

# Proposed 2023 Enterprise Projects

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**Budget and Priorities Working Group**

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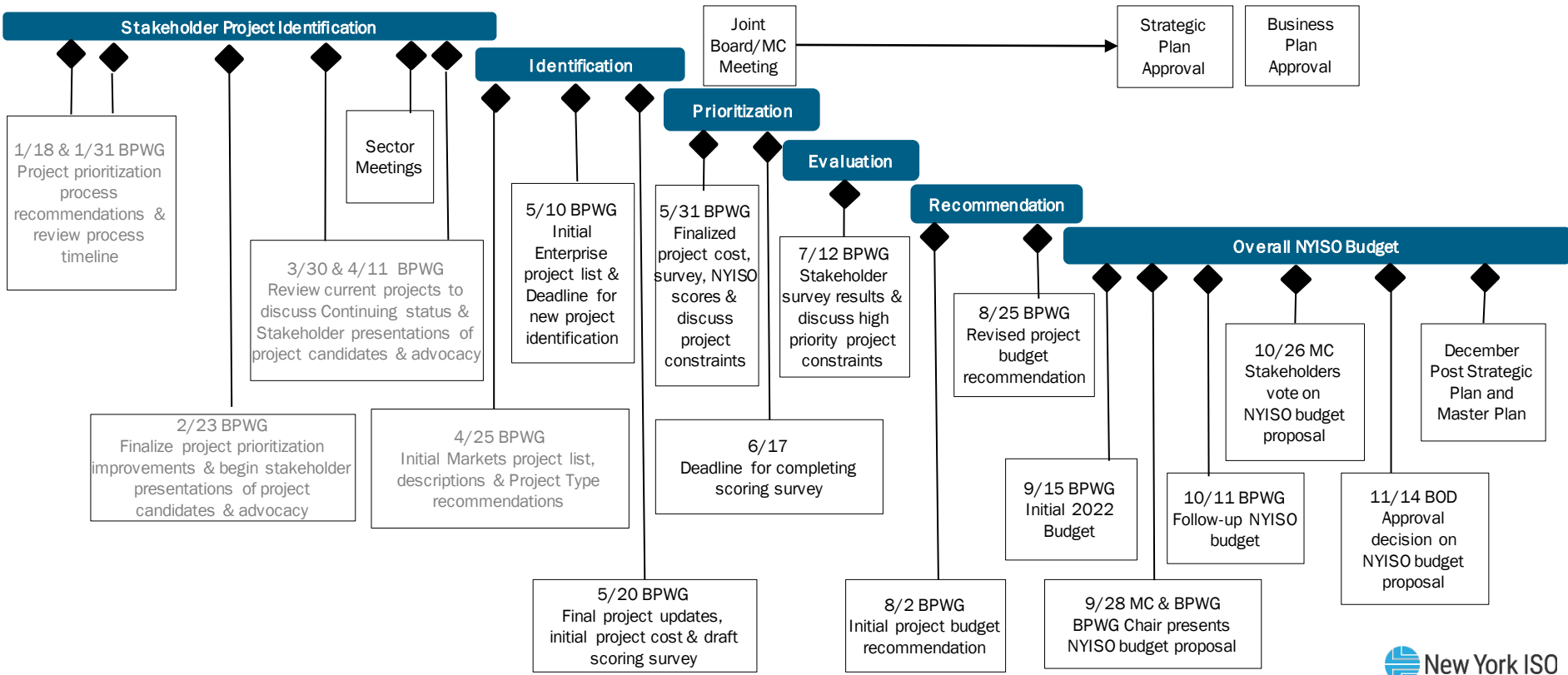
# Agenda

- **Project Prioritization Timeline**
- **Project Descriptions**
- **2023 Enterprise Project Candidates**
- **Next Steps**

# Project Prioritization Timeline

# 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 |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|



# Project Descriptions

# Project Descriptions

- **The NYISO has developed project descriptions for 50 proposed Enterprise projects**
  - 7 Business & Finance, 3 Capacity Market, 2 Energy Markets, 16 Enterprise, 2 New Resource, 9 Operations and Reliability, 4 Planning & 0 TCC Market
  - 0 Mandatory, 10 Continuing, 41 Prioritize & 0 Future
- **Last year, there were 45 proposed Enterprise projects at this time in the project prioritization process**
- **Project descriptions are included with today's posted meeting materials**

# 2023 Enterprise Project Candidates

# Prioritize 2023 Enterprise Projects

| Item | Project   | Product Area       | Project Type | 2023 Proposed Deliverable | 2022 Deliverable        |
|------|---|--------------------|--------------|---------------------------|-------------------------|
| 1    | Access Management Platform Upgrade                | Enterprise         | Prioritize   | Deployment                |                         |
| 2    | Block Storage Refresh                             | Enterprise         | Prioritize   | Deployment                |                         |
| 3    | BSS and Billsim Upgrade                           | Enterprise         | Prioritize   | Deployment                |                         |
| 4    | BTM Solar Demand Forecasting Product Enhancements | Planning           | Prioritize   | Deployment                | Functional Requirements |
| 5    | Budgeting Tool                                    | Business & Finance | Prioritize   | Functional Requirements   |                         |
| 6    | Building Management System (BMS) Controls Upgrade | Enterprise         | Prioritize   | Deployment                |                         |
| 7    | Carman Security Enhancements                      | Enterprise         | Prioritize   | Deployment                |                         |



# Prioritize 2023 Enterprise Projects

| Item | Project   | Product Area             | Project Type | 2023 Proposed Deliverable | 2022 Deliverable        |
|------|---|--------------------------|--------------|---------------------------|-------------------------|
| 8    | CMS and ConInvoice Data Integration                                       | Business & Finance       | Prioritize   | Deployment                | Functional Requirements |
| 9    | Contingency Analysis Results for Transmission Owner Situational Awareness | Operations & Reliability | Prioritize   | Deployment                | Functional Requirements |
| 10   | Control Room Logging Replacement  | Operations & Reliability | Prioritize   | Functional Requirements   |                         |
| 11   | Credit Price Spread Updates Virtual and External Transactions             | Business & Finance       | Prioritize   | Deployment                | Functional Requirements |
| 12   | Demand Forecasting Operational Reporting Enhancements                     | Planning                 | Prioritize   | Functional Requirements   |                         |
| 13   | DER Operational Enhancements  | New Resource             | Prioritize   | Deployment                |                         |
| 14   | Generator Modeling Database Enhancements                                  | Planning                 | Prioritize   | Deployment                |                         |

# Prioritize 2023 Enterprise Projects

| Item | Project  | Product Area             | Project Type | 2023 Proposed Deliverable | 2022 Deliverable        |
|------|--|--------------------------|--------------|---------------------------|-------------------------|
| 15   | GFER Enhancements                                | Operations & Reliability | Prioritize   | Deployment                |                         |
| 16   | Grid Operations Web Forms Enhancements           | Enterprise               | Prioritize   | Deployment                |                         |
| 17   | Gurobi Upgrade                                   | Operations & Reliability | Prioritize   | Deployment                |                         |
| 18   | ICAP Supplier Status Enhancements                | Capacity Market          | Prioritize   | Functional Requirements   |                         |
| 19   | IT Development and Control of Compliance Reports | Operations & Reliability | Prioritize   | Deployment                |                         |
| 20   | Krey Control Room A/V Replacement                | Enterprise               | Prioritize   | Deployment                | Study Complete          |
| 21   | LFDR Upgrade and Enhancements                    | Planning                 | Prioritize   | Deployment                | Functional Requirements |

# Prioritize 2023 Enterprise Projects

| Item | Project   | Product Area             | Project Type | 2023 Proposed Deliverable | 2022 Deliverable        |
|------|---|--------------------------|--------------|---------------------------|-------------------------|
| 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 |
| 24   | Meter Services System                                 | Business & Finance       | Prioritize   | Deployment                | Functional Requirements |
| 25   | Modernizing ASIS                                      | Enterprise               | Prioritize   | Deployment                |                         |
| 26   | Natural Gas Notices Enhancement Project               | Operations & Reliability | Prioritize   | Deployment                | Functional Requirements |
| 27   | Network Manager Cisco Refresh                         | Enterprise               | Prioritize   | Development Complete      |                         |
| 28   | Next Gen Security Architecture                        | Enterprise               | Prioritize   | Study Complete            |                         |

# Prioritize 2023 Enterprise Projects

| Item | Project   | Product Area             | Project Type | 2023 Proposed Deliverable | 2022 Deliverable |
|------|---|--------------------------|--------------|---------------------------|------------------|
| 29   | OASIS Reliability Upgrade                       | Enterprise               | Prioritize   | Study Complete            |                  |
| 30   | OMS Enhancement                                 | Operations & Reliability | Prioritize   | Deployment                |                  |
| 31   | On-Boarding of New Resources                    | New Resource             | Prioritize   | Study Complete            | Study Complete   |
| 32   | Ongoing TCC Collateral Coverage Assessment Tool | Business & Finance       | Prioritize   | Deployment                |                  |
| 33   | Outage States Portal Dashboard                  | Capacity Market          | Prioritize   | Functional Requirements   |                  |
| 34   | Price Correction Report Modifications           | Operations & Reliability | Prioritize   | Deployment                |                  |

# Prioritize 2023 Enterprise Projects

| Item | Project   | Product Area             | Project Type | 2023 Proposed Deliverable | 2022 Deliverable |
|------|---|--------------------------|--------------|---------------------------|------------------|
| 35   | Redundant Wind Solar Forecast Feed - Independent Vendor               | Operations & Reliability | Prioritize   | Issue Discovery           |                  |
| 36   | Secure Communication Channel with MPs                                 | Energy Market            | Prioritize   | Deployment                |                  |
| 37   | Settlement Systems Effective Dating and Filtering of Billing Entities | Business & Finance       | Prioritize   | Software Design           |                  |
| 38   | Smart Grid Upgrade  | Enterprise               | Prioritize   | Deployment                |                  |
| 39   | Transaction Modifications API   | Business & Finance       | Prioritize   | Deployment                |                  |
| 40   | Watchlist for Rest of State Units                                     | Energy Market            | Prioritize   | Deployment                |                  |

# Continuing 2023 Enterprise Projects

| Item | Project                          | Product Area             | Project Type | 2023 Proposed Deliverable | 2022 Deliverable |
|------|----------------------------------|--------------------------|--------------|---------------------------|------------------|
| 41   | Application Platform Upgrade     | Enterprise               | Continuing   | Deployment                | Deployment       |
| 42   | Database Upgrade                 | Enterprise               | Continuing   | Deployment                | Deployment       |
| 43   | EMS/BMS Operational Enhancements | Operations & Reliability | Continuing   | Deployment                | Deployment       |
| 44   | IT Infrastructure Automation     | Enterprise               | Continuing   | Deployment                | Deployment       |
| 45   | ITSM Security Enhancements       | Enterprise               | Continuing   | Deployment                | Deployment       |
| 46   | Microsoft 365                    | Enterprise               | Continuing   | Deployment                | Deployment       |
| 47   | Network Infrastructure Upgrade   | Enterprise               | Continuing   | Deployment                | Deployment       |

# Continuing 2023 Enterprise Projects

| Item | Project                         | Product Area | Project Type | 2023 Proposed Deliverable | 2022 Deliverable |
|------|---------------------------------|--------------|--------------|---------------------------|------------------|
| 48   | Unified Communications Platform | Enterprise   | Continuing   | Deployment                | Deployment       |
| 49   | UPS Replacement                 | Enterprise   | Continuing   | Deployment                | Study Complete   |
| 50   | Windows System Upgrade          | Enterprise   | Continuing   | Deployment                | Deployment       |

# Next Steps



# Next Steps

- **Written feedback on project descriptions and project type categorization may be provided until May 12<sup>th</sup> for incorporation into May 20<sup>th</sup> presentation**
  - Send email to Kevin Pytel at [kpytel@nyiso.com](mailto:kpytel@nyiso.com) or call cell at (518) 428-9528 for assistance
- **Final updates to proposed 2022 Market and Enterprise projects to be reviewed at the May 20<sup>th</sup> BPWG**
- **Stakeholder advocacy and draft scoring survey of Market Projects are scheduled for the May 20<sup>th</sup> BPWG**
- **NYISO provides scores for Market and Enterprise projects at the May 30<sup>th</sup> 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 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 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    | 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                                    |

# 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. |