

2019 Project Schedule Milestone Update

Robb Pike

Director, Market Design & Product Management

Budget and Priorities Working Group

March 27, 2019 - Krey Corporate Center

DRAFT – FOR DISCUSSION PURPOSES ONLY

©COPYRIGHT NYISO 2019. ALL RIGHTS RESERVED



Project Milestone and Status Definitions

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. |

Status Definitions

| Status | Definition |
|------------------|---|
| Complete | Requirements for delivery have been satisfied. |
| At Risk/Delayed | Progress continues but project challenges may require moving the delivery date later in the same calendar year. |
| Not Started | NYISO is not actively working on the project but expects the delivery can still be met based on scope of deliverable and time left to deliver. |
| On Schedule | Project is proceeding according to the project plan with expectations of meeting the required delivery by its target date. |
| Critical/Overdue | Project is in progress but project challenges may require moving the delivery date to the next calendar year or beyond the date specified in corporate incentive goals. |
| Reprioritized | Project has been reprioritized; resources have been reallocated to address emerging business needs which may delay the delivery date to the next calendar year or beyond the date specified in corporate incentive goals. |
| Cancelled | Project has been cancelled; resources have been reallocated to other efforts and there are no plans to pursue this project any further. |

Project Types

| Type | Definition |
|------|---|
| KP | Key project as identified in corporate incentive goal #6b |
| MP | Major project as identified in corporate incentive goal #6a |
| AP | Other approved project as identified in 2019 project budget |
| NP | New project to address emerging business needs |

DRAFT – FOR DISCUSSION PURPOSES ONLY

2019 Project Milestones

| Project Name | Type | Qtr | Project Commitment | Commitment Status |
|---|------|-----|--------------------|--------------------|
| <i>Business and Finance Products</i> | | | | |
| Enterprise Information Management – Data Integration Phase IV | KP | Q2 | Deployment | On Schedule |
| S&P Credit Ratings Platform Change | MP | Q1 | Deployment | On Schedule |
| Rate Schedule 12 Settlement | MP | Q2 | Deployment | On Schedule |
| Financial Risk Assessment and Scoring Enhancement | MP | Q3 | FRS | Not Started |
| Oracle Financials Upgrade | MP | Q3 | ADS | On Schedule |
| Finance Systems Strategic Vision Planning | MP | Q3 | Study Complete | On Schedule |

Bold red text indicates status update since last presentation

Bold blue text indicates projects under stakeholder discussions through the end of Q2

DRAFT – FOR DISCUSSION PURPOSES ONLY

©COPYRIGHT NYISO 2019. ALL RIGHTS RESERVED



2019 Project Milestones

| Project Name | Type | Qtr | Project Commitment | Commitment Status |
|--|------|-----|--------------------|-------------------|
| <i>Business and Finance Products (continued...)</i> | | | | |
| FERC Form1 Redesign | AP | Q4 | Deployment | Not Started |
| Vendor Management Tool | AP | Q2 | SDS | On Schedule |
| Position Control System | AP | Q4 | FRS | Not Started |

Bold red text indicates status update since last presentation

Bold blue text indicates projects under stakeholder discussions through the end of Q2

DRAFT – FOR DISCUSSION PURPOSES ONLY

©COPYRIGHT NYISO 2019. ALL RIGHTS RESERVED



2019 Project Milestones

| Project Name | Type | Qtr | Project Commitment | Commitment Status |
|--|------|-----|--------------------------------|-------------------|
| <i>Capacity Market Products</i> | | | | |
| Enhancing Fuel and Energy Security | KP | Q2 | Study Complete | On Schedule |
| Competitive Entry Exemption for Increased CRIS | MP | Q3 | Market Design Complete | On Schedule |
| BSM Repowering | MP | Q3 | Market Design Complete | On Schedule |
| Tailored Availability Metric | MP | Q3 | Market Design Concept Proposed | On Schedule |
| Demand Curve Reset | MP | Q4 | Study Defined | On Schedule |
| CRIS for External - ROS Transmission Investments | AP | Q3 | Deployment | On Schedule |

Bold red text indicates status update since last presentation

Bold blue text indicates projects under stakeholder discussions through the end of Q2

DRAFT – FOR DISCUSSION PURPOSES ONLY

©COPYRIGHT NYISO 2019. ALL RIGHTS RESERVED



2019 Project Milestones

| Project Name | Type | Qtr | Project Commitment | Commitment Status |
|--|------|-----|------------------------|-------------------|
| <i>Capacity Market Products (continued...)</i> | | | | |
| External Capacity Performance & Obligations | AP | Q3 | Market Design Complete | On Schedule |
| ICAP AMS Redesign Phase III | AP | Q4 | Deployment | On Schedule |

Bold red text indicates status update since last presentation

Bold blue text indicates projects under stakeholder discussions through the end of Q2

DRAFT – FOR DISCUSSION PURPOSES ONLY

©COPYRIGHT NYISO 2019. ALL RIGHTS RESERVED

2019 Project Milestones

| Project Name | Type | Qtr | Project Commitment | Commitment Status |
|-------------------------------|------|-----|------------------------|------------------------|
| <i>DER Products</i> | | | | |
| DER Participation Model | NP | Q1 | Market Design Complete | At Risk/Delayed |
| | MP | Q4 | FRS | At Risk/Delayed |
| Enabling Technologies for DER | AP | Q2 | Study Complete | At Risk/Delayed |
| NYISO Pilot Framework | AP | Q4 | Study Complete | On Schedule |

Bold red text indicates status update since last presentation

Bold blue text indicates projects under stakeholder discussions through the end of Q2

DRAFT – FOR DISCUSSION PURPOSES ONLY

©COPYRIGHT NYISO 2019. ALL RIGHTS RESERVED



2019 Project Milestones

| Project Name | Type | Qtr | Project Commitment | Commitment Status |
|---|------|-----|------------------------|------------------------|
| <i>Energy Market Products</i> | | | | |
| Carbon Pricing | KP | Q2 | Market Design Complete | On Schedule |
| More Granular Operating Reserves (SOM) | KP | Q3 | Market Design Complete | On Schedule |
| ESR Participation Model (SOM) | KP | Q4 | Development Complete | At Risk/Delayed |
| Automated Default Mitigation Implementation | MP | Q3 | SDS | On Schedule |
| Ancillary Services Shortage Pricing (SOM) | MP | Q4 | Study Complete | Not Started |
| Enhanced Fast Start Pricing | AP | Q3 | FRS | Not Started |

Bold red text indicates status update since last presentation

Bold blue text indicates projects under stakeholder discussions through the end of Q2

DRAFT – FOR DISCUSSION PURPOSES ONLY

©COPYRIGHT NYISO 2019. ALL RIGHTS RESERVED



2019 Project Milestones

| Project Name | Type | Qtr | Project Commitment | Commitment Status |
|---|------|-----|--------------------------------|------------------------|
| <i>Energy Market Products (continued...)</i> | | | | |
| Constraint Specific Transmission Shortage Pricing (SOM) | AP | Q2 | Market Design Complete | At Risk/Delayed |
| Reserve Procurement for Resilience | AP | Q3 | Market Design Concept Proposed | On Schedule |

Bold red text indicates status update since last presentation

Bold blue text indicates projects under stakeholder discussions through the end of Q2

DRAFT – FOR DISCUSSION PURPOSES ONLY



2019 Project Milestones

| Project Name | Type | Qtr | Project Commitment | Commitment Status |
|---|------|-----|--------------------|--------------------|
| <i>Enterprise Products</i> | | | | |
| Microsoft Systems Upgrade | MP | Q4 | Deployment | On Schedule |
| Network Infrastructure Upgrade | MP | Q4 | Deployment | On Schedule |
| Database Platform Upgrade -2019 | MP | Q4 | Deployment | On Schedule |
| Application Platform Upgrade Phase - 2019 | MP | Q4 | Deployment | On Schedule |
| Identity and Access Management (IAM) - 2019 | AP | Q3 | Deployment | On Schedule |
| IT Infrastructure Automation | AP | Q4 | Deployment | On Schedule |

Bold red text indicates status update since last presentation

Bold blue text indicates projects under stakeholder discussions through the end of Q2

DRAFT – FOR DISCUSSION PURPOSES ONLY



2019 Project Milestones

| Project Name | Type | Qtr | Project Commitment | Commitment Status |
|---|------|-----|----------------------|-------------------|
| <i>Operations & Reliability Products</i> | | | | |
| EMS/BMS System Upgrade | KP | Q4 | Deployment | At Risk/Delayed |
| EMS/BMS Workstation Upgrade | KP | Q4 | Deployment | At Risk/Delayed |
| PI System Upgrade | KP | Q4 | Deployment | At Risk/Delayed |
| Gurobi (MIP) Refresh | MP | Q4 | Deployment | On Schedule |
| TOA Platform Upgrade Phase III | AP | Q4 | Development Complete | On Schedule |

Bold red text indicates status update since last presentation

Bold blue text indicates projects under stakeholder discussions through the end of Q2

DRAFT – FOR DISCUSSION PURPOSES ONLY

©COPYRIGHT NYISO 2019. ALL RIGHTS RESERVED



2019 Project Milestones

| Project Name | Type | Qtr | Project Commitment | Commitment Status |
|--|------|-----|------------------------|-------------------|
| <i>Planning Products</i> | | | | |
| Interconnection Project Queue (or Portal) Automation | MP | Q3 | Deployment | On Schedule |
| Comprehensive System Planning Process Review | MP | Q3 | Market Design Complete | On Schedule |
| Climate Change Impact and Resilience Study | MP | Q4 | Study Complete | On Schedule |

Bold red text indicates status update since last presentation

Bold blue text indicates projects under stakeholder discussions through the end of Q2

DRAFT – FOR DISCUSSION PURPOSES ONLY

©COPYRIGHT NYISO 2019. ALL RIGHTS RESERVED



The Mission of the New York Independent System Operator, in collaboration with its stakeholders, is to serve the public interest and provide benefits 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 policy makers, stakeholders and investors in the power system



www.nyiso.com

DRAFT – FOR DISCUSSION PURPOSES ONLY

©COPYRIGHT NYISO 2019. ALL RIGHTS RESERVED