Northwest **Power** and **Conservation** Council

Invited Testimony of Tom Eckman
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Before the
House Subcommittee on Energy and Power
Regarding
Home Appliance Energy Efficiency Standards Under the Department of Energy
Stakeholder Perspectives
June 10, 2016

The Northwest Power and Conservation Council (Council) appreciates the opportunity to share its views on the Department of Energy Appliance Standard's process and impacts on consumers in our region. The Council is an interstate agency that was formed in 1981 by the states of Idaho, Montana, Oregon and Washington under Congressional authorization granted by the Northwest Electric Power Planning and Conservation Act of 1980 (Power Act).[1] This federal statute charged the Council with developing a regional power and conservation plan to assure the Pacific Northwest of an adequate, efficient, economical, and reliable power supply and to protect, mitigate and enhance the fish and wildlife resources impacted by the development and operation of the federal hydroelectric generating projects on the Columbia and Snake Rivers. Also under this federal statute, cost-effective energy efficiency was designated as the first priority resource to be relied upon to meet future power needs, followed by renewable resources and then conventional thermal generation.

Before commenting specifically on the topic of this hearing, I believe it would be useful to provide some context so that the Subcommittee members may better understand the Council's views on the role of federal appliance efficiency standards. In particular, their role in fulfilling the charge given the Council under the Power Act to assure an adequate, efficient, economical and reliable power system.

[1] 16 United States Code Chapter 12H (1994 & Supp. I 1995). Act of Dec. 5, 1980, 94 Stat. 2697. Public Law No. 96-501, S. 885.

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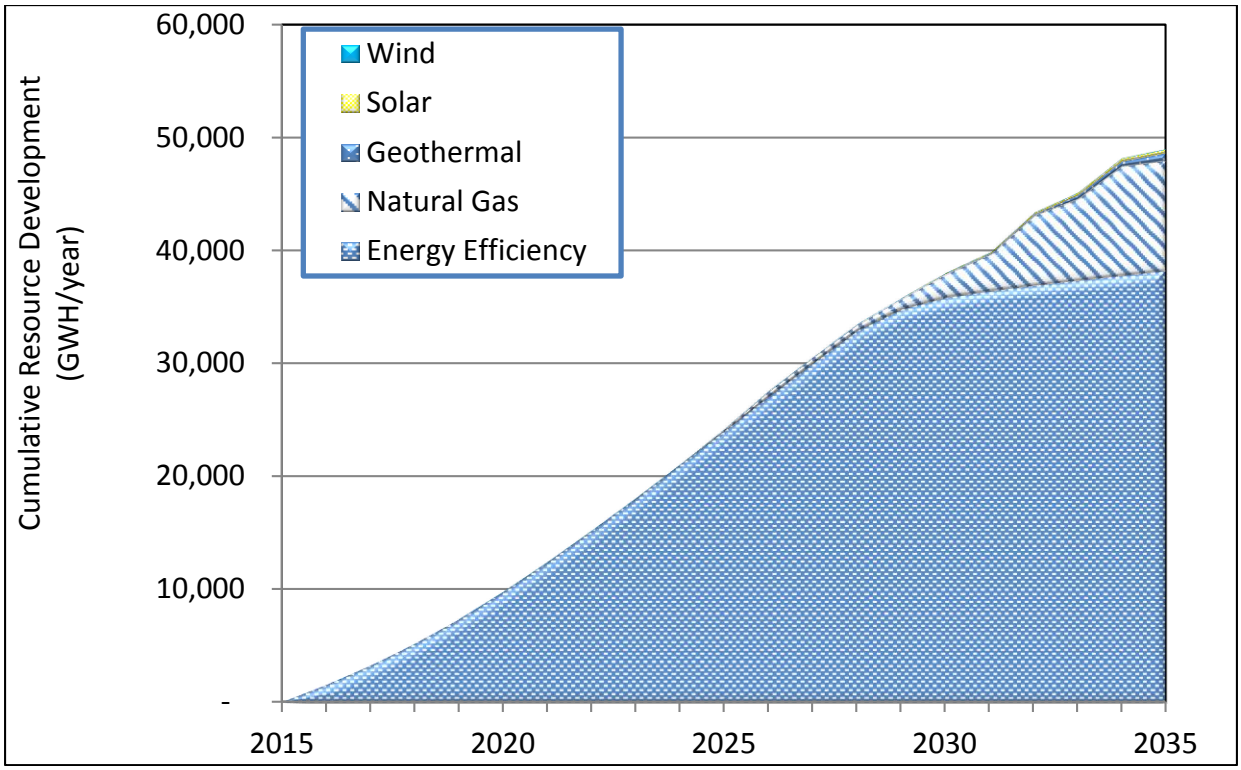
The Power Act directed the Council to develop a 20 year forecast of future electric power needs and a plan to meet those needs with a least cost mix of resources, including energy efficiency. These forecast and plans were to be reviewed and updated every five years. The Council just adopted its Seventh Regional Power Plan in February of this year. The Seventh Plan, as have all prior plans, relies heavily on energy efficiency to meet future load growth. Figure 1 shows the resources targeted for development over the next 20 years to meet the Northwest forecast future need for electricity. An inspection of Figure 1 shows that the development of cost-effective energy efficiency dominates the region's future resource portfolio. In fact, energy efficiency is expected to meet all regional load growth through the year 2030 under nearly all future economic conditions tested.

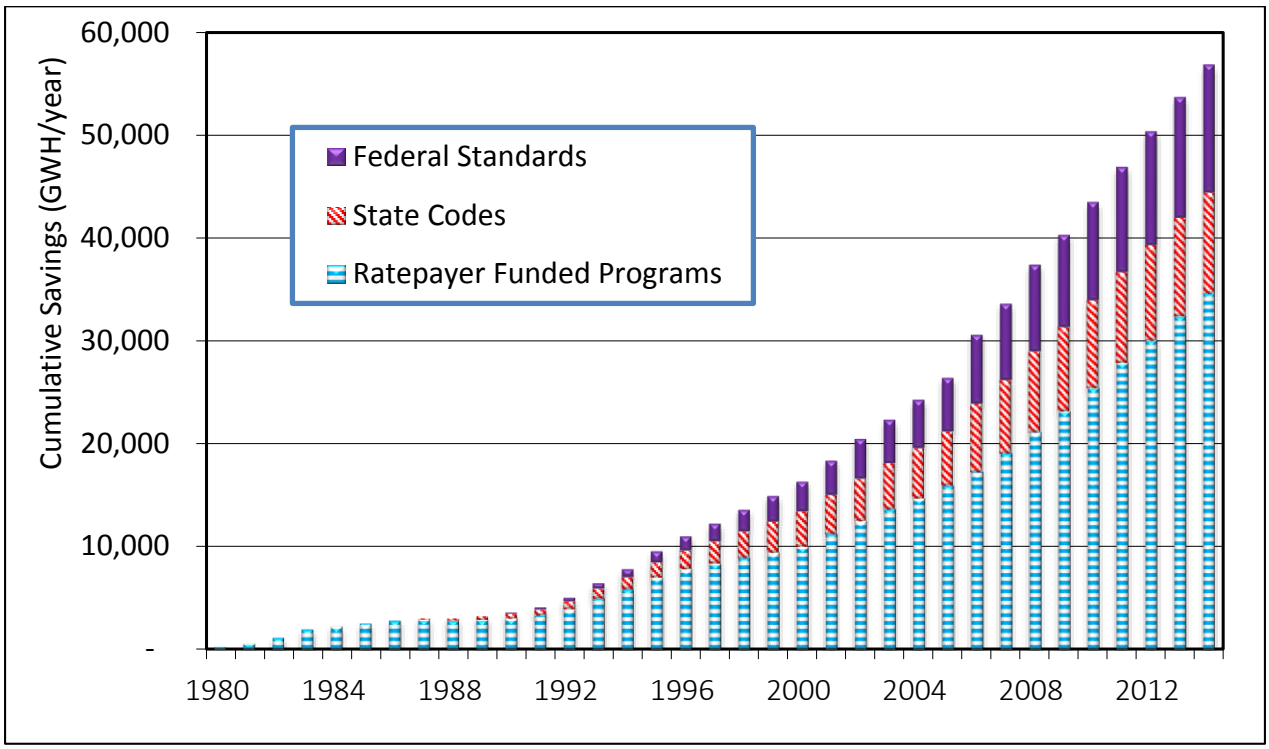
Figure 1 – Seventh Power Plan Resource Strategy



The Seventh Power Plan's reliance on cost-effective energy efficiency to meet future Northwest load growth builds on 35 years of actual experience. The Council has tracked regional energy efficiency impacts since the Power Act was enacted in 1980. Figure 2 shows the cumulative savings from energy efficiency developed in the Northwest since 1980. In 2014, the most recent year for which data is available, regional energy efficiency savings from all mechanisms totaled nearly 57,000 gigawatt-hours per year (GWh/yr.). To place this in perspective, this is equivalent to the annual electricity use of almost six Seattles, and more than one and one-quarter times the total annual electricity use of the entire state of Oregon.

Relevant to the subject of this hearing is that inspection of Figure 2 also shows that federal standards adopted through both Congressional action and the Department of Energy regulatory proceedings accounted for over one-fifth of the savings since 1980.

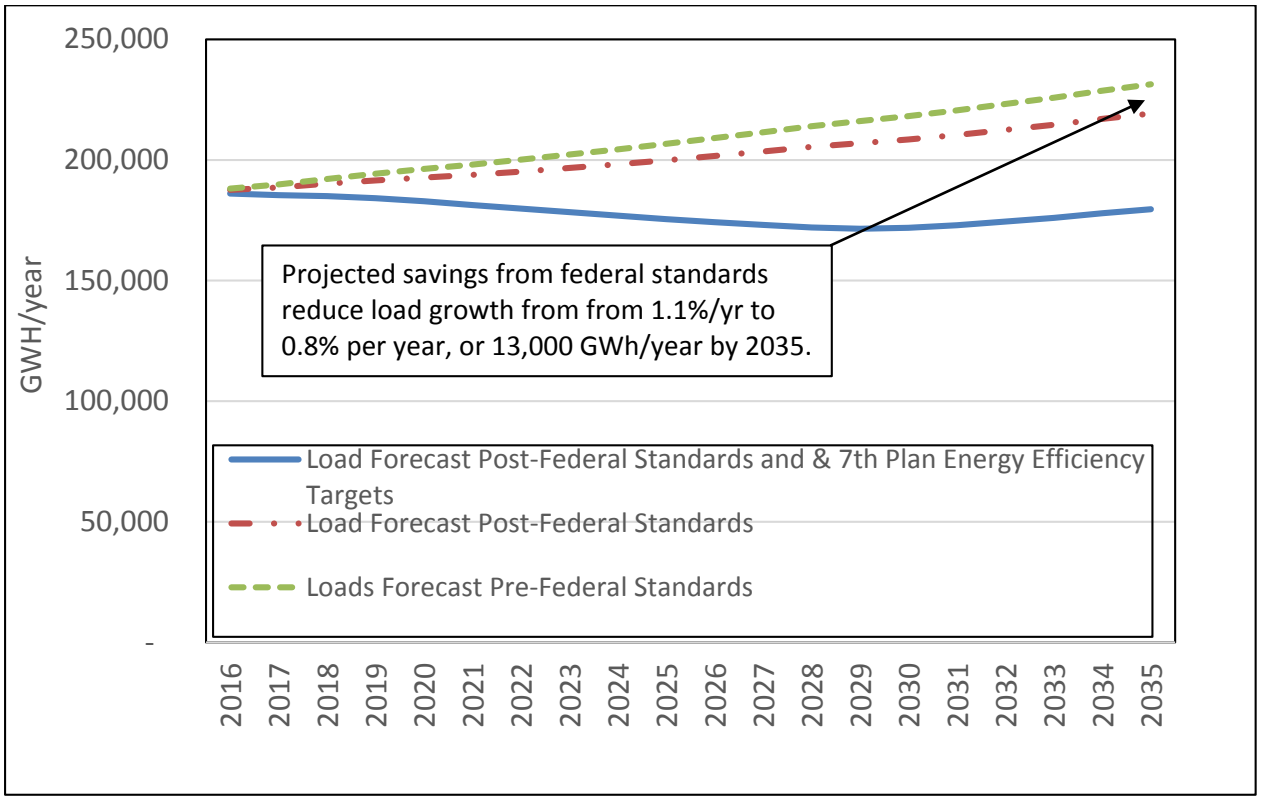
Figure 2 – Cumulative Electric Energy Efficiency Savings for the Northwest States since Passage of the Northwest Electric Power Planning and Conservation Act of 1980 by Source of Savings



Moving beyond the energy savings, the Council estimates that in 2014 alone the electricity savings from federal standards reduced regional consumers' power bills by nearly $1 billion and avoided just over 5 million metric tons of carbon dioxide emissions.

From the data shown in Figure 2 it is clear that federal standards have historically played a major role in improving the efficiency of electricity use across the Northwest states and have resulted in significant consumer economic benefits. On a prospective basis, savings from federal standards also reduce the need to add new power generation facilities. As noted above the Council is required under the Power Act to forecast future demand for electricity over the next twenty years. In this process the Council identifies the key factors that could impact future power needs, such as the pace of economic and population growth, the potential adoption of new technologies (i.e. electric vehicles, solar PV) and known changes federal standards and state energy codes. When the Council developed its long-term load forecast for the Seventh Power Plan it therefore, accounted for the federal standards that the Department of Energy had finalized as of the end of 2014. Figure 3 shows the impact on future load growth from the federal standards finalize after the Council developed the load forecast for its Sixth Power Plan in 2009 and when it developed the load forecast for its Seventh Power Plan early in 2015.

Figure 3 – Impact of Federal Standards on Forecast Northwest Regional Electricity Load Growth 2015 - 2035 (Medium Forecast)



As can be seen from a review of Figure 3, the Council estimates that federal standards finalized by the Department of Energy between 2010 and the end of 2014 will reduce Northwest electricity load growth from 1.1% per year to 0.8% per year, producing savings of nearly 13,000 gigawatt-hours in 2035.[2]

Although both regulatory mechanisms and ratepayer funded programs are needed to secure all cost-effective savings, in the Council's view securing efficiency improvement through regulations such as appliance standards and state energy codes have several significant advantages over ratepayer funded programs. First, federal standards (and state energy codes) produce savings at lower "total cost" because they avoid utility program administrative costs. Second, federal standards (and state energy codes) effect the entire market while programs effect only a portion of the market. As a result standards product greater total savings for comparable improvements in per appliance or per product efficiency. Finally, acquiring savings through federal standards is more equitable because the "cost" of meeting a standard is borne directly by the consumers who benefit from the increased efficiency through lower power or natural gas bills.

Turning now to the Department of Energy's standards development process. The Council has been actively engaged in the Department rulemaking processes since the

[2] Additional load reductions will come from new and revised standards adopted since the end of 2014 when the Council finalized the load forecast shown in Figure 3. The Council has not yet estimated the impact of standards adopted since December of 2014 on future Northwest electricity loads.

early 1990's following the enactment of the National Appliance Energy Conservation Act of 1987. I have represented the Council in the Department's regulatory proceedings, including the "process improvement" rulemaking and more recently as a member of the Department's Appliance Standards Rulemaking Federal Advisory Committee (ASRAC). Based on over 25 years of personal engagement in the Department's federal standards regulatory proceedings, in my judgement the current process, while not without flaws, is far more transparent and offers greater opportunity for stakeholder involvement than any prior period. A bit of history is instructive here.

Prior to the establishment of the ASRAC "informal" negotiations between manufacturers and energy efficiency advocates were the only vehicle open to parties to collaborate on determining what might be mutually acceptable appliance standards. Starting in the mid-2000s during the informal negotiations between "white goods" manufactures and "efficiency advocates," the Department, for the first time made available its technical consultant teams to support the negotiations. While these consultants took no position in these negotiation they were able to gain greater insight into the issues facing manufacturers and improve the information on which to base the Department's analysis.

At least in part, based on its positive experience supporting the informal negotiations on "white goods" efficiency standards, the Department convened a more formal negotiated rulemaking on electric transformers under the auspices of its agency level advisory committee. This time the Department's technical consultants and agency representatives supported the negotiations. Again, both agency staff and technical consultants were able to obtain better data and improve their understanding of stakeholder concerns and positions that in the standard "notice and comment" process called for under the process improvement rule.

Following its success with both the "white goods" and electricity transformer negotiations the Department formally established the ASRAC to facilitate more formal negotiated regulations. Since the establishment of the ASRAC, multiple workgroups have successfully negotiated both test procedures and efficiency standards that the Department issued as final rules. These negotiated rulemakings are successful because the parties have greater access to Department consultants and agency staff and consultants and agency staff have more direct communications with manufacturers and advocates. This process improves not only the data on which the standards are based, but improves the understanding of all parties with respect to the costs and benefits associated with increasing minimum efficiency requirements.

In summary, the federal appliance efficiency standards have and are forecast to continue to be a significant benefit to the Northwest power system and Northwest electricity consumers. The Department of Energy's rulemaking process, while not without minor flaws, is far more transparent and offers greater opportunity for stakeholder involvement than any prior period since the first standards were established by Congress in 1987.