



American Council for an Energy-Efficient Economy

WASHINGTON, DC

Equipment Efficiency Standards in the House- and Senate-Passed Energy Bills

Background: National appliance and equipment efficiency standards are a proven energy-saving policy with broad bipartisan support. The first standards were established in 1987 (signed by President Reagan) and subsequent standards enacted by Congress in 1988, 1992, and 2005. Typically, states enact standards on a product, then manufacturers and efficiency supporters work together to negotiate consensus standards that are brought to Congress for adoption. These federal standards preempt new state standards. DOE is instructed to review and revise the standards periodically. ACEEE estimates that standards already enacted will save about 5 quadrillion Btu's of energy in 2020, which is 4% of projected nationwide energy use in that year. Peak load reductions will be about 144,000 MW, equivalent to 480 power plants of 300 MW each.

Consensus Standards in Both the House and Senate Energy Bills: The Senate-passed bill contains new consensus standards on 6 products —

- electric motors
- reflector lamps
- residential boilers
- clothes washers
- dishwashers
- dehumidifiers

These are based on consensus agreements between efficiency advocates and industry trade associations including NEMA (lighting and motors), AHAM (clothes washers, dishwashers, and dehumidifiers), and GAMA (boilers). The House bill contains these same standards. We encourage the conferees to include these standards in the final bill.

Consensus Standards in Just the House Bill: After the Senate acted, consensus agreements were reached with industry on additional product standards including —

- metal halide lighting fixtures (commonly used in high-ceiling commercial and industrial applications)
- walk-in coolers and freezers
- external power supplies (the little black boxes attached to the power cords of many electronic products)
- standby mode and off mode power use of currently regulated products

These provisions are based on consensus agreements between efficiency advocates and NEMA (lighting fixtures), ARI (walk-ins), and AHAM and CEA (external power supplies and standby power¹). We recommend the Senate accept these provisions.

Lamp Efficiency Standards: The House bill sets efficiency standards for common light bulbs (known as “lamps” in the lighting trade), requiring them to use about 20–30% less energy than present incandescent bulbs by 2012–2014 (phasing in over several years) and about 65% less energy by 2020. The initial targets can be met by advanced incandescent lamps the major manufacturers are introducing to the market, which use halogen capsules with infrared reflective coatings. The longer-term targets can be met by compact fluorescent lamps and light-emitting diodes (LEDs). The Senate bill contains a sense-of-the-Senate provision that lamp standards should be included in the final bill. Senators Bingaman and Stevens recently introduced a bill that builds upon but modifies the House language. We urge the conferees to

¹ ARI and NEMA also support the standby power provision.

take the Bingaman-Stevens language but make modifications to clarify intent, close potential loopholes, and discourage marketing of bulbs that are dim and might not meet consumers' expectations.²

Regional Standards for Heating and Cooling Equipment: Both the House and Senate bills contain provisions allowing up to two regional standards (in addition to the main national standard) for heating and cooling equipment, in order to better accommodate the range of climatic conditions across the U.S. Both provisions only allow regional standards if economically justified, including consideration of economic impacts on manufacturers. The House provision is better in that it would have DOE resolve these issues in a single rulemaking. In the Senate version, after DOE action, states would have to adopt regional standards and then petition DOE for acceptance of the state standard, based on criteria that are not specified and therefore appear to be up to DOE's discretion. This is likely to be a time-consuming and cumbersome process with uncertain outcomes that will likely lead to a patchwork of state standards. We strongly prefer the House version because it has a clear process and will result in cohesive regions. At an absolute minimum, the Senate version should be modified so that when a state adopts a regional standard authorized by DOE, no further substantive review by DOE is needed.

Other Program Reforms in the House and Senate Bills: In addition to regional standards, both the House and Senate bills contain a variety of reforms to the appliance standards program, primarily reforms to the process by which DOE revises standards. Significant reforms are as follows:

- Requirement for regular DOE reviews of all standards and test methods. Under current law, test method reviews frequently do not happen and only two revisions of the standards first set in 1987 are required. With the reforms, standards must be reviewed and revised periodically. The Senate bill gives DOE 5 years from the date of a previous final rule to decide whether a change in a standard is justified, and then 3 more years to issue a final rule. The House provision is similar but gives 6 years for a determination and 2 more years for a final rule. The House provision includes commercial product standards; the Senate version does not. Both bills call for DOE to review test procedures for both residential and commercial equipment at least every 7 years. We support these provisions and we defer to DOE to indicate whether they prefer the House or Senate schedule for revisions.
- Authority for multiple efficiency metrics on a single product. DOE General Counsel has ruled that new standards may only contain a single metric, rejecting the use of two metrics in a consensus agreement between boiler manufacturers and efficiency supporters. Similarly, under the General Counsel's interpretation, water efficiency metrics cannot be added for water consuming products. With the new provision, multiple metrics are not required, but they are allowed. We strongly support this provision as the General Counsel's opinion leaves the program unnecessarily rigid and has made it much more difficult for DOE to accept consensus agreements.
- Authority for expedited DOE rules in response to consensus recommendations. This provision allows consensus recommendations to be adopted more quickly, putting consensus standards in place sooner and freeing up resources for other rulemakings. This provision has consensus support from manufacturer trade associations and efficiency supporters. The House language is preferable, since it includes a more explicit timetable for DOE action to adopt a consensus recommendation.
- Firm schedule for rulemaking on furnace electricity use. The Energy Policy Act authorized a rulemaking on furnace electricity use; the new bills go a step further and set dates by which the rule must be completed (July 2013 in the House bill, Dec. 2014 in the Senate bill). Substantial energy savings are at stake, so we support setting a deadline, with the earlier House deadline preferable.
- Firm schedule to complete DOE reviews of new ASHRAE equipment standards. Under the Energy Policy Act of 1992, the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) is given the lead to develop new standards for commercial heating, cooling, and water

² Further details are available in S. Nadel's Sept. 12, 2007 testimony before the Senate Energy Committee: <http://aceee.org/tstimony/index.htm>.

heating and DOE reviews these new ASHRAE standards and decides whether to make them national standards or whether stronger standards are justified. DOE has sometimes taken a long time to make these decisions. The Senate and House bills give DOE 18 months to decide whether to accept the ASHRAE standard, and an additional 12 months to set a stronger standard if justified. We encourage the conferees to include these provisions in the final bill.

- Technical correction so DOE can set new efficiency standards for small commercial air conditioners. DOE is interpreting a provision in the Energy Policy Act of 2005 as preventing them from revising a standard for small commercial air conditioners prior to 2010. Both bills solve this problem. The House bill goes farther and sets this standard at an efficiency of SEER 13, the same standard as for similarly sized residential equipment. Both industry and ACEEE support the House provision.
- Develop new labeling requirements for televisions, personal computers, cable and satellite set-top boxes, stand-alone digital video recorder boxes, and personal computer monitors (Senate bill only). The Senate bill requires the FTC to develop new energy consumption labeling programs for these products. These products are significant energy consumers and sales are growing. We recommend that the House accept this provision.
- Elimination of requirement for an Advanced Notice of Proposed Rulemaking (House bill only). Without a formal ANOPR, the process to revise standards can move a little more quickly. Under DOE regulations, a workshop to review initial analyses will still take place, but it will be less formal and not require a formal *Federal Register* notice and the legal review that accompanies such notices. We support this change and encourage the Senate to accept this House provision.
- Allow states with performance-based building codes to set baseline assumptions higher than federal minimums. Performance-based codes allow tradeoffs between various efficiency measures, so it will still be possible to install equipment just meeting the federal minimums, but the lost savings relative to the state baseline will need to be made up with other measures (such as more insulation, improved windows, etc.). We support this provision but recommend that the wording be clarified to make clear that state codes must provide a pathway for those that use equipment just meeting federal minimums.

Energy Savings: ACEEE estimates that the standards provisions in the House bill will save about 2.65 quadrillion Btu's in 2030, which is 2% of projected nationwide energy use that year. The bill will also reduce peak electric demand by about 45,000 MW, equivalent to 150 power plants of 300 MW each. Since the Senate bill contains fewer provisions, its 2030 savings will be about 35% of the savings of the House bill.