

## Energy Insights -- September 2013

### Monthly Briefing on Energy Issues and Trends

#### **Boston Named Most Energy Efficient City**

The American Council for an Energy-Efficiency Economy (ACEEE) named Boston the most energy efficient city in the nation, in a report that ranks 34 U.S. cities on policies and initiatives to save energy.

ACEEE's *2013 City Energy Efficiency Scorecard* ranked energy saving efforts in five areas: buildings, transportation, energy and water utility efforts, local government operations and community-wide initiatives. Boston achieved the highest score of 76.75 out of a possible 100, particularly for the following initiatives:

- *2011 Climate Action Plan* which sets energy savings goals for municipal operations and the entire community
- *Greenovate Boston Initiative* led by business and institutional leaders to implement efforts to attain greenhouse gas emission goals
- *Renew Boston Initiative* which brings energy savings to residents and small businesses through partnerships with community groups and utility companies
- *2013 Building Energy Reporting and Disclosure Ordinance* which requires all large buildings to rate and report their energy use to improve energy management

Boston joins other top-scoring cities including Portland (Oregon), New York, San Francisco, Seattle and Austin. ACEEE noted that all the cities, even the highest scorers, have significant room for improvement.

Source: 2013 City Energy Efficiency Scorecard, American Council for an Energy Efficient Economy, September 2013, [www.aceee.org](http://www.aceee.org)

#### **Summer Electricity Demand Set Record for Year**

This summer's high temperatures and humidity resulted in record electricity use in New England. According to ISO New England, while the region didn't exceed the all-time peak electricity demand of 28,130 Megawatts (MW) set on Wednesday, August 2, 2006, several days did set some other records:

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- Two weekdays were among the top 10 peak demand days. On July 18, peak demand was 26,867 MW (ninth highest) and Friday July 19, peak demand was 27,360 MW (fourth highest).
- Saturday July 20 saw the highest recorded demand for electricity on a weekend at 24,649 MW (electricity use is lower on weekends than weekdays).
- While electricity consumption data is still under review, July may have broken the record for the highest electricity use month.

Source: ISO Newswire, July 2013, [www.iso-ne.com](http://www.iso-ne.com).

### **FERC Judge Rules to Lower New England Transmission Rates**

Last month, a federal administrative judge ruled that New England electric transmission companies should lower their rates by an estimated \$115 million per year because consumers are being over-charged for infrastructure investments.

Federal Energy Regulatory Commission (FERC) Law Judge Michael Cianci determined that the rate of return for transmission investments should be lowered from the current 11.14 percent to 10.6 percent for the period from October 1, 2011 to December 31, 2012 (the timeframe triggered by the filing of a complaint over the rates) and lowered to 9.7 percent going forward. Transmission companies are allowed to recover the costs to construct transmission lines plus earn a profit.

The complaint was filed by a coalition of New England state officials, industrial companies and municipal utilities led by Massachusetts Attorney General Martha Coakley. The region's transmission companies noted that lowering the profits on transmission projects could decrease much-needed investment in new transmission, particularly to move renewable generation from remote areas to where electricity is needed the most.

This decision will be reviewed by the FERC commission prior to issuance of a final decision.

Source: FERC Judge Rules that New England Transmission Rates Should be Reduced, Public Power Weekly, August 19, 2013.

### **Northeast Tightens Power Plant Carbon Emissions Cap**

Officials in the six New England states and Delaware, Maryland and New York have implemented new rules to the Regional Greenhouse Gas Initiative (RGGI) (one of only two cap-and-trade programs in the U.S.) to lower the annual cap on CO<sub>2</sub> power plant emissions from 165 million tons to 91 million tons beginning in 2014 (a reduction of 45%). The new

rules also call for an additional 2.5 percent reduction in the CO<sub>2</sub> cap each year from 2015 to 2020.

The cap was lowered because the region not only met but exceeded the original carbon emissions reduction goal set in 2005. Since 2008, the region's electricity generating sector has generated thirty percent less CO<sub>2</sub> than anticipated because of increased reliance on natural gas and renewable resources for electricity generation (that replaced some coal and oil use) as well as successful energy efficiency initiatives that have reduced demand for electricity.

Under RGGI, electricity generators must buy allowances through an auction system that permits them to emit specific amounts of CO<sub>2</sub>. In early September, an auction was held for electricity generators to buy the reduced number of allowances to emit CO<sub>2</sub>.

Due to the lower emissions cap, the price of an allowance to emit one short ton of carbon dioxide increased from \$1.90 to \$2.67 per short ton. The cost of allowances, paid for by ratepayers totaling \$102.5 million for the region, will be used to fund energy efficiency and renewable energy initiatives in each state. Since 2008, cumulative ratepayer proceeds from all RGGI CO<sub>2</sub> allowance auctions total \$1.4 billion.

Sources: Singer, Stephen. (2013 July 18). Northeast Cuts Power Plant Polluting Allowances. The Associated Press.

Regional Greenhouse Gas Initiative, Inc. "21<sup>st</sup> Auction Marks Five Years of Success for RGGI", September 6, 2013.

### **Vermont Yankee Closure May Increase Reliance on Natural Gas**

Entergy, the owner of Vermont Yankee, plans to close and decommission its Vermont Yankee Nuclear Power Station located in Vernon, Vermont. The station is expected to cease power production after its current fuel cycle and move to safe shutdown in the fourth quarter of 2014. The station will remain under the oversight of the Nuclear Regulatory Commission (NRC) throughout the decommissioning process.

According to Entergy, the decision to close the plant was based on a number of financial factors including:

- A natural gas market that has undergone a transformational shift in supply due to the impacts of shale gas, resulting in sustained low natural gas prices and wholesale electricity prices.
- A high cost structure for this single unit plant. Since 2002, the company has invested more than \$400 million in the safe and reliable operation of the facility. In addition, the financial impact of cumulative regulation is especially challenging to a small plant

under these market conditions.

- Wholesale market design flaws that continue to result in artificially low energy and capacity prices in the region which do not provide adequate compensation to merchant nuclear plants for the fuel diversity they provide.

Operating through the fourth quarter of 2014 enables Entergy to properly plan for a safe and orderly shutdown and prepare findings with the NRC regarding shutdown and decommissioning.

In a statement on Entergy's announcement to retire the plant, ISO New England said that while the regional power grid could be operated reliably without Vermont Yankee, its retirement will result in less fuel diversity and greater dependence on natural gas as a fuel for power generation. ISO has identified New England's dependence on natural gas for power generation and the potential retirement of large generators as key strategic reliability challenges and is developing solutions to address them.

Sources: "Entergy to Close, Decommission Vermont Yankee", Press Release, Entergy Corporation, August 27, 2013.

ISO New England's Statement on Entergy's Announcement to Retire Vermont Yankee Nuclear Plant, August 27, 2013.

### **Oil and Gas Industry's Role in Reducing Emissions**

A new study by the American Petroleum Institute (API) states the oil and gas industry has invested more than the federal government and nearly every other sector of the economy combined to reduce emissions. The study found that between 2000 and 2012, the U.S. oil and gas industry invested approximately \$81 billion in greenhouse gas mitigation technologies. Other U.S. industries combined invested about \$91.2 billion, while the federal government spent an estimated \$79.7 million. The study further reports that U.S. carbon emissions are at the lowest level in 20 years due, in part, to advancements in the oil and natural gas industry.

Source: Vindicator, Jamison. (2013 September 11). API Says Oil and Gas Industry Does Most to Reduce Emissions. McClatchy-Tribune Regional News.

### **About the New England Energy Alliance, Inc.**

The New England Energy Alliance is a coalition of energy companies advocating to ensure the availability, reliability and affordability of future energy supplies which are vital to the region's economic growth and prosperity. Formed in 2005, the Alliance works to balance public debate about solutions to New England's energy infrastructure by providing information on the region's energy needs and the resources, technologies and policies needed to meet those needs.

Please visit [www.newenglandenergyalliance.org](http://www.newenglandenergyalliance.org) for more information on the Alliance.