

2019 Market Projects

Q3 Update

Mike DeSocio, Senior Manager of Market Design

ICAPWG/MIWG

August 21, 2019



Purpose

- This presentation provides updates on the 2019 Capacity, DER, and Energy Market Design projects as of July 31, 2019
- The following slides include status, schedule, and deliverables updates

Capacity Market Design

Capacity Market Project Overview

2019 Capacity Market Design Projects	Q1	Q2	Q3	Q4	2019 Deliverable
Enhancing Fuel and Energy Security	CD	S			Q2 Study
External Capacity Performance & Obligations	PR	MDCP	MDC		Q3 MDC
Tailored Availability Metric	PR	CD	MDCP		Q3 MDCP
Demand Curve Reset	PR		S	S	Q4 Study
Competitive Entry Exemption for Additional CRIS	PR	CD	MDC		Q3 MDC
Repowering	PR	CD	MDC		Q3 MDC

KEY

PR	Project Review
S	Study

MDCP	Market Design Concept Proposed
MDC	Market Design Complete

FR	Functional Requirements
CD	Continuing Discussions

Enhancing Fuel and Energy Security

- **2019 Deliverable: Q2 2019 - Study Complete**
- **Stakeholder Engagement Plan:**
 - Q1 2019
 - Consultant to present proposed study assumptions and scenarios to stakeholders
 - Consultant to present preliminary findings to stakeholders
 - Q2 2019
 - Consultant to present final report to stakeholders
- **This effort is slightly behind schedule due to additional time taken in vetting assumptions, methodology and results**
 - Analysis Group reviewed preliminary results with stakeholders on August 2, 2019
 - The NYISO currently anticipates completing final report in early Q4

External Capacity Performance & Obligations

- 2019 Deliverable: Q3 2019 - Market Design Complete
- Stakeholder Engagement Plan:
 - Q2 2019
 - Discuss proposed market solutions that are aimed at enhancing reliability through refining the eligibility and energy delivery of external capacity suppliers
 - Q3 2019
 - Present revised tariff
 - Market Design Complete Presentation
- **The external capacity deliverability updates are expected to be complete by the end of Q3**

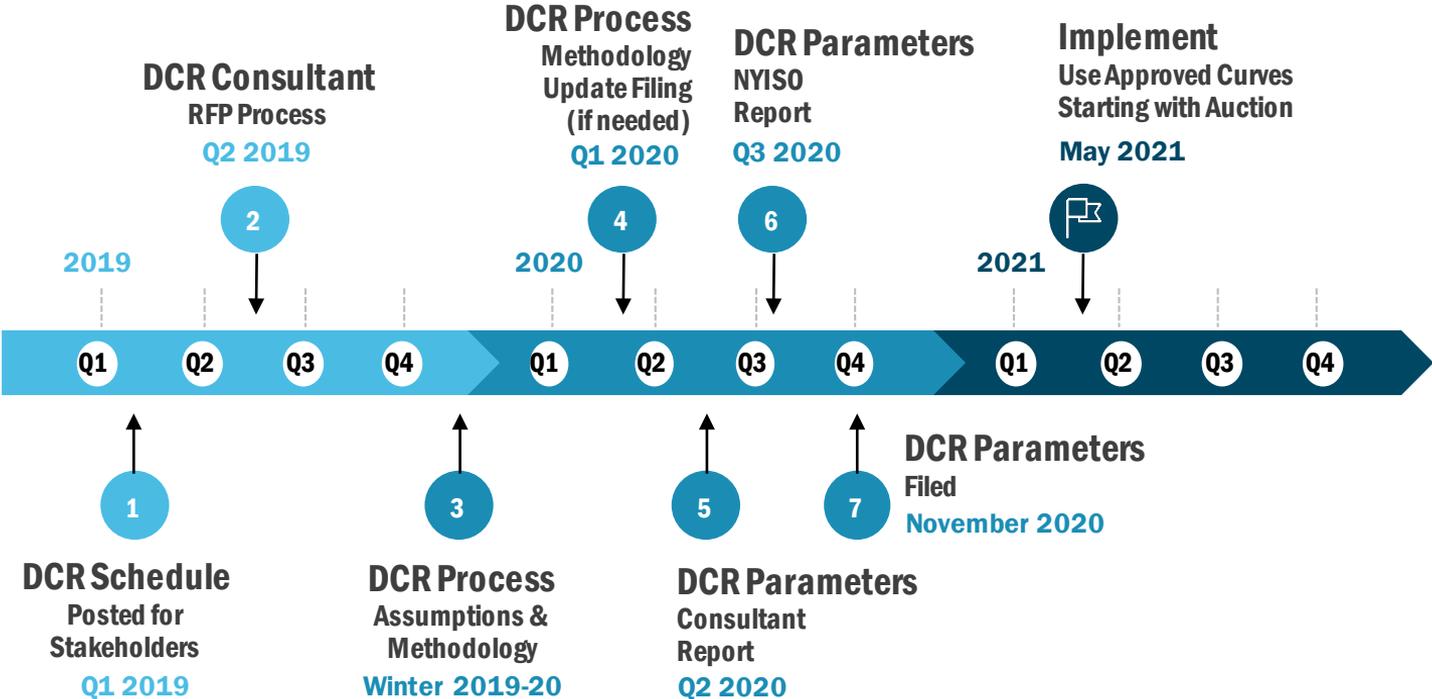
Tailored Availability Metric

- **Deliverable: Q3 2019 – Market Design Concept Proposed**
- **Stakeholder Engagement Plan:**
 - January, 2019: Problem Description
 - February, 2019: Discussion of Analysis
 - April – July, 2019: Discussion of Analysis and Proposal
 - August – September, 2019: Market Design Concept Proposal
- **This analysis is taking longer than originally planned**
 - The most recent discussion was on July 24, 2019

Demand Curve Reset

- **Deliverable: Q2 2019 – Issue RFP**
- **Stakeholder Engagement Plan:**
 - Q3 2019: Begin engagement with selected independent consultant
- **Analysis Group has been selected as the independent consultant for the 2019-2020 DCR**
 - Stakeholder discussions to begin on August 23, 2019

Demand Curve Reset



CEE for Additional CRIS

- Deliverable: Q3 2019 – Market Design Complete
- Stakeholder Engagement Plan:
 - Q2 2019
 - Discuss draft tariff language
 - Q3 2019
 - Present revised tariff language
 - BIC & MC vote on final market design
 - Q4 2019 - If approved by stakeholders
 - Seek BOD Approval
 - File tariff revisions with FERC
- This initiative is slightly delayed but completion is still anticipated in 2019

Repowering

- **Deliverable: Q3 2019 – Market Design Complete**
- **Stakeholder Engagement Plan:**
 - Q2 2019
 - Analyze impact of potential market design
 - Present draft tariff language
 - Q3 2019
 - Present revised tariff language
 - BIC & MC vote on final market design
 - Q4 2019 - If approved by stakeholders
 - Seek BOD Approval
 - File tariff revisions with FERC
- **This initiative is slightly delayed but completion is still anticipated in 2019**

DER Market Design

DER Project Overview

2019 DER Market Design Projects	Q1	Q2	Q3	Q4	2019 Deliverable
DER Participation Model	MDC	CD	CD	FR	Q4 FRS
NYISO Pilot Framework	S	S	S	S	Q4 Study
Enabling Technologies for DER	PR	S			Q2 Study

KEY

PR	Project Review
S	Study

MDCP	Market Design Concept Proposed
MDC	Market Design Complete

FR	Functional Requirements
CD	Continuing Discussions

Enabling Technology for DER

- Deliverable: Q2 2019 – Study Complete
- Stakeholder Engagement Plan:
 - Q1/Q2 2019
 - Evaluate and identify any needed upgrades
 - Discuss market facing finding with stakeholders
- Due to delays with the DER Participation Model market design, this initiative is behind schedule
 - The NYISO is considering whether alternative communications paths for telemetry and/or market data would ease DER integration

DER Participation Model

- Deliverable: Q4 2019 – Functional Requirements
- Stakeholder Engagement Plan:
 - Q2 2019
 - Submit tariff filing to FERC, and begin functional requirements
 - Begin developing manual updates
 - Q3 2019
 - Continue development of manual updates
 - Q4 2019
 - Complete Functional Requirements
- The filing with FERC was made on June 27, 2019
 - This project is currently at risk/delayed

NYISO Pilot Program

- **Deliverable: Q4 2019 – Study Complete**
- **Stakeholder Engagement Plan:**
 - Q2-Q4 2019
 - Share with internal and external stakeholders the findings and results of the pilot projects that complete their demonstration periods
 - Q1 2020
 - Evaluate the feasibility of a 2nd round of pilot projects for selection and entry into the Pilot Program
- **Testing with the first pilot project will continue through late fall**
 - Testing engagement with additional pilot projects to begin in early Q4

Energy Market Design

Energy Market Project Overview

2019 Energy Market Design Projects	Q1	Q2	Q3	Q4	2019 Deliverable
Carbon Pricing	CD	MDC			Q2 MDC
Reserves for Resource Flexibility	PR	S	MDCP		Q3 MDCP
More Granular Operating Reserves	PR	MDCP	MDC	FR	Q3 MDC
Ancillary Services Shortage Pricing	PR	CD	S	S	Q4 Study
Constraint Specific Transmission Shortage Pricing	MDCP	MDC		FR	Q2 MDC
Enhanced Fast Start Pricing			FR		Q3 FRS

KEY

PR Project Review
S Study

MDCP Market Design Concept Proposed
MDC Market Design Complete

FR Functional Requirements
CD Continuing Discussions

Carbon Pricing

- **Deliverable: Q2 2019 - Market Design Complete**
- **Stakeholder Engagement Plan:**
 - Q1 2019
 - Continue carbon pricing discussions with stakeholders.
 - Collaborate with stakeholders providing necessary additional clarity on analysis, finalizing proposal and reviewing draft tariff language.
 - Q2 2019
 - Stakeholder vote on Carbon Pricing market design.
- **This project milestone has been met for this year, however, the Carbon Pricing working is continuing**
 - Analysis Group is working on completing the study
 - The NYISO currently anticipates discussing the study with stakeholders in late Q3/early Q4

Constraint Specific Transmission Shortage Pricing

- **Deliverable: Q2 2019 – Market Design Complete**
- **Stakeholder Engagement Plan:**
 - Q1 2019
 - Complete Market Design proposal and propose specific enhancements to the current transmission constraint pricing logic to stakeholders.
 - Conduct Consumer Impact Analysis and present results to Market Participants.
 - Q2 2019
 - Finalize design proposal (including development/review of accompanying tariff revisions).
 - Seek stakeholder approval at BIC and MC.
- **This effort is behind schedule**
 - The NYISO is considering whether it is prudent to request a stakeholder vote at this time based on other project priorities and implementation timing

Enhanced Fast Start Pricing

- **Deliverable: Functional Requirements**
- **Stakeholder Engagement Plan:**
 - Q2-Q3 2019
 - Discuss the NYISO's design approach with stakeholders
- **FERC Ordered the NYISO to submit a compliance filing by December 31, 2019**
 - The order requires deployment by December 31, 2020
 - The NYISO is working with Market Participants and its External Market Monitor on a methodology for amortizing commitment costs of fast start resources when determining LBMPs

More Granular Operating Reserves

- **Deliverable: Q3 2019 – Market Design Complete**
- **Stakeholder Engagement Plan:**
 - Q2 2019
 - Discuss Market Design Concept Proposal
 - Q3 2019
 - Present complete Market Design proposal and associated tariff revisions
- **Market Participants approved the creation of a Zone J reserve region March 2019**
 - The Zone J reserve region was implemented on June 26, 2019
- **The NYISO is continuing to research and consider the need for load pocket reserves within NYC in order to develop a market design**

Reserves for Resource Flexibility

- **Deliverable: Q3 2019 – Market Design Concept Proposed**
- **Stakeholder Engagement Plan:**
 - Q2 2019
 - Discuss concepts and possible benefits within New York
 - Q3 2019
 - Discuss benefits, concepts and impacts
 - Present Market Design Concept Proposal
- **This project is on schedule**
 - The NYISO continues to analyze the need for flexibility and anticipates developing a proposal for further discussion by the end of Q3

Ancillary Service Shortage Pricing

- Deliverable: Q4 2019 – Study Complete
- Stakeholder Engagement Plan:
 - Q2 2019
 - Perform preliminary research
 - Outline study approach with stakeholders
 - Q3 2019
 - Perform preliminary analysis
 - Seek stakeholder feedback
 - Q4 2019
 - Present completed study to Market Participants
- This project is on schedule

Feedback/Questions?

email: mdesocio@nyiso.com

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