



STATE OF WASHINGTON

STATE BUILDING CODE COUNCIL

Department of Enterprise Services

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Energy Code Technical Advisory Group Meeting Review Notes for July 13, 2018

Agenda Items	TAG Actions
1. Welcome and Introductions	Meeting called to order at 9:04 a.m. Duane Jonlin welcomed everyone and introductions were made
<p>TAG Members Present: Duane Jonlin, Chair; Amy Wheelless; *Bill Krause; Bryan Russo; Chuck Murray; *Andrew Pultorak; Dave Baylon; Jared Sheeks; Kim Barker; Lisa Rosenow; Mike Fowler; Robby Oylear; Treasa Sweet</p> <p>Visitors Present: Eric Vander Mey, Mike Kennedy, Medgar Marceau, Michael Rosenberg, Louis Starr, Eric Makela, Eric Lacey, Nick O’Neil, Rick Crooks, Dave Nehren, Roger LeBrun, Jeff Sloan</p> <p>TAG Members Absent: Alan Duer, Dean Moody, Gary Heikkinen, Jonathan Jones, Mike Lubliner, Todd Blevins, Paul Highly</p> <p>Staff: Krista Braaksma</p> <p style="text-align: right;">* indicates an alternate member</p>	
2. Review and Approve Agenda	Agenda approved as modified. Chuck Murray requested that Env020 be taken off the table and added to the agenda. The TAG concurred.
3. Review and Approve meeting notes for June 15	The meeting summary was approved as written.
4. Review of Commercial Admin/Scope and Envelope Code Change Proposals	
Env013	<p>Lisa introduced a revision of both 012 and 013. The revision clarifies the envelope requirement details. It also folds in requirements from previously approved proposals. Duane asked about the economic impact of the proposals. Nick O’Neil said the impact hasn’t changed from the original proposal; there is a relatively short payback of about a year for most greenhouses</p> <p>Motion: Chuck Murray, Mike Fowler moved to recommend approval</p> <p>Motion: Lisa Rosenow moved to modify the proposal by adding Item 4 from Env012. Robby Oylear seconded the motion. The motion carried four to three.</p> <p>Main Motion as modified. The motion carried five to three.</p>
Env012	<p>Chuck spoke in opposition to the heating portion of this proposal.</p> <p>Motion: Chuck Murray, Dave Baylon moved to recommend disapproval. The motion carried four to three.</p>
Env019	<p>Chuck felt that since another proposal with similar language was approved and the necessary economic analysis is not forthcoming he recommends disapproval.</p> <p>Motion: Chuck Murray, Mike Fowler moved to disapprove. The motion carried with</p>

	no opposing votes.
<u>Env020</u>	<p>Chuck said this was essentially the same as the previous proposal. It was passed by the TAG at a previous meeting but the Chair sent it back for lack of economic support on removal of occupancy types and the addition of line 5. The proposed modification only defines when the exception is allowable. Louis asked what the industry thought about this. Rick Crooks asked for additional time to review the proposal. Duane agreed that additional time should be allowed.</p> <p>Motion: Chuck Murray, Dave Baylon moved to approve <u>as modified</u>. Chuck later withdrew his motion and the proposal was tabled to allow further consideration. The motion carried with no opposing votes.</p>
<u>Env025</u>	<p>Mike Kennedy said after this was passed at the last meeting he discovered some instances where the references to “area” were not clear so this just clarifies the terms.</p> <p>Motion: Chuck Murray, Mike Fowler moved to recommend approval <u>as modified</u>. Motion carried.</p>
<u>Env026</u>	Withdrawn by Proponent
<u>Env027</u>	<p>Duane noted that 026 and 027 were both trying to fix the same problem. This one also incorporates the SHGC fix from 025. It should now match the formula NEEC uses in the compliance forms. Mike noted the proposal on the board still did not provide all the necessary fixes. After a break, Duane came back with the appropriate changes to fully coordinate the equation with the compliance forms.</p> <p>Motion: Chuck Murray, Dave Baylon/Treasa Sweek moved to recommend approval <u>as modified</u>. The carried.</p>
<u>Env032</u>	Withdrawn by Proponent
<u>Env033</u>	<p>Dave Baylon felt the last sentence did nothing but cause confusion and proposed striking it. The TAG discussed the appropriateness of the 45 degrees of true north at this latitude. Chuck Murray suggested it be changed to 30 degrees.</p> <p>Motion: Dave Baylon, Mike Fowler moved to recommend approval <u>as modified</u>. The motion carried with no opposing votes.</p>
<u>Env038</u>	<p>Mike noted the section switched between gross and net floor area. The mashup went to 25% of net floor area, which allows a large number of buildings to comply. Duane felt it was an error in accepting the IECC changes in this section, since it ends up being less stringent than the original WSEC language.</p> <p>Chuck suggested simplifying the proposal by striking item 2 and deleting the first part of the sentence in part 1.</p> <p>Motion: Dave Baylon, Chuck Murray moved to recommend approval <u>as modified</u>. The motion carried with no opposing votes.</p>
<u>Env039</u>	<p>Chuck felt the net floor area definition should be deleted in light of the adoption of 038, so the TAG is only looking at items 3 and 4. Lisa said this was just a cleanup and clarification of the code language. Mike Rosenberg wondered if the exceptions to C405.2.4 would get you out of daylighting controls. He suggested specifying you need to have those controls.</p> <p>Motion: Chuck Murray, Treasa Sweek moved to recommend approval <u>as modified</u>. The motion carried with one opposing vote.</p>
<u>Env040</u>	<p>Eric noted that this would set the visible transmittance at 50 percent or higher, which is better than the current baseline and product is readily available.</p>

	<p>Motion: Treasa Sweek, Dave Baylon moved to recommend approval. The motion carried with one opposing vote.</p>
Env041	<p>Eric Lacey said for about a 10% increase in U-factor, this section would allow a 30% increase in glazing area. The proposal tightens up the requirement and makes the requirement material neutral. It uses a metal framed window at 30% as the starting point, the calculated U-factor for equivalent for 40% glazing would be about 0.285. The same calculations were performed for SHGC values. Eric Vander Mey questioned whether there was actually any double glazed window that would meet the requirements. Duane questioned the cost effectiveness.</p> <p>Motion: Dave Baylon, Chuck Murray moved to recommend approval. Chuck Murray moved to table to align this with the proposal with the previous U-factor proposal. Treasa Seconded. Chuck withdrew his motion to table. The motion failed, four to five.</p>
Env042	<p>Duane noted there was no economic analysis with this proposal. He asked if the TAG wished to continue to move forward on it. The consensus was to move forward. Lisa noted the proposal would prevent DOAS buildings from triple dipping for benefits.</p> <p>Motion: Chuck Murray, Lisa Rosenow moved to recommend approval. The motion carried.</p>
Env044	<p>Lisa noted this proposal was intended to close a loophole in the code related to skylights. It address three problems. The first is leveling the playing field for buildings with both single and multi-story portions. The second issue is the fact that the exception would allow a building type required to have skylights to be exempted by just meeting the required LPA. The final part clarifies control requirements in warehouses. Duane noted there is always an overlap of daylight sensing and occupant controls. Lisa agreed to the removal of the proposed exception to the warehouse controls. Mike Rosenberg suggested some simplified language for exception 2.</p> <p>Motion: Treasa Sweek, Mike Fowler moved to recommend approval.</p> <p>Motion: Chuck Murray, Andrew Pultorak moved to modify the motion by striking the exception to C405.2.1.2. Motion carried.</p> <p>Motion: Andrew Pultorak, Chuck Murray moved to further modify Exception 2 to Section C402.4.2. Motion carried with one opposing vote.</p> <p>Call for Question: For the proposal as modified. The motion carried.</p>
Env045	<p>Louis Starr noted the proposal would require buildings to pass the air barrier testing. The proposal includes an exception for certain sized buildings, but Louis noted that he would agree to remove the exception based on comments that it wasn't any more difficult for the larger buildings to pass the test. Chuck felt the exception should be removed. As it stands now, this section is not being enforced in many locations with the built in out. Chuck felt this needs to be enforced to get the intended energy savings. Duane commented that this section can cause some heartburn because you don't know if you can get a C of O until the last possible minute.</p> <p>Motion: Chuck Murray, Treasa Sweek moved to recommend approval as modified. The motion carried with two opposing votes.</p>
Env046	<p>Mike Fowler introduced the modified proposal from Passive House Northwest to reduce the infiltration rate from 0.40 to 0.25. The revision also adds requirements for 60% heat recovery effectiveness in multifamily. Duane noted that the proposal in Seattle for 0.25 was not supported but the industry did say they would support 0.30.</p>

	<p>Eric Vander Mey noted the proposal will need to be correlated with the mechanical code. Treasa noted the ventilation portion would need to point back to the commissioning provisions. Robby Oylear felt the ventilation provisions should be in a tradeable section, while others felt it should be mandatory. Robby successfully argued that it should at least be in the equipment selection section and added to Table C407.2 if it is determined to be a mandatory provision. Lisa asked how this would work for existing buildings. Duane tasked her with crafting language for chapter 5.</p> <p>Motion: Chuck Murray, Lisa Rosenow moved to recommend approval as modified. The motion carried with no opposing votes.</p>
Env047	<p>Robby Oylear said this was intended to address buildings using natural ventilation and leaving doors propped or rolled open. There was a question on how this would be enforced.</p> <p>Motion: Robby Oylear, Treasa Sweek moved to recommend approval. The motion failed, two to five.</p>
Env048	<p>Eric said this proposal clarified that small, separate occupancies that essentially function as a vestibule in themselves do not require a vestibule as long as they have a door to the rest of the occupancy. The TAG wordsmithed the proposal to clarify the intent.</p> <p>Motion: Dave Baylon, Chuck Murray moved to recommend approval as modified. The motion carried with no opposing votes.</p>

5. Review of Commercial Mechanical Code Change Proposals

Env141	<p>Mike Rosenberg spoke to some of the changes he's made to the proposal in response to TAG comments addressing 90.1 mandatory requirements. He also correlated the proposal with earlier approved proposals. He noted there was a group working on the electricity numbers (see Chuck Murray's presentation). There were concerns that the proposal would favor electric over gas.</p> <p>Motion: Chuck Murray, Treasa Sweek moved to recommend approval as modified.</p> <p>Motion: Dave Baylon, Lisa Rosenow moved to modify the electricity line to 0.55. Motion carried three to two.</p> <p>Mike Rosenberg noted the table would need to be changed to reflect that value as well. Chuck noted his motion includes the understanding that the proposal will need to be modified to account for other changes made within the code.</p> <p>The modified motion carried.</p>
Env143	<p>It was noted this proposal would need to be coordinated with the changes made as part of 141.</p>
Env144	<p>It was noted this proposal was already voted at a previous meeting.</p>
Env049	<p>Eric noted these definitions come from ASHRAE 90.1-2016. These are currently undefined terms in the WSEC.</p> <p>Motion: Chuck Murray, Treasa moved to recommend approval. Motion carried.</p>
Env051	<p>Jeff Sloan summarized his proposal to address data centers. After much discussion, the TAG sent the proposal back to the proponent to address questions on internal references to ASHRAE 90.1 within standard 90.4, how to address the addenda, and other edits that need to be made. Mike Rosenberg and Louis Starr will work with Jeff</p>

	<p>to revise the proposal and come back in two weeks.</p> <p>Motion: The proposal was tabled, to be considered at a future meeting to give the proponent time to consider the issues raised by the TAG.</p>
<u>Env052</u>	<p>Eric said the proposal looks to clarify the requirements for duct insulation by incorporating a table and details from both the code commentary and ASHRAE 90.1</p> <p>Motion: Lisa Rosenow, Mike Fowler moved to recommend approval. Dave Baylon, Chuck Murray moved to add R-3.3 on supply air and the associated modification to C403.10.1.2 exception 2. Motion carried on both.</p>
<u>Env053</u>	Withdrawn by Proponent
<u>Env054</u>	<p>Mike Kennedy noted the proposal extracts language directly from ASHRAE 90.1. The main difference is the WSEC language makes it sound like the zone itself has to be over 25,000 square feet. Eric asked if this was intended to address DOAS or just other systems. The use of the term “isolation zone” was questioned, since this isn’t a defined term.</p> <p>Motion: Lisa Rosenow, Treasa Sweek moved to recommend approval <u>as modified</u>. Motion carried with one opposing vote.</p>
6. Other Business	The next meeting is scheduled for July 20 at the Smart Building in Seattle.
7. Adjourn	The meeting was adjourned at 3:06 p.m.