

Fuel Assurance Initiative

Dr. Nicole Bouchez

*Principal Economist, Market Design
New York Independent System Operator*

August 27, 2014

Management Committee

Krey Blvd, Rensselaer, NY

High Level Problem Statement

- ◆ The New York ISO needs mechanisms that provide incentives for generation to be available to reliably meet the real-time needs of the NYCA, especially during days where there is a high risk for a reduction in real-time resource availability due to factors such as interchange and fuel supply uncertainty.
- ◆ The NYISO is calling this the Fuel Assurance Initiative

Winter 2014 Cold Snap

- ◆ The Winter of 2013-2014 was characterized by many days of gas prices exceeding oil prices -- resulting in high levels of economic scheduling of oil-fired generation.
- ◆ The majority of oil-fired generation was able to be replenished by either barge or truck deliveries at rates close to their oil-burn rates.
- ◆ The primary operational issues during the first three winter 2014 cold snaps were cold weather equipment issues and gas-only generator outages.
- ◆ The primary operational issues during the last two Winter 2014 cold snaps were oil inventory monitoring and management.

Fuel Assurance Initiative

- ◆ **Needed to meet NY needs for the future.**
- ◆ **Multiple components:**
 - *Energy & Ancillary Service Market Changes,*
 - *Capacity Market Changes.*
- ◆ **Multi-phase with implementation over the next several years.**
- ◆ **The first task will be working on identifying components of the initiative to meet NY needs.**

Fuel Assurance Initiative

- ◆ **Possible Energy & Ancillary Market Changes**
 - *Winter outage/availability (MMU recommendation in the 2013 State of the Market Report)*
 - *Additional Reserve areas and quantities*
 - *Creation of critical operating days*
- ◆ **Possible Capacity Market Changes**
 - *Looking at ways to better incent and reflect performance especially on critical operating days*
 - *Separate summer and winter EFORd*
- ◆ **Work Already Underway or Implemented**
 - *Reference Level Changes (June 2014)*
 - *EMS Visualization of the gas system (October 2014)*
 - *Code of Conduct Revision: Gas Operational Information Sharing (Approved at August MC)*

Fuel Assurance Initiative

Incent
Intra-day
Operational
Flexibility

Promote
Resource
Availability

The NYISO's Efforts

Capacity Market

- *Ways to better incent and reflect performance*
- *Possible Summer/Winter EFORD*
- ...

Energy Market

- *Comprehensive Shortage Pricing*
- *Comprehensive Scarcity Pricing*
- *RLS Changes*
- ...

Gas-Electric Coordination

- *EMS Visualization of Gas System*
- *Gas Operational Information Sharing*
- *Fuel Availability Self Reporting project*
- ...

Timeline

Work Already Underway or Implemented:

RLS Changes
EMS Visualization
Gas Operational Information Sharing

2014

2015

2016

This year:

Identification of Components

2014/2015 Projects:

Scheduling & Pricing: Comprehensive Shortage Pricing (already initiated)
Scheduling & Pricing: Comprehensive Scarcity Pricing (discussed at the May MIWG)
Fuel Assurance Market Design Concepts
Fuel Availability Self Reporting

Future 2016 Projects:

To be identified

Next Steps

- ◆ **Identification of Fuel Assurance components with stakeholders in the working groups.**

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.



www.nyiso.com