

## **Uneconomic Overproduction**

#### **Zachary Stines**

Manager, Energy Market Design

#### Market Issues Working Group

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## Agenda

- Uneconomic Production Tariff Sections
- Proposed Enhancements
- Next Steps



## **Market Rules**



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DRAFT - FOR DISCUSSION PURPOSES ONLY

## **MST Attachment H**

## Section 23.2.4.1.3

• Defines Uneconomic Production and Uninstructed Deviation

## Section 23.3.1.3.1.1

Describes thresholds for conduct

### Section 23.3.2.1

• Describes thresholds for impact

### Section 23.4.3.3.2

• Describes penalty for uninstructed deviation



# Proposed Enhancements



## Definition: MST 23.2.4.1.3

- Enhancement to the uneconomic production definition makes it more consistent with the economic and physical withholding definitions
- Proposed definition:

"Uneconomic production from an Electric Facility, that is, increasing the output of an Electric Facility to levels that would not be in the economic interest of the Market Party or its Affiliates in the absence of market power"



## Definition: MST 23.2.4.1.3

- Additional tariff language clarifies the following:
  - The NYISO does not need to demonstrate that the Market Party was exercising market power or had an economic incentive to do so, in order for uneconomic production to have occurred
  - Uneconomic production is not excused by a showing the Market Party did not intend to exercise market power or did not benefit from the behavior



## Conduct Test: MST 23.3.1.3.1.1

- Conduct based on having an energy schedule at an LBMP that is lower than the applicable reference by the greater of \$25/MWh or 80% of the reference
  - LBMP < Reference max(\$25, 80%×Reference)</li>
- Uneconomic production will not be evaluated for resources running during intervals when the LBMP is greater than \$25/MWh
  - Any offer below \$25/MWh is currently not evaluated for economic withholding; therefore we propose that running at a LBMP greater than \$25/MWh not be considered uneconomic production

 The proposed change will facilitate thresholds when reference levels are low or negative

## Impact Test: MST 23.3.2.1

- Impact would be defined as resulting in an increase of \$100/MWh or 200%, which ever is lower, to a Day-Ahead LBMP, Real-Time LBMP, or the absolute value of the congestion component of a LBMP. Provided the impact is at least \$25/MWh
- This proposal ensures the impact test does not generate very tight thresholds when LBMPs or congestion is low
- Also impact would be defined as causing an increase in either Bid Production cost guarantee payments (BPCG) or Day-ahead Marginal Assurance Payments (DAMAP) by 200% or 50% in a Constrained Area
  - Would apply to both the conduct failing generator and also any affiliated generator(s)



## Mitigation Measure: MST 23.4.3.3.2

- Clarify the applicable mitigation measure for uneconomic production is a financial sanction determined by:
  - 1.5x the increase in Guarantee Payment(s) (*i.e.*, BPCG or DAMAP) to the conduct-failing Generator and all affiliated Generators
  - 1.5x the absolute value of the congestion component of the LBMP, times the quantity of MW produced by the conduct-failing Generator
- Provide opportunity for consultation between NYISO and MP prior to applying mitigation



# Our mission, in collaboration with our stakeholders, is to serve the public interest and provide benefit 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 policymakers, stakeholders and investors in the power system





# **Questions?**



# Appendix



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## Example 1

In HB 20, Generator A is operating

### Generator A LBMP = \$7/MWh

Marginal Cost of Energy = \$15/MWh

- + Losses = \$1/MWh
- Congestion = \$9/MWh

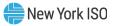
### Generator A Reference = \$30/MWh



## **Example 1: Conduct for Generator A**

#### Conduct failing LBMP =\$5/MWh

- Generator A is said to be failing conduct if it operates at a LBMP less than \$5/MWh
- LBMP < \$30 max(80%×\$30, \$25)
- Since Generator A is operating in HB 20 and \$7/MWh is greater than \$5/MWh, Generator A is NOT failing conduct



## Example 2

In HB 5, Generator A is operating

### Generator A LBMP = \$0/MWh

Marginal Cost of Energy = \$12/MWh

+ Losses = \$1/MWh

- Congestion = \$13/MWh

### Generator A Reference = \$30/MWh



## **Example 2: Conduct for Generator A**

#### Conduct failing LBMP =\$5/MWh

- Generator A is said to be failing conduct if it operates at a LBMP less than \$5/MWh
- LBMP < \$30 max(80%×\$30, \$25)
- Since Generator A is operating in HB 5 and \$0/MWh is less than \$5/MWh, Generator A is failing conduct

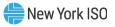


## **Example 2: Impact for Generator A**

 Impact is determined by evaluating the LBMPs and their congestion components if Generator A had operated consistent with its applicable reference (*i.e.*, \$30/MWh)

#### This would have resulted in an LBMP of \$8/MWh

- Marginal Cost of Energy = \$12/MWh
- + Losses = \$1/MWh
- Congestion = 5/MWh
- If Generator A had operated consistent with its reference, the congestion component would have been \$5 instead of \$13 (an increase in \$8)
- The \$8 increase in the congestion does not exceed the threshold of \$25; therefore Generator A DOES NOT has impact



## Example 3

In HB 7, Generator A is operating

### Generator A LBMP = \$-25/MWh

Marginal Cost of Energy = \$35/MWh

+ Losses = \$2/MWh

- Congestion = \$62/MWh

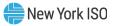
#### Generator A Reference = \$30/MWh



## **Example 3: Conduct for Generator A**

#### Conduct failing LBMP =\$5/MWh

- Generator A is said to be failing conduct if it operates at a LBMP less than \$5/MWh
- LBMP < \$30 max(80%×\$30, \$25)
- Since Generator A is operating in HB 7 and -\$25/MWh is less than \$5/MWh, Generator A is failing conduct



## **Example 3: Impact for Generator A**

 Impact is determined by evaluating the LBMPs and their congestion components if Generator A had operated consistent with its applicable reference (*i.e.*, \$30/MWh)

#### This would have resulted in an LBMP of \$30/MWh

Marginal Cost of Energy = \$35/MWh

- + Losses = \$2/MWh
- Congestion = 7/MWh
- If Generator A had operated consistent with its reference, the congestion component would have been \$7 instead of \$62 (an increase in \$55)
- The \$55 increase in the congestion does exceed the threshold of 200%; therefore Generator A DOES have impact

