

# **Enhanced Fast Start: Proposed Manual Changes**

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#### Agenda

- Project Overview
- Proposed revisions to the Transmission & Dispatch Operations Manual
- Proposed revisions to the Day-Ahead Scheduling Manual
- Next Steps



## Project Background



#### **Background**

- On April 18, 2019, FERC issued an Order concerning fast-start pricing in the NYISO's energy markets. FERC required the NYISO to:
  - 1. Modify pricing logic to allow fast-start resources' commitment costs (*i.e.*, start-up costs and minimum generation (no-load) costs) to be reflected in prices; and
  - 2. Allow the relaxation of all dispatchable fast-start resources' economic minimum operating limits by up to 100 percent for the purpose of setting prices.
- On Feb. 6, 2020, FERC accepted the NYISO's December 31, 2019
   Fast-Start Resource compliance filing.
  - Implementation must be completed by December 31, 2020.



#### **Overview of Fast-Start Pricing Changes**

#### Today

- Existing fast-start pricing logic relaxes minimum generation constraints of these resource types in the ideal (pricing) dispatch:
  - 1. Fixed Block Units that can start up and synchronize to the grid in 30 minutes or less, that have a minimum run time or one hour or less, and that submit economic offers for evaluation.
- In the ideal dispatch, RTD adds the start-up costs of eligible offline 10-minute Fixed Block Units to their incremental offers, which impacts the LBMP calculation.
  - 10-minute Fixed Block Units cannot offer minimum generation costs

#### Future

- Revised fast-start pricing will extend the existing logic to dispatchable units.
- After implementation, fast-start pricing will apply to:
  - 1. All resources that can start up and synchronize to the grid in 30 minutes or less, that have a minimum run time of one hour or less, and that submit economic offers for evaluation.
- Revised fast-start pricing logic will include the start-up and minimum generation costs of all fast-start resources in the LBMP calculation in the ideal dispatch.
- Revised fast-start pricing logic will also applyin the withdrawal state, for fast-start resources that are eligible to submit commitment costs.



# Overview of Fast-Start Pricing Changes in SCUC and RTC

Start-up Time	Type of Unit	Eligible Today?	Eligible After Changes?	Commitment Costs Included in Pricing when Injecting or Withdrawing?
N/A	Continuously dispatchable	N/A	N/A	N/A
30 min or less	Fixed Block Unit	Υ	Υ	Today: No Future: Yes
	Dispatchable	N	Y	



# Proposed revisions to the Transmission & Dispatch **Operations Manual**



#### **6.1.1 Real Time Commitment Process**

- Real-Time Bids to Supply Energy and Ancillary Services
  - Clarified that DA-scheduled Fast Start Resources can submit Real-Time Minimum Generation Bids specifying dollar components that exceed those in their DA bids
    - Bids must use ISO-Committed Fixed, ISO-Committed Flexible, and Self-Committed Flexible modes



#### **6.1.1 Real Time Commitment Process**

- Dispatch Options for 10-Minute Start and 30-Minute Start Generators,
   10-Minute Start Generators, 30-Minute Generators
  - Expanded language to include all eligible Fast-Start Resources that can respond to instructions to start, synchronize to the grid, inject energy within 30 minutes, and have a minimum run time of one hour or less
  - Clarified that the ideal pass will treat these units as dispatchable between zero and their upper operating limits, except for Energy Limited Resources that are withdrawing Energy (which shall be treated as dispatchable between their lower operating limits and zero), and will relax the economic minimum operating limits of all eligible fast-start resources by 100 percent for the purpose of determining LBMPs in the Day-Ahead Market and Real-Time Market

1. See FERC Docket No. EL18-33-000.



#### **Appendix C**

 Included example calculations of the adjusted offer curve for Fast-Start Resources



# Proposed revisions to the Day-Ahead Scheduling Manual



#### 4.3.2 SCUC Components

- Network Constrained Unit Commitment (NCUC)
  - Expanded language to include Fast Start Resources



## Next Steps



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#### Implementation Go Live

- Targeting the second week of December 2020
- NYISO will submit a notice to FERC and Stakeholders at least two weeks prior to the effective date
- Manual revisions will become effective on the go live date



#### **Next Steps**

- 11/11 BIC
- 11/12 OC



# Questions?



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