

STATE OF WASHINGTON

## STATE BUILDING CODE COUNCIL

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## Residential Energy Code Technical Advisory Group Meeting Review Notes for May 30, 2025

**TAG Members Present**: Kjell Anderson, Chair; \*Anne Anderson; \*Larry Andrews; Tom Balderston; Kim Barker: Julie Blazek; Rick Blumenthal; \*Michael Brasgalla; Greg Davenport; \*Shailesh Desai; Jason Garrood; \*Patrick Hanks; Luke Howard; Greg Johnson; Duane Jonlin; \*Jonah Kinchy; \*John Lange; Shane Nilles; Irina Rasputnis; Albert Rooks; Deepa Sivarajan; Poppy Storm; \*Elizabeth Torske

**TAG Members Absent**: \*Michael Beanland; Wade Craig; Kevin Duell; \*Nate Geller; \*Bryan Russo; \*Alexis Suggs; Gavin Tenold; \*Joel Ward

**Visitors Present**: Sean Angeley, Scott Austin, David Baylon, Joseph Briscar, Ian Casey, J. Cravalho, Daimon Doyle, Gary Heikkinen, Bryan Imai, Jonny Kocher, Nick Manning, Mike Moore, Sheri Newbold, Kevin Rose, Michael Rosenberg, Rob Salcido, Steve Tapio, Kelly Thomas

Agenda Items	TAG Actions	
1. Welcome and Introductions	Meeting called to order at 8:30 a.m. Kjell Anderson welcomed everyone, and roll was called. A quorum was present.	
2. Review and Approve Agenda	The agenda was approved as modified, with petition 040 being heard before petition 033.	
3. Review and Approve meeting notes from March 6, 2025	The meeting notes from the March 6, 2025, meeting were approved as written.	
4. Preliminary Review of Proposals		
Code Basics:		
replace the WS Provisions. The the credits as r	The TAG began the discussion with the petition from Gregory Johnson to replace the WSEC Residential Provisions with the IECC Residential Provisions. The State could still achieve its efficiency targets by adjusting the credits as necessary. He also stated that any current proposals could be modified to fit in the framework of the IECC.	
	ussed the pros and cons of the proposal, such as making it of state builders to comply and providing more credit options	

Staff: Krista Braaksma

\* indicates an alternate member

	for flexibility vs. going backwards in energy efficiency and making it more difficult for experienced users to comply. The TAG performed a straw poll of all those present to see if there was general support to put in the effort to modify the proposal to review and incorporate existing proposals and petitions to fit the framework. Approximately 68 percent of those voting would not support the proposal this year, although more would support this idea for the next cycle. A workgroup was solicited to examine the proposal and look at a business case for the benefits of moving forward with it. Those volunteering to work with Greg were Anne Anderson, Elizabeth Torske, and Larry Andrews. Kjell suggested that Patrick Hanks also be included, given the similarity of the two proposals
<u>24-RE-026</u>	This petition was initially skipped over; the proponent was scheduled to return to the meeting in approximately three hours. Patrick Hanks rejoined the meeting, and his petition was discussed beginning at 11:58 a.m. Patrick noted that his approach was more minimalistic than Greg's. This would just cite the IECC by reference. He felt this approach would match the state policy as stated in RCW 19.27A.020(9) and would provide more resources to help with compliance.
	The Chair suggested that Patrick work with Greg's workgroup on 002 to come up with a plan moving forward.
<u>24-RE-040</u>	Kevin Rose introduced a petition to add an ERI compliance pathway to the WSEC. As a compliance pathway, it shouldn't be weaker or stronger than the other pathways. The current values are aligned with the 2021 code and would need to be recalculated based on where the 2024 prescriptive path ends up. NEEA worked with PNNL to model a variety of scenarios with variables of home type and heating system type. We looked at other things but found they had less of an impact on the ERI.
	The TAG discussed the proposal, asking questions such as the role of the building official, quality assurance and the certification of HERS raters, the documentation needed, how it interacts with RESNET, why the targets seem higher than anticipated, and if other systems are truly marginal to the results.
	A workgroup was established to review the required documentation and any other necessary cleanup. The volunteers to work with Kevin Rose were Patrick Hanks, Daimon Doyle, Greg Johnson, Tom Balderston, Jon Lange, Gavin Tenold, and Poppy Storm.
<u>24-RE-033</u>	This petition was initially skipped over; the proponent was scheduled to return to the meeting in approximately an hour. Patrick Hanks rejoined the meeting, and his petition was discussed beginning at 12:02 p.m.
	Patrick Hanks summarized his petition to have an ERI pathway approved for the 2024 code. He is happy to correlate his proposal with the NEEA proposal. To achieve the targets, BIAW contracted with an energy rater to model homes as if they were built in 2026 under that code and federal requirements

	and then averaged out the ERI to what the target should be working towards the 70% reduction. He noted it would be his preference to keep the section numbering in line with the IECC for both the ERI and additional credit sections.
<u>24-RE-024</u>	This petition was initially skipped over; the proponent was scheduled to return to the meeting shortly. Patrick Hanks rejoined the meeting, and his petition was discussed beginning at 12:09 p.m.
	Patrick Hanks stated this proposal was based on feedback from a town hall- style meeting with BIAW members. It was felt the permit valuation section R106.3 was not necessary and matched the IBC language rather than that in the IRC.
	The TAG discussion centered around the fact that there is no energy code permit. Duane Jonlin agreed that it could be deleted, but Shane Nilles felt it should be retained, since there are references to permitting within the code, and amended to match the IRC language. He felt it could avoid conflict at the permit counter. Patrick said he would look at the language within the other codes.
<u>24-RE-011</u>	Rick Blumenthal introduced his petition to address continuous insulation inspections to ensure correct installation of control layers.
	The TAG discussed the proposal, first focusing on the difference between the manufacturer's installation instructions for fasteners versus what may be required by a structural engineer for shear or similar concerns. The TAG did recommend a change to item 3 under R107.2.6, replacing structural engineer with registered design professional.
<u>24-RE-048</u>	Sheri Newbold spoke to her petition adding another building type allowed under the residential energy code to address missing middle housing and correlate with the work being done by the ad hoc TAG on Single Exit / Multiplex Housing. It would allow a six-plex up to three stories to be built under the residential energy code. The idea is that this type of housing could choose to use either the residential or commercial provisions of the energy code.
	The TAG discussed the proposal and offered some language changes to clarify the intent to allow either code to be used. The TAG briefly discussed which would be the more economical route. They also noted that installation should always be in conformance with the manufacturer's instructions. Another concern was with the removal of "without thermal bridges" from the definition of continuous insulation. The TAG also felt portions of this may be more appropriate for either the IBC or IRC since it deals with the vapor barrier placement.
<u>24-RE-025</u>	This petition was initially skipped over as the proponent was unavailable; it was addressed at 12:28 p.m., directly after the lunch break.

	Patrick Hanks noted this proposal removes the new IECC definition for "substantial improvement." The term was addressed in a portion of Chapter 5 that was not recommended for adoption and is not in use within the WSEC. The TAG expressed general consensus.
<u>24-RE-008</u> <u>24-RE-009</u>	These two petitions were skipped by the TAG because the proponent was unable to attend the meeting.
<u>24-RE-018</u>	Jonny Kocher introduced his petition to adopt the IECC appendix for electric readiness. It changes some of the number to coordinate with the WSEC and adds back in the space heater language removed when the IECC language was moved to an appendix. He noted that he specifically made this applicable to both the performance and passive house pathways as well as the prescriptive pathway.
	There was some concern expressed that this would violate EPCA. Some also felt this was not related to energy conservation and did not belong in the energy code. Others felt it added cost with no direct benefit to consumers.
<u>24-RE-038</u>	Kevin Rose introduced NEEA's petition to add a requirement for H/ERVs in Climate Zone 5. In a cost analysis done for a 2027 IECC proposal, it showed this measure was cost effective in CZ 5 but not CZ 4. The language is essentially out of the 2024 IECC.
	The TAG discussed the cost effectiveness of the requirement. Mike Moore noted that with a balanced ventilation system, the payback would likely be cut in half. There was concern that the pricing shown in the analysis was much lower than the actual market costs. It was discussed as to whether this was a good candidate for a credit and how that would be constructed as it would only apply to one of the climate zones. It was noted there is already a credit option and the TAG discussed whether it should remain as a credit if it is moved into the prescriptive requirements. General feeling seemed to agree that allowing the credit would be beneficial at least for the first cycle of the new requirement. Kevin Rose noted that this proposal is associated with another that would lower the infiltration rate to 3 ACH.
Section R406 Basics: <u>24-RE-013</u>	Larry Andrews introduced his petition to remove all of Section C406. He felt the entire section was all about carbon emissions and violates EPCA.
	Kjell Anderson noted that Section R406.2 contains outdated language referencing carbon emissions after the associated table was changed to energy equalization, but the associated data is all related to energy efficiency. Larry indicated he had an updated proposal he will send to staff.
<u>24-RE-029</u>	Patrick Hanks' next petition seeks to replace Section R406 with the additional efficiency Section R408 from the IECC. The IECC offers more options and flexibility than the current requirements. He noted he would be willing to work on the proposal if the TAG felt it necessary.

	The TAG discussed the proposal and how the baseline would be determined. It was noted that some of the options would need to be adjusted to align with the current baseline and further work would be necessary depending on changes made to the prescriptive path for the 2024 code. The TAG also asked for more detail on the origins of the point values.
<u>24-RE-017</u>	Jonny Kocher said his petition mostly just moves the equalization table credits into the credit table.
<u>24-RE-030</u>	The TAG briefly discussed the origin of the equalization table. Patrick Hanks said he felt that heat pumps received double credits based on the current energy equalization table and credit options. Heat pump homes are required to achieve less credits, and thus less energy savings, under the 2021 code than under the 2018 code. This proposal goes back to the 2015 style of credits, where each home, regardless of heating type, needs to achieve the same number of credits. So you are no longer comparing a gas building to a heat pump building. The number of credits was calculated as the average number of credits needed to achieve the desired energy savings.
	The TAG discussed the difference in efficiency between fossil fuel equipment and heat pumps, as well as possible EPCA concerns.
<u>24-RE-046</u>	Larry Andrews introduced his petition to require that all dwellings, regardless of size, achieve 5 R406 credits. Additionally, if they include a basement, they would only need to achieve 4 credits, as basements are more efficient than above ground construction. Requiring more credits for a larger home is not equitable. With the trend towards multigenerational housing, it makes sense to make larger homes more affordable.
	The TAG discussed the concept and how it could be adjusted—should the number of bedrooms figure into the equation, or the percentage of conditioned floor area in the basement?
<u>24-RE-035</u>	Duane Jonlin introduced a petition to increase the credit requirement by one for medium and one and a half for large homes and introduces a new category for very large dwellings over 5,000 square feet. To achieve the statutory target, we need to reduce the currently energy use of homes by about 30 percent, which equates to 10 percent, or one credit, per remaining code cycle.
	The TAG discussed the idea of more dwelling categories and made some suggestions for different split points. It was also noted that the proposal loses the existing split for larger additions. There was concern voiced over the increase in credit requirements before the changes to the baseline are known and calculated. Based on the last progress report, not much gain is needed in this cycle to stay on track.
<u>24-RE-031</u>	Patrick Hanks submitted a petition with a different approach to the credit requirement, with a gradient based on the amount of conditioned floor area.

	This prevents the large jump in requirements when going from a 1500 square foot home to a 1600 square foot home.
	The TAG discussed the concept. Some felt it would be a rollback for the more common home types. A workgroup was assembled to provide some analysis and fine tune the language. The group consists of Greg Johnson, Anne Anderson, Duane Jonlin, and Kjell Anderson.
<u>24-RE-005</u>	Gregory Johnson introduced his petition to allow fossil fuel heating to be used in any situation that allows the use of electric resistance heating and removed any penalties for the use of supplemental heating. Supplemental heating shouldn't be taken into consideration when looking at the primary heating source and shouldn't be penalized.
	The TAG debated the proposal and noted some areas of the table that needed to be corrected. There was disagreement across the TAG on system sizing and the use of supplemental heating sources and the removal of System Type 2. As Greg noted the language was based on requirements in the commercial code, it was suggested that some of that language be included in this proposal for clarity.
<u>24-RE-004</u>	Greg's next petition reverts the energy equalization table back to the 2018 fuel normalization table. He noted that he could not find any supporting data for the change made.
	Kjell noted that the changes were based on modeling done, most likely by Ecotope. Jonny Kocher volunteered to search for the data and forward it to Greg.
5. Other Business	None addressed due to lack of time.
6. Adjourn	The meeting was adjourned at 3:02 p.m.