Pricing of Capacity (SOM)	Capacity Market Products	Future					
11	Expanding Peak Hour Forecasts	Capacity Market Products	Prioritize	Market Design Concept Proposed	0.04	0.00	0.00	0.04
12	Demand Curve Translation Enhancement (SOM)	Capacity Market Products	Prioritize	Market Design Complete	0.04	0.00	0.00	0.04
13	Monthly Demand Curves (SOM)	Capacity Market Products	Future					
14	CRIS Expiration Evaluation – Requested by NYS Utility Intervention Unit	Capacity Market Products	Prioritize	Market Design Complete Market Design Concept Proposed	0.11	0.00	0.00	0.11

2021 Market Project Candidates

Item	Project Name	Product Area	Project Type	Proposed Deliverable	Estimated Cost (in millions)				
					Labor	Capital	Prof. Serv.	Total	
15	Tailored Availability Metric Enhancements – Requested by Central Hudson, Con Edison, National Grid, New York Power Authority, and O&R	Capacity Market Products	Prioritize	Market Design Concept Proposed	0.06	0.00	0.05	0.11	
16	Climate Change Impact and Resilience Study ^{*1}	DER Products	Continuing	Market Design Concept Proposed	0.02	0.00	0.30 0.00	0.33 0.02	
17	DER Participation Model	DER Products	Mandatory	Deployment Under Development	3.49 2.60	0.10	5.88 2.58	9.46 5.27	Cost revised
18	Expanding Capacity Eligibility	DER Products	Mandatory	Deployment	0.17	0.00	0.00	0.17	
19	Engaging the Demand Side	DER Products	Prioritize	Issue Discovery	0.09	0.00	0.00	0.09	
20	Grid in Transition ^{*1}	DER Products	Continuing	Issue Discovery	0.21	0.00	0.60 0.40	0.81 0.61	
21	Hybrid Storage Model	DER Products	Continuing	Development Complete Deployment	0.30 0.81	0.00	0.36 0.65	0.66 1.48	Cost revised

^{*1} Grid in Transition and Climate Change Impact and Resilience Study are being combined. Proposed deliverable is under development.

2021 Market Project Candidates

Item	Project Name	Product Area	Project Type	Proposed Deliverable	Estimated Cost (in millions)			
					Labor	Capital	Prof. Serv.	Total
22	Ongoing TSO and DSO Coordination	DER Products	Continuing	Issue Discovery	0.07	0.00	0.05	0.12
23	Ancillary Services Shortage Pricing (SOM)	Energy Market Products	Continuing	Development Complete Deployment	0.27 0.34	0.00	0.27 0.30	0.54 0.64
24	Reserves for Resource Flexibility	Energy Market Products	Continuing	Development Complete Deployment	0.23 0.26	0.00	0.27 0.23	0.50 0.48
25	5 Minute Transaction Scheduling – Requested by HQUS	Energy Market Products	Prioritize	Market Design Complete	0.22	0.00	0.00	0.22
26	Carbon Pricing	Energy Market Products	Continuing	Software Design	0.39	0.00	0.00	0.39
27	Constraint Specific Transmission Shortage Pricing (SOM)	Energy Market Products	Prioritize	Development Complete Software Design	0.28 0.31	0.00	0.51 0.51	0.79 0.82
28	Large Scale Solar on Dispatch	Energy Market Products	Prioritize	Deployment	0.28 0.20	0.00	0.40 0.20	0.68 0.40

Cost revised

2021 Market Project Candidates

Item	Project Name	Product Area	Project Type	Proposed Deliverable	Estimated Cost (in millions)			
					Labor	Capital	Prof. Serv.	Total
29	Mitigation Thresholds Review	Energy Market Products	Prioritize	Functional Requirements	0.08	0.00	0.00	0.08
30	Multi-Level References	Energy Market Products	Prioritize	Software Design	0.06	0.00	0.02	0.08
31	Reserve Enhancement for Constrained Areas (SOM)	Energy Market Products	Prioritize	Study Complete	0.07	0.00	0.20 0.35	0.27 0.42
32	Adjustment of Energy Offer/Bid Floor (SOM)	Energy Market Products	Prioritize	Market Design Complete	0.05	0.00	0.00	0.05
33	Grid Services from Renewable Generators - Requested by NYSERDA	Energy Market Products	Prioritize	Study Complete	0.05	0.00	0.00	0.05
34	Long Island Reserve Constraint Pricing (SOM)	Energy Market Products	Prioritize	Market Design Complete	0.09	0.00	0.00	0.09
35	Eliminate Fees for CTS Transactions with PJM (SOM)	Energy Market Products	Future					

2021 Market Project Candidates

Item	Project Name	Product Area	Project Type	Proposed Deliverable	Estimated Cost (in millions)			
					Labor	Capital	Prof. Serv.	Total
36	Enhanced PAR Modeling (SOM)	Energy Market Products	Future					
37	Long Island PAR Optimization and Financial Rights (SOM)	Energy Market Products	Future					
38	RTC-RTD Convergence Improvements (SOM)	Energy Market Products	Future					
39	More Granular Operating Reserves (SOM)	Energy Market Products	Prioritize	Development Complete	0.47	0.00	0.10	0.57
40	Reserving Capacity for TCC Balance-of-Period (BOP) Auctions	TCC Products	Prioritize	Functional Requirements	0.07	0.00	0.00	0.07
41	Time Differentiated TCCs – Requested by Calpine & Vitol	TCC Products	Prioritize	Market Design Concept Proposed	0.10	0.00	0.00	0.10

Initial Enterprise Project Budget Recommendation

2021 Enterprise Project Candidates

Item	Project Name	Product Area	Project Type	Proposed Deliverable	Estimated Cost (in millions)			
					Labor	Capital	Prof. Serv.	Total
1	Enterprise Information Management - Data Integration Phase IV	Business and Finance Products	Continuing	Deployment	0.85	0.10	1.60	2.55
2	FERC Form1 Redesign	Business and Finance Products	Mandatory	Deployment	0.04	0.00	0.00	0.04
3	NYISO Budget (Rate Schedule 1) Cost Recovery Update	Business and Finance Products	Prioritize	Functional Requirements	0.04	0.00	0.00	0.04
4	Transactions Modifications and Confirmation Tool	Business and Finance Products	Continuing	Deployment	0.17	0.00	0.00	0.17
5	Credit Price Spread Updates - Virtual & External Transactions	Business and Finance Products	Prioritize	Functional Requirements	0.04	0.00	0.00	0.04
6	Working Capital Application Enhancements	Business and Finance Products	Prioritize	Functional Requirements	0.06	0.00	0.00	0.06
7	Accounting and Settlements Integration	Business and Finance Products	Prioritize	Deployment	0.07	0.00	0.00	0.07

2021 Enterprise Project Candidates

Item	Project Name	Product Area	Project Type	Proposed Deliverable	Estimated Cost (in millions)			
					Labor	Capital	Prof. Serv.	Total
8	Minimum Oil Burn Enhancements	Business and Finance Products	Prioritize	Deployment Development Complete	0.11	0.00	0.00	0.11
9	SDX API Pilot	Business and Finance Products	Prioritize	Deployment	0.14	0.00	0.00	0.14
10	Stakeholder Services Salesforce CRM Enhancements	Business and Finance Products	Prioritize	Deployment	0.26	0.00	0.21	0.47
11	Demand Curve Reset Tool Updates	Capacity Market Products	Prioritize	Deployment	0.03	0.00	0.00	0.03
12	DAM Congestion Settlement Re-Allocation	Energy Market Products	Continuing	Deployment	0.06	0.00	0.00	0.06
13	Energy Market Software Performance	Energy Market Products	Prioritize	Deployment	0.15	0.00	0.40	0.55
14	ACC Control Room Renovations	Enterprise Products	Continuing	Deployment	0.36 0.27	5.02 3.10	0.00	5.38 3.37

2021 Enterprise Project Candidates

Item	Project Name	Product Area	Project Type	Proposed Deliverable	Estimated Cost (in millions)			
					Labor	Capital	Prof. Serv.	Total
15	Access Management	Enterprise Products	Prioritize	Deployment	0.50	0.00	0.00	0.50
16	Application Platform Upgrade	Enterprise Products	Prioritize	Deployment	0.37	0.00	0.00	0.37
17	Database Upgrade	Enterprise Products	Prioritize	Deployment	0.27	0.00	0.01	0.29
18	IT Infrastructure Automation	Enterprise Products	Continuing	Deployment	0.25	0.08	0.20	0.53
19	IT Service Management Improvements	Enterprise Products	Continuing	Deployment	0.30	0.00	0.20	0.50
20	Network Infrastructure Upgrade	Enterprise Products	Continuing	Deployment	0.25 0.22	3.29 2.69	0.00	3.54 2.91
21	2021 NERC CIP Audit	Enterprise Products	Mandatory	Study Complete	0.52	0.00	0.00	0.52

2021 Enterprise Project Candidates

Item	Project Name	Product Area	Project Type	Proposed Deliverable	Estimated Cost (in millions)			
					Labor	Capital	Prof. Serv.	Total
22	Linux and Storage Infrastructure Refresh	Enterprise Products	Prioritize	Deployment	0.20 0.15	0.77 0.38	0.04 0.00	1.01 0.52
23	Ringdown Replacement	Enterprise Products	Prioritize	Deployment	0.08	0.00	0.00	0.08
24	Unified Communications Platform	Enterprise Products	Prioritize	Study Complete	0.06	0.01	0.07	0.14
25	Windows System Upgrade	Enterprise Products	Prioritize	Deployment	0.29 0.25	1.22 0.67	0.20 0.10	1.71 1.02
26	Application Security Enhancements	Enterprise Products	Prioritize	Deployment	0.09	0.14	0.00	0.24
27	Gurobi (MIP) Migration and Upgrade	Enterprise Products	Prioritize	Deployment	0.09	0.23	0.00	0.32
28	Web Content Management System Upgrade	Enterprise Products	Prioritize	Deployment	0.05	0.00	0.35	0.40

2021 Enterprise Project Candidates

Item	Project Name	Product Area	Project Type	Proposed Deliverable	Estimated Cost (in millions)			
					Labor	Capital	Prof. Serv.	Total
29	UPS Replacement	Enterprise Products	Prioritize	Deployment	0.07	1.10	0.00	1.17
30	Automated Default Bid Mitigation	Operations & Reliability Products	Continuing	Deployment	0.10	0.00	0.00	0.10
31	Load Forecasting System Upgrade and Build Out	Operations & Reliability Products	Prioritize	Deployment	0.28	0.00	0.07	0.35
32	Transmission and Generation Scheduling System (TAGSS)	Operations & Reliability Products	Continuing	Development Complete	0.44	2.00 1.58	0.00	2.44 2.02
33	NextEra Transmission Owner Integration	Operations & Reliability Products	Mandatory	Deployment	0.62	0.09	0.40	1.12
34	EMS Visualization Native PI Viewer – Interface and Event Tool	Operations & Reliability Products	Prioritize	Deployment	0.05	0.13	0.00	0.18
35	EMS/BMS Operational Enhancements	Operations & Reliability Products	Continuing	Deployment	0.09	0.00	0.80	0.89

2021 Enterprise Project Candidates

Item	Project Name	Product Area	Project Type	Proposed Deliverable	Estimated Cost (in millions)			
					Labor	Capital	Prof. Serv.	Total
36	Grid Guardian Network Topology Feature Implementation	Operations & Reliability Products	Prioritize	Deployment	0.07	0.13	0.00	0.20
37	Natural Gas Notices Enhancement Project	Operations & Reliability Products	Prioritize	Functional Requirements	0.02	0.00	0.00	0.02
38	IT Development and Control of Compliance Reports	Operations & Reliability Products	Prioritize	Deployment	0.10	0.00	0.00	0.10
39	LFDR Upgrade and Enhancements	Planning Products	Prioritize	Functional Requirements	0.11	0.00	0.00	0.11
40	Demand Forecasting Operational Reporting Enhancements (SAS)	Planning Products	Prioritize	Functional Requirements	0.04	0.00	0.00	0.04
41	ePlanning Migration	Planning Products	Prioritize	Functional Requirements	0.15	0.00	0.00	0.15
42	Dynamic Modeling Database Enhancements	Planning Products	Prioritize	Deployment	0.04	0.09	0.00	0.13
43	TCC Auction Billing	TCC Products	Prioritize	Deployment	0.21 0.11	0.00	0.00	0.21 0.11

Next Steps

Next Steps

- The NYISO is still evaluating the recommended projects and costs in consideration of the NYISO overall budget
- Written feedback on the 2021 Project Budget Recommendation may be provided until August 11th
 - Send to Brian Hurysz at bhurysz@nyiso.com : (518) 461-6405
- Review the NYISO's revised project budget recommendation at the August 27th BPWG meeting

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?