

# **Energy Efficiency Resource Standard (EERS)**

# ACEEE PRIORITIES

Congress should...

- Establish a federal EERS with 15% electricity and 10% natural gas savings by 2020, including savings from efficiency programs, improvements to building codes and equipment efficiency standards, combined heat and power, and distribution efficiency. Alternately, targets can be 10% electricity and 7% natural gas savings if savings from codes and standards are excluded.
- Allow for flexibility mechanisms so utilities may purchase or transfer electricity savings and natural gas savings from other entities, including other retail electricity and natural gas distributors, states, or third parties (such as energy service companies) within the same state or power pool.
- Encourage states to implement a state EERS that meets federal guidelines or to administer a federal EERS.
- Encourage utilities to coordinate energy efficiency programs to maximize energy savings on a statewide basis.

### THE ISSUE

Energy efficiency saves energy and money and helps reduce greenhouse gas emissions. Studies show that large energy efficiency opportunities are available in all states, with estimates of 20–30% savings or more from installation of cost-effective efficiency measures. Furthermore, new conventional fossil fuel power plants generate electricity at a rate between 7 and 13 cents per kilowatt-hour. At a cost of 2.5 cents per kilowatt-hour saved, efficiency improvements are significantly less expensive than building new plants, new power lines, and burning more greenhouse gas-emitting fossil fuel.<sup>1</sup>

#### SUMMARY

An Energy Efficiency Resource Standard (EERS) is a mechanism that encourages more efficient use of electricity and natural gas. A federal EERS would set a national goal for energy savings, requiring explicit reductions in energy consumption for retail electricity and natural gas distributors for a specific period, such as from 2011 through 2020. Implementation opportunities range from end-use efficiency improvements, such as high efficiency lighting and appliances, to combined heat and power (CHP) systems and distribution system improvements.

Implementing a national EERS would commit every state to utilizing this least-cost resource and establish a baseline level of cost-effective and achievable energy savings. A number of states have already achieved significant savings under an EERS. For example, Vermont has saved about 9% of annual electricity sales as a result of efficiency measures installed from 2000–2008, more than 2% of which was achieved in 2008 alone.

ACEEE estimates that by 2020, a federal EERS with 10% electricity savings would reduce peak electric demand by almost 57,000 megawatts<sup>2</sup>— equivalent to over 190 power plants that each has a capacity of 300 megawatts. Carbon dioxide emissions reductions would total approximately 129 million metric tons in 2020—equivalent to taking 21.5 million automobiles off the road (for a year), and creating 150,000 net jobs. Furthermore, utility customers would save a net \$78.8 billion, with the proposed EERS producing a benefit-to-cost ratio of about 2:1.

For 29 years, ACEEE's energy efficiency experts have helped to shape our nation's energy efficiency research and policy agenda. We achieve our success through...

- conducting in-depth technical & policy analyses
- advising policymakers, energy professionals & utilities
- working collaboratively with businesses & other organizations
- organizing conferences
- publishing conference proceedings and reports
- educating consumers & businesses

Collaboration is key to ACEEE's success. We work with organizations around the globe including federal, state, and local government agencies, utilities, research institutions, businesses, and public interest groups. Our focus is on 6 primary program areas:

- Energy Policy
- Economic Analysis
- Buildings, Appliances, & Equipment
- Utilities
- Industry &
- Agriculture
- Transportation

ACEEE is leading the development of technology and policy solutions that ensure the security of our energy systems. As energy leaders, we promote the vibrancy of the American economy and the sustainability of the environment worldwide.

### FOR MORE INFORMATION:

http://www.aceee.org/topics/eers

ACEEE CONTACTS

Steven Nadel snadel@aceee.org (202) 507-4011 Suzanne Watson swatson@aceee.org (202) 507-4006

<sup>&</sup>lt;sup>1</sup> Lazard. June 2008. Levelized Cost of Energy Analysis — Version 2.0: <u>http://www.narucmeetings.org/Presentations/2008%20EMP%20</u> Levelized%20Cost%20of%20Energy%20-%20Master%20June%202008%20(2).pdf

<sup>&</sup>lt;sup>2</sup> These savings are in addition to savings now required under state EERSs.