

2016 Project Prioritization & Budgeting Process

Ryan Smith

Senior Manager, Enterprise Product &

Project Management

New York Independent System Operator

Budget & Priorities Working Group

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Krey Corporate Center

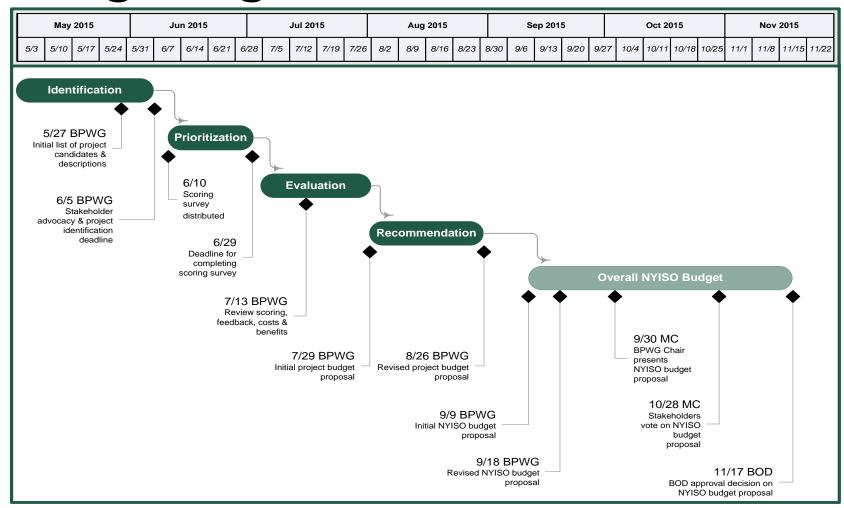


2016 Project Selection Process

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	The phase involves the NYISO and stakeholder scoring of projects. The NYISO scores projects using objective criteria that reflects strategic alignment, expected outcomes, risks, and ability to execute. Stakeholders score projects based on their organizational priorities via a survey mechanism.	
Evaluation	This phase involves performing a feasibility assessment based on detailed direct cost and labor estimates.	
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.	



2016 Project Prioritization & Budgeting Timeline





2016 - 2018 Strategic Initiatives & FERC Orders

2040			
2016	2017	2018	

NERC CIP v5 Transition

Demand Curve Reset

Regulated Transmission Cost Recovery Phase 2

FERC Funded Rerun Phase 4

NAESB Public Key Infrastructure

Wholesale Market Alignment with the NY PSC REV Proceeding

Gas / Electric Coordination

EMS / BMS System Upgrade

FERC Order / Tariff Compliance

NYISO Strategic Initiative



Business Intelligence Products

Enterprise Information Management: Data Integration Phase 2

Enterprise Information Management: Analytics Environments

Public Website Refresh

Capacity Market Products

DMNC Test Validation Automation

ICAP AMS Enhancements Phase 3

ICAP Auction Validation and Reporting Phase 3

ICAP Reference System Phase 2

Reactive Test Data Management System

Automate ICAP Import Rights

Demand Curve Reset

Winter DMNC Temperature Adjustments



Capacity Market Products (continued)

ICAP Import Rights Design

Fuel Assurance – Study

Alternative Methods for Calculating the Locational Capacity Requirements

Modify Demand Curve to Minimize Costs of Satisfying LCR (SOM)

Internal Capacity Deliverability Rights for Transmission Upgrades into a Local Area (SOM)

Locational Planning Requirements – Pre-define Capacity zones (SOM)

Expand BSM to Address Uneconomic Transmission Investment (SOM)

Reform Offer Floor for Mitigated Projects (SOM)

Behind the Meter: Net Generation Integration

Develop Rules for the Elimination of Capacity Zones or Achievement of Price

Convergence

Model Zone K as Export Constrained



Capacity Market Products (continued)

External CRIS Rights for non-UDR Transmission Expansion

Mitigation Rules for Uneconomic Retention of Capacity (SOM)

Mitigation Rules for Uneconomic Investment Outside the G-J Locality (SOM)

Limited Application of Buyer Side Mitigation by Technology

Renewables Exemption

Self-Supply Mitigation Measures

Repowering Exemption

Competitive Entry Exemption for Additional CRIS

Modify the Pivotal Supplier Test (SOM)

Modify Treatment of Units Being Replaced, Mothballed and Retired in Forecasts of ICAP Prices and Net Revenues (SOM)

Enhanced EAS Forecasting Engine



Capacity Market Products (continued)

BSM Part A and Part B Test Enhancements

Develop Physical Withholding Rules for UDRs

Demand Response

Demand Response in the Real-Time Energy Market

DRIS and DR Reporting Enhancements for DR Program Administration

Demand Response Contingency Implementation: Order 745 or DR Backstop Design

Energy Market Products

Fuel Assurance □Constrained Fuel Supply Bidding (SOM)

Energy Storage Optimization

Targeted Virtual Trading

Linked Virtual Buy-Sell Transactions

Long Island PAR Optimization & Financial Rights (SOM)



Energy Market Products (continued)

Hybrid GT Pricing Improvements (SOM)

RTC-RTD Forward Horizon Coordination Improvements (SOM)

Enhanced PAR Modeling (SOM)

Review of RACT Compliance Plans (SOM)

Wholesale Market Alignment with the NY PSC REV Proceeding

Fuel Limited Reserves (SOM)

5 Minute Transaction Scheduling

15 Minute Transaction Scheduling – HQ Cedars (SOM)

15 Minute Transaction Scheduling – IESO (SOM)

Enterprise Products

NERC CIP v5 Planning & Conversion ∃Phase II

NAESB Public Key Infrastructure



Enterprise Products (continued)

Market Test Environment

Storage Infrastructure Redesign Phase II

Identity and Access Management (IAM) ∃Phase V

Application Platform Upgrade Phase III

Enterprise Monitoring Phase III

Stakeholder Services Suite Phase II

Integration Platform Availability Improvements

Learning Management System

Service Management Enhancements

Database Upgrades and Performance Improvements

Telephony System Upgrade

Enterprise Job Scheduling Upgrade



Enterprise Products (continued)

Network Proxy Upgrade

Laptop/Desktop Refresh and Migration

Content Management System Upgrade and Consolidation

Email Security Enhancements

Conference Room Technology Refresh

Enterprise Project Management (EPM) Upgrade

Finance Products

Regulated Transmission Cost Recovery - Phase 2

Day Ahead Margin Assurance Payment (DAMAP) Enhancements

North Subzone Redistricting

Rate Schedule 1 Technology Automation

Settlements Sub Accounts



Finance Products (continued)

CMS Financial Risk Assessment Tools

CMS Ratings Automation

CMS Unbalanced Trading Hubs

Foreign Guarantees

Budget versus Actual Automation

RFP Evaluation Tool

Operations & Reliability Products

Calculations of BAL Standards

Breaker Level Market Modeling

Transmission Outage Application Platform Upgrade

EMS BMS System Upgrade

Coordinated Transaction Scheduling with ISO: NE (SOM)



Operations & Reliability Products (continued)

MetrixIDR (Load Forecaster Upgrade)

Scheduling & Pricing □Comprehensive Scarcity Pricing (SOM)

Comprehensive Scarcity Pricing ∃Ranger DRIS Integration

Transmission Service Charges Rate Update

Interconnection Reliability Operating Limits IROL Visualization

Smart Grid Visualization

NERC Certification Task Management

Price Validation Test Automation

PCC Visualization Options

CTS - NE System Audit

Synchrophasor Product Upgrade

NERC IDC System Tool Modification



Operations & Reliability Products (continued)

DAM Posting Improvements

FERC Funded Rerun Phase 4

2016 Reference Level Software Enhancements

Market Operations Report Automation

Modeling 100+kV Transmission Constraints

Planning Products

Order 1000

Solar Forecasting Initiatives

Generator Reporting Enhancements

Congestion Reporting Enhancements

TCC Products

TCC AMS Round Type and Upgrade



TCC Products (continued)

TCC Balance-of-Period (TCC AMS, TCC AVS & CMS)

On-Peak/Off-Peak TCCs

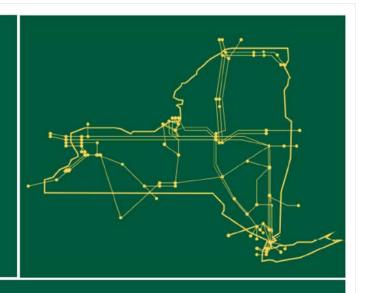


Next Steps

- Ongoing dialogue with stakeholders
- Stakeholder advocacy and review of project candidates at June 5th BPWG
- Identify project candidates by June 5th for inclusion in stakeholder scoring survey
- Stakeholder scoring surveys distributed on June 10th
- Stakeholder scoring surveys due June 29th
- Review project scoring, feedback, etc. at July 13th BPWG



The New York Independent System Operator (NYISO) is a not-for-profit corporation responsible for operating the state's bulk electricity grid, administering New York's competitive wholesale electricity markets, conducting comprehensive long-term planning for the state's electric power system, and advancing the technological infrastructure of the electric system serving the Empire State.



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