

# Master Plan Outline

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Whitney Lesnicki  
Manager, Energy Market Design

Market Issues Working Group

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Based on feedback received from stakeholders, this presentation has been updated.

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# Agenda

- Background
- Master Plan Outline
- Detailed Timeline
- Appendix: Previous Presentations

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# Background

- **The NYISO has committed to publishing a “Master Plan” in 2018 that will provide one cohesive strategic vision for market design:**
  - Will consider the interdependencies of continuing projects, new market design concepts identified in 2017 and 2018, and FERC compliance directives.
  - Intended to provide a comprehensive 5-year plan that will enable the NYISO to prepare for anticipated changes to the bulk power system.
- **The objective of this presentation is to share the NYISO’s initial outline for the Master Plan and solicit stakeholder feedback.**
  - Feedback on the Master Plan outline is requested by May 3, 2018.
  - First Draft of Master Plan will be posted on or before May 10, 2018.
  - Revised Draft will be posted on or before June 5, 2018.



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# Background

- **The Master Plan will prioritize market design initiatives that have been previously identified in, or in support of, one or more of the following publications:**
  - Pricing Carbon into NYISO's Wholesale Energy Market to Support New York's Decarbonization Goals, (Brattle Group, August 2017)
  - Wholesale Market Assessment of the Impact of 50% Renewable Generation, (NYISO, December 20, 2017)
  - Capacity Resource Performance in NYISO Markets (Analysis Group, November 6, 2017)
  - FERC 206 Order on Fast-Start Pricing (December 21, 2017)
  - FERC Grid Resilience Order (January 8, 2018)
  - Performance Assurance Management Response (NYISO, February 21, 2018)
- **The Master Plan will also consider initiatives associated with the current market design projects listed below:**
  - Energy Storage Participation Model
  - DER Roadmap
  - Modeling 100+ kV Transmission Constraints
  - Other initiatives not listed here
  - Constraint Specific Transmission Shortage Pricing
  - Enhanced Fast Start Pricing
  - RTC-RTD Convergence Improvements

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# Strategic Themes

- Across the spectrum of current and proposed market design initiatives, two unifying themes have been identified:
  - Flexibility
  - Resilience
- The Master Plan will describe these themes and how various initiatives fit within them.
- Project efforts will be grouped together by theme and initiative to facilitate logical prioritization.
- Final project prioritization will be subject to stakeholder feedback.

# Master Plan Outline

## Executive Summary

- Background
- Drivers
- 5-year timeline (visual)

## Introduction

- Grid in Transition; Need for Resource Flexibility & Grid Resilience.
- NYISO is preparing for the grid of the future through its DER and Energy Storage efforts.
- Master Plan ties multiple efforts together with a cohesive strategy going forward.
- The NYISO continues with efforts to address harmonizing wholesale markets and state policies, and ensuring that markets continue to drive resource performance.

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# Strategic Vision for Market Design

This section will provide a discussion of why each project is needed, what it will accomplish, dependencies with other projects, and proposed timelines. *Blue font indicates an active project in 2018 and/or a proposed project within the 2019 prioritization process.*

## *ESR Participation Model (SOM)*

### *More Frequent Transaction Scheduling*

### *Large Solar Participation Model*

## *Distributed Energy Resource Integration*

- i. DER Participation Model
- ii. Enabling Technologies for DER

## *Price Formation*

- i. Carbon Pricing
- ii. Model 100+ kV Transmission Constraints (SOM)
- iii. Constraint Specific Transmission Shortage Pricing (SOM)
- iv. Enhanced Fast Start Pricing (SOM)
- v. RTC-RTD Convergence Improvements(SOM)

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# Strategic Vision for Market Design (cont.)

*This section will provide a discussion of why each project is needed, what it will accomplish, dependencies with other projects, and proposed timelines. Blue font indicates an active project in 2018 and/or a proposed project within the 2019 prioritization process.*

## ***Performance Incentives***

- i. Real-Time Performance Incentives
- ii. Tailored Availability Metric
- iii. External Capacity Performance & Obligations

## ***Evolution of Ancillary Services***

- i. Flexible Ramping Product
- ii. Ancillary Services Shortage Pricing
- iii. More Granular Operating Reserves
- iv. Dynamic Reserve Requirements (SOM)
- v. Reserve Procurement for Resilience
- vi. Review Regulation Movement pricing
- vii. Review Regulation Capacity requirements
- viii. Separating Regulation Up and Regulation Down

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# Timeline

- **April 24, 2018**
  - Discuss Master Plan outline with stakeholders.
- **May 3, 2018**
  - Deadline for stakeholder feedback on Master Plan outline.
- **May 10, 2018**
  - Draft Master Plan posted with 5/15 MIWG materials.
- **May 15, 2018**
  - Discuss draft Master Plan.
- **May 25, 2018**
  - Deadline for stakeholder feedback on Master Plan draft.
- **June 12, 2018**
  - Present ~~Final~~ Master Plan at MC.
- **June 13, 2018**
  - Discuss ~~Present Final~~ Master Plan at MIWG.

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# Questions?

We are here to help. Let us know if we can add anything.

# 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



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