

Good morning Mr. Chairman and Commissioners.

We are pleased to present the Office of Enforcement's 2012 State of the Markets Report. The State of the Markets Report is staff's annual opportunity to share our assessment on natural gas, electric, and other energy markets.

This report does not necessarily reflect the view of the Commission or any Commissioner.

## State of the Markets 2012

- Lowest natural gas prices since 2002
- Shift in electric generation from coal to natural gas
- Higher power burn
- Increased financial risks to pipelines
- Electricity prices lower in 2012
- Electricity demand falls for the second straight year

Major themes in natural gas and electric markets in 2012 were:

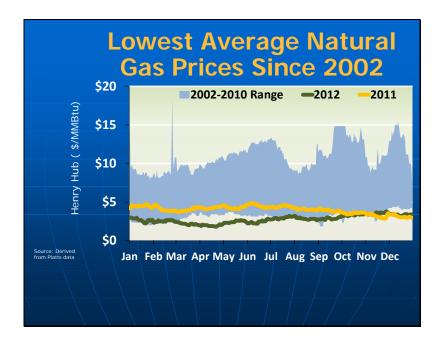
Natural gas production grew to a new all-time record in 2012 which contributed to the lowest nominal natural gas prices since 2002. Low natural gas prices resulted in much greater reliance on natural gas as the fuel of choice for power generation while coal-fired power generation fell to the lowest level in 30 years.

Growing use of natural gas to produce electricity, (known as "power burn"), and the demands that natural gas-fired generators place on pipelines, such as large variability in consumption rates throughout the day, increased awareness about the importance of greater coordination between the natural gas and electric industries.

Although generally good for the energy industry and the economy, regional changes in natural gas production resulted in falling utilization of some pipelines, which increased their financial risk.

Since natural gas is often the marginal fuel in electric generation, lower natural gas prices generally resulted in lower electric prices across the country.

Warm winter weather in 2012, a slowly recovering economy, and increasing energy efficiency contributed to a second year of declining electricity demand.



As indicated on the graph, U.S. natural gas prices fell to a 10-year low in 2012, with the spot price at Henry Hub averaging \$2.74/MMBtu for the year, down 31 percent from 2011.

Contributing to the price decrease was a five percent growth in U.S. natural gas production, a 10 percent drop in residential and commercial natural gas demand due to one of the warmest winters on record in the first quarter of 2012, and high storage levels. By the spring of 2012, working gas in storage stood at a record 934 Bcf surplus to the five-year average and robust injections in the spring and fall brought storage to near record levels by November 2012.

The growth in production was driven by gains in drilling rig efficiency and was centered mostly in Pennsylvania's Marcellus shale, the Eagle Ford shale in Texas, and the Fayetteville shale in Arkansas. In other major shale plays, production stalled or declined as producers concentrated on liquids rich natural gas fields. By the end of 2012, production from the six major U.S. shale formations accounted for 38 percent of total U.S. natural gas production, up from 22 percent at the beginning of 2011.

During the course of the year spot natural gas prices at Henry Hub fell to a low of \$1.82/MMBtu, before gradually rising to a high of \$3.77/MMBtu in late November. The rise was largely a result of high natural gas demand from power burn and, in the fourth quarter, the onset of the 2012/2013 winter heating season.

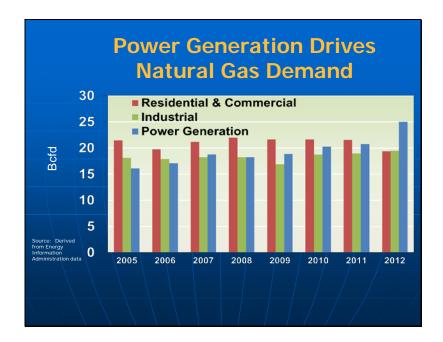


Natural gas prices fell 25 to 40 percent across the country in 2012. The price difference between major trading hubs and the Henry Hub, also known as basis, in many cases was only pennies. The 2011 capacity expansions on Florida Gas Pipeline eliminated price spikes at the FGT-Z3 hub, and natural gas prices there averaged \$2.92.

In New England, the Algonquin Citygate hub near Boston experienced the highest spot prices in the country, averaging \$3.91/MMBtu due to pipeline constraints and a drop in LNG imports. With the exception of very cold days, there were few natural gas transportation constraints into New York City and spot prices at Transco Zone 6 NY averaged \$3.19/MMBtu.

In California, increased demand for gas-fired power generation due to the outage of the San Onofre Nuclear Generating Station put upward pressure on natural gas prices through the spring and summer.

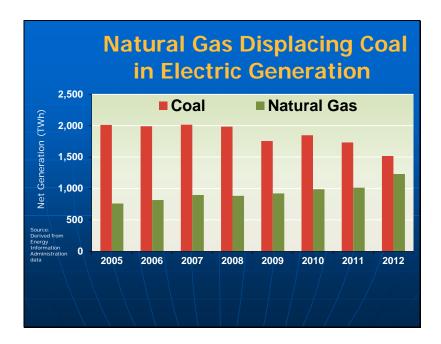
Natural gas prices in the Rockies were among the lowest in the country. They averaged \$2.59/MMBtu at the Colorado Interstate Gas (CIG) hub. Rockies natural gas producers lost market share to growing production closer to the markets in the Northeast and Midcontinent.



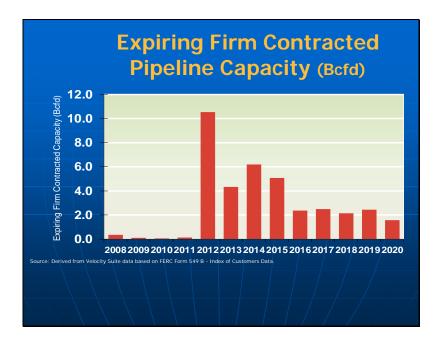
Total average daily U.S. natural gas demand grew four percent to 70 Bcfd in 2012, the highest level on record. This occurred despite a 10 percent decline in residential and commercial natural gas demand. Natural gas demand for gas-fired generation grew to a record 25 Bcfd in 2012, a 21 percent increase over 2011. Power burn growth was centered primarily in PJM and the Southeast states. For the first time ever, natural gas used for power generation was greater than the combined residential and commercial gas demand.

Greater reliance on natural gas as a fuel for power generation led to increased awareness about the importance of greater coordination between the natural gas and electric industries.

New England was identified as a market particularly at risk for service disruption due to limited pipeline capacity into the region. Most natural gas-fired generators in New England have little or no firm transportation capacity in their natural gas supply portfolios and depend on interruptible capacity on pipelines for their supplies. However, availability of interruptible capacity in the region is decreasing. Natural gas-fired generators also rely on the capacity release market, but this option may not be available on high demand days, such as during a cold snap when local distribution companies need pipeline capacity to meet increased customer demand.



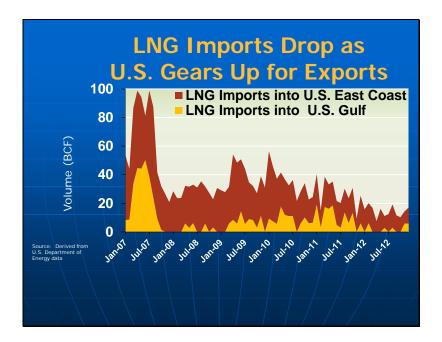
Natural gas-fired generation displaced substantial amounts of electricity output from coal-fired generation in 2012, particularly from generators in the East. The chart shows this displacement. Due to low natural gas prices, the U.S. natural gas-fired combined cycle plant fleet was more heavily used than at any time in the past 10 years. Natural gas-fired generation reached 1,231 TWh, 30 percent of total net generation in 2012, up from 25 percent in 2011. Coal-fired generation fell to 1,517 TWh, 37 percent of total net generation, down from 42 percent in 2011.



Over 10 Bcfd of long term transportation capacity contracts on nine major U.S. natural gas pipelines expired during 2012. In cases where customers re-contracted, it was generally for shorter durations and smaller volumes. Cumulatively, almost 26 Bcfd of capacity is due to expire by 2015 and 37 Bcfd by 2020.

Declines in pipeline utilization and changing customer needs pose financial risks to long-haul pipelines. The erosion of regional price differences over the past few years has reduced the value of many long-haul pipeline routes. Pipelines which move natural gas into the Northeast from the Gulf Coast and from the Rockies experienced the greatest declines in utilization in 2012. The new natural gas flow patterns raised the possibility that some pipelines may not be able to find buyers for long term capacity once their current contracts expire.

As a result of declining utilization some pipeline companies are converting, or considering converting, natural gas pipelines to transport crude oil or natural gas liquids.

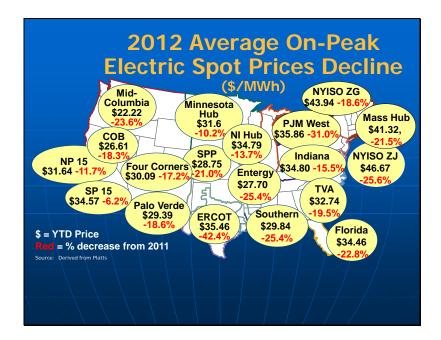


U.S. LNG imports continued to decline in 2012. Low domestic natural gas prices made it difficult to attract LNG cargoes to the U.S., and imports fell 50 percent. Of the 12 active U.S. terminals, only Everett LNG in Massachusetts and Elba Island in Georgia received regular LNG cargoes throughout the year, although with lower frequency than in past years. Both have long term contracts in place.

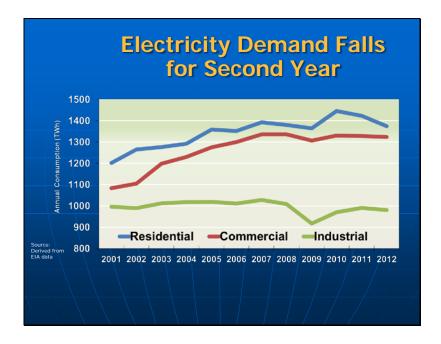
In 2012 LNG sold in Asia for approximately \$15/MMBtu, four to five times higher than in the U.S, \$10-\$11/MMBtu in Europe, and around \$12-\$13/MMBtu in South America. The price spread between U.S. and world natural gas prices created interest in liquefying and exporting U.S. natural gas. However, U.S. LNG exports are at least two to three years away due to the long time horizon for permitting and building export facilities.

Even as companies contemplated LNG exports, U.S. natural gas pipeline exports to Mexico increased 24 percent in 2012. Exports of Marcellus shale gas to Canada also commenced in the latter half of 2012.

U.S. imports of natural gas from Canada fell nine percent in 2012. This is because U.S. produced natural gas generally had a transportation advantage over natural gas from Canada, particularly in the Northeast and upper Midwest.



Electricity prices nationwide were lower in 2012 than in 2011. The lower prices followed natural gas prices, a major determinant of electricity prices. Low natural gas prices have been largely responsible for relatively low electricity prices since the beginning of 2009, but lower electric demand as a result of continued weak economic activity and energy efficiency were also contributors. The low prices in 2012 were seen in all regions of the country, but there was variation because of more region-specific conditions. Prices in the East were between 10 to 31 percent lower than in 2011. Western prices fell between six and 23 percent.



Sales of electricity dropped by 1.7 percent or 63 TWh in 2012 compared to 2011. Annual consumption of electricity across the three principal sectors, residential, commercial, and industrial, is shown in the chart. From 2011 to 2012 industrial and commercial demand stayed flat but residential demand showed a sharp decline.

As we will discuss in the next slide, demand was down across the nation due to three primary factors: a decrease in residential demand, lack of demand growth in the commercial and industrial sectors, and increased energy efficiency.

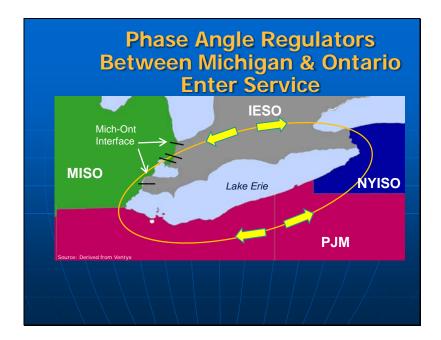
## Factors Affecting Electric Demand in 2012

- Residential demand (unusually warm winter temperatures)
- Industrial and commercial consumption with a slowly recovering economy
- Energy efficiency

Residential demand decreased because of a drop in heating load due to a warm winter. The first quarter of 2012 broke the January-March average temperature record for the continental U.S. by a significant 1.4°F.

Industrial sales fell by 0.8 percent and commercial sales fell by 0.2 percent in 2012. Reduction in industrial demand generally reflects a slowly recovering economy with commercial consumption staying flat as a result of the economy and weather.

Energy efficiency is responsible for a portion of the reduction in load. Several states with active energy efficiency programs were able to achieve savings that amount to about one percent of total sales. Even with only part of the country represented by active state programs, the results that have been documented are sufficient to influence the overall trend in consumption.



ITC, the transmission owner in Michigan at the border with Ontario, Canada, installed new phase angle regulators (PARs) that put the interface between Michigan and Ontario under PAR control starting in late June 2012. PARs are physical devices that help to better align actual alternating current power flows with scheduled power flows across transmission paths and can be used to control loop flow on parallel transmission paths. For years, loop flow around Lake Erie has caused difficult-to-manage congestion and reliability costs in the four surrounding regions, New York ISO, Ontario's, Independent Electricity System Operator, MISO, and PJM. Full PAR control on the interface was the culmination of more than 20 years of various projects.

Since the complete system of PARs on the Michigan-Ontario interface have gone into service, loop flows have decreased compared to earlier periods. Early reports indicate that congestion costs in Michigan are lower with fewer binding constraints and the interchange capacity across the Michigan-Ontario interface has been boosted.

## Physical and Financial Markets

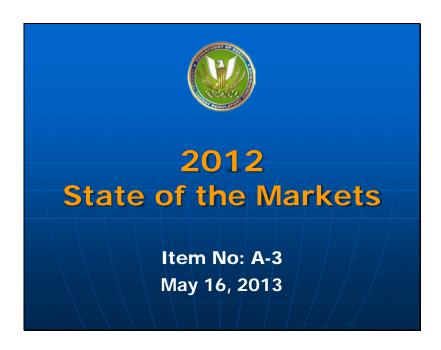
- Financial trading in energy markets remained substantial
- Decline in both financial and physical trading volumes continues a pre-existing trend
- The Dodd-Frank Act is changing financial market structures
- Access to investment capital is maintained

Financial products continue to play an important role in energy markets. Financial trading of natural gas in 2012 exceeded physical trading by an order of magnitude. Financial trading allows participants to hedge and arbitrage prices without the risk of physical delivery requirements or related costs. Also, in electricity markets, financial trading plays a prominent role with approximately 90 percent of financial trading taking place at RTO and ISO trading hubs. In 2012, traders evaluated trading opportunities in a market environment of declining prices and lower profit margins.

In 2012, financial trading volumes for both natural gas and electricity remained substantial overall. However, trading for electricity continued to decline in 2012 even as end use consumption remained relatively flat. The volume of electricity trading on the IntercontinentalExchange in 2012 decreased 19 percent compared to 2011, as part of a longer-term trend; physical transactions reported in EQR have also been in decline since 2008. However, open interest in the markets remained high particularly in the Nymex futures and swaps markets as producer and merchant participation held steady and managed money trading increased to replace declines by banking institutions.

Toward the end of 2012, financial trading of both natural gas and electricity shifted as trading platforms offered revised products in response to regulatory changes required under the Dodd-Frank Act. In particular, the markets transitioned by converting certain traditional swaps products into futures to facilitate increased transparency in the markets.

With regard to credit, public utilities maintained access to investment capital through stable credit ratings. A relatively favorable credit environment existed for utilities that maintained higher credit ratings. With low interest rates available for investment grade utilities, debt issuance by the lowest investment grade (BBB) rated utilities stayed flat while A-rated utilities increased their issuance by 25 percent in 2012.



That completes the prepared portion of our comments. A copy of this presentation will be posted on the Commission's website. We are available to answer any questions you may have.