

STATE OF WASHINGTON

STATE BUILDING CODE COUNCIL

Department of General Administration

210 11th Avenue SW • P.O. Box 41011 • Olympia, Washington 98504-1011 (360) 902-7293 • fax (360) 586-0493 • e-mail sbcc@ga.wa.gov • www.ga.wa.gov/sbcc

February 23, 2011

To: The Washington Building Code Council

From: Tim Nogler, Managing Director, Building Code Council

Subject: Analysis and Recommendation in Response to Petition to Repeal the 2009 Washington Energy Code

This memorandum provides the Building Code Council with background information on the 2009 Washington Energy Code, a staff analysis, and a recommendation to the Council in response to John Neff's January 7, 2011 petition for repeal of all amendments to the 2006 energy code.

Based on the following analysis, I recommend that the Council deny the January 7, 2011 petition for repeal of all amendments to the 2006 energy code. The petition does not establish that there are valid grounds for repeal of the rule.

A. Background on the 2006 and 2009 Energy Codes

Buildings are currently responsible for the single largest share of the United States' total energy use; according to the U.S. Department of Energy residential and commercial buildings together account for almost 40 percent of total national energy use and 70 percent of electricity use, more than either the industrial or transportation sectors. U.S. Dep't of Energy (DOE), *Why Building Energy Codes?* http://www.energycodes.gov.why_codes/ (last visited November 4, 2010) (hereafter "DOE, Why Codes?").

As the Washington legislature has found, "energy efficiency is the cheapest, quickest and cleanest way to meet rising energy needs, confront climate change, and boost our economy." RCW 19.27A.130. Reducing building energy use can lead to substantial national energy savings. DOE, Why Codes? Energy savings from energy-efficient buildings, in turn, provide a variety of benefits in the areas of energy, the environment, and the economy. Reducing fossil fuel combustion substantially reduces the emission of greenhouse gases and other pollutants that pose significant risks to human health and the environment. DOE, Why Codes? Energy-efficient buildings also create energy bill savings for consumers and businesses throughout the lifetime of the building. EPA, Clean Energy - Environment Guide to Action: Policies. Best Practices. and Action Steps for States, 4-37,

<u>http://www.epa.gov/statelocalclimate/documents/pdf/guide_action_chapter4.pdf</u> (last visited February 17, 2011).

Recognizing these substantial benefits from strong state building energy codes, Congress and the Department of Energy have taken steps to encourage and support states' adoption of strong energy codes. 42 U.S.C. § 6833(a)(5)(B). In addition, Congress has authorized grants to state and local governments that implement strong energy codes. Please refer to American Recovery and Reinvestment Act of 2009, Pub. L. No. 111–5, §§ 410(a)(2)(A)-(B), 123 Stat. 115, 147 (2009).

For over 27 years, Washington has developed, adopted and enforced a building energy code to reduce the State's energy use and achieve the numerous benefits of such energy reduction. RCW 19.27A.020; Laws of 1990 ch. 2, §1 (1990 legislative findings codified after RCW 19.27A.015); RCW 19.27A.130. Since 1990, the legislature has required that Washington's energy code for residential structures be consistent with the following legislative findings and statements of legislative intent and policy:

The legislature finds that using energy efficiently in housing is one of the lowest cost ways to meet consumer demand for energy; that using energy efficiently helps protect citizens of the state from negative impacts due to changes in energy supply and cost; that using energy efficiently will help mitigate negative environmental impacts of energy use and resource development; and that using energy efficiently will help stretch our present energy resources into the future. The legislature further finds that the electricity surplus in the Northwest is dwindling as the population increases and the economy expands, and that the region will eventually need new sources of electricity generation.

It is declared policy of the state of Washington that energy be used efficiently. It is the intent of this act to establish residential building standards that bring about the common use of energy efficient building methods, and to assure that such methods remain economically feasible and affordable to purchasers of newly constructed housing.

Laws of 1990, ch. 2, §1 (codified after RCW 19.27A.015).

Since 1996, the legislature has required the Building Code Council to review Washington's energy code every three years and has empowered the Building Code Council to amend each energy code to increase the energy efficiency of newly constructed residential buildings. RCW 19.27A.025; RCW 19.27A.045.

Washington's 2006 building energy code required residential builders to comply with general installation requirements for insulation, moisture control, air leakage control, mechanical systems including duct sealing, water heating, and lighting; and then to chose one of three different compliance pathways: a systems analysis performance pathway in Chapter 4; a building envelope tradeoff performance pathway in Chapter 5; or a prescriptive requirements pathway in Chapter 6.

In 2008, a review conducted by the American Council for an Energy Efficient Economy recognized the state-developed energy codes in California, Oregon, and Washington as the top three energy codes in the United States. Washington was specifically recognized in this report for superior code implementation, ahead of everyone else in the country. This is confirmed by the fact that

Washington has received excellent code compliance ratings through several evaluations conducted by the Northwest Power Planning and Conservation Council and the Northwest Energy Efficiency Alliance. The Washington State University Extension Energy Program, and previously the Washington State Energy Office, has provided compliance training with funding from the United States Department of Energy, the Northwest Energy Efficiency Alliance, the Bonneville Power Administration, and other grants. Compliance assistance is provided to industry and code compliance personnel statewide at no cost. Compliance assistance includes:

- Classroom training sessions on the energy code and on the ventilation and indoor air quality code. Hundreds of trainings, reaching thousands of participants, have been conducted.
- Ongoing publication and maintenance to the Washington State Energy Code Builder's Field Guide. The current version of the Builder's Field Guide is in its eighth edition.
- Prescriptive requirements compliance forms for local jurisdictions. Many, if not most, jurisdictions use the compliance forms provided by WSU.
- Component performance analysis worksheets, which also size heating systems.
- A question and answer newsletter with over 1000 subscribers statewide.
- Telephone and email technical assistance. The WSU Extension Energy Program receives over 1000 calls annually.
- On-site meetings with building department staff to address specific questions.
- Specialized, on-site training on a variety of subject such as Blower Door operations and the operation of duct testing equipment.
- Provision of free copies of the energy code and the ventilation and indoor air quality codes.

Between 1980 and 2008 these efforts contributed to the following energy efficiency achievements in the region:

- Through 2008 (the latest year for which we have data) regional savings were just shy of 4,000 average megawatts. Expressed as generated electricity, that is enough to power all of the state of Idaho and Western Montana all year, with enough left over to meet the needs of a city the size of Eugene.
- In 2008, the region's electric utilities set an all-time record for acquiring energy efficiency 235 average megawatts in one year (as generation, enough to power more than 14,200 Northwest homes for a year).
- Since 1980, half of the growth in demand for electricity in the Northwest has been met with energy efficiency.
- As a result of the conservation savings, we didn't have to build 8-10 new coal- or gas-fired generating plants. This means we emitted 15 million tons less carbon-dioxide in 2008 alone.
- These energy savings have cost utilities less than 2 cents per kilowatt-hour, on average, which is less than the roughly 3 cents per kilowatt-hour the Bonneville Power Administration currently charges its electric-utility customers. Energy efficiency costs about 20 percent as much as wind power, which currently costs 8 to 12 cents per kilowatt-hour.
- Because consumers didn't have to buy 4,000 average megawatts of electricity in 2008, they paid \$1.8 billion less for electricity even after accounting for the cost of energy-efficiency programs in their electric rates.

In January 2009, the Council began its regular triennial consideration of proposed changes to the 2006 energy code.¹ In February 2009, the Council learned that the Governor would be requesting that the Council achieve a 30 percent reduction in new building energy use compared to the 2006 code.² On February 12, 2009, the Council published a CR 101 pre-proposal statement of inquiry, which stated as follows:

Reasons why rules on this subject may be needed and what they might accomplish: The State Building Code Council regularly reviews the Washington State Building Code, as outlined in WAC 51.04 and RCW 19.27.074, to review revisions made to the codes by the national model code committees, and to review and consider proposals for state wide code amendments. In addition, the Governor has requested that the Council revise the Energy Code to achieve a 30 percent reduction in new building energy use compared to the 2006 edition. The estimated effective date of the new codes is July 1, 2010.

WSR 09-05-054 (signed by then Council chair John Neff).

In April 2009, the legislature mandated in Engrossed Second Substitute Senate Bill 5854 ("ESSSB 5854") that Washington's energy code lead to the construction of increasingly energy efficient homes and buildings that help achieve the broader goal of building zero fossil-fuel greenhouse gas emission homes and buildings by 2031 and that the Council evaluate and consider adoption of the international energy conservation code in place of the existing energy code. RCW 19.27A.020(2)(a) and (8) (Laws of 2009, ch. 423, §4) (passed by Senate on April 20, 2009; passed by House April 14, 2009) (attached at Attachment A). In addition, the legislature specified that residential and nonresidential construction permitted under the 2031 energy code must achieve a 70 percent reduction in annual net energy consumption as measured against the 2006 energy code. RCW 19.27A.160(1) (Laws of 2009, ch. 423, §5). To this end, the legislature specifically required the Building Code Council to adopt energy codes from 2013 through 2031 that incrementally move towards achieving the 70 percent reduction requirement. RCW 19.27A.160(2). The only exception to these requirements is if the Council determines that economic, technological, or process factors would significantly impede adoption of or compliance; in that case the Council may defer implementation of the proposed energy code. RCW 19.27A.160(2). The legislature based these requirements on these legislative findings:

The legislature finds that energy efficiency is the cheapest, quickest, and cleanest way to meet rising energy needs, confront climate change, and boost our economy. More than thirty percent of Washington's greenhouse gas emissions come from energy use in buildings. Making homes, businesses, and public institutions more energy efficient will save money, create good local jobs, enhance energy security, reduce pollution that causes global warming, and speed economic recovery while reducing the need to invest in costly new generation. Washington can spur its economy and assert its regional and national clean energy leadership by putting efficiency first. Washington can accomplish

¹ Consistent with WAC 51-04-020 the Council publicized the state building code amendment process, calling for submission of energy code change proposals by March 1, 2009.

² The Governor's request implemented a 2008 Climate Action Team recommendation that the Council achieve a 30 percent reduction in new building energy use. Climate Action Team, "Leading the Way: Implementing Practical Solutions to the Climate Change Challenge, Appendix 3 at 25-26 <u>http://www.ecy.wa.gov/climatechange/2008CATdocs/ltw app v2.pdf</u> (last visited February 17, 2011). The Governor's request also allowed the State to receive a grant from the Department of Energy to increase the energy efficiency of the Washington energy code.

this by: Promoting super efficient, low-energy use building codes; requiring disclosure of buildings' energy use to prospective buyers; making public buildings models of energy efficiency; financing energy saving upgrades to existing buildings; and reducing utility bills for low-income households.

RCW 19.27A.130 (Laws of 2009, ch. 423, §1). These requirements of law became effective on July 25, 2009.

In evaluating proposed changes to the 2006 energy code during the 2009 triennial review process the Council held nine regular meetings (including two public hearings and a work session) and four special meetings (including a special public hearing on adoption of the International Energy Conservation Code("IECC")). The Council's Economic and Regulatory Assessment Committee met three times to consider economic impacts; the Council's Energy Committee met three times to review technical advisory group (TAG) recommendations, and the Council's Energy Technical Advisory Group ("Energy TAG") met 15 times to review 172 statewide amendment proposals. A list of Energy TAG members is attached at Attachment B. The members represented a variety of interest groups, including local governments. All meetings of the Council, Council committees, and the Energy TAG were open to the public, publicized through Council mailings and web postings, and agendas were posted prior to each meeting with access via conference phone and the internet available. Excerpts of meeting minutes pertinent to this petition are attached at Attachment C. The Council filed its CR 102 on August 19, 2009 and held public hearings in Renton on September 29, 2009 and in Spokane on October 5, 2009. Copies of the minutes of those meetings are attached at Attachment D. A number of local government representatives provided testimony at these two meetings including: John Hogan, City of Seattle; Lee Kranz, City of Bellevue; Tom Craig, City of Spokane; Mary Kate McGee, City of Spokane Valley; Joe Wizner, City of Spokane. Training and implementation was not raised as a major issue. In addition, the Council received 54 written comments on the energy code. Of these, two letters were from building officials and one letter was from letter from Mayor Nickels of Seattle; none of these letters raised training and implementation as an issue.

On November 20, 2009, the Building Code Council adopted the 2009 energy code.³ The 2009 code built on the general structure of the 2006 building energy code. Builders still must comply with the general installation requirements in Chapter 5, and then must choose among the same three pathways: the systems analysis performance pathway in Chapter 4; the building envelope tradeoff performance pathway in Chapter 5; and the prescriptive requirements pathway in Chapter 6.

In the 2009 energy code, the Council made multiple changes to the 2006 code, including modifications to the pathways in Chapters 4, 5, and 6. The same general code structure was maintained but the changes estimated energy savings by approximately seven percent over the 2006 code. The Council also added Chapter 9, which provides a menu of options for builders to achieve an additional approximately eight percent energy savings on top of the seven percent savings achieved through the modifications to Chapters 4, 5, and 6.⁴ The eight percent savings achieved in Chapter 9, combined with

³ The 2009 building energy code was adopted with a July 1, 2010 effective date. The Council subsequently extended the effective date to January 1, 2011.

⁴ Chapter 9 implements this eight percent requirement through two different approaches tailored to the choice made by the builder among Chapters 4, 5, and 6. For builders who use the Chapter 4 systems analysis pathway, Chapter 9's eight percent energy savings is built into the Chapter 4 systems analysis, which requires that proposed buildings use eight percent less energy than the code-specified target building. In contrast, for builders who choose either the Chapter 5 envelope component tradeoff performance pathway or the Chapter 6 prescriptive requirements pathway, Chapter 9 allows builders to

the seven percent savings achieved in Chapters 4, 5, and 6, brought the total energy savings achieved by the 2009 code to 15 percent over the 2006 baseline.

Since its November 2009 adoption of the 2009 energy code, the Council has made additional changes to the code, many at the request of stakeholders. These changes include delaying the effective date to January 1, 2011 and allowing furnace replacement in existing homes without mandatory duct sealing, and editorial changes to correct errors.

B. DISCUSSION OF THE ISSUES RAISED IN THE PETITION

1. Is the rule authorized?

Yes. As described above at page 2, since 1996 the Building Code Council has been required to adopt the state energy code and to review it on a triennial basis; RCW 19.27A.045 ("beginning in 1996 the council shall review the Washington state energy code every three years") and RCW19.27A.025 ("amendments shall be adopted no more frequently than every three years"). In performing this triennial review, the Council has been specifically authorized by the legislature to amend any of the code's provisions to increase the energy efficiency of residential buildings, RCW 19.27A.045 ("...the council may amend any provisions of the Washington state energy code to increase the energy efficiency of newly constructed residential buildings") and nonresidential buildings, RCW 19.27A.025 ("the council may...amend that code's requirements for new nonresidential buildings provided that...such amendments increase the energy efficiency of typical newly constructed nonresidential buildings.."). In considering the need for such amendments, the Council is required to take into account legislative findings and legislative statements of policy and intent describing the state's multiple interests in energy efficiency (such as protecting Washington's citizens from the negative impacts of changes in energy supply and cost) and the need for the common use of efficient building methods. Laws of 1990, ch. 2, §1 (codified after RCW 19.27A.015).

This means that the petition is incorrect when it says that based on ESSSB 5854 the Council lacked authority to consider any new code prior to 2013. Since 1990 the Council has been required to consider new codes on a triennial basis; i.e., e.g. the Council was required to consider code revisions during its 2009 review cycle. The process deadline for statewide amendment proposals (March 1) had already passed before ESSSB 5854 was approved by the legislature. Nothing in ESSSB 5854 amends the preexisting triennial review requirements in RCW 19.27A.045 and RCW 19.27A.025 or the legislature's preexisting authorization for the Council to consider increasingly energy efficient residential energy codes in conformance with the legislature's 1990 findings about the importance of increased energy efficiency as the "cheapest, quickest, and cleanest way to meet rising energy needs, confront climate change, and boost our economy" and the legislature's intent that Washington's energy code promote "super efficient, low-energy use building codes....". RCW 19.27A.130. To achieve these outcomes,

pick from a menu of 13 energy efficient building design options (many with multiple suboptions) – ranging from improving the efficiency of the home's furnace to improving the insulation of the walls and ceiling – to achieve the required eight percent energy efficiency by selecting an option or combination of options that total "1 credit". Chapter 9 was based upon a proposal from the Washington Department of Commerce Energy Policy Division, as refined by the work of the Council's Energy TAG. Based on the Energy TAG's discussions and negotiations with stakeholder groups, and in response to a motion by the Building Industry Association of Washington's representative, the Council reduced the energy savings required in Chapter 9 from 24 percent as originally proposed by the Department of Commerce to the eight percent ultimately included in the rule.

ESSSB 5854 imposed *additional* obligations on the Council to adopt energy codes beginning in 2013 to incrementally move toward achieving a 70 percent reduction in annual net energy savings over a 2006 baseline but ESSSB 5854 did not eliminate the Council's pre-existing authority. Interpreting ESSSB 5854 to limit the Council's pre-existing authority would be inconsistent with two decades of legislative findings and statements of intent, the language of Chapter 19.27A RCW and its legislative history, and the plain meaning of RCW 19.27A.160 (Laws of 2009, ch. 423, §5). This conclusion is supported by an October 1, 2009 letter to the Council from Senator Derek Kilmer (the prime sponsor of ESSSB 5854) and Representative Christine Rolfes (the prime sponsor of ESSSB 5854's companion house bill) stating that the 2013 through 2031 language in the bill was intended to implement the legislature's intent to *not* disrupt the ongoing 2009 energy code revision cycle. ("...it was never our intent to "freeze" the energy code standards until the 2013 revision...."). A copy of that letter is attached at Attachment E.

The petition is equally incorrect in asserting that ESSSB 5854 required the Council to consider adoption of the IECC prior to considering adoption of amendments to the 2006 Washington state energy code and that the Council was directed by the legislature to "use the time from the passage of the legislation to review and consider the IECC." On its face, RCW 19.27A.020(8) places no time limit on the Council's consideration of the IECC; it states simply "[t]he state building code council shall evaluate and consider adoption of the international energy conservation code in Washington state in place of the existing state energy code." The legislature knows how to impose time deadlines on the Council (see for example the deadline for reporting in RCW 19.27A.160(2) (Laws of 1990, ch. 423, §5)) and the lack of a deadline for consideration of the IECC plainly means that the legislature was not imposing a deadline. In addition, nowhere does ESSSB 5854 direct the Council to "use the time from the passage of the legislation to review and consider the IECC." Again, if the legislature had intended that outcome, it knew how to say so but did not.

Moreover, the Council is, in fact, complying with the legislature's directive to consider the IECC. Whenever an international model code is adopted, states are required to analyze their state residential codes against the model code to determine whether their state code meets or exceeds the requirements of the model code. 42 U.S.C. §6833(a)(5)(B). The Council considered the IECC in 2005 when it developed a detailed analysis comparing the 2003 IECC with the 2003 state energy code and found that over 140 revisions to the IECC would be necessary to make the IECC as energy efficient as the state code. This is significant because under state law, the Council cannot adopt energy codes that are less efficient than prior versions of the code. RCW 19.27A.025; RCW 19.27A.045. Based on this 2005 analysis, the Council decided to move forward with the state code rather than the IECC because it would not have been reasonable or cost-effective to adopt the IECC at that time. When the 2006 IECC was released, the Council again compared its requirements to the 2006 Washington code and determined that the Washington code again exceeded the IECC in energy efficiency.

When the 2009 IECC was released, the Council's Energy TAG considered but voted down dual consideration of the IECC and the Washington energy code because the Council was faced with 172 energy code amendment proposals, over 160 of which were based on the Washington code and not the IECC. As a result there would be insufficient time to apply and analyze each of those proposals in the context of two different energy codes (the IECC and the Washington code). The Energy TAG reported to the Council on the TAG's recommendation that the Council consider the IECC. Attachment C (March 12, 2009 meeting). The Council decided to hold a special meeting on March 26, 2009 to consider the relative merits of the IECC and the Washington Code. Attachment C (March 26, 2009 meeting). At that meeting, David Baylon, who has extensive and exclusive experience modeling energy savings in the Pacific Northwest, testified that the 2009 IECC was approximately equivalent in energy savings to the <u>2006</u> Washington code, the Code to which the Council was preparing to make significant improvements

in the 2009 energy code revision cycle. Attachment C (March 26, 2009 meeting). As a result, adopting the 2009 IEEC would not have moved the Washington energy code forward in terms of improving energy efficiency, progress that is required by RCW 19.27A.025 and RCW 19.27A.045 and statements of legislative intent since 1990. Testimony at the special meeting varied widely with some participants strongly opposing adoption of the 2009 IECC, some strongly supporting it, and others all along the spectrum in between. Of the three local government representatives who testified, two supported adoption of the IECC and one supported continued use of the Washington energy code. Of the two that supported adoption of the IECC, only one did so based on a perception that implementation resources would be greater if the IECC were adopted.

On May 7, 2009, the Council met and voted to update the state energy code during the 2009 review process and in the future consider adoption the 2012 IECC, once it is released. The Council's current work plan, adopted on January 14, 2011, contains the following provision in preparation for review, analysis, and receipt of 2012 code change proposals:

Develop Draft Reference Document for the Energy Code based on the 2012 International Energy Conservation Code:

- Obtain final document from ICC (scheduled publication 4/30/11)
- Staff will integrate 2009 WSEC
- MVE Code Committee reviews Draft Reference document

In addition to these actions, the Council has continued to participate in the development of the IECC, has submitted numerous proposals and provided testimony at the International Code Council⁵ hearings, and has closely tracked the changes incorporated in both the 2009 and the 2012 editions of the IECC. The Council currently is waiting for the publication of the 2012 edition of the IECC.

2. Is the rule needed?

Yes. First, as explained in the preceding section, the petition is incorrect in stating that the 2009 energy code was not needed because, according to the petition, the rule was unauthorized by statute and the legislature directed the Council to consider the IECC before considering other codes. The petition is also incorrect when it implies that the Department of Energy favors the IECC over the Washington code. While the Department of Energy indeed requires states to analyze whether their state codes meet or exceed the requirements of the international model codes, the Department of Energy neither mandates that states adopt the IECC nor prohibits states from adopting their own codes.

Second, the 2009 energy code was needed to comply with the Climate Action Team's recommendation and the Governor's request for a 30 percent increase in energy efficiency over the 2006 code. As discussed above, buildings are responsible for the single largest share of the nation's total energy use; residential and commercial buildings account for almost 40 percent of total national energy use and 70 percent of electricity use.

Third, the Washington legislature has found that energy efficiency is the cheapest, quickest and cleanest way to meet rising energy needs, confront climate change, and boost Washington's economy and has for years mandated that the Building Code Council adopt increasingly energy efficient energy codes. RCW 19.27A.025; RCW 19.27A.045.

⁵ The International Code Council develops and publishes the IECC.

3. Does the rule conflict with or duplicate other federal, state or local laws?

No. The petition is incorrect that the 2009 code "clearly conflicts with 42 U.S.C. §6297(f) (3)(a through g." First, the only portion of the 2009 energy code that has ever been argued to be within the scope of the federal Energy Policy and Conservation Act or "ECPA", 42 U.S.C. §6297(f)(3), is Chapter 9. As a result, even if Chapter 9 conflicts with EPCA (which it does not) there would be no reason to invalidate the balance of the 2009 energy code on this basis as requested in the petition. Second, on February 7, 2011, federal District Court Judge Robert Bryan issued his decision in favor of the Council in <u>Building Industry Association et al v. Washington State Building Code Council et al</u>. Judge Bryan confirmed that Chapter 9 does not violate EPCA and is not preempted by federal law. A copy of Judge Bryan's orders are attached at Attachment F.

4. Do alternatives exist that serve the same purpose at less cost?

No. First, the petition provides no evidence that the adoption of the IECC will "produce the same energy efficiencies at less cost." The adoption of the 2009 IECC will not produce the same energy efficiencies as the 2009 Washington code. The 2009 Washington code is about 15 percent more energy efficient than the 2009 IECC based on calculations done by David Baylon at Ecotope using the same modeling that is the basis for region-wide energy planning. (2009 Washington State Energy Code: Analysis of Code Changes Adopted By the Washington State Building Code Council; testimony, March 26, 2009) Without modification of the 2009 IECC to achieve parity with the 2009 Washington code, the IECC does not serve the same purpose as the Washington code. To achieve the goals set forth by the Council's statutory authority, the Climate Action Team, and the Governor, the Council determined that revision to the existing rule was the best alternative.

Second, as discussed above, the petition is incorrect when it implies that the Department of Energy mandates the IECC over the Washington code. The Department of Energy does not mandate that states adopt the IECC or prohibit states from adopting their own codes. The support provided by DOE to building officials and builders in states which adopt the IECC is limited to unamended model codes and is not cost-free to local governments.

Third, with regard to enforcement by local governments, the Washington energy code has been in effect since 1980 and is well known and very familiar to the construction industry and the enforcement community. Industry and the enforcement community carry out training and implementation activities in response to every code revision cycle. Each proposed amendment to the code that is submitted to the Council includes an Economic Impact Worksheet. The worksheet requires information on the proposal's cost and benefit for both construction and enforcement. The Council also received a detailed cost and benefit analysis of all the proposed amendments to the to energy code.

Testimony received by the Council was clear that funds were available to provide training to the construction industry and enforcement community. David Cohan of the Northwest Energy Efficiency Alliance repeatedly testified that the NEEA would continue to fund energy code education and training statewide regardless of which code the Council adopted. Attachment C (March 26, 2009 meeting); Attachment D (September 29, 2009 meeting). Moreover, the Council carefully considered all comments that were provided to it concerning implementation of the 2009 energy code, including comments from local governments that supported adoption of the Washington code and local governments that supported adoption of the IECC. The Council was aware of the implementation costs to local governments and the resources that were available to address those costs. In this regard, the legislature has expressly split the authority and responsibility for the energy code between the Council (which is

responsible for promulgating and amending the energy code as required by its authorizing legislation) and local governments (which are responsible for implementing the code in accordance with their own legal authorities). RCW 19.27A.020 (the Council adopts the energy code as part of the building code); RCW 19.27.050 (local governments enforce the building code). The Council does not have the legal authority to perform either implementation planning or actual implementation on behalf of scores of local governments statewide or on behalf of design professionals and builders statewide.

Moreover, although the 2009 energy code contains more changes than usual, there is no direct shift in enforcement procedures. The code layout, code documentation, construction techniques, and compliance documents remain essentially the same. For new substantive areas, substantial training has taken place and continues to take place. To date, in preparation for implementation of the 2009 energy code, the WSU Extension Energy Program and the Northwest Energy Efficiency Council have spent approximately \$400,000 on classroom training, development of compliance forms, preparation of training videos for building code officials, updating the Builder's Field Guide, and answering questions from builders, design professionals and other interested individuals. Gary Nordeen from the WSU Extension Energy Program repeatedly updated the Council at public hearings on the status of ongoing training efforts.

5. Does the rule serve the purpose for which it was adopted?

Yes, as discussed above, the rule achieves the gain in energy efficiency that the Council determined was reasonable and cost effective based on the Council's longstanding legislative direction, the recommendation of the Climate Action Team, and the request of the Governor. Also as discussed above, the Council was not required to adopt the IECC before it adopted the 2009 energy code.

With respect to training and implementation efforts, as discussed above, the Council considered the testimony provided to it by local governments and others. Ongoing training efforts are available and adequately funded for the 2009 Washington energy code. The petition provides no supporting information for the assertion that the Department of Energy's Building Code Energy Program provides support that is superior to that which is available from the WSU Extension Energy Program. As discussed above, WSU Energy Extension Program's training and implementation program is current, regularly updated, and reflects all changes to the 2009 Washington energy code. The assertions in the petition are equally unfounded that the WSU Extension Energy Program and the Northwest Energy Efficiency Council⁶ are supported by "vested interests for keeping the current code in place." The petition does not identify or explain the basis for this statement. The Washington energy code, and the training programs that support it, have resulted in Washington being recognized by the American Council for an Energy Efficient Economy as one of the top three energy codes in the nation and Washington has achieved excellent code compliance ratings through several evaluations conducted by the Northwest Power Planning and Conservation Council and the Northwest Energy Efficiency Alliance.

6. Are the costs imposed by the rule unreasonable?

No. First, the Council considered all comments that it received from local governments on the issue of costs. As discussed above, the Council was aware of the costs of implementation and the

⁶ The petition refers to the Northwest Energy Efficiency Alliance. This reference appears to be an error. The entity that provides training for nonresidential energy code implementation is the Northwest Energy Efficiency Council. If, however, the petition intended to refer to the Northwest Energy Efficiency Alliance, then as discussed above, David Cohan of the NEEA repeatedly testified that the NEEA would continue to fund energy code education and training statewide regardless of which code the Council adopted.

resources available. The Council does not have the legal authority to develop a system of staffing for enforcement of the rule by local governments. The local authority having jurisdiction has administrative authority to charge fees and hire staff.

Second, the Council filed a small business economic impact statement with the proposed amendments to the 2009 WSEC, and adopted a cost benefit analysis of the code provisions prepared by the Department of Commerce. The Council sent a March 26, 2010 letter to the chair of the Joint Administrative Rules Review Committee, stating "[i]t is the Council's professional opinion and judgment that adequate data regarding cost benefits and jobs was obtained and considered when deliberating the impact of the proposed amendments." The amendments as proposed targeted a 30 percent improvement in energy efficiency in new buildings; the final rule adopted by the Council achieves about 15 to 18 percent improvement, thereby further reducing the impact of the rule. This reduction was made in response to testimony by the Building Industry Association of Washington's representative at a May 15, 2009 energy TAG meeting that with this reduction "is a reasonable solution and it has balance."

Third, in response to the Governor's June 8, 2010 letter the Council delayed implementation of the rule by six months to allow for economic recovery and preparation for enforcement of the rule.⁷ The Council also provided relief on one specific amendment related to testing ducts in existing homes when the furnace is replaced to mitigate the cost impact of the rule. Testimony received by the Council did not show any link between statewide economic recovery and the incremental cost differences between the 2006 and 2009 energy codes. At no time did any evidence suggest that the consumer does not want a more energy efficient home or commercial building.

7. Is the rule clearly and simply stated?

Yes. The building codes are technical requirements that describe the construction of complex structures. As described above, the state energy code is written to provide multiple pathways for compliance for flexibility in the design and construction of buildings, consistent with energy codes in effect for over two decades. The prescriptive paths are designed to be easy to follow and limit the burden on the designer, builder and enforcement official. The legislature granted authority to the Council to provide interpretations to the local enforcement officials, given the complex nature of building codes. In addition, the Council's staff is always available to answer emailed questions about code interpretation. Building Code Council, "Ask Us а Question". https://fortress.wa.gov/ga/apps/sbcc/default.aspx (last visited February 6, 2011). As described above, adoption of the IECC is not mandated by ESSSB 5854. In addition, the petition's reference to RCW 19.27.031 is incorrect. RCW 19.27.031 is not part of the enabling law for the energy code; Chapter 19.27A RCW is the portion of the Council's enabling law that pertains to the energy code and mandates that the Council develop a Washington state energy code.

8. Is the rule different than a federal law applicable to the same activity or subject matter without adequate justification?

⁷ The petition's characterization of this letter is incorrect when it states "the Governor's Council of Economic Advisors stated clearly that the 'economy needed to rebound,' prior to implementation of the new code." The letter said that the Council of Economic Advisors had made it clear "that the recovery of the construction industry is central to the recovery of our state's economy." Nowhere did the letter say that the Council of Economic Advisors had linked economic recovery to implementation of the incremental differences between the 2006 and 2009 energy codes. In addition, the Governor did not request that the Council delay implementation of the 2009 energy code until the economy recovers; she requested that the Council delay implementation until April 1, 2011.

No. As described above, extensive expert technical analysis shows that the provisions of the 2009 energy code meet the exceptions to federal preemption for equipment covered by the EPCA. As discussed above, on February 7, 2011, federal District Court Judge Robert Bryan ruled that the Washington energy code is not preempted by EPCA.

Moreover, the question of federal preemption was not ignored by the Council. Throughout the process, the Council consulted with its Assistant Attorney General. The Council expressly asked its Assistant Attorney General for legal advice on this issue and it considered her advice.

9. Was the rule adopted according to applicable provisions of law?

As the Council stated in its March 26, 2010 letter to the Joint Administrative Rules Review Committee "[i]t is the opinion of the Council that data used by the Council in its decision process was adequate and the procedures followed complied with the law."

With respect to the Energy TAG and the Council's bylaws, the Energy TAG recommendations were made in accordance with Council procedures. TAG member votes were taken on each of the proposed amendments. Votes of all present were used to instruct the chair and the TAG members on the opinions of the attendees, which at times numbered up to 30 people in attendance. Those in attendance had expertise related to topics on the agenda. The Energy TAG chair consistently requested a final vote by TAG members only and the final votes were made only by TAG members in accordance with the bylaws. As the summary of energy TAG votes shows, the final votes were taken only by TAG members. Attached at Attachment G. Moreover, contrary to the assertion in the petition that the Energy TAG adopted the energy code without complying with the Council's bylaws, the Energy TAG does not adopt the energy code. The Council considers TAG recommendations for entering proposed rules for public hearing. After public testimony, the Council makes the final decision on rule adoption.

10. Other (1): Was a needs assessment of training of local inspectors, plan reviewers, registered design professionals and contractors completed prior to implementation?

There is no legal requirement for the Council to develop a "needs assessment" for training. Nonetheless, as discussed above, the Council considered all testimony offered by local governments and others on the availability of funds and programs for training. In addition, as discussed above, the Council concluded that adequate provisions for training were available from the entities legally empowered and funded to provide such training. The local authority having jurisdiction has administrative authority to charge fees and hire staff.

11. Other (2): Did the agency develop a well thought out implementation plan prior to adopting and later setting an effective date?

There is no legal requirement or legal authority for the Council to develop implementation plans on behalf of local governments prior to adopting the energy code. To the contrary, as discussed above, the local authority having jurisdiction has administrative authority to charge fees and hire staff. Also as described above, the Council carefully considered all comments that were provided to it concerning implementation of the 2009 energy code, including comments from local governments.

12. Other (3): Did the agency reply to the Joint Administrative Rules Review Committee as requested. If not, what implications have arisen from the agency's adoptive action?

Yes. As discussed above, the petition is incorrect in asserting that the Council did not respond to JARRC's request. In addition, the petition is incorrect that the Council asserted that it was exempt from following the requirements of the law because it is an executive branch agency. The 2009 Washington energy code is a legally effective rule.

13. Other (4): Local Government's Implementation Dilemma.

As discussed above, the 2009 Washington energy code was adopted in accordance with applicable laws, and complies with the requirements of state and federal law for energy efficiency. It is a legally binding rule.

14. Other (5): WAC 51-11-0701, Reference standard 33 and all references to it contained within WAC 51-11, is not authorized by the law.

The petition is incorrect. Section 701 of the energy code identifies a variety of standards that are incorporated by reference. One of those standards is RS-33. RS-33 sets technical standards for duct testing on new or existing construction. One of the requirements in RS-33 is that "[a]II testing must be done by a qualified technician" and that the minimum qualification requirement is "documented attendance at a duct testing training course approved by the building official." In other words, the reference standard requires personnel to be trained, but defers to the local government building official to determine what training is required and who is a "qualified technician." The training can be obtained through a number of different programs.⁸

The petition is incorrect that the Council's reference to RS-33 is "clearly intended to remove authority from the local governments." The reference to RS-33 and the express language of RS-33 clearly leaves the authority for determining who is and who is not qualified to do duct testing with the local government building official. The reference does not violate Wash. Const. art. XI, §11.

The petition is also incorrect that that the Council's reference to RS-33 as a "standard" is improper because RS-33 was not "developed under the procedures of a nationally recognized standards developing organization...." Nothing in the Council's rulemaking authority prevents it from using the word "standard" in its rules and when the Council uses the word "standard" in its rules to describe a guideline, nothing in its rulemaking authority requires that such a "standard" be developed by a nationally recognized standards developing organization.

⁸ RS-33 identifies two such programs: Northwest ENERGY STAR Homes Program, Performance Testing training for new construction and Performance Tested Comfort Systems (PTCS) training for existing homes and new construction.