



STATE OF WASHINGTON

STATE BUILDING CODE COUNCIL

Department of Enterprise Services

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Commercial Energy Code Technical Advisory Group Meeting Meeting Review Notes for July 18, 2023

Agenda Items	TAG Actions
1. Welcome and Introductions	<p>Kjell Anderson, TAG Chair, called the meeting to order at 8:31 a.m. Roll was taken, and it was established that a quorum was present. Kjell laid out the meeting ground rules and procedures for being recognized. Legal counsel is not present at the meeting today, but will be reviewing the options sent forward from the TAG to advise the MVE Committee. Kjell recommended moving forward multiple options for the MVE to consider. The Council is still bound by the mandate to reduce energy use by 70 percent by 2031 and it should be possible to comply with EPCA without reducing the energy savings of the 2021 code. Anything moved forward will go through several more public forums prior to adoption. The TAG's main job is to provide good ideas and good language for consideration by the Council. Kjell also provided a brief summary of the actions taken at the last meeting.</p>
<p>TAG Members Present: Kjell Anderson, Chair; Ray Allshouse (alt); Erik Bedell; Chris Boroughs (alt); Sarah Brede (voting alt); Mike Fowler; Patrick Hayes; Gary Heikkinen; Luke Howard; Duane Jonlin; Gregory Johnson; John Lange (voting alt); Shane Nilles; Henry Odum; Erik Olnon; Irina Rasputnis; David Reddy; Liz Reichert (alt); Lisa Rosenow; Poppy Storm; Shaun Vig</p> <p>TAG Members Absent: Martin Connor, CJ Brockway, Allan Montpellier (Elizabeth Joyce also absent as alt), Gavin Tenold, Michael Curtright</p> <p>Visitors Present: Jay Arnold, Tom Handy, Roger Heeringa, Bryan Ahee, Laura B., Julie Banerjee, Kim Barker, Katya Bautista, S. Belzak, Misti Bruceri, Neil Bulger, Andi Burnham, Ian Casey, Kathleen Collins, Brett Conway, Michael Cook, Mallorie Davies, Thomas Deary, Chris Edmark, John Frankel, Aaron Guzner, Max Greenheck, Scott Henderson, Melissa Howard, Mary Hull-Drury, Ty Jennings, Noah Johnson, Jonny Kocher, Eric Lacey, Duane Lewellen, Doug Maddox, S. Mangeley, Ted McCammant, Jeanette McKague, Mark McMicheal, George N., Dave Nehren, Kathleen Petrie, Laura Petrillo-Groh, Jose Rios, Kevin Rose, Michael Rosenberg, Carlton Smith, Michael Snook, Kelly Thomas. Tom Young</p> <p>Staff: Stoyan Bumbalov, Krista Braaksma, Annette Haworth</p> <p>(alt) indicates an alternate TAG member in attendance (voting alt) indicates primary member is absent and the alternate has voting rights</p>	
2. Review and Approve Agenda	<p>Agenda approved as written. Duane Jonlin expressed some frustration that the agenda did not provide an order of consideration or any direction on review of the remaining proposals. Kjell stated he would like to go through the prescriptive options first, as there is already a motion on the table for the modeling proposals. So, begin with 004, 011, 012, 013, 021, 022, 023, 030, 025, 029, 014, 024, some modifications to 036, and 037. Then look at 036, 026, 027, and 028.</p>

<p>3. Review and Approve Minutes</p>	<p>The minutes of the June 21, 2023, meeting were approved as written (commercial TAG portion).</p>
<p>4. Review of Commercial Energy Proposals for EPCA Considerations</p>	<p>The TAG began by looking at the prescriptive proposals, starting with 004. Ty Jennings provided a description of 004, which removes portions of C403.1.4 and C404.2.1 that conflict with EPCA.</p> <p>Erik Bedell moved to recommend approval of 004. Greg Johnson seconded the motion. The TAG voiced a request to hear other similar proposals before making a determination on this proposal.</p> <p>Greg Johnson introduced 011 which strikes the heat pump space heating section and leaves the credit table as the source of efficiency gains. David Reddy remarked that the credit table would need to be revised accordingly. Gary Heikkinen stated he preferred this option over 004. The TAG also looked at Greg's 012, which similarly struck the heat pump water heating section. Greg noted that 013 should have been included as part of 012 as it just removed the rest of the HP water heating subsections. .</p> <p>Ian Casey introduced his 021, which is also similar to 011 and he noted the TAG could defer to Greg's proposal. The same is true for 022 addressing HP water heating. However, 023 includes 2018 language on high input-rated water heating in addition to striking the HP subsections. Several TAG members voiced the opinion that the 2018 language was important to include to prevent a step back on stringency. The same is true for Bryan Ahee's 030. Shane Nilles was concerned that the 2018 language may not be EPCA compliant.</p> <p>The TAG returned to the motion on 004. After some discussion, Erik and Greg withdrew the motion.</p> <p>Gary Heikkinen moved to package proposals 011, 012, 013 and 023. Patrick Hayes seconded the motion. The motion failed, 7 to 9. Some of the cited reasons included seeing it as a substantial step back in stringency, adopting something under the assumption that additional changes will also be passed, including recalculating credits, but not knowing what the final version will look like.</p> <p>Shane Nilles moved to approve 023, along with an alternate of the combined 012 and 013. Greg Johnson seconded the motion. The motion failed, 7 to 9, with similar reasons as the previous motion.</p> <p>The next proposal to be reviewed was 025 from Ian Casey, which adds two credit options for high efficiency gas water heating, with the credit amounts to be calculated through modeling by a third party. Proposal 029 from Bryan Ahee is similar with one gas water heating option.</p> <p>The TAG briefly looked at 014 from Greg Johnson which replaces C406 with the 2018 language.</p> <p>Lisa Rosenow moved to disapprove 014 based on the reduction of energy efficiency. Duane Jonlin seconded the motion. The motion, by voice vote, carried with no opposing votes and one abstention.</p> <p>Based on proposal 024, the TAG next discussed the need for recalibrating the C406 credits and requirements to equate to the efficiency gains from the heat pump requirements and to make determinations for new credit measures.</p> <p>The TAG moved on to consider the motion tabled at the June 21 meeting: Gregory Johnson moved to recommend approval of 21-GP3-036 as modified to include all the prescriptive path options in 011, 012, 013, 024, 025, and 029. Patrick Hayes seconded the motion. The motion was</p>

modified to remove 003, as it was disapproved at the meeting on June 21. Greg summarized the motion as removing the mandatory heat pump language (011, 012, and 013), adjusting the credits as necessary (024), adding new credit options for gas appliances (025, 029), and the changes to the performance path in C407 (036). **The motion failed, 6 to 9.** Some of the cited reasons for voting against this proposal: the credit adjustments are still an unknown factor; portions of the original 036 are outside of the original EPCA response mandate; there are new versions of 036 to consider; and some of the building performance factors look like they may be off.

Gary Heikkinen **moved to recommend approval of the previous package of proposals (011, 012, 013, 024, 025, 029, and original 036) with the added direction that the credits would be recalculated and increased as needed and the building performance factors recalculated.** Patrick Hayes seconded the motion. **The motion failed, 6 to 9.**

The next discussion was on the new 036 options 1 and 2. Jonny Kocher noted the original version focused on the performance modeling approach and struck the mandatory requirements for HP space and water heating. Based on feedback from the last meeting, he added a prescriptive pathway. [Option 1](#) strikes the HP requirements in C403 and C404 and relocates them to C406 as credit options. He noted that Exception 18 was missing from the HP space heating section and needed to be added. [Option 2](#) creates two separate pathways in C403.1.4 and C404.2, one for gas and one for heat pumps and adds a new table to C406 requiring additional credits be achieved when using gas appliances. Poppy Storm noted that the proposals pretty much incorporates the language from 011, 012, 013, 022, 024 and 026, but maybe 025 should also be added. Gary Heikkinen suggested that 029 be added as well. There was a long discussion on modeling to determine the proper credit numbers and equivalencies and the timelines involved. There was also a discussion about whether this would be EPCA compliant as there is a penalty for using gas. Another topic was the switch from emissions to site energy.

Poppy Storm made a motion to **move both Option 1 and Option 2 of 036 forward to the MVE Committee for consideration.** Lisa Rosenow seconded the motion. Lisa amended the motion to include that additional language will be developed to address supplemental gas heating. Poppy accepted the amendment to the motion.

Gary Heikkinen **moved to modify the motion to include language from 023 and 025** in both options. Greg Johnson seconded the motion. Jonny Kocher suggested that 023 was not compatible with the two options. Gary **withdrew the addition of 023.** There was a voice **vote on adding 025, which carried with no opposing votes.**

The **main motion carried, 12 to 2** with three abstentions.

Duane Jonlin presented a PowerPoint on his revised [037](#). The basic premise is to make up any loss of efficiency between using heat pump water and space heating and using gas space and water heating with additional C406 credits to make up the difference. He used the conversion factor that Jonny Kocher developed to translate from carbon emissions to energy use. Duane worked with Neil Bulger on energy modeling over the past two weeks to arrive at the necessary credit amounts. In the models completed, it takes a significant number of additional credits to make up that deficit. In many cases, this could only be made up through renewable credits.

	<p>Greg Johnson asked if any hybrid systems had been modeled, to which the answer was no. Mike Rosenberg asked why the revised proposal does not require TSPR; Duane replied that the current version is based on a heat pump system, although a fossil fuel TSPR path could be recreated, but it would take time and money. Poppy also felt there was no need to remove the TSPR requirement. There was some TAG discussion on the use of formulas to calculate the necessary credits and if there was an easier method. Greg asked if supplemental gas heating would be allowed, to which Duane answered yes, but then you'd need to follow the fossil fuel pathway. There was also a discussion of electrification readiness requirement in Section C401.3.6 and if the additional construction cost was warranted.</p> <p>Duane Jonlin moved to recommend approval of 037 modified to remove item 6 in C401.3.1 (TSPR exemption). Mike Fowler seconded the motion. The motion carried, 9 to 4 with four abstentions.</p> <p>Duane agreed to work on some specific examples over the next two weeks for the next TAG meeting, as a part of the motion for 037.</p> <p>Kjell noted the TAG has yet to look at any changes in Chapter 5, which will be necessary. David Reddy suggested looking at a pathway that limits the prescriptive pathway to certain building types. Duane Jonlin stressed the need to look at the proposals once the credit options have been fleshed out.</p>
9. Adjourn	The meeting was adjourned at 4:00 p.m.

Attachments:

- Kevin Duell [Proposal Comparison Spreadsheet](#)
- [Revised 036, Option 1](#)
- [Revised 036, Option 2](#)
- [Revised 037](#)
- [PowerPoint Presentation](#) for 037