FERC Enforcement and Market Monitoring Practices

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U.S. Federal Energy Regulatory Commission

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Disclaimer

The views expressed in this presentation are my own, and do not represent the views of the Federal Energy Regulatory Commission, its Chairman, its Commissioners, or its Staff.
Agenda

• FERC Jurisdiction
• U.S. Wholesale Electricity Markets
• Office of Enforcement
  – Market Oversight
  – Investigations
  – Analytics & Surveillance
  – Audits
U.S. Wholesale Electricity Markets
Office of Enforcement

Organized into four divisions:

- Energy Market Oversight
- Investigations
- Analytics and Surveillance
- Audits and Accounting

The divisions include attorneys, economists, engineers, analysts, and accountants
Office of Enforcement

Goals:

• Detect fraud and market manipulation
• Detect anticompetitive conduct
• Ensure transparency of regulated markets
• Identify serious violations of reliability standards
• Encourage a culture of compliance
Market Oversight

• **Monitor energy markets at a macro level**
  – Analyze market fundamentals to detect market manipulation, assess affect of Commission rules, understand all aspects of the markets to identify “risks”
  – Fuels markets analysis
  – Electric market analysis

• **Inform the Commission**
  – Conduct analysis and studies, generate reports, and make presentations

• **Forms compliance, collection, and analysis**

• **Ex-post analysis using forms data**
FERC provides market oversight of interstate electricity and natural gas markets and publishes analyses and reports including the Winter Energy Market Assessment, the Summer Market and Reliability Assessment, the State of the Markets Report, and the Energy Primer.

- 2019 Summer Energy Market and Reliability Assessment
- 2018 State of the Markets Report Presentation
- 2018 OE Energy Market Snapshot
- 2015 Energy Primer
Example: Summer Reliability and Energy Market Assessment, May 2019

Highlights

• Higher than average temperatures are expected in the West, South and East.
• Reserve margins are expected to be adequate in all regions except ERCOT.
• Aliso Canyon natural gas storage inventories remain an item of interest for electric reliability within the Western Interconnection.
• Natural gas futures price movements are mixed when compared to 2018 summer levels.
• Battery storage and wind and solar capacity will exceed previous summer levels.
• New LNG export capacity will drive natural gas demand growth.
• High natural gas injections are predicted to return storage to average levels.
• High hydroelectric power production is expected in California but below-average levels are expected in the Pacific Northwest.
Division of Investigations

• Sources of Investigations
  – Referrals from other Office of Enforcement Divisions, other FERC Offices, and the Commission itself
  – Market Monitor Referrals
  – Self-reports
  – Hotline
  – Whistleblowers
  – Other Federal Agencies
Sources of Investigations

• To date in 2019, two new investigations stemmed from Market Monitor referrals, three arose from Division of Analytics & Surveillance referrals, and one originated from a Hotline tip.

• In 2018, 13 new investigations stemmed from Market Monitor referrals, four stemmed from Division of Analytics & Surveillance referrals, and two arose from Hotline tips.

• In 2017, 14 new investigations originated from Market Monitor referrals, three stemmed from Division of Analytics & Surveillance referrals, and one arose from a Hotline tip.
Opened and Closed Investigations

• In 2019, thus far, eight investigations opened and seven closed without a penalty or any further action.

• In 2018, 24 investigations opened and 23 closed without a penalty or any further action.

• In 2017, 27 investigations opened and 11 closed without a penalty or any further action.

• In 2016, 17 investigations opened and five closed without a penalty or any further action.
Examples of Recent Settlements

*Barclays Bank PLC*, 161 FERC ¶ 61,147 (2017): Under the settlement agreement, Barclays paid a $70 million civil penalty and $35 million in disgorgement.

*City Power Marketing, LLC*, 160 FERC ¶ 61,013 (2017): Under the settlement agreement, City Power’s owner paid a $1.42 million civil penalty and $1.3 million in disgorgement to PJM. City Power paid a civil penalty of $9 million. The owner also agreed to a ban from trading in Commission jurisdictional markets for three years.

Orders to Show Cause Proceedings and Federal District Court Litigation

This page provides significant orders and federal district court papers related to all matters that have proceeded to Orders to Show Cause. Matters are listed in alphabetical order.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

A

<table>
<thead>
<tr>
<th>Subject(s) of Investigation</th>
<th>Sanctions Imposed or Pending</th>
<th>Issues and Orders</th>
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</table>
| Amaranth Advisors, LLC, et al. | $7,500,000 Civil Penalty. | The Commission issued an Order to Show Cause why it should not assess a penalty for violation of Commission’s Anti-Manipulation Rule, 18 C.F.R. § 1.c.1, for trading natural gas futures contracts on the NYMEX to affect the index price at which related derivative and swap positions settled. The Commission subsequently approved a settlement resolving the matter.  
  - Order to Show Cause and Notice of Proposed Penalty, 120 FERC ¶ 61,085 (July 26, 2007)  
  - Order Approving Uncontested Settlement, 120 FERC ¶ 61,154 (Aug. 12, 2009) |

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Penalties

• Congress granted the Commission enhanced penalty authority in the Energy Policy Act of 2005
• The Commission adopted its Penalty Guidelines in 2010
  • Modeled on U.S. Sentencing Guidelines
  • Does not apply to individuals
  • Establishes base penalty adjusted for aggravating and mitigating factors
Division of Analytics & Surveillance

- Conducts natural gas and electric market surveillance and provides analytical expertise for investigations
  - Rigorous analysis of trading data from individual market participants, trading platforms, RTOs/ISOs, and other sources
  - Analyze relevant market fundamentals
  - Test traders’ explanations for their trading activities
  - Evaluate market harm, unjust profits, and disgorgement calculations.
Surveillance Process

1. Data Input
2. Data Processing
3. Data Visualization and Algorithmic Screening
4. Screen Alerts
5. Staff-Driven Analysis and Assessment
6. Inquiries
7. Referrals for Investigation
Common surveillance programs elements for both natural gas and electricity

Automated screens that sift through both public and non-public data

• DAS staff builds screens based on:
  – Known manipulative schemes
  – Market rules
  – Behavior that could constitute manipulation
  – Statistical measures that help identify market anomalies

• Analysts routinely run screens and analyze the output

• Analysts routinely present screening results to the broader DAS team
  – Regular team meetings to discuss results across geographies and trading products
## Types of screens available for each ISO/RTO

<table>
<thead>
<tr>
<th>Screen/Report Name</th>
<th>Description</th>
<th>CAISO</th>
<th>ISONE</th>
<th>MISO</th>
<th>NYISO</th>
<th>PJM</th>
<th>SPP</th>
<th>Non-RTO</th>
<th>Reports</th>
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- **✓** Available
- **x** Not Applicable
Natural Gas Surveillance

• DAS screens for anomalous trading activities at all active physical natural gas trading hubs in the United States on a weekly and monthly basis.

• Currently, there are approximately 240 hubs that trade physical natural gas in the United States.
# Natural Gas Surveillance

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<tr>
<th>Surveillance Screens and Reports</th>
<th>Frequency of Screen Execution</th>
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<td>Index Divergence</td>
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<td>Bidweek</td>
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<tr>
<td>Financial Products:Large Trader Report</td>
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<td>Trader, Company &amp; Hub Profile</td>
<td>Weekly (Next Day Gas); Monthly (Bidweek)</td>
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<td>Storage</td>
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<td>Monthly</td>
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<tr>
<td>Profit &amp; Loss</td>
<td>Monthly</td>
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</tbody>
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Audits

• Audits primarily focus on compliance with Commission requirements, transparency, accountability, operational efficiency and effectiveness

• Completed audits results and related materials are published on the Commission’s online docketing system

• Publishing the results provides audited entities and the industry with insight into areas of emphasis and concern

• Summaries of audit results and trends also are included in the Office of Enforcement’s Annual Report on Enforcement
Thank you.

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