

2013 Project Prioritization and Budgeting Process

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Budget & Priorities Working Group

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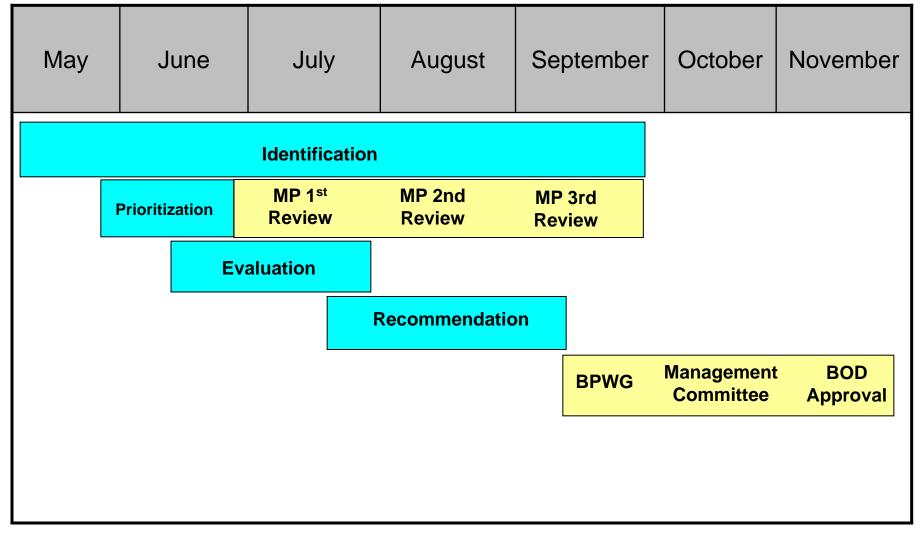


2013 Project Selection Process

Phase	Definition
Identification	•FERC Orders
	•Existing tariff obligations
	Strategic Initiatives
	State of the Market recommendations
	Necessary infrastructure enhancements
	•Feedback from MPs throughout the year
	 Product Plans, Market Design Evolution and Strategic Plan
Prioritization	Evaluate projects using objective criteria that reflects the NYISO strategy, stakeholder interest, and potential impacts to budget and resources
Evaluation	Conduct feasibility assessment – detailed estimates of hardware, software, consultancy and staff
Recommendation	Refine 2013 proposed projects based on feasibility assessment



2013 Project Prioritization and Budgeting Timeline





2012 – 2014 Product Plan: Strategic Initiatives and FERC Orders



2012 Product Plan - Strategic Initiatives and FERC Orders

Q1-2012	Q2-2012	Q3-2012	Q4-2012	
Carman Road Data Center Migra	Carman Road Data Center Migration			
Krey Boulevard Control Room Planning and Buildout				
	Smart Grid Investment Grant Implementation			
EITC Phase III: PJM - Development/Testing Deployment				
Market-to-Market Coordination (PJM) — Development/Testing/Deployment				
EITC Phase IV: ISO-NE (IRIS) – Architectural Design Specification				
EITC Phase V: PJM Coordinated Transaction Scheduling (CTS) – Market Design Concept				
	DSASP Aggregations Phas	e II: Direct Communications		
Additional Capacity Zones – Functional Requirements Complete/Software Development				
	FERC Order 755 – Market Design/Development/Testing/Deployment			
TCC Multi-Duration/Non-Historic Fixed Price TCCx Phase I: Development/Testing/Deployment				
Demand Response in Real-Time Energy Market – Market Design				
NVISO Strategia laitietiva		FERC Order 760 Complia	nce	
BRM - FERC Order FERC Order				



2013 - 2014 Product Plan - Strategic **Initiatives and FERC Orders**

2013 2014

Krey Boulevard Control Room Migration Planning and Execution

Smart Grid Investment Grant Implementation

EITC Phase V: PJM CTS - Market Design

EITC Phase IV: ISO-NE CTS - Internal System Buildout

EITC Phase V: PJM CTS - Software Developmentt

EITC Phase IV: ISO-NE CTS - Software Development

Market-to-Market: New England - Requirements

Additional Capacity Zones - Development/Testing/Deployment

FERC Order 745

FERC Order 760

Demand Response in RT Energy Market - Market Rule Development/Requirements

Demand Curve Reset

Demand Response in RT Energy Market - Development and Testing

NYISO Strategic Initiative

BRM - FERC Order

FERC Order

Tariff Compliance

BRM Estimated Timeline – As of June 2012



Project	2011 Deliverables	2012 Deliverables	2013 Deliverables	2014-2015 Deliverables	Post 2015 Deliverables
Buy Through of Congestion					Evaluation
ITC ¹ Phase I: HQ on Dispatch	Deployment 15-Minute				Deployment 5-Minute
ITC Phase II: Ancillary Services				Evaluation	Deployment
ITC Phase III: PJM Intra-hour Transaction Scheduling		Deployment*			
ITC Phase IV: ISO – NE Intra-hour Transaction Scheduling	Tariff Filing	Arch. Design	Development	Deployment	
ITC Phase V: PJM – Coordinated Transaction Scheduling		Market Design Concept	Market Design	Deployment	
ITC Phase VI: OH – Coordinated Transaction Scheduling				Evaluation	Deployment
Market to Market Coordination: PJM		Deployment*			
Market to Market Coordination: ISO-NE				Requirement	Deployment ²
Market to Market Coordination: MISO				Evaluation	
Market Flow Calculator (PJM M2M)	Deployment				
Market Flow Calculator (NERC IDC)	Deployment				
PAR Modeling Upgrades (updated proxy bus pricing)	Deployment				
Ranger Software Upgrade				Deployment	
Ranger Optimization and Performance Enhancements ³			Arch. Design	Deployment	

¹ITC = Interregional Transaction Coordination

*Deployed & operational no later than January 15, 2013

²ISO-NE has indicated it could not support a deployment of Market to Market Coordination prior to 2014

³Includes Mixed Integer Programming (MIP) algorithm in Security Constrained Unit Commitment (SCUC)



Stakeholder Input Following 5/21 BPWG

Stakeholder Input	NYISO Response
Any software changes necessary to enable a transfer of data to a GATS system	Project included for prioritization/evaluation in Business Intelligence Products
Disaggregated Virtual Trading	Project included for prioritization/evaluation in Energy Market Products
Ranger software changes to allow more pricing nodes and bid volume	Ranger Optimization & Performance Enhancements included in Operations & Reliability Products for prioritization/evaluation
Unbalanced Trading Hubs	Project included for prioritization/evaluation in Finance Products
Phase II of ICAP Bidding Requirements	Project included for prioritization/evaluation in Finance Products
Removing capacity zones determined to be no longer needed	NYISO is open to further exploring the development of criteria to eliminate existing or newly created zones
Phase II Improvements in Frequency Regulation	Frequency Regulation Compensation scheduled for October 2012; Phase II would require stakeholder discussions regarding enhancement opportunities based on Phase I outcomes



Stakeholder Input Following 5/21 BPWG

Stakeholder Input	NYISO Response
Internal dispatch/external import limits: trade-off for economics	Concept needs to be introduced by stakeholders at MIWG for discussion
Capacity Market Restructuring Proposals	Capacity Market Study under way with expected completion late summer 2012; results will be discussed with stakeholders at ICAPWG
Changes related to mothballed/retired generators	Topic to be addressed through stakeholder process
Modeling of excess capacity in Planning studies	Input forwarded to System Resource Planning group
Tariff changes related to the impact of potential gas supply outages under future electric system conditions to be conducted in conjunction with the reliability planning process	Input forwarded to System Resource Planning group
Improved bid mitigation notification	Input forwarded to Market Mitigation & Analysis
Additional storage for RLS attachments	Input forwarded to Market Mitigation & Analysis



2013 Preliminary Project Candidates



Business Intelligence Products

2013 Candidates

Mandatory Projects*

FERC Order 760 Automation

Projects for Prioritization

Business Intelligence Platform Design

Document Management Search/Collaboration

DSS Business Objects Webi Migration

DSS Environment Upgrade

eTariff Business Owner Assignment

NYS Generator Attributes Tracking System (GATS) Integration

Public Website: Maps and Graphs

Public Website: Posting Renewables Data

Public Website: Technology Upgrade



Capacity Market Products

2013 Candidates

Mandatory Projects*

Additional Capacity Zones

Demand Curve Reset

Projects for Prioritization

GADS Portal

ICAP Masked Bid Data Automation

ICAP Reference System

Reactive Power Test

Reliability Resource Compensation

^{*}Mandatory = FERC Order, Strategic Initiative, Tariff Obligation, or Dependency To Support Order, Initiative, or Obligation



Demand Response Products

2013 Candidates

Mandatory Projects*

Demand Response - Real Time Energy Market

FERC Order 745: Monthly Net Benefits Test**

2012 Project Continuation

DSASP Aggregrations

Projects for Prioritization

DRIS-SCR: Local Generators

DRIS-SCR: Provisional ACL

DRIS-SCR: 6-hour Performance and ACL Weather Adjustment

SCR Baseline Study

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^{**}NYISO currently awaiting FERC response to August 2011 Compliance Filing



Energy Market Products

2013 Candidates

Mandatory Projects*

CTS -NE Phase 1: Internal System Build-out

CTS-PJM

2012 Project Continuation

Ancillary Services Mitigation

Scheduling & Pricing: Graduated Transmission Demand Curve

Projects for Prioritization

Disaggregated Virtual Trading

PAR Modeling Phase 2: Partially Controlling Mode

Scheduling & Pricing: Hybrid GT Pricing Improvements

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Enterprise Products

2013 Candidates

Projects for Prioritization

Corporate Workstation Upgrades

Enterprise Data Storage Management

Enterprise Project Management Phase II

Enterprise System Reliability Monitoring Enhancements

HR Business System

Identity and Access Management Phase III

Market Data Management

Market Job Scheduling Upgrade

Market and Web Application Server Upgrade

Mobile Device Management Upgrade

Network Reliability Upgrades

Ranger Messaging Integration Phase II

Windows Server Upgrade



Finance Products

2013 Candidates

2012 Project Continuation

Credit Management System (CMS): Energy Transactions

Projects for Prioritization

CMS: Enhanced MP Data Access

DSS: Enhanced MP Data Availability

Data Retention: Settlements Data

Expanded Functionality Billing Simulator

ICAP Spot Market Credit Enhancements

Oracle Financials Upgrade

Performance Tracking System Replacement

Unbalanced Trading Hubs



Operations & Reliability Products

2013 Candidates

Mandatory Projects*

Energy Management System (EMS) Visualization

Phase I Metering Upgrade

2012 Project Continuation

HTP Controllable Tie Line

Projects for Prioritization

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Dispatcher Training System (DTS) Sustainability	Ranger Optimization & Performance Enhancements
Enhanced Scarcity Pricing	Ranger Software Upgrade
LI PAR Optimization	Ranger Workstation Upgrade
MetrixIDR (Load Forecaster Upgrade)	Reference Level Software (RLS) Enhancements
Operational Tools 2013	ROS DAM BPCG Mitigation Automation
Ranger Enhancements	TSC Enhancements

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Planning and TCC Products

2013 Candidates

Projects for Prioritization

FERC Order 760: TCC Revenue Automation and Delivery

High Performance Computing Redundancy

Multi-Duration Centralized TCC Auction Phase 2

Siemens PTI Model-on-Demand Phase 2

TCC Auction Engine Upgrade

TCC Auction VB6 Validation Tool Replacement Phase 1

TCC Three-month Bid Data Release Automation

Weekly Invoice Automation of TCC Markets

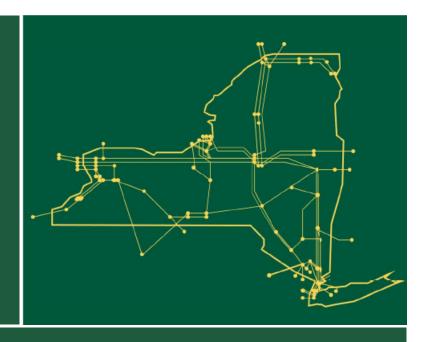


Next Steps

- Ongoing dialogue with Market Participants at BPWG and other working groups
- Continue internal NYISO prioritization process
- Conduct feasibility assessment of mandatory projects and high priority projects
- Solicit feedback from Market Participants at July 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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