

Energy Efficiency Question 11: The current Energy Optimization standards are a type of numerical standard, i.e., one that explicitly defines the quantity of energy savings to be achieved for a given program year (e.g., Megawatt hours or Mcf), based on retail sales. Have other jurisdictions used other methods (including non-numerical standards or Commission discretion to impose requirements), and if so, what was the result?

Executive Summary

1. Numerical standards that explicitly define energy savings targets based on a percentage of retail sales is common practice across the United States. Like Michigan, many states base their savings targets, and associated performance incentives, on cumulative annual savings over a three-year period. Some states have targets that are not expressed in percentage form, but rather in specific kWh and Mcf quantities of energy savings to be achieved by the utility in a given time period.
2. In some states, the utilities prepare their energy efficiency plans and savings forecasts and submit the plans to the regulator for review and approval. The saving targets, as a percent of sales, for each utility, may vary depending on the situational circumstances. Compliance toward the established goal might be annual or cumulative over a specified time period.
3. Numerical standards as a percentage of retail sales based on current and realistic assessments of energy efficiency potential are preferable to more general statements of “all cost-effective energy efficiency” because numerical standards provide clear goals and greater certainty for planning and delivering effective programs.

1. Numerical standards that explicitly define energy savings targets based on a percentage of retail sales is common practice across the United States. Like Michigan, many states base their savings targets, and associated performance incentives, on cumulative annual savings over a three-year period. Some states have targets that are not expressed in percentage form, but rather in specific kWh and Mcf quantities of energy savings to be achieved by the utility in a given time period.

In some states, utilities prepare their energy efficiency plans and savings forecasts and submit the plans to the regulator for review and approval. The saving targets, as a percent of sales, for each utility, may vary depending on the situational circumstances. Also, compliance toward the established goal might be annual or cumulative over a specified time period.

Energy Efficiency Question 11: The current Energy Optimization standards are a type of numerical standard, i.e., one that explicitly defines the quantity of energy savings to be achieved for a given program year (e.g., Megawatt hours or Mcf), based on retail sales. Have other jurisdictions used other methods (including non-numerical standards or Commission discretion to impose requirements), and if so, what was the result?

Like Michigan, many states (e.g. Pennsylvania) base their savings targets, and associated performance incentives, on cumulative annual savings over a three-year period. The following list illustrates how various jurisdictions apply energy efficiency standards.

Michigan: Beginning in 2012, Michigan's efficiency resource standard (EERS) requires electric utilities to achieve 1.0% savings each year and natural gas utilities must achieve 0.75% savings each year. Utilities have the choice to calculate electric and natural gas sales to retail customers, in megawatt hours of electricity and decatherms or MCFs of natural gas, based on either (1) a single year's weather-normalized sales or (2) the average sales during the previous three years. Once a utility's plan has been approved by the MPSC, the definition of sales cannot be changed. Consumers Energy has chosen to base electric and natural gas sales savings relative to the average prior three years' annual retail electricity sales.¹

Each MWh of savings achieved by a utility in a given year qualifies for one energy optimization credit. Excess credits can be "banked," i.e., can be used to meet up to one-third of the required energy savings in the year following the year in which they were achieved. Excess credits cannot be banked if a utility has opted to receive incentive payments for exceeding its savings targets in a particular year.²

Wisconsin: The Public Service Commission of Wisconsin issued an order in November 2010, which adopted electricity and natural gas savings goals for Focus on Energy (Focus), the statewide energy efficiency and renewables program. The electricity goals, as a percent of peak load and electric sales, were set at 0.75% in 2011, ramping up to 1.5% in 2014. The PSC also approved natural gas goals of 0.5% in 2011, ramping up to 1% in 2013.³

Shortly after the energy EERS was established by the PSC, the state legislature limited funding for Focus to 1.2% of utility revenues, impeding the ability to meet the established savings targets. The goals are now held at 0.75% of electric sales through

¹ <http://aceee.org/sector/state-policy/michigan>

² *Id.*

³ <http://aceee.org/sector/state-policy/wisconsin>.

Energy Efficiency Question 11: The current Energy Optimization standards are a type of numerical standard, i.e., one that explicitly defines the quantity of energy savings to be achieved for a given program year (e.g., Megawatt hours or Mcf), based on retail sales. Have other jurisdictions used other methods (including non-numerical standards or Commission discretion to impose requirements), and if so, what was the result?

2013, rather than ramping up to 1.5%. Natural gas targets stay at 0.5% of sales for over the same time frame.⁴

Wisconsin law also allows investor owned utilities (IOUs) to operate voluntary programs with funding in addition to the 1.2% they contribute to Focus on Energy. These voluntary programs need to be approved by the Public Service Commission. Currently, three IOUs operate some level of voluntary programs.⁵

Illinois: Legislation passed in 2007 requires substantial electric utility energy efficiency programs. The legislation set an EERS savings goal beginning at 0.2% of sales per year in 2008 and ramping up to 2.0% of sales per year by 2015. Illinois established a new gas EERS in 2009 with a goal of providing 8.6% cumulative savings by 2020. Cumulative gas savings will be achieved with annual savings of 0.2% in 2011, ramping up to 1.5% in 2019.⁶

Utilities in Illinois are subject to non-compliance fees related to the EERS. For both natural gas and electric utilities, failure to submit an energy reduction plan by a specified will result in a fine of \$100,000 for each day until the plan is filed. This penalty is deposited in the Energy Efficiency Trust Fund and may not be recovered by through rate recovery. If an electric utility fails to comply with its plan after 2 years, it must make a contribution to the Low-Income Home Energy Assistance Program (LIHEAP). The level of contribution is determined by the number of customers served. Natural gas utilities that fail to meet their efficiency plans after three years must also make a contribution to LIHEAP.⁷

Iowa: The Iowa Utilities Board (IUB) is required to develop energy savings performance standards for each utility. Accordingly, the IUB issued an order asking investor-owned utilities (IOUs) to submit plans including a scenario to achieve a 1.5% annual electricity and natural gas savings goal. Iowa's two investor-owned electric utilities, Interstate Power and Light Company (IPL) and MidAmerican Energy Company, complied with this request by filing Energy Efficiency Plans for 2009-2013 that outline how the utilities could meet the 1.5% electric target. Both utilities determined the 1.5% natural gas target

⁴ *Id.*

⁵ *Id.*

⁶ <http://aceee.org/sector/state-policy/illinois>.

⁷ http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=IL19R.

Energy Efficiency Question 11: The current Energy Optimization standards are a type of numerical standard, i.e., one that explicitly defines the quantity of energy savings to be achieved for a given program year (e.g., Megawatt hours or Mcf), based on retail sales. Have other jurisdictions used other methods (including non-numerical standards or Commission discretion to impose requirements), and if so, what was the result?

would be unattainable. While MidAmerican plans to meet the 1.5% electric goal, the IUB declined to approve a slightly lower electric goal for IPL due to potential rate impacts. Municipal and cooperative utilities also are required to implement energy efficiency programs, set energy savings goals, create plans to achieve those goals, and report to the IUB on progress. Municipal and co-operative utilities filed goals on December 31, 2009.⁸

Iowa's natural gas utilities also set annual energy efficiency savings targets for the period between 2009 and 2013. Annual goals vary: municipal utilities plan to save 0.74% by 2013; MidAmerican 0.85%; Black Hills Energy 0.94%; and IPL 1.2%.⁹

Minnesota: Minnesota investor-owned electric and gas utilities are subject to the energy savings requirements of the Next Generation Energy Act (NGEA), passed by the Minnesota Legislature in 2007 (Minnesota Statutes 2008 § 216B.241). Among its provisions, the NGEA set energy-saving goals for utilities of 1.5% of retail sales annually, commencing with the first triennial plan period that began January 1, 2010. Of the 1.5%, the first 1% must be met with direct energy efficiency energy savings or conservation improvements. This may include savings from efficiency measures installed at a utility's own facilities. The NGEA also allows savings to be achieved indirectly through energy codes and appliance standards. Up to 0.5% may be met by efficiency enhancements to each utility's generation, transmission, and distribution infrastructure.

California: The energy efficiency standards are tailored for each utility by the CPUC. The standards explicitly state the electric and natural gas savings and demand reduction requirements by each utility. These goals can be met through energy efficiency program savings or by counting energy savings from state building codes, federal/state appliance standards, and state-wide market transformation efforts.¹⁰ Savings are calculated on a 3-year cycle, not annually.¹¹

Ohio: In 2008, the Ohio state law SB221 established Ohio's first energy efficiency resource standards for all investor-owned utilities, along with renewable energy

⁸ <http://aceee.org/sector/state-policy/iowa>.

⁹ <http://aceee.org/energy-efficiency-sector/state-policy/iowa/188/all/191>.

¹⁰ DSIRE

¹¹ <http://www.aceee.org/sites/default/files/publications/researchreports/u112.pdf>

Energy Efficiency Question 11: The current Energy Optimization standards are a type of numerical standard, i.e., one that explicitly defines the quantity of energy savings to be achieved for a given program year (e.g., Megawatt hours or Mcf), based on retail sales. Have other jurisdictions used other methods (including non-numerical standards or Commission discretion to impose requirements), and if so, what was the result?

standards and the requirement of greenhouse gas emission reporting. The energy efficiency standards require an annual reduction in energy savings equal to 0.3% of sales up until 2013, and then increasing to 1.0% annually until 2018, when it would be increased again to 2.0% annually from 2019 to 2025. These energy savings benchmarks are calculated against the normalized average number of total KWh sold by the electric distribution utilities during the preceding three years. In total, the savings culminate in 22% reduction in energy use by 2025, as compared to baseline. Peak demand reduction benchmarks must also be met on a yearly basis, starting with a 1% reduction in 2009 and additional 0.75% each year until 2018, which will result in a total peak energy demand reduction of 7.75% compared to baseline.

If these energy savings benchmarks are not achieved on a yearly basis, the utilities must forfeit an amount determined by state legislature. The PUCO has the power to amend the benchmarks if, after applications from the utilities, the benchmarks are not reasonable due to various currently unforeseen economic or technological limitations. Additionally, SB221 gave PUCO the authority to establish rules for electric and natural gas utilities to move toward decoupling mechanisms.¹² Overall, this law intended to create new green sector jobs and provide financial relief to Ohio's rate-payers. The benefit of establishing a state-wide energy plan was also critical in leveraging funding opportunities from the American Recovery and Reinvestment Act, which had a strong focus on energy efficiency and clean energy.¹³

2. In some states, the utilities prepare their energy efficiency plans and savings forecasts and submit the plans to the regulator for review and approval. The saving targets, as a percent of sales, for each utility, may vary depending on the situational circumstances. Compliance toward the established goal might be annual or cumulative over a specified time period.

3. Numerical standards as a percentage of retail sales based on current and realistic assessments of energy efficiency potential are preferable to more general statements of "all cost-effective energy efficiency" because numerical standards provide clear goals and greater certainty for planning and delivering effective programs.

¹² <http://www.mwalliance.org/policy/ohio-policy-info>

¹³ <http://aceee.org/research-report/e092>