

STATE OF WASHINGTON

STATE BUILDING CODE COUNCIL

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STATE BUILDING CODE COUNCIL MEETING MINUTES

LOCATION:

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CenterPlace Regional Event Center 2426 N. Discovery Place Spokane Valley, WA 99216 DRAFT

MEETING DATE: September 14, 2018

<u>Members in Attendance</u>: Doug Orth, Chair; Jim Tinner, Vice Chair; Al French; Diane Glenn; Leanne Guier; Robert Graper, Traci Harvey; Duane Jonlin; Andrew Klein; Steve Simpson; Kevin Shutty, Eric Vander Mey

Members Absent: Barry Long; Phil Lemley

<u>Staff In Attendance</u>: Richard Brown, Managing Director; Dawn Cortez, Assistant Attorney General; Krista Braaksma; Ray Shipman; Lori Yantzer

<u>Visitors Present</u>: Al Leech, Louis Starr, Randy Hastings, GF Scheuermann, Brendon Mattis; Micha Chappell, Robert Dixon, Guy Miller; Jan Rohila; Chuck Murray; Lee Kranz; Matt Ojala; Dave Kokot: Dennis Richardson; Craig Stevenson; Shane McClary; Janice Whitman; Pam Allen; Margaret Spitznas; Greg Schrader; Terry Beals; Gary Higgin; Dave Baylon; Mike Baranick; Mike Rosenberg; Amy Wheeless;

Agenda Items	Council Actions/Discussion
1. Welcome and Introduction	Meeting called to order at 10:00 a.m. by Chair Doug Orth. Everyone was welcomed and introductions were made.
2. Review & Approve Agend	Items 8 and 9 were combined, otherwise the <u>agenda</u> was approved as written.
3. Public Comment on Items not on the Agenda	There was a request for an interpretation clarification. The proponent will contact SBCC staff.
4. Review & Approve Minute of July 27, 2018	s The <u>minutes</u> were approved as written.
5. Overview of Council Proce	ss Richard Brown made a PowerPoint presentation. There was no discussion or action.
6. Public Comments/Proposed Off-Cycle Rules*	
 IBC Table 1604.5 – Add Group I-4 to Risk Factor III 	No Public Comments
 Section 602.4 et al, Mass Timber 	<u>Matt Ojalla with Forterra</u> - We are a nonprofit that works to make our communities and our regions as a whole here in the State more sustainable and more livable. We

are in strong support for the Mass Timber proposal. We've worked in close partnership with AIA Washington Council in developing it and to see it advance here in the State. Forterra believes strongly, that Mass Timber plays an important role here in Washington and in the potential benefits it has to offer to our State. It has the ability to support rural communities, health efforts, and to be an important building product future of our cities. Over the last four years, Forterra has led a statewide coalition to really see that we can move forward Mass Timber here in the State. We had over 100 groups in our coalition ranging from government agencies, elected officials, timber companies, environmental groups, architects and builders, all sharing the belief that Mass Timber plays a key role in [inaudible] Washington. Critical to these efforts are the building code changes before you, they have been vetted thoroughly over a number of years, brought in by a variety of stakeholders. I'll just add in addition, as I am sure you are aware, the State Legislature has been keeping an eye on this as well. Passing legislation earlier in the year that requires updates to the State Building Code on Mass Timber and notably that legislation passed with overwhelming support in the House and Senate. So again, Forterra is in support of this proposal, there's strong support thru out the State and we want to thank you for all of your efforts.

<u>Jim Tinner</u>- I highly recommend that we follow the ICC process which will continue thru November regarding Mass Timber, and look at implementing as soon as possible. It's the only carbon sync and the only truly renewable product left and it has survived the fire type test C in type 1 and type 2 construction. I recommend that we follow the ICC process, and wait until the end of the CDP Access vote, which I believe is November, with whatever the IBC process comes out with.

Dennis Richardson /Western Regional Manager with American Wood Council -We are a not for profit trade organization, we have code committees that work on the standards that wood buildings are built with in the IBC and the national design specification as well as the special design requirements for wind and seismic. We also work very closely with local officials and with the ICC process. We made the request for the ICC Board of Directors to have a tall wood ad hoc committee. They asked of the membership if they thought it was a good thing, because of a lot of the interest in Tall Mass Timber Buildings, and they agreed to go forward with it. They put forth a balanced committee, we've had one member of our staff on that Committee, and like I said, it's a balanced committee that represents a lot of code experts, fire officials, and code officials. They've come up with these code change proposals. There's three new types of construction, type 4A, 4B and 4C. The type 4 heavy timber is still left in there unchanged. Basically I think that one of the questions some of the proponents have brought up, is the contribution of wood, to a fire. What I can tell you, and I've spent a lot of time working on this involving testing. Fire behaviors really depends on the amount and the arrangement of the exposed wood and the adhesive. That kind of lends itself towards the 3 types of constructions. Very briefly, type 4A, everything's covered up with gypboard, 2/3 of the fire resistant rating has to come from noncombustible materials like chipboard. Type 4B, there's some small elements that are allowed to be exposed, and it has fire resistant ratings similar in performance to type 1B construction. Then there's type 4C, which is kind of like Heavy Timber on steroids. It doesn't go any taller than heavy timber, but it allows more floors instead of the 45 to 1 hour type fire resistance of heavy timber that we've known and loved for years, it has a two hour fire resistant rating. There's been a lot of misinformation, that's been promulgated by some folks that are opposed to these proposals, and I really appreciate the opportunity to speak today, I'm not going to go into a lot of the details, but if there is technology Information that is being provided, some of it may be misinformation, I just request the opportunity to rebut that information

respectfully.

<u>Doug Orth</u>- Can you speak to what Jim raises and the what the difference would be to what's he's suggesting and what the current proposal is?

Dennis Richardson- I think the question was to wait to see what the ICC consensus was. I can speak to that very briefly. The ICC process has the first step which is the technical committee votes. All 14 of these code changes have been blessed by the code change committees. I think in all those cases, there was no more than 2 or 3 people that voted, out of the committee of 14 that voted, against any of these. The second step in the ICC process, is the ability for anyone to submit a public comment. That then goes to a hearing in October, in Richmond Virginia. That sets the agenda based on the feedback of the governmental members for the online government consensus vote. That ratifies what's done in Virginia, and that will be done in November. I think he's asking to wait to finalize any of this to wait till it goes thru that process. I think it's built into the schedule.

<u>Steve Simpson-</u> Thank you Mr. Chair. My question is for Richard. What did we get for direction as far as the State Legislature? I know our first speaker talked about passing some bills about what to do with Mass Timber, and requested that the SBCC do something. I just want to make sure we are not holding anything up, and that we are following our legislative mandates, if there are any.

<u>Richard Brown</u>- I apologize I should pull it up, but my memory is that there is no timeline for the legislative mandate and that we consider national standards.

<u>Doug Orth</u>- Richard is correct, the legislature did not have time line associated with it. I think we have every due diligence to expedite this to the greatest extent possible.

<u>Traci</u>- I have been following this closely, and I will be in Richmond on Oct 24th when these hearings start for the public comment. I checked it twice to be sure, There really doesn't appear to be a lot of impact to the changes on what the original ICC language was at this time. At this point we are fairly safe, at this stage of the game that we aren't looking for any big last minute surprises.

<u>Richard Brown</u>- I just have a point of clarification for the Council. Thru this public comment process, if there are some substantial changes, then we have to go back to square one. We can't be modifying the proposal.

<u>Doug Orth</u>- My interpretation of what I just heard would be, if there's an ICC document that's substantially different from what's currently being proposed, then the review cycle process starts over again.

<u>Richard Brown</u>- That's correct. The Council has the option to see if these changes are desired and substantial, then we would stop this process and start over again with the changes. If you agree they are minor, then you can just incorporate them as part of public comment.

<u>Krista Braaksma</u>- I just wanted to clarify in order to have something in effect Next July, the Council will have to adopt by December 1.

<u>Lee Kranz/Representing the WABO Technical Committee</u>- We are in support of this proposal, we think it makes a lot of sense, and the sooner we get it adopted the better.

<u>Jim Tinner-</u> I agree with Lee. This proposal makes good sense, and we should follow The ICC process. I don't think there will be a lot of controversy from the CDP access folks, at the Committee action hearing, it was almost unanimous support for these proposals, and I think we are on the right track with Mass Timber.

<u>Craig Stevenson/Representing International Code Council</u>. I didn't want to cause any distraction in the room for my counterparts that spoke. My purpose in coming forward is just to provide some clarity on dates. I understand the piece of legislation we have to deal with, the Councils process, and I understand the timeline which were very clearly articulated. The public comments hearings will be October 24th thru the 31st. The online governmental consensus vote will be on November 15th thru the 30th for the ICC process. It always takes a few days, to a week to provide you with what the results are from the consensus vote. Given that you have November decision making to be able to put forward a permanent rule, I just realized that you have that time. So I am not going to comment on whether you should or shouldn't adopt this. I think you have enough information brought forward by other people who have been following the technical requirements and other activities very carefully. I just wanted to provide you with these dates so you are aware of them as you contemplate your decision making.

<u>Doug Orth-</u> If I may reiterate, the ICC Process will be done essentially by the end of November. We have a December 1 deadline to put this forward to submit to the legislature and sit thru the cycle to be adopted by next July 1. So there's a couple of things that could happen. If there are substantial changes from the ICC which we may or may not adopt now or there could be minor changes which we could make thru the reconciliation process. So we've got a couple of options, by moving forward with this adoption as soon as possible. Is that accurate?

<u>Craig Stevenson</u> I believe so, and Council may decide that they have confidence to move forward with the permanent rule. Council may find at a future date, that there was substantial changes and if there were, I do believe Council has some tools to consider repeal of what they would do. Am I accurate on that Richard?

Richard Brown- Yes, but with limited options.

- Shane McClary-I'm here kind of wearing two hats. I am here representing the Washington Electronics Security Association and also Bay Alarm Company. We have a branch in Everett over on the west side. This is regarding the allowance using The ESA, NTS program as equivalent to the NICET certification for fire alarm, which is now required if you work on fire alarms within the state of Washington. I hold both certifications, I hold the NTS certification and I also hold the NICET certification in fire alarm. Both programs are very good, and I feel are equivalent. The one issue with the NICET is the time. I took an exam $2\frac{1}{2}$ months ago, another NICET certification on sprinkler systems, and I am still waiting to hear back from them for a review of my documentation. I passed the exam, and it's still 2 1/2 months later I have still yet to hear from NICET. On the NTS side, when you go thru that process, you actually take a class, and at the end of the class is the proctored exam. In about a week, you get the results back that you either passed the exam or not, and you receive a certification at that time. It's a lot quicker process. Also for those that are installing fire alarm systems, I think the NTS does spend a little more time in the actual installation of the fire alarm system. In NCIT certification, especially level 3 and 4 which is also required in the state if you do level 3 for design work which is more on the design side than the installation side. So I am just hear to say they are equivalent, but would urge the Council once you get to that point, to adopt the NTS thru the ESA which can also
- IFC: Section 907.10 Fire Alarm Certification alternative

be used to obtain the required certification to install fire alarm systems within the State.

Janice Whitman representing the ESA and the Washington Alarm Company – The NICET certification is really more of a test, there are requirements that you have to meet in order to become certified. As a company, we like the NTS approval because it is classes and as Dr. McClary mentioned, it does have a test afterwards, but there are actual classes that everyone has to take, in order to have this equivalent certification offered by ESA.

<u>Pam Allen Electronic Security Association of National Training Schools.</u> Our fire certification has been approved as equivalent to the NICET Certification in a number of states. It was included in the proposal on Level 3 Fire Certification and the level 2 for the technicians. They go thru a training process, and they also have an exam. For the Level 2 there are actually 3 courses that they need to take and pass each one of those examinations, then once they've completed it, they turn in the paperwork that shows proof of their 2 years of work experience, in order to obtain the certification. For the Level 3, there are some additional courses they have to take, in addition to the first 3 courses. and pass that exam, then they take a comprehensive exam to obtain the certification. And again, they have to provide proof of the work history, recommendations, etc. Our process is equally as stringent, the only difference is we actually provide training.

<u>Shane MClary</u> – Having taken both of the exams, they do pretty much contain the same scope of knowledge between the various exams.

<u>Micah Chappell</u> –Just reviewing this section that they proposed, it does not align currently with the 2018 ICC. Is this proposal for the 2018 ICC or 2015 ICC?

Doug Orth- the 2015 ICC

<u>Micah Chappell</u>- Ok, because if they are amending this section, that section is currently all about system maintenance in the Code and not for certification.

<u>Traci</u>- That would be a numbering change because what they submitted in the 2018 TAG process there was a desire for this just to be an emergency rule, but need not be lifesaving issue, so as it was expedited to the rulemaking path this seemed to get it in place sooner. The only issue was for the number to fit into the 2015 Code but would not change the language. My understanding was this was technical change and not a substantive change.

<u>Margaret Spitznas The Executive Director of the Washington Electronics Security</u> <u>Assoc</u>- The members that we have polled, and have spoken to a lot of Fire Marshalls, all fields said that this alternative would be very valuable. Not only to try to get their people thru quicker, but also for the education portion of it. The education portion of it is just extremely valuable. I know that a lot of companies have had experience with having their people have to take the NICET more than once just due to the fact the training is just not there, it's just a test.

 IBC/IFC Section 3101/3801 – Passenger Rail Systems <u>Greg Schrader with City of Bellevue –</u> We had actually encouraged Sound Transit to approach the State Building Code Council because the challenges with integrating NFPA 130, which is the standard used universally throughout the US for light rail systems and stations. The challenge of integrating of what NFPA 130 covers with what the IBC covers, and how do you reconcile conflicting provisions. Would a local city adopt NFPA130? Would they accept it as an alternate? There's a lot of things that NFPA 130 doesn't cover that are in the IBC. We've spent a lot

	of time working with Sound Transit. I think the City of Seattle went thru a similar process, in trying to reconcile the two in what we felt was a reasonable way. That was kind of the incentive, to encourage Sound Transit.
	<u>Jim Tinner-</u> On our TAG, we spent quite a lot of time on this topic, the City of Seattle and the City of Bellevue have already adopted NFPA 130. It makes sense to have the same rules across Sound Transit lines. I would highly recommend that we [inaudible] of NFPA 130.
	<u>Doug Orth</u> - I would also encourage both Committee Members and other interested parties to read the proposal. There's a significant cost impact savings that can be realized as a result of this adoption.
	<u>Traci</u> – [inaudible] when it came to the Fire Code TAG, we are already moving to a new chapter 38, and we had moved this into section 320 in the Fire Code, giving its own subsection under general provisions versus 38 which Sound Transit was ok with that. It's just still in there under general provisions, it's just a numbering item that I don't see reflected here. I do know that it was discussed. The representatives of Sound Transit seemed to be having issues with the new location, since we didn't change any language we just put it in a place that made more sense.
	Duane Jonlin- So Traci, your comment is just about coordination and get it integrated?
	<u>Traci</u> - Yes, it just made more sense. There is some not substantive change, it's a numbering Item that will be noted later to be corrected. In this case it's expedited to match up with the 2015. In either case, there is an existing chapter 38 that already occupied that spot. I am pretty sure that Sound Transit is going to want [inaudible] supply for their facilities.
	Terry Beals with Sound Transit- I support that.
	<u>Terry Beals</u> – I would just like to make a quick comment. I appreciate all the support by the folks who were commenting this morning. We appreciate the whole Council action on this and look forward to working with all the jurisdictions in moving forward to build this light rail system. Thank you very much.
WSEC Section C402.1.5 – UA Calculation	No public comments
 corrections Section C404.6 – Pipe Insulation exception for short runs 	No public comments
• IRC: Section R403.1.1 Footings	No public comments
7. Emergency Rule Request – City of Bellevue IBC 1613.5	<u>Lee Kranz</u> - I believe Greg Schrader our Building Official is in the audience and he's going to want to speak to it also. This amendment was intended to create a level playing field for the state in terms of the design loads that apply to high-rise buildings, exceeding 160 feet, to resist lateral loads. The proposal is based on recommendations from nationally recognized experts in structural review and design. The City of Seattle has already implemented these rules and they felt that the changes were necessary and important enough that they would adopt it. We feel

that this improves the safety of the occupants of these buildings to ensure we are applying the current science related to structural design and post-earthquake resiliency. I will also note, that the Building Code TAG endorsed the proposal that we also submitted for 2018 IBC.

Greg Schrader- I would like to add briefly to what Lee said. I testified on this myself as did Steve Pfeiffer who I think should be on the phone. There's about 20 years experience on the West Coast, Seattle area, San Francisco, Los Angeles, some of those cities with these buildings that are performance based designs. Typically what is happening is yo'ur using panels with a two walled system that is over 240 feet in height that's outside the bounds of the code. We've had peer reviews done by experts, in fact the city of San Francisco requires a panel of 3 peer reviewers, it gets a little complicated. So both Seattle and Bellevue have buildings that exceeded 240 feet back in the late 90's. So there's been a lot of experience with this. As the computer capability has increased over time for analyzing these buildings, we discovered some deficiencies that on the performance based buildings these have been addressed, but there's concerns that the buildings that range from 160 to 240 feet, which have similar issues that don't want to have to go thru the peer review process, that these really should be addressed. The problem with going through the National Code change process, has been the amount of time it takes because of trying to sync up ASCE7 code cycle with the IBC. We have the potential to go through the national process and not be effective here until potentially as late as July 1, 2026. We're in the middle of a development boom at this time, we are encouraging engineers to take this into account. Most of the local engineers are aware of it and designed to it. We have concerns about people from outside the area coming in and may choose to not follow these recommendations. So as Lee says, we're just trying to get to a level playing field. Seattle has adopted it into their code effective July 1, 2016. I know the City of Tacoma supports it, Sue the Building Official there is in favor of it, and we've reached out to some other folks and I think there is some pretty widespread support for it. I don't know whether it should be an emergency rule or not, but we would like it to be effect at least by July of 2019 if possible. And as Lee mentioned, we do have a proposal for 2018.

Jim Tinner- Has the FCAW weighed in on this?

<u>Greg Schrader</u>- Yes, I actually, and I don't know if the materials were distributed I sent Richard about a week ago. The copies of the minutes, has been discussed several times at the Statewide FCAW engineering committee going back to when Seattle was first proposing this amendment to their code. There was a lengthy discussion in that meeting that myself and Steve Pfeiffer had attended. And at another more recent meeting, I wouldn't say its 100% consensus, there was a discussion about the pros and cons of the national process but it was definitely a substantial majority for making the change because of the known inefficiencies.

<u>Lee Kranz</u>- I just wanted to point out to the Council there were 2 different proposals submitted, one that would follow the Emergency Rule track, then the other was just a typical submittal that would be included in the 2018.

<u>Greg Schrader</u>- I do have additional information, I don't know if you received it, Richard. I have two different sources of information. One was from an engineering firm in Seattle, Magnuson Klemenick, who did a design of a 240 foot building. They estimated, for the 3 provisions combined, which are listed here, it effects the sheer wall, the diaphragm, and the [inaudible] foundation. With a rough magnitude cost of \$250.000. That was their estimate.

	Doug Orth- Does that include the third party peer review?
	<u>Greg Schrader</u> - No it did not, just the hard construction costs. The 160 to 240 foot range a third party peer review is not required. This would implement prescriptive requirements for the foundation, diaphragm and sheer wall.
	Doug Orth- But it does require a lateral analysis between 160 to 240 correct?
	<u>Greg Schrader</u> -I am not sure, I would have to check for the changes, I don't know if Steve Pfeiffer is on the line here, if he is, he can verify that. On the costs impact, we've got a bunch of them under construction right now in Bellevue that did implement all 3 of these prescriptive post requirements. The developer sent the information estimating based on the tonnage of the added rebar, they estimated between \$80,000 and \$90,000. Now they self-perform on some of the labor, so I'll round it up to \$100,000. So that's in the range between \$100,000 and 250,000 for 24 stories, and that's for all three combined.
	<u>Lee Kranz</u> - Just a quick rebut, of the comments that were made about not pursing it as an emergency rule. I think in our area we have a lot of large commercial projects that would fit into this category that not adopting the emergency rule, would create the option for engineers to use a lesser standard that's in our current code, which creates inconsistency in Code application. Our goal is to create more consistency in the way that we apply the codes. I recommend approval. Thank you.
	<u>Jim Tinner</u> I'm not sure I understand the Code proposal, is this a lessening of the Standard 38?
	Steve Simpson- This is actually increasing the Standard from the way I read it.
	Greg Schrader- Yes it is, all three provisions would increase the standard.
	<u>Jim Tinner</u> - The Specialty Engineering Association of Washington feels that our current standards are inadequate. They support this Code change to make our system more adequate, so I would support it.
Motion:	Proceed with emergency rule. The motion passed and then revisited due to discussions regarding the impact on the design and development community regarding the immediate implementation of an emergency rule. There was a follow-up motion to replace the emergency rule motion with a motion to proceed with off-cycle rule making. The replacement motion was approved with one abstention
 8. Committee Reports 9. Public Comment on Proposed 2018 Amendment and Adoption* 	
IBC/IEBC	<i>B14-2018</i> 504.4.1 & 909.6.3
	Jim Tinner- I'd like to make a comment on the stairwell pressurization. I assume Dave Kokot is in the room? Yes? Ok. Originally then the Building Code Council allowed 5 stories of wood framed construction for R1 and R2 occupancies part of that was based on pressurizing the stair towers, to keep smoke out of the stair towers if somebody had to evacuate that would be causing pressure, it was amended, I believe last Code Cycle, the language wasn't as clear as it should have been. People are now interpreting that as full blown smoke control systems. I think

it's very important that the intent was not to be smoke control systems but to pressurize the stairs more. I would like to revisit that with the full Council when the opportunity presents.

Dave Kokot- I filed this not as a representative of the Fire Marshalls, but just as myself. This was actually brought to me by a consultant that does a lot of these designs. The question came up with "How much of a report do I have to do to start pressurization. I am looking at the requirements of 909 and there are quite a few things that don't apply to the Code pressurization system". He did not want to take that proposal forward, so I ended up putting together the proposal for the TAG. The TAG was kind of interesting, it was kind of at the point where being on the Fire TAG, we didn't even know this change had occurred. So we were kind of surprised, "How come they changed Chapter 9 references in the Building Code but not in the Fire Code"? So it was kind of a confusing thing to us there. It was also an interesting thing to find there was this full blown report required just to maintain the pressure between the stairways and the building. The TAG was very unsupportive of it, there were people saying, "We don't think there should be any amendments, the language is fine as it is" we didn't even get a second from the Committee when I first brought this up. So I'm not actually remembering, Richard, when it passed because when I first did it, it did not pass. My understanding today was that I was coming to support and make sure it was going forward with testimony. If it did pass, I am appreciative of that, but it didn't happen when I was there.

<u>Richard Brown</u>- I apologize, I misspoke, it didn't pass by the TAG. The TAG asked for a resubmittal. The TAG requested that the Standing Committee look at it. The Standing Committee yesterday, without approval or disapproval, moved this forward for consideration to the full Council.

<u>Dave Kokot</u>- That clarifies it. It is important because there is a cost factor associated with this and time as well. We are seeing in our Jurisdiction in Vancouver, a lot of construction along the river, a lot of pressurization systems and it should be a simple design and not a full blown report with pages and pages to be able to justify that yes, I've got my pressure difference with the fan [inaudible]. I do hope that the Council will consider that evaluation.

Duane Jonlin- What was the TAGs overwhelming objection to this proposal?

<u>Dave Kokot</u>- Basically they said that 909 was fine. One gentlemen that was very adamant said "I don't want to support anything that's unnecessary and I feel that this is unnecessary amendment and that 909 addresses this just fine and that it's up to the local jurisdiction." He said, well, they don't have to do all the pieces. My big concern about that is that some jurisdictions don't have the understanding that [inaudible] to the Code. And that is what we are seeing for the most part, you need every part of 909 to pressurize the stairwell.

<u>Doug Orth</u>- So Dave, this one on the surface seems to be a walking back to the life safety protocol? Speak to that issue if you could.

<u>Dave Kokot</u>- This is the same as the original language we had in 2012. The Building Code TAG made the modification to the 2015. So, it has the appearance of stepping backwards, but the requirements we are asking for are the only ones that are necessary. We don't have to worry about [inaudible] for this space or [inaudible] for this space. There's a lot of repetitive unnecessary requirements that just basically take up time. Doug Orth- So the objection wasn't a life safety concern but to the process.

Dave Kokot-Yes the process.

<u>Doug Orth-</u> I've got a comment then. For me, anything that has a cost reduction to the building that doesn't impact life safety, I am strongly in favor of.

<u>Dave Kokot</u>- I guess I would just like to reiterate what we see designing these systems is a lot of differences between jurisdictions. Some jurisdictions are requiring a full smoke control analysis complying with all 909, others are just "Give me a basis for the systems, and what are the key sections you need to do". That's the difference of hiring a smoke control consultant or a mechanical engineer being able to design based on the approved method within the Code. I agree this should move forward into the proposed rule, so that we can get further clarification.

Jim Tinner- Maybe it would help if I gave a little history on this. Years ago, I worked for the City of Auburn, and the City of Seattle had approved 5 Story wood building construction for R1's and R2's. We started getting pressure from our planning Departments, "Well if Seattle can do it, why can't we?" So several of us, City of Bellevue, City of Renton, Auburn, and perhaps Tukwila took a look at this, and we decided that Seattle did it based on surround and drown. They have enough apparatus, fire fighters and water that they weren't too concerned with it. So we thought ok, where does this limit for four stories come from? It actually comes from the mid 1800's, when everything was 3 stories and then added 4 if you sprinkled it so we thought, how we can make it safe for 5 stories? So we looked at how fast the average person walks about 5 feet per second on the stairway, about 3 feet per second. So let's take that exiting time into account by pressurizing the stairway. That's where the original amendment in the State Code came from. The building officials decided to propose to the State, let's just add a little extra safety by putting extra pressure into the stair towers, and that's what came into play. It was never intended to be a smoke controlled system or smoke evacuation. That wasn't the intent, it was just to keep the smoke out of the stair towers so I would appreciate it if the Council would take that into consideration. Thank you.

<u>Craig Stevenson-International Code Council and Chair of the BFP Committee</u>- I fully realize the importance of moving proposals forward and to make sure they are fully vetted. It's my understanding that the TAG has made a recommendations but the Council has the ability to move things forward after testimony that the TAGs may have been split on or for whatever reason didn't move forward. In reading Mr. Kokots proposal I would like to encourage you to move it forward so that you can take public testimony on it. I haven't heard a representative come forward and state a position on it, while the technical committee [inaudible]. My recollection of this provision, I think we might have had something like this in the 97 UBC and the stairway pressurization was brought into the code when we increased wood frame [inaudible] buildings, I believe you've had good performance across the state, so I'm not weighing in on whether you should do this or not, I'm just weighing in on that it's appropriate to take testimony on it and move it forward to public hearing. Thank you very much.

<u>Lee Kranz-</u> Representing myself. In Bellevue we've done many of these pressurized stair enclosures for the 501 projects. We actually do consider them to be a smoke control system, and my only concern, I haven't had a chance to study the proposal, but that there may be other provisions in 909 that may be required that aren't contained in 909.11 or 909.20. I'm not exactly sure what those could be

at this point of time, but I am going to reserve any support for this proposal until we have a chance to study this more carefully. Thank you.

Motion

m The motion to approve B14-2018 was approved with one abstention.

B04-2018 303.4, 309.1, T1004.5

Micah Chappell- This was a proposal for a couple of minor changes to Chapter 3 and Table 1004.5 that would allow art galleries more than 3000 square feet to remain classified as an A3 occupancy, and then we added a section in 309.1 for Mercantile, that Art Galleries 3000 square feet or less would be allowed to be classified in that Group M and then under that table we modified that section for Mercantile and added the group M art gallery and put an occupancy load factor of 30 gross. There was a few reasons we wanted to make this proposal. We believe that it would capture a lot of these spaces that are underutilized in a lot of the smaller jurisdictions. Say there are two story buildings that are B occupancy or a large enough space, if they are going to get more than 50 occupants, or they are larger than 750 square feet, they are going to have to be classified as an A3. That can triggers some significant alterations if it's on a level other than a discharge you have to sprinkler that facility. What this does is allow those spaces to be utilized, and prevent things like that ghost ship tragedy and a lot of smaller art galleries and art spaces could be used. That's why we have this as a Seattle amendment in our Seattle Codes currently, and we feel it has some good benefits to be utilized by the rest of the State. We did have some input from some other building officials that they would use it, and they thought it was a good direction to go. We would like the whole council to consider this. The TAG originally thought this was a good proposal, but they struggled a little bit with the group M art gallery occupant load in the Table. I think that's why they shot it down.

Duane Jonlin- Did they think it as supposed to be 15 square feet?

<u>Micah Chappell-</u> No, I think they didn't like the gross factor, the 30 gross instead of net, if you go to the Exhibit Galleries above, it's 30 net. But we had some concerns, say that an art gallery would come in , say they had 2000 square feet of storage space, and 1500 square feet of exhibit space, and they decide that they were going to have a special exhibit, and now they want to use that 2000 square feet to pack with people, and we didn't want to add that risk to this proposal. I think that was the the only reason they couldn't come to grips with it. It also limited that 3000 square foot space to 100 occupants and that was kind of aligning with sprinklers and some other uses.

<u>Jim Tinner</u>- We've had a number of these in Bellingham as well, that have been very problematic, so I would support Seattle's recommendation for approval.

Motion The motion to approve B04-2018 was approved with one abstention.

BF03-2018 902.1.1, 913.2.1

<u>Eric VanderMey</u>- I submitted proposal BF03- which has been extensively deliberated by the Building Code TAG in regards to providing correlation references to NFPA 20 in regards to Fire Pump Access rooms. This was discussed yesterday in the committee meeting. I am recommending that that one moves forward into the proposed draft, so we can get further pubic comment on the exact

language. Currently the TAG used the City of Bellevue language which is pretty close to what we need but it might need a little bit of refinement so I just wanted to make that clear.

<u>Doug Orth</u>- So yesterday, like Eric said, there was extensive conversation In the current proposal that we're considering, creates a passageway to this fire room that doesn't fall into the same restrictions that as a exit passageway which would limit the number of penetrations to that space. There was some discussion, Jim in particular, was not in favor of the more liberal interpretation of that passageway and wanted no penetrations, wanted it to be looked at as an exit access. So the proposal as written, creates a passageway that is open to more penetrations as a code defined exit passageway. Correct?

<u>Eric VanderMey</u>- Correct, the NFPA language is not Building Code language so the NFPA language needs to be interpreted by the Building Code. This would allow us to get public comment on calling it just a passageway as Bellevue does, and we hope to refine the language to be more enforceable statewide.

<u>Doug Orth</u>- And just to clarify for others who may not have been here, the NFPA language that he is referring to, stipulates that this passageway is required to have the same rating as the NFPA rating as the room itself. Correct?

Eric VanderMey-Correct.

<u>Duane Jonlin</u>- So something connecting the ground floor of an exit stair to the outside is an exit passageway that is a defined term. And this doesn't use this that terminology, it needs to be an exit passageway.

<u>Eric VanderMey-</u> That's the crux of the question. The NFPA 20 language doesn't define it as an exit passageway, it requires it [inaudible] it defines it as a protected enclosure to get to the fire pump room.

<u>Teri</u>- This isn't an exit passageway, it's an entrance passageway. Fire services onsite are trying to get to the pump room.

<u>Duane Jonlin</u>- This is a passageway from the interior exit stairway to the exterior exit which wouldn't necessarily be the way people go out.

<u>Eric VanderMey</u>-it could be though. You could go out a vestibule, or a corridor or a passageway, a protected pathway. There is no clear term in the Code, so they picked a new term that's undefined, which is a passageway.

<u>Duane Jonlin</u>- But in the I codes, exit passageway is a clearly defined term, and it's required for some such situations.

<u>Eric VanderMey</u>- That's an exit passageway, and that's just for the Fire Department to get to that room, that's the crux of the question. Do we need to go to the level of exit passageway, or is an enclosed passageway enough? So we could move it into the public comment and we could debate that.

Motion The motion to approve BF03-2018 was approved with one abstention

B37-2018 1006.3.3

Micah Chappell- This was a minor change that was reviewed by the TAG. Under

single exits, item number 1 was the addition of allowing single exits within the portion of the building served by a single exits in other words, item number 1 says "Occupant load number of [inaudible] units to have a common path to the building served by the single exit do not exceed the values in table 206. 3.1 or 206.3.2. Through the discussions with the TAG, they felt that they would allow this to occur, but technically the Code says it can't occur. So we've provided a few diagrams, mind you we do realize that the occupant load for this specific diagram is not correct, it should be 20 and not 40 on each side because of the second provision in the Code for this B occupancy. Under this proposal if the occupant loads were 20, it would be 40 which exceeds 29 requiring 2 passage egress and it is not on the level of discharge. Technically this building would require access [inaudible] you couldn't have this separation down the middle it would require access to both of those exits. Each side of that would meet the single exit provision. So it's minor in nature but it has a large impact as it does effect a large portion of the building.

Motion

IFC

 n^{m} The motion to approve B37-2018 was approved with one abstention

F15-2018 903.2.8

<u>Steve Simpson</u>- So yesterday we had testimony on this from Chelan County. They came and addressed the group. Specifically it has to do with the number of occupants and whether it needs to be a type of [inaudible] whether you need fire sprinklers or not was it pretty much the issue. The TAG turned it down, I can't speak to why they turned it down.

<u>Richard Brown</u>- it was Traci's TAG, The note said, that the proposal actually made the model code language less clear.

<u>Traci-</u> It's one of those things that you've got the interaction of the Code and it came out when we got the Interpretation request from them, as we are all well aware. When you get a [inaudible] Code change, the wording on the question kind of directs the answer. This particular item kind of crosses over to is it an IRC building, when does it become an IBC building, levels of sprinklers, how many people live there before? It's actually really complicated. The discussion being [inaudible]. To what level do you rent out houses? What kind of house do you rent out? Somebody rents it out by the year, some by the month and what's the difference there. How many people are in it? How many people live there. It's all these variations that make it very very difficult to put in the Code.

<u>Steve Simpson</u>- 'I'd like to make a suggestion for this group. I know we haven't heard the end of this. I know this is a common practice all over the State of Washington whether we're doing the right things or the wrong things. Whether the people who own these buildings are doing the right things or wrong things. I personally know that I can't make a motion but I would actually like to see this go thru the process and actually be discussed as the process goes thru.

Doug Orth- it almost warrants a Code Development Group.

<u>Jim Tinner</u>- The Council's already dealt with this. Cindy of Spokane 2 or 3 years ago, has already dealt with this. So many Air BnB's. So as it currently stands, if it's owner occupied has two or fewer bedrooms it's considered a dwelling. If it has 3 to 5, it needs sprinklers, and if it has more than 5, it's considered a Hotel.

Doug Orth- So Jim, I know that there's news reports lately that has people renting

	luxury homes in Bellevue for example, and renting them out on Air BnB. So how would that work?
	Jim Tinner- Those are hotels, sprinkle it.
	Duane Jonlin- All our construction Codes relate to what happens when a person comes in for a permit. None of this is related to that because someone can buy a house and a couple of years later they can rent it out as a BnB. There's no-one coming in for building permits so these things don't kick in. It seems like any such regulation would be more appropriate for a municipal zoning code or something like that. Because there isn't any construction involved, and even change of occupancy doesn't trigger these types of things. Nobody is coming in and asking for a permit for that. So I don't think this is appropriate to try to get into this level of detail doing an Air BnB in Bellevue.
	<u>Traci-</u> Any discussion of this will not solve the problem, because these rental homes are built under the IRC which is not an R3 Building. An R3 building is currently an IBC building that requires sprinklers except under certain [inaudible] So this doesn't actually do anything because it wouldn't apply to the buildings they are asking the questions about [inaudible] so that was [inaudible] we had several.
	Jim Tinner- Again, this is something we've already dealt with, and based on the City of Spokane, we said owner occupied, you could rent up to two rooms and it's a house. Rent 3 to 5 and you'd have to sprinkle it, and more than 5, it's a hotel. this is already in our Code.
Motion	The motion to not approve F15-2018 was approved with one abstention
• WSEC	Testimony
	<u>Gary Higgin-Northwest Natural</u> - I know we are a northern Oregon utility but we do provide services to Southwest Washington. I was also a member of the TAG Energy Code, not only this go around, but the last go around in 2015. I was also on the 2015 [inaudible] Code TAG. I was also on the Green Building Code TAG with Steve, and I've enjoyed working here in Washington. I was also on the Review Committee for the Oregon Energy Code, and I sit on the Building Code Structure Board in Oregon. I'm also a member of the Building Energy Codes and Standard Committee for the American Gas Association for the past 7 years and sit on the Chair for that as well. I provided some minority reports for two proposals, 050 which is the Total Systems Performance Ratio, and 141 which is the Total Performance Pathway. I submitted these for the MVE, I wasn't able to make it yesterday to provide public testimony on that. To talk about 050 TSPR and what it would do is add a requirement for some computer simulation to the prescriptive path part of the Code for certain building types which would add some complexity and time and potential expense. Rather than require some prescriptive path that would require some ABCD, it would add another step to analyze the HVAC system on a pass or fail basis. It would add time and expense and basically render a prescriptive path not truly prescriptive anymore. I'm not disputing the value of the methodology, it's a pretty sound methodology. Michael Rosenberg in the room with us, was involved in the development of that and it's a sound method. My concern is that we are adding it to a prescriptive path, adding some complexity, and costs. I have more concern with the fact that we're now going to be using carbon emissions rather than energy use for energy costs as the metric in this process. The method was originally developed using energy costs but the TAG has approved

putting it forward using carbon emissions which wouldn't be too bad, I think you can measure things with carbon emissions, it makes a lot of sense, but it's very important to get the carbon emissions factor correct. I believe the number that the TAG has landed on in this proposal, the .55 pounds per Kilowatts hour for electricity, is too low. The method used to come up with that factor was kind of ad hoc in nature. I have provided some solid sources I think for a different carbon emissions factor. Organizations like the EPA, Ashrae, and American Society of HVAC and NW Power Code Council all agree that utilizing marginal emissions is a factor you ought to be using when evaluating energy efficiency and conservation and not using average emissions. The average emissions for Washington is very low which is a good thing. When you add load or save load, your typically adding or saving at the margin. Without going into too much detail, that number in the Northwest Power Council's report was somewhere between .91 kw and .97 kilowatts and that is projecting out to the 2020 or 2030 time range when this code would be coming into play. Just as reference, the emissions factor for 2016 was 1.83 so much much higher. The .91 or .97 does reflect the retirement of coal plants, and that's a good thing, in projecting forward. That is my main concern, with the 050 TSRP proposal that's been put forth and approved. Again it adds complexity, but the concern is the emissions factor. If you have it too high or too low, you can get unintended consequences, and maybe make system decisions that are not as good as they could be.

<u>Doug Orth</u>- Your concern or objection to the proposed proposal is to how that emissions factor was arrived at? Is that accurate?

<u>Gary Higgins</u>- That is the major concern now. I suppose my primary recommendation would be to do it based upon energy costs since that's the way it was originally developed. If the Council and the State really want to start zeroing in on emissions, I could understand that. It's important to get the right emissions factor because it's going to be written into code.

<u>Doug Orth</u>- Did the TAG have a conversation about using that average load factor versus the margin?

<u>Gary Higgins</u>- There was that discussion about whether is ought to be average or marginal, but I think where we landed up, was a calculation somewhere in between there. Taking a look at some emissions factors from some generating sources, and factoring in some level of conservation as they come up, and Dave was the primary author of the calculation and he is here to provide his perspective.

Doug Orth- The margin is where the factor that would most apply?

<u>Gary Higgins</u> – That's what I believe, and that's not just my opinion, It's the EPA, Ashrae, NW Power Council, they all agree that the margin factor is [inaudible] it's closer to 9. The combined cycle combustion turbine is probably under 1, a single cycle combustion turbine is over 1, coal is up over 2, but there's a combination of gas and coal on the margin today. Coal's going to start to go away, it's going to be mostly gas on the margin.

<u>Eric VanderMey</u>- So the questions would be on the cost and complexities. So there was an exception added for buildings with condition 4 area of 5000 square feet or less and that was too low of a threshold? I mean, how would you recommend? Do you think this is a good process for larger buildings?

<u>Gary Higgins</u>- I guess I hadn't thought about that. That might be a good compromise... My major concern, if it is decided to use a major emissions factor to

get to that number.

<u>Gary Higgins</u>- 141 is pretty simple, it uses the same emissions factor. 141 would replace the existing performance path in the Code today, with the performance path from Ashrae 90.1. I was in agreement with using that because I think it's a better method. It provides a lot more guidelines' and guidance and will help ensure a little more consistency in how you model buildings on the performance path. It too was designed to use energy costs and not energy use or emissions but again the TAG has put forward to using emissions rather than energy and it also is using the lower emissions factor. The concern is the same for both of those proposals.

<u>Duane Jonlin</u>- Energy modeling is supposed to be a way that people can use alternative ways to have the same energy use. As such, its just an accounting methodology and therefore it seems like it has nothing to do with marginal energy use. It really should be the overall carbon content of the full years energy use, it's not an energy efficiency measure in any way. Energy modeling is simply a different way to an accounting methodology is just a different way to meet that same level of efficiency as a prescriptive code. Since it's not an efficiency measure, the full year carbon content is not marginal. Is that right?

<u>Gary Higgins</u>- Well I mostly disagree with that. Mostly based upon the expertise I sited before, the Ashrae, EPA, Northwest Power Council. .

Duane Jonlin- Those are for efficiency ratings.

Gary Higgins- Well, you're still though evaluating total energy right? When you're doing a performance path. One building you're going to run a computer simulation on your code or standard building, and compare it to your building. And your going to do that on some basis be it energy use or energy costs. Doing it on emissions, and if you have the wrong emissions factor, it could result in different results, mainly because the Ashrae Standard 90.1 now does utilize single baseline. Measuring electric technologies against gas technologies and vice a versa. In the old method of the performance path if you were using a standard gas heating system and only comparing it to a high efficiency gas system. If you were using an electric system, it would be electric to electric . It didn't matter whether your using emissions, costs or energy, you were always measuring a standard something against a better something. With the new methodology in Ashrae 90.1 it establishes a single base line so now everything is going to be based on that. If it happens to be a gas hot water system that's in the baseline building, you can compare gas or electric to that. If you're doing it on an emissions basis and the emissions factor is wrong, it's going to favor one over the other when you make that comparison. I think that you will have the same problem if the emissions factor is not correct.

<u>Doug Orth</u>- So, the ultimate consequence is that you would inappropriately drive one energy system to a source [inaudible] ...

Gary Higgins- You could.

<u>Dave Baylon-</u> In developing the Table, that's been used by 141 or 050, the principal rationale was and is, when we looked at the incremental load in this region, it's better to look at how much load we are actually going to get, than how we expect to read it. I used an arbitrary year from the power plan in 2026, because that was the point in the power plan that had detailed information. I looked at how they were planning to meet the loads in 2026 with the plan. Now it's true, they had margins 10% or so of that incremental load 2016 to 2026, was gas, and it is true it

was a combination of gas turbines, and those gas turbines ended up being something like .97. That last increment was only 10% of the total that was going to be added. The remaining 90 % was energy efficiency and reasonably resources, but mostly energy efficiency. So I thought, well that's an important feature, but is it really realistic? Given that we have some uncertainty about the availability of all those things, although not so much anymore, I said, let's ratchet that back, to what the Power Council said would be required, if we took into account load sharing which is an art form we haven't really mastered in any grid so far. That is to say you might need extra gas turbines, especially combustion peak turbines, to meet incremental loads that are not conveniently met by wind or solar because they happen to occur when wind or solar are not available. That number turns out to be 66%. When you look at that in the power plan, it says, you should assume we need about 33% more capacity to meet that. So I thought, let's use that. So 66% of that new load from 2016 to 2026, is met by the efficiency and renewable that is put into the power plan that is cost effective and new generating resource, what the power plan is about, and the remaining 33% is gas turbines. When I did this, I used numbers, approximately 95 or 1.0, and when you do that, the generating capacity is required in 2026 is a combination of existing generating capacity and now stretched by conservation resources and renewable is at zero emissions. is now stretched to meet the new loads that will occur in 2026. The second part of this calculation is that the coal resource that is part of our system is being shut down, when is kind of an open question. At least 3 out of the 5 plants are scheduled to be shut down by 2026. So I took what a generating system would look like, if those coal plants shut down, and then I added to that, the emissions from several gas turbines that would be required to make up for those reduced loads that are beyond the views of the Power Plan. I said if that turns out to be about 15 % less than carbon emissions and replace it with [inaudible] cycle gas which is less than half of that. I balanced that out with new incremental loads at the 33 % I talked about earlier at a somewhat higher gas emissions rate for gas, and that's where The .55 comes in. It is true, that these are estimates. I would argue at this point, given the nature of our resources, our planning resources and support in this region, we cannot do a marginal analysis on what will happen in the region without taking into account the investments in conservation over the next decade, or in the last 40 years where we have used conservation as the principal resource to meet incremental load code. We are about 5000 megawatts average in that period. So it's far and away the largest single source of the "new generation" in the region in the last 40 years and it will probably be in the future. So that's how I arrived at the number. It is true that there are various ways that you can make this calculation. I seriously object to using the marginal rates that last 10%, as though it was the entire requirement of the new commercial construction in Washington. It is basically a question of the baseline and what do you think the new baseline is.

Doug Orth- So this change is not an energy saving but an accounting change?

<u>Duane Jonlin</u>- It is an energy savings, we are evaluating the energy savings based on carbon emissions rather than site energy emissions.

Steve Simpson- Why? Is it more accurate?

<u>Eric VanderMey</u>- Because we have two goals in this state. One of them is to save energy and the other is to the carbon goal.

<u>Doug Orth</u>- Energy and carbon reduction go hand in hand so they don't necessarily need a methodology to achieve a carbon reduction, you need an energy reduction. This might provide a way to measure that carbon reduction, but you can measure

that in other ways as well.

<u>Eric VanderMey-</u> And just to be clear, we have never used energy costs as a metric. We've used site energy and now we are looking at carbon as the metric so that is the big thing that affects these two proposals and so if we are delaying this decision for a month, is there further debate that this Council wants to see at the TAG level, or is there more minority reports we want to see produced as far as carbon energy or do we want to task the Department of Commerce to come up with the appropriate metric? We have to strategize on how this is going to move forward and [inaudible].

<u>Gary Higgins</u>- I do differ with Dave, I felt that his methodology was flawed in some ways and I believe the flaw there is finding the factor for that conservation somehow being in the marginal mix. Conservation is by definition 'avoided energy'. So when you do conservation, you're avoiding that energy at the top of the stack, everyone benefits from that because you're building less power plants by doing the conservation. That's where I differ and disagree with Dave on his particular methodology. I did print up copies of the minority reports that I provided that are over here if you want to take one and really get immersed. I am absolutely open to any questions or discussions.

<u>Andrew Kline</u>- I have a couple comments. We've definitely heard where this puts a damper on the prescriptive path, which definitely is an issue, I've got a concern on the scope of the Energy Code also, that it is strictly the energy use over the life of each building. I am all for fewer carbon emissions but its should be in the Green Code it doesn't belong in the Energy Code here. Furthermore, I have concern over putting this into a Building Code at all, as opposed to having the generators or suppliers of electricity to deal with this issue. If marginal energy use is the issue, then having the manufacturers creating their products where the fan turns on and so forth, by the time it gets to the architect and the mechanical engineers [inaudible] equipment, basically it would take any kind of product that's out there and build it into efficiency standards, those are my concerns and I am not in favor of this.

Chuck Murray- Early on in the development of these two proposals, the discussion was, what's the energy inside the building, and when we look at different fuel types, we frequently convert from one fuel type to another fuel types units of measure in order to make those [inaudible] and that really leads to some significant [inaudible] If we use BTU's for example, we give a huge advantage to the eco system with our comparable metric. If we use cost we are departing from talking about energy, what we are talking about is the relative value of fuels and what you'll find is that low cost fuels will give an unfavorable big advantage. So we're not really comparing energy. I suggested carbon emissions on the site based method is where we could make comparable [inaudible] I have to admit I abstained from the vote on what the carbon emissions number is, I did proved a detailed comparison what the difference is between the two proposals and that's on the record. I can write it up a different way, I can give the Council a proposal to help clarify this. I do want to talk about the marginal versus the average a little. Gary's right, the Power Council, EPA and others use this marginal resource, but they are using it for significantly different purposes than what we are employing here. What they are trying to decide here is whether we do conservation or do we do power [inaudible] and when you are trying to make that decision, yes it's a new power [inaudible]. The question is, what Dave highlights, how we're are going to meet our future loads. Dave's made that argument already, I am not going to reiterate it. I just want to stress that these are very different purposes. You need to think about the building and what's going on in the building. We are comparing total building

performance and that's the [inaudible] at any rate, I think this conversation will continue, and I'll be glad to answer any questions you might have.

<u>Doug Orth-</u> I'm not sure who my question would be for, Eric, or Andrew, the question is for engineers for developing and designing their new structures, how available is this calculation? It seems like it's going to be extraordinarily complex. This is introducing a level of complexity of designing new systems that's [inaudible].

<u>Eric VanderMey</u>-With the energy modeling path we are going to, which is based on the ASHRAE 90.1 2016 methodology, without going into a lot of detail, basically there's a static 2004 ASHRAE building that we are comparing with. The idea that the baseline building does not change and all we are changing is the factor percent that have to be better by that tool. So we are measuring a static building.

Doug Orth- So that's a static that's based on fuel type and this one is carbon.

<u>Eric VanderMey</u>-That static building says if you're a multifamily building with a hot water system, then this is your fuel type. if you're an office building and you have a heating system, you can propose to do anything you want and we have to base it on the carbon emissions right now, and the factors once we set them, the modelers wouldn't have to mess with it. TSPR has different modeling systems, where you can go in there and try different systems. We will be probably talking about this for a while, what the factors are. These are good steps forward.

<u>Dave Baylon</u>- The concern that he raises is the impetus going with the carbon accounting that we proposed. It has the effect of disadvantaging heat pump against gas especially high efficiency gas by about 40%. It disadvantages gas against heat pump but the [inaudible] is still relatively efficient. On the other hand that is a cost question and often you end up with different results depending upon how the different designs work. The main effect of this carbon accounting is to disadvantage electric resistant heating in whichever ways this is used, against an efficient gas system. I think the fear that this is going to change the accounting is justified in the sense that it will make it so that there are codes, that electrical resistance systems heating options will be less favorable.

Mike Baranick- I actually have three proposals I want to talk about, 2 of them not approved. First one being EMV805 this is a proposal that I had done. Basically what we tried to do is provide an exception to the occupancy steps that are sectioned for DOAS units that are in assembly spaces. The reason for this is there are some complexities here that [inaudible] with the DOAS sections that were back in 2015, there's no changes to this occupancy code section. Personally I don't think there are interactions between these two sections were analyzed. What's happening here is you have a multi zoned DOAS unit that serves one space that requires an occupancy sensor. Without this exception it forces the DOAS section to become a variable air volume and essentially provide pressure independent of the unit. For all zones, not just the one zone. It greatly increases system complexities, I have a couple of diagrams that show it was between a combined DOAS system versus a variable air volume DOAS system. One comment from the TAG was, well you could just provide a bunch of single zone DOAS systems. For a school of 40 classrooms which in where DOAS systems are required, it would basically require 40 DOAS units in addition to the heating and cooling systems that is needed to support that building as well. The cost effect of this is that the life cycle is just not reasonable in my opinion. The second thing is, by requiring the DOAS system to be DAV, it increases the cost of that system dramatically, on an analyses we [inaudible]. It increased the cost by nearly \$3.00 per square foot or about \$150.000.

	It really only gave about 1 UI of savings. I did have one TAG member, Rod the engineer, he did vote in favor off this proposal and since then, we've actually modified this proposal to address some other peoples concerns. One concern that we did hear, was "We don't want a multzoned DOAS serving spaces of various occupancy types. So far example serving a classroom and a conference room because those would have different schedules and operating perimeters so what we recommended was to modify some sections which are shown here in red, to limit the exceptions only if the DOAS served that occupancy type. <u>Jim Tinner-</u> The legislation is very clear. It talks about building consumption, it does not talk about system or carbon, it talks about buildings. I think the TAG and Council needs to stay focused on building consumption energy.
10. Group 2 TAG Composition	Though discussed at the meeting, the suggested TAG composition modifications were not posted prior to the meeting. This will be addressed at the next Council meeting.
11. Staff Report	None
12. Other Business	None
13. Adjourn	The meeting was adjourned at 2:00p.m.

Note: This is not a formal public hearing due to the timing of the proposed rule filing, but we take public comment and forward those comments to the hearing process. The comment period is open through October 26, 2018

Attachments: Overview of Council Process [PowerPoint]

Group 1 Code Change Proposals:

IBC/IEBC Proposals

- IFC Proposals
- WSEC Proposals

Last updated: October 8 2018

Group 1 Code Change Proposals - 2018 IBC/IEBC Proposals

Date Received	Proponent	Code	Section	Int. Log Number	Log Number	Description	TAG	TAG Action	Committee Action	Council Action	Economic Impact	Testimony (O: Oral W: Written)
5/25/2018	John Williams, CRS	IEBC	706.4, 806.5	<u>18-GP1-101</u>	<u>B01-2018</u> REV B01-2018	Seismic bracing of elements and systems, Level 1 & 2 Alterations		7/25/2018 TAG requested a resubmittal. Because of a clarical error on 8/29/2018 TAG agreed to have this reviewed by the BFP Codes Standing Committee		10/2/2018 Proponent requested that the proposal be withdrawn 9/14/2018 approved	Yes	0/W
5/25/2018	Matt Campbell, CRS	IEBC	1002.1	<u>18-GP1-102</u>	<u>B02-2018</u>	Adding Group I-1: Licensed Assisted Living and Residential Treatment Facilities		8/29/2018 TAG recommended approving	9/13/2018 recommend approving	9/14/2018 approved	No	
								6/6/2018 TAG				
2/20/2018	Dave Kokot	IBC	202	<u>18-GP1-003</u>	<u>B03-2018</u>	Definitions: Added Accessory Occupancy	IBC		9/13/2018 recommend not approving	9/14/2018 not approved	No	
5/24/2018	Micah Chappell, Seattle	IBC	303.4, 309.1, T1004.5	<u>18-GP1-065</u>	<u>B04-2018</u> REV B04-2018	Art Gallery Classification		7/25/2018 TAG requested a resubmittal 8/22/2018 TAG recommended not approving	9/13/2018 recommend approving	9/14/2018 approved	Yes	
5/25/2018	Allen Spaulding, CRS	IBC	308.3.3	<u>18-GP1-103</u>	<u>B05-2018</u> REV B05-2018	Licensed care facilities - Licensed Residential treatment facility occupancy change		8/1/2018 TAG requested a resubmittal. 8/29/2018 TAG recommended not approving	9/13/2018 recommend further consideration	9/14/2018 Council tabled consideratiuon until the next meeting	Yes	w
5/25/2018	Matt Campbell, CRS	IBC	308.3.3	<u>18-GP1-115</u>	<u>B06-2018</u>	Institutional Group I-1, definition of licensed care facilities		8/29/2018 TAG recommended approving	9/13/2018 recommend approving	9/14/2018 approved	No	
5/25/2018	Eric Vander Mey	IBC	403.4.8.3	<u>18-GP1-206</u>	<u>B07-2018</u>	Sump Pump Power Type (Requested Section 5. Explination be filled out 6/4/2018)		8/8/2018 TAG recommended approval	9/13/2018 recommend approving		No	
5/24/2018	Micah Chappell, Seattle	IBC	420.2, 705.3	<u>18-GP1-066</u>	<u>B08-2018</u>	Exterior walls separating units		7/25/2018 TAG recommended not approving	9/13/2018 recommend not approving	9/14/2018 not approved	No	
5/25/2018	John Williams, CRS	IBC	407.4.4.3	<u>18-GP1-104</u>	<u>B09-2018</u>	Access to corridor		7/25/2018 TAG recommended approval	9/13/2018 recommend approving		Yes	

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5/25/2018	John Williams, CRS Allan Spaulding, CRS	IBC	420.2	<u>18-GP1-105</u>	<u>B10-2018</u> REV B10-2018	Fire Partitions in licensed care facilities		8/1/2018 TAG requested a resubmittal. 8/29/2018 TAG requested a re- resubmital for review by the BFP Codes Standing Committee	9/13/2018 recommend Council review further consideration with a nutral recommendation from the Committee	9/14/2018 Council tabled consideratiuon until the	Yes	
5/25/2018	Todd Thayer, Rushing	IBC	427	<u>18-GP1-207</u>	<u>B11-2018</u>	Electrical Vehicle Charging		8/22/2018 TAG recommended not approving	9/13/2018 recommend not approving	9/14/2018 not approved	No	
5/17/2018	Lee Kranz, WABO TCD	IBC	503.1.4	<u>18-GP1-028</u>	<u>B12-2018</u>	Occupied roofs		6/20/2018 TAG recommended approval and again on 7/18/2018	9/13/2018 recommend approving	9/14/2018 approved	No	
5/24/2018	Micah Chappell, Seattle	IBC	504.4	<u>18-GP1-067</u>	<u>B13-2018</u>	Number of Stories		8/1/2018 TAG recommended not approving	9/13/2018 recommend not approving	9/14/2018 not approved	No	
2/20/2018	Dave Kokot	IBC	504.4.1 & 909.6.3	<u>18-GP1-004</u>	<u>B14-2018</u> <u>REV B14-2018</u>	Stair-enclosure pressurization increase	IBC	6/6/2018 TAG recommended not approving as submitted. The re- resubmital will be reviewed by the BFP Codes Standing Committee.	9/13/2018 recommend approving	9/14/2018 approved	Yes	w
5/25/2018	Allen Spaulding, CRS	IBC	504.4.1	<u>18-GP1-106</u>	<u>B15-2018</u> <u>REV B15-2018</u>	Stair-enclosure pressurization increase		8/1/2018 TAG requested staff to modify proposal to address all I-1 (strike "Condition 2"). TAG recommended approval	9/13/2018 recommend approving		No	
5/17/2018	Lee Kranz, WABO TCD	IBC	505.2.3	<u>18-GP1-029</u>	<u>B16-2018</u>	Mezzanine - Openness		6/20/2018 TAG recommended not approving and again on 7/18/2018				
5/25/2018	Eric Vander Mey	IBC	509 Table	<u>18-GP1-208</u>	<u>B17-2018</u>	Incidental uses		7/18/2018 TAG recommended not approving	9/13/2018 recommend not approving	9/14/2018 not approved	No	
5/17/2018	Lee Kranz, WABO TCD	IBC	510.2	<u>18-GP1-030</u>	<u>B18-2018</u>	Horizontal Separation - Interior Stair		6/20/2018 TAG recommended approval and again on 7/18/2018	9/13/2018 recommend approving		Yes	
5/25/2018	Allen Spaulding, CRS	IBC	510.2	<u>18-GP1-107</u>	<u>B19-2018</u>	Condition 6 Podium buildings		8/1/2018 TAG recommended approval	9/13/2018 recommend approving	9/14/2018 approved	No	

Date Received	Proponent	Code	Section	Int. Log Number	Log Number	Description	TAG	TAG Action	Committee Action	Council Action	Economic Impact	Testimony (O: Oral W: Written)
2/9/2018	Lee Kranz, WABO TCD	IBC	510.5	<u>18-GP1-001</u>	<u>B20-2018</u>	Group R-1 and R-2 buildings of Type IIIA construction - Update IBC 510.5 to account for deletion of 504.2 (20' sprinkler increase) in 2015 IBC.	IBC	5/23/2018 TAG Recommend approval	9/13/2018 recommend approving	9/14/2018 approved	No	
5/17/2018	Lee Kranz, WABO TCD	IBC	510.5	<u>18-GP1-031</u>	<u>B21-2018</u>	Group R-1 and R-2 buildings of Type IIIA construction - Group R Height increase		6/20/2018 TAG recommended approval and again on 7/18/2018	9/13/2018 recommend approving	9/14/2018 approved	No	
5/17/2018	Lee Kranz, WABO TCD	IBC	704.6.1	<u>18-GP1-024</u>	<u>B22-2018</u>	Fire Resistive Construction structural attachments		6/20/2018 TAG recommended approval and again on 7/18/2018	9/13/2018 recommend approving		No	
5/17/2018	Lee Kranz, WABO TCD	IBC	705	<u>18-GP1-025</u>	<u>B23-2018</u>	Exterior walls & projections		6/20/2018 TAG recommended approval and again on 7/18/2018	9/13/2018 recommend approving	9/14/2018 approved	Yes	
5/17/2018	Lee Kranz, WABO TCD	IBC	706.6.1	<u>18-GP1-026</u>	<u>B24-2018</u> <u>REV B24-2018</u>	Stepped Buildings		6/20/2018 TAG recommended proponent fix text and tentative approval and again on 7/18/2018 8/22/2018 TAG recommended approving	9/13/2018 recommend			
5/17/2018	Lee Kranz, WABO TCD	IBC	707.4, 1024.8	<u>18-GP1-022</u>	<u>B25-2018</u>	Exit passageways		6/20/2018 TAG recommended approval and again on 7/18/2018	approving 9/13/2018 recommend approving	9/14/2018 approved 9/14/2018 approved	No Yes	
5/17/2018	Lee Kranz, WABO TCD	IBC	707.5	<u>18-GP1-027</u>	<u>B26-2018</u>	Continuity of Fire Barriers		7/18/2018 TAG recommended approval	9/13/2018 recommend approving		No	
5/25/2018	Eric Vander Mey	IBC	713.13.4	<u>18-GP1-209</u>	<u>B27-2018</u>	Chute Discharge Room		8/8/2018 TAG recommended not approving			No	
5/25/2018	Eric Vander Mey	IBC	713.13.7 NEW	<u>18-GP1-210</u>	<u>B28-2018</u>	Waste and Linen Chutes		8/1/2018 TAG recommended approval	9/13/2018 recommend approving		No	
5/25/2018	Lee Krans, WABO	IBC	717.5.2, 717.5.4	<u>18-GP1-194</u>	<u>B29-2018</u>	Fire Barriers / Fire partitions - Clarify requirements for exception to install fire dampers in fire barrier and fire partition walls.		8/22/2018 TAG recommended approving	9/13/2018 recommend approving	9/14/2018 approved	No	
5/25/2018	Eric Vander Mey	IBC	717.6.1	<u>18-GP1-211</u>	<u>B30-2018</u>	Horizontal Assemblies		8/8/2018 TAG recommended not approving	9/13/2018 recommend not approving	9/14/2018 not approved	No	
5/23/2018	Ryan Pflueger	IBC	806.1.1	<u>18-GP1-051</u>	<u>B31-2018</u>	Decorative materials and trim – General		8/29/2018 TAG recommended not approving	9/13/2018 recommend not approving	9/14/2018 not approved	No	

Date Received	Proponent	Code	Section	Int. Log Number	Log Number	Description	TAG	TAG Action	Committee Action	Council Action	Economic Impact	Testimony (O: Oral W: Written)
5/25/2018	Clynn Wilkinson, CRS	IBC	903.2.6	<u>18-GP1-108</u>	<u>B32-2018</u> <u>REV B32-2018</u>	Group I		8/8/2018 TAG requested a resubmittal. 8/29/2018 TAG recommended approving with one desenting vote.	9/13/2018 recommend approving	9/14/2018 approved	Νο	
5/24/2018	Micah Chappell, Seattle	IBC	1004.5 Table	<u>18-GP1-061</u>	<u>B33-2018</u>	Maximum Floor Area Allowances Per Occupant		8/1/2018 TAG recommended approval with one desenting vote	9/13/2018 recommend approving		No	
5/17/2018	Lee Kranz, WABO TCD	IBC	1006.2.1	<u>18-GP1-017</u>	<u>B34-2018</u>	Travel Distance		7/18/2018 TAG recommended approval	9/13/2018 recommend approving	9/14/2018 approved	Yes	
5/24/2018	Tim Woodward, WABO TCD	IBC	1006.2.2.4	<u>18-GP1-082</u>	<u>B35-2018</u>	Group I-4 means of egress		8/8/2018 TAG recommended not approving		9/14/2018 approved	No	
5/17/2018	Lee Kranz, WABO TCD	IBC	1006.3.3	<u>18-GP1-018</u>	<u>B36-2018</u>	Single Exits		7/18/2018 TAG recommended approval	9/13/2018 recommend approving	9/14/2018 approved	No	
5/24/2018	Micah Chappell, Seattle	IBC	1006.3.3	<u>18-GP1-062</u>	<u>B37-2018</u> REV B37-2018	Single Exits		8/1/2018 TAG requested a resubmittal 8/22/2018 TAG recommended not approving	9/13/2018 recommend approving	9/14/2018 approved	No	0
5/24/2018	Micah Chappell, Seattle	IBC	1009.2.1	<u>18-GP1-063</u>	<u>B38-2018</u> <u>REV B38-2018</u>	Elevators Required		8/1/2018 TAG requested a resubmittal and again on 8/22/2018 8/29/2018 TAG recommended approving with modifications made during TAG review.			Νο	
5/17/2018	Lee Kranz, WABO TCD	IBC	1010.1	<u>18-GP1-019</u>	<u>B39-2018</u>	Locking egress doors Note: this will superceed WAC 51-50-10100		7/18/2018 TAG recommended approval	9/13/2018 recommend approving	· · · · ·	No	
5/17/2018	Lee Kranz, WABO TCD	IBC	1019.3	<u>18-GP1-020</u>	<u>B40-2018</u>	Exit access stairways		7/18/2018 TAG recommended approval	9/13/2018 recommend approving	9/14/2018 approved	No	
5/25/2018	John Williams, CRS	IBC	1020.4	<u>18-GP1-109</u>	<u>B41-2018</u>	Dead ends		7/25/2018 TAG recommended approval	9/13/2018 recommend approving	9/14/2018 approved	Yes	
5/17/2018	Lee Kranz, WABO TCD	IBC	1023.5	<u>18-GP1-021</u>	<u>B42-2015</u>	Exit stairway penetrations		7/18/2018 TAG recommended approval	9/13/2018 recommend approving	9/14/2018 approved	No	
5/24/2018	Micah Chappell, Seattle	IBC	1030.6	<u>18-GP1-064</u>	<u>B43-2018</u>	Drainage		8/1/2018 TAG recommended approval	9/13/2018 recommend approving	9/14/2018 approved	No	

Date Received	Proponent	Code	Section	Int. Log Number	Log Number	Description	TAG	TAG Action	Committee Action	Council Action	Economic Impact	Testimony (O: Oral W: Written)
5/25/2018	Clynn Wilkinson, CRS	IBC	1103.2.13	<u>18-GP1-116</u>	<u>B44-2018</u>	Scoping Requirements		8/8/2018 TAG requested a resubmittal. 8/29/2018 proponent withdrew amendment proposal.			Νο	
5/17/2018	Lee Kranz, WABO TCD	IBC	1105.1	<u>18-GP1-023</u>	<u>B45-2018</u> REV B45-2018	³ Power Doors		8/22/2018 TAG requested a resubmittal. 8/29/2018 TAG recommended approving	9/13/2018 recommend approving		Yes	
5/25/2018	John Williams, CRS	IBC	1107.5	<u>18-GP1-110</u>	<u>B46-2018</u> <u>REV B46-50-</u> 2018	Group 1		7/25/2018 TAG requested a resubmittal. 8/29/2018 This was combined with B47, B48, B49 and B50- 2018 and TAG recommended approving.	9/13/2018 recommend approving	9/14/2018 approved	Yes	
5/25/2018	John Williams, CRS	IBC	1107.5.2	<u>18-GP1-111</u>	<u>B47-2018</u> <u>REV B46-50-</u> 2018	Group I-2 Nursing Homes		7/25/2018 TAG requested a resubmittal. 8/29/2018 This was combined with B46, B48, B49 and B50- 2018 and TAG recommended approving.	9/13/2018 recommend		Yes	
5/25/2018	John Williams, CRS	IBC	1107.5.4	<u>18-GP1-112</u>	<u>B48-2018</u> <u>REV B46-50-</u> 2018	Group I-2 Rehabilitation Facilities		7/25/2018 TAG requested a resubmittal. 8/29/2018 This was combined with B46, B47, B49 and B50- 2018 and TAG recommended approving.	9/13/2018 recommend approving		Yes	
5/25/2018	John Williams, CRS	IBC	1109.2	<u>18-6P1-113</u>	B49-2018 <u>REV B46-50-</u> 2018	Toilet and bathing facilities		7/25/2018 TAG requested a resubmittal and combine with B50- 2018. 8/29/2018 This was combined with B46, B47, B48 and B50-2018 and TAG recommended approving.	9/13/2018 recommend approving		Yes	

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								7/25/2018 TAG				
								requested a resubmittal and				
								combine with B49-				
					B50-2018			2018. 8/29/2018				
5/25/2018	John Williams, CRS	IBC	1109.2.3	<u>18-GP1-114</u>	REV B46-50-	Toilet and bathing facilities		This was combined				
					2018			with B46, B47, B48				
								and B49-2018 and				
								TAG recommended	0/12/2018 recommand			
								approving.	9/13/2018 recommend approving	9/14/2018 approved	Yes	
								7/18/2018 TAG	approving	5/14/2010 approved	163	
								recommended				
5/17/2018	Lee Kranz, WABO TCD	IBC	1206.1	18-GP1-032	<u>B51-2018</u>	Sound Transmission		approval with one				
								desenting vote	9/13/2018 recommend			
									approving	9/14/2018 approved	No	
								7/18/2018 TAG				
5/17/2018	Lee Kranz, WABO TCD	IBC	1207.4	<u>18-GP1-033</u>	<u>B52-2018</u>	Efficiency Dwelling Unit		recommended	9/13/2018 recommend	0/11/2010		
								approval 8/1/2018 TAG	approving	9/14/2018 approved	No	
5/24/2018	Micah Chappell, Seattle	IBC	1207.4 (G128)	18-GP1-068	B53-2018	Efficiency Dwelling Units		recommended	9/13/2018 recommend			
5/24/2010	Mican chappen, Seattle	ibe	1207.4 (0120)	10 01 1 000	055-2018	Enclency Dweiling Onits		approval	approving	9/14/2018 approved	No	
								8/1/2018 TAG	*FF: *0	<i>•, = , = = = • • • • • • • • • • • • • •</i>		
5/24/2018	Micah Chappell, Seattle	IBC	1207.4 (G129)	18-GP1-069	<u>B54-2018</u>	Efficiency Dwelling Units		recommended	9/13/2018 recommend			
								approval	approving	9/14/2018 approved	No	
						Water Protection - New Section –		5/23/2018TAG				
12/30/2017	Hector Plata	IBC	1403.2/1404.2	<u>18-GP1-010</u>	<u>B55-2018</u>	Means of Drainage	IBC	Recommend	9/13/2018 recommend			
						5		disapproval	not approving	9/14/2018 not approved	No	
2/12/2018	Julius Carreon, Bellevue	IBC*	1604.5 Table	18-GP1-002	B56-2018	Risk Category for I-4 Occupancies	IBC	TAG Recommend approval-off cycle		7/27/2018 approved for		
2/12/2010	Julius Carreon, Dellevue	IDC.	1004.5 14016	10-091-002	D30-2010	NISK Category for 1-4 Occupancies	IDC	(4/25)		off-cycle rule making	No	
								8/1/2018 TAG		on cycle rule makilly	110	
5/25/2018	John Williams, CRS	IBC	1604.5 Table	<u>18-GP1-117</u>	B57-2018 RE\	Risk Category of Buildings and		recommended	9/13/2018 recommend			
-	•				B57-2018	Other Structures		approval	approving	9/14/2018 approved	Yes	
						System Specific Requirements for		5/23/2018 TAG				
3/1/2018	Lee Kranz, WABO TCD	IBC	1613.4	<u>18-GP1-006</u>	<u>B58-2018</u>	Increased Structural Height Limit	IBC	Recommend	9/13/2018 recommend			
								approval	approving	9/14/2018 approved	Yes	W
2/20/2010		10.0*	1612 5	10 CD1 005	DE0 2010	System Specific Requirements for	IDC	5/23/2018 TAG		0/11/2010		
2/26/2018	Lee Kranz, WABO TCD	IBC*	1613.5	<u>18-GP1-005</u>	<u>B59-2018</u>	Increased Structural Height Limit	IBC	Recommend for Emergency Rule		9/14/2018 approved for off-cycle rule making	Voc	w
								5/23/2018 TAG		on-cycle rule making	Yes	vv
5/10/2018	Chris Seaman, Tacoma FD	IBC	1705.12.6	18-GP1-014	B60-2018	Plumbing, Mechanical and		Recommend	9/13/2018 recommend			
.,,						Electrical Components		approval	approving	9/14/2018 approved	Yes	

Date Received	Proponent	Code	Section	Int. Log Number	Log Number	Description	TAG	TAG Action	Committee Action	Council Action	Economic Impact	Testimony (O: Oral W: Written)
4/11/2018	Jyoti Naik	IBC	2902 and 1109	<u>18-GP1-016</u>	<u>B61-2018</u> <u>REV B61-2018</u>	Separate Facilities		6/20/2018 TAG requested a resubmittal. 7/18/2018 TAG requested a rewrite. 8/22/2018 on a vote of 4 yes and 3 no the TAG requested a resubmittal restricted to the text of option 2 exception 5. 8/29/2018 TAG Recommend approval		9/14/2018 approved	Νο	
5/24/2018	Micah Chappell, Seattle	IBC	2902.7, 202, 1109.5.1	<u>18-GP1-070</u>	<u>B62-2018</u> REV B62-2018	Bottle Filling Stations		8/1/2018 TAG recommended approval (Note: After the meeting the proponent requested a resubmittal to clean up the reason statement. The modified proposal will need to be reviewed by the TAG. 8/29/2018 TAG Recommend approval as amended during TAG review				
5/25/2018	Karen Steward, VRFA	IBC	3001.6 NEW	<u>18-GP1-180</u>	<u>B63-2018</u> REV B63-2018	General Elevator required		8/29/2018 TAG Recommend not approving	9/13/2018 recommend approving 9/13/2018 recommend not approving	9/14/2018 approved	No	w
5/25/2018	Eric Vander Mey	IBC	3005.2	<u>18-GP1-214</u>	<u>B64-2018</u> REV B64-2018	Venting		8/1/2018 TAG recommended approval based on changing "Branch" to "source".	9/13/2018 recommence		No	
5/25/2018	Eric Vander Mey	IBC	3009.3	<u>18-GP1-215</u>	<u>B65-2018</u> <u>REV B65-2018</u>	Elevator Hoistway Venting		8/8/2018 TAG requested a resubmittal and combine with B66- 2018 and getting stakeholder feedback. 8/22/2018 TAG recommended not approving.	9/14/2018 recommence not approving			

Date Received	Proponent	Code	Section	Int. Log Number	Log Number	Description	TAG	TAG Action	Committee Action	Council Action	Economic Impact	Testimony (O: Oral W: Written)
5/25/2018	Eric Vander Mey	IBC	3009	<u>18-GP1-216</u>	<u>B66-2018</u> REV B66-2018	HOISTWAY VENTING		8/8/2018 TAG requested a resubmittal and combine with 865- 2018 and getting stakeholder feedback. 8/22/2018 TAG recommended approval	9/13/2018 recommend approving	9/14/2018 approved	Yes	
5/22/2018	Terry Beals, Sound Transit	IBC/IFC	3101/IFC 3801	<u>18-GP1-048</u>	BF01-2018 REV BF01- 2018	NFPA 130		7/25/2018 TAG recommended off- cycle rule making by the SBCC		7/27/2018 Approved for	Voc	
5/22/2018	Jeffrey Hamlett	IBC*/IFC	Mass Timber	<u>18-GP1-050</u>	<u>BF02-2018</u>	Mass Timber		Note: This has parrallel paths, one for the 2015 Codes and one for the 2018 Codes. 8/29/2018 TAG Recommend approval of the 2018 amendments.		off-cycle rule making 7/27/2018 the 2015 Amendments Approved for off-cycle rule making. 9/14/2018 approved 2018 Amendments	Yes	0
5/25/2018	Eric Vander Mey	IBC[F]	902.1.1 & 913.2.1	<u>18-GP1-212</u>	BF03-2018 REV BF03- 2018	Access		8/8/2018 TAG requested a resubmittal. 8/22/2018 TAG recommrnded going with Belview's language. 8/29/2018 TAG approved resubmittal and requested coordination with the Fire Code	9/13/2018 recommend approving	9/14/2018 approved	Νο	
5/25/2018	Eric Vander Mey	IBC [F]	2702.1.5	<u>18-6P1-213</u>	BF04-2018 REV BF04- 2018	Load duration		8/8/2018 TAG requested a resubmittal. 8/22/2018 TAG recommended going with the "exception option and resubmit. 8/29/2018 TAG Recommend approval	9/13/2018 recommend approving		No	

Date Received	Proponent	Code	Section	Int. Log Number	Log Number	Description	TAG	TAG Action	Committee Action	Council Action	Economic Impact	Testimony (O: Oral W: Written)
5/24/2018	Diane Glenn	IFC/IBC	3304.5.1 / 3314.1	<u>18-GP1-080</u>	BF05-2018 REV BF05- 2018	Fire watch during combustable construction		8/8/2018 TAG Recommend approval based on language approved by Fire TAG	9/13/2018 recommend approving	9/14/2018 approved	Yes	
TAG Generated Proposa	lls											
Date Received	Proponent	Code	Section	Int. Log Number	Log Number	Description	TAG	TAG Action	Committee Action	Council Action	Economic Impact	Testimony (O: Oral W: Written)

Group 1 Code Change Proposals - 2018 IFC TAG

Proponent	Code	Section	Init. Log Number	Log Number
Terry Beals, Sound Transit	IBC/IFC	3101/IFC 3801	<u>18-GP1-048</u>	<u>BF01-2018</u>
Jeffrey Hamlett	IBC*/IFC	Mass Timber	<u>18-GP1-050</u>	BF02-2018 See IBC link
Eric Vander Mey	IBC[F]	902.1.1	<u>18-GP1-212</u>	<u>BF03-2018</u>
Eric Vander Mey	IBC [F]	2702.1.5	<u>18-GP1-213</u>	BF04-2018
Diane Glenn	IFC/IBC	3304.5.1 / 3314.1	<u>18-GP1-080</u>	BF05-2018
Matt Campbell, CRS	IFC	202 Occup Class, LCF	<u>18-GP1-118</u>	F01-2018
Matt Campbell, CRS	IFC	202 RTF	<u>18-GP1-119</u>	<u>F02-2018</u>
Brian Imai, WSADA	IFC	314	<u>18-GP1-052</u>	F03-2018
Traci Harvey	IFC	T 315.7.6(1)	<u>18-GP1-015</u>	<u>F04-2018</u>
Ken Brouillette, Seattle	IFC	510.4	<u>18-GP1-071</u>	<u>F05-2018</u>
Ken Brouillette, Seattle	IFC	510.4.1.1	<u>18-GP1-072</u>	<u>F06-2018</u>
Ken Brouillette, Seattle	IFC	510.4.2.4	<u>18-GP1-073</u>	<u>F07-2018</u>
Ken Brouillette, Seattle	IFC	510.4.2.5	<u>18-GP1-074</u>	<u>F08-2018</u>
Ken Brouillette, Seattle	IFC	510.5	<u>18-GP1-075</u>	<u>F09-2018</u>

Ken Brouillette, Seattle	IFC	510.5.3	<u>18-GP1-076</u>	<u>F10-2018</u>
Ken Brouillette, Seattle	IFC	510.5.5 NEW	<u>18-GP1-077</u>	<u>F11-2018</u>
Ken Brouillette, Seattle	IFC	510.6.1	<u>18-GP1-078</u>	<u>F12-2018</u>
Ken Brouillette, Seattle	IFC	510.6.1	<u>18-GP1-011</u>	<u>F13-2018</u>
Mark Murray, UW	IFC	701.6	<u>18-GP1-059</u>	<u>F14-2018</u>
Bob Plumb, Chelan	IFC	903.2.8	<u>18-GP1-044</u>	<u>F15-2018</u>
Dave Kokot	IFC	903.2.9	<u>18-GP1-012</u>	<u>F16-2018</u>
Michael Six	IFC	904.1.1	<u>18-GP1-098</u>	<u>F17-2018</u>
Paul Clark, CRS	IFC	906.2	<u>18-GP1-120</u>	<u>F18-2018</u>
Tim Nickols, Electronic Security Assoc.	IFC	907.1	<u>18-GP1-007</u>	<u>F19-2018</u>
Tim Nickols, ESA	IFC	907.10	<u>18-GP1-043</u>	F20-2018
Matt Campbell, CRS	IFC	1010.1.9.3	<u>18-GP1-121</u>	<u>F21-2018</u>
Matt Campbell, CRS	IFC	1010.1.9.7	<u>18-GP1-122</u>	<u>F22-2018</u>
Corey Thomas, Renton	IFC	3803.3.2	<u>18-GP1-045</u>	<u>F23-2018</u>
Traci Harvey	IFC	3904, Ch 80	<u>18-GP1-060</u>	F24-2018
Jacob Blanchette	IFC	5003.11.1 Table	<u>18-GP1-081</u>	<u>F25-2018</u>

Ken Brouillette, Seattle	IFC	Ch 80	<u>18-GP1-079</u>	F26-2018
Corey Thomas, Renton	IFC	319.1		<u>F27-2018</u>

	TAG Action
Description	
	Proponant is going to re-word a portion of the proposal and re-submit
	Proposal has been re-worded and Recommed approval Posted 8/27
Standard for Fixed Guideway Transit and Passenger Rail Systems	
	Not the fire code Deffer to the IBC
Clarify how DOAS and zone terminal units are treated	
Fire pump equipment access requirements clarification in NFPA	Recommend Denial
20.	
Run time requirements by NFPA 20 as referenced by the IBC for	Recommend Denial
fire pumps.	
Fire watch during nonworking hours for new construction	Proposal has been re-worded and Recommend approval Posted 8/27
(exceeding 40 feet).	
Strike "licensed care facility" from state amendment.	Recommend Approval
Correct amendment from "residential care facility" to I-1,	Recommend Approval
condition 2.	
Indoor display amendment clarification. Section 314.	Proposal has been re-worded and Recommed approval Posted 8/27
Correction to table 315.7.6(1) Wood pallet separation distance	Recommend approval
from building.	
Requirements to test and list equipment installed to enhance	Recommend approval
emergency responder radio coverage in a building.	
Proposal intended to put the minimum design criteria of -95dBm	Recommend approval
back into the code.	
	Recommend approval Change IP-66 to IP-65 in the proposal Posted 8/27
Signal booster requirements, If used.	
Add "Oscillation of active RF-emitting devices(s)" to section	Recommend approval
510.4.2.5	
Section correction from 510.5.4 to 510.5.5	Recommend approval
	······································

	Recommend approval
Testing procedures for emergency responder radio coverage.	
Donor antenna mounting and signage requirements.	Recommend approval
Testing and proof of compliance of emergency responder radio	Recommend approval
coverage.	
Testing and proof of compliance of emergency responder radio	Proposal has been re-worded and Recommed approval Posted 8/27
coverage.	
Strike inventory and annual inspection records from Owners	Proposal has been re-worded and Recommed approval Posted 8/27
Responsibility.	
	Recommend denial of this proposal. It was seconded and unanimous vote.
	TAG deemed proposal made model code less clear.
Vacation rental property sprinkler requirement guidance.	
Group S-1 self storage automatic sprinkler requirement when	Recommend approval
fire area exceeds 2500 Square feet.	
Specific certification(s) requirements when performing life	Recommended denial. TAG recommends waiting for this to happen at the
safety work.	national level before doing it locally.
	Recommended denial. Proposal will be forwarded to the mechanical TAG.
	TAG agreed that this should be addressed by the mechanical TAG and not the
	fire TAG. Group asked that the proponent check the numbering on the
	proposal, may be some errors.
Hoods not required footnote "E" Table 609.2.1	
Testing, Maintenance and Certification for new and existing fire	Recommend approval-off cycle
alarm systems.	
Certification requirement for fire alarm system testing.	Recommend Denial Conflict with other proposal F-19
	Recommend Approval
Locks latches and emergency light for Group I-1 Facilities.	
Clinical staff shall have means necessary to operate locking	Recommend Approval
systems.	
Areas dedicated to extraction shall be equipped with panic	Recommend Approval
hardware or fire exit hardware.	
Systems or equipment used for the extraction of oils	Recommend Approval
requirements.	
Maximum allowable quantity of consumer products Table	Recommend Approval
5003.11.1 Footnote K.	

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‡Short Form	Returned for correction			
Committee Action	Council Action			
move to off cycle rule making				
Recommend Approval	Recommend Approval			
Recommend Approval	Recommend Approval			
Recommend Approval Recommend Approval	Recommend Approval Recommend Approval			
Recommend Approval	Recommend Approval			
Recommend Approval	Recommend Approval			
Recommend Approval	Recommend Approval			
Recommend Approval	Recommend Approval			
Recommend Approval	Recommend Approval			
Recommend Approval	Recommend Approval			
Recommend Approval	Recommend Approval			
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Recommend Approval	Recommend Approval			
Public testimony Bob Plumb	Tabled till October meeting on 9/14			
Recommend Approval	Recommend Approval			
	needinnena Approva			

Recommend Approval	Recommend Approval
Recommend Approval	Recommend Approval

Recommend ApprovalRecommend ApprovalRecommend ApprovalRecommend Approval

COUNCIL PROCESS FOR CODE REVIEW, MODIFICATION AND ADOPTION

This presentation addresses adopting the 2018 model codes as well as the Off-Cycle Rules being considered today.

September 14, 2018



The Council's authority is addressed in: RCW <u>19.27.035</u>

The Council's process is addressed in: RCW <u>19.27.074</u>

WAC 51-04-020 WAC 51-04-030 WAC 51-04-040



WAC 51-04-040 Reconsideration.

(1) When the council approves, denies or modifies a statewide or local amendment to the building code, any party with written or oral testimony to the council related to the amendment on the record may file a petition for reconsideration. The petition must be received by the Washington State Building Code Council, 1500 Jefferson Avenue S.E., P.O. Box 41449, Olympia, Washington 98504-1449, within twenty calendar days of the date of the council action on the amendment. The petition must give specific reasons for why the council should reconsider the amendment for approval or denial.

(2) Within sixty calendar days of receipt of a timely petition for reconsideration, the council shall in writing:

(a) Grant the petition for reconsideration and enter rule making to revise the amendment;

(b) Deny the petition for reconsideration, giving reasons for the denial; or

(c) Request additional information and extend the time period for not more than thirty calendar days to either grant or deny the petition for reconsideration.

(3) The council's denial of a proposed statewide or local government amendment, or the council denial of a petition for reconsideration under this section, is subject to judicial review under chapter <u>34.05</u> RCW.



2018 Group 2 Review Process (Draft Schedule)

October 12, 2018 Group 2 code review timeline adopted and TAGs member appointments confirmed. October though December 15.

	Group 2 TAGs meet. The objective is to review significant changes to model codes and existing state amendments. Schedule three meetings for each TAG over an eight week period. Assign chapter review to TAG members. TAG report shows recommendations to maintain or delete existing state amendments, and flags significant changes to model codes needing further review.
January 2019	SBCC regular meeting. Council reviews TAG reports, establishes a submission period for new statewide amendments to the 2018 codes. (January 15-March 15)
March 15 2019	Submission deadline, pending SBCC approval.
April 2019	SBCC regular meeting. The SBCC can accept proposals for the public hearings, deny proposals or refer proposals to the appropriate TAG.
April through Jun	e 2019:
	Group 2 TAGS meet to review proposed statewide amendments to the 2018 model code and make recommendations to the SBCC. TAGs recommend amendments be approved, denied or modified.
June 2019	Regular SBCC meeting. The SBCC can accept TAG recommendations, or overturn TAG recommendations, or refer proposals back to the TAG. Approved or modified proposals are filed for public hearings in the fall.
August 2019	Proposed rules adopting 2018 Group 1 codes filed for public hearings. September &
October 2019	Regular SBCC meetings. Public Hearing, and work session to review testimony.
November 2019	Regular SBCC meeting. Final adoption of 2018 Group 2 codes.



2018 Codes Adoption Timeline





Council Options Regarding Proposed Code Changes

- 1. Emergency Rule
- 2. Off-Cycle Rulemaking
- **3. Regular Code Update Process**
- 4. Expedited Rulemaking
- 5. Deny the Proposal



1. Emergency Rule: If the Council determines that there is an imminent threat to life/health/safety, the Council may proceed with an *emergency rule*. This approach bypasses the requirement for public hearings and puts the rule into effect as soon as the rule is filed with the *code reviser*.

Although not required, the Council has typically had such items as a Council meeting agenda item and taken public comment on the merit/need for the rule.

Emergency rules remain in place for 120 days after filing. Emergency rules cannot be refiled unless the regulatory body (i.e., the Council) has begun the steps for permanent adoption.



2. Off-Cycle Rulemaking: If the proposal is thought to be important, but not rising to the level of an emergency, the Council may elect to go into off-cycle rulemaking. (This is a bit confusing because the Council Bylaws refers to both this option and option 1 above as emergency rulemaking.) This approach involves filing the proposed rule with the *code reviser*, holding a public hearing on the rule, and then adopting the rule with a specified effective date after the end of the next regular legislative session but before the effective date of the next code edition.

The rule would still be held to the time constraints outlined in the rulemaking process—30 days between the publishing of the CR101 form (**pre-notice inquiry / preproposal**) and the filing of the CR102 form (**Proposed Rule / Notice of Proposed Rulemaking**), 20 days between the publishing of the CR102 and any public hearing, and filing the CR103 form (**Final Rule**). The Bylaws specify that any rule other than an emergency rule will not go into effect until adoption of the next code edition.



3. Regular Code Update Process: If the Council thinks that the proposed change has/may have merit but do not think it rises to the level of immediate action, or the issue can be worked out through discussion and negotiation, the Council may send the issue through the regular code update process to be reviewed by the technical advisory group and be addressed during the adoption of the next code edition.



- **4. Expedited Rulemaking:** Agencies can use an "expedited process" to adopt, repeal, or amend rules in certain limited circumstances. Generally this process is available if:
- The rule applies only to internal government operations;
- The rule incorporates only federal or state law or other agency rules;
- The rule is correcting only typographical errors, making name or address changes, or clarifying the language of a rule without changing its effect;
- The rule is explicitly and specifically dictated by statute; or
- The rule was developed through negotiated or pilot rulemaking.

In the expedited process, the agency files the proposed rule with the Code Reviser for publication in the Register, and sends the notice to interested parties, but no hearing is scheduled. If any person objects to the expedited process within forty-five days of publication, the agency considers the notice to be the same as the proposal notice used in the basic rulemaking process, and it must complete the rulemaking using the basic process detailed above.



5. Deny the Proposal: If the Council thinks that the proposal is not necessary, or is flawed in some way and needs further development by the proponent, the Council can deny the proposal.



Washington's Rule Making Process

- **Step 1:** Notice of intent to change, adopt, or repeal a rule. (**Pre-notice inquiry**)
- Step 2: Proposed new or revised rule language. (Notice of Proposed Rulemaking) CR101
- Step 3: Final Adoption of the Rule. (Final rule) CR102



	Group 1 Code Change Pr WSEC - Commercial	oposals - 2	2018	As of August 3, 20	*eRule request or off cycle		<pre>\$\$\$ \$\$\$ \$\$\$ \$\$\$ \$\$\$ \$\$\$\$ \$\$\$\$ \$\$\$\$ \$\$</pre>	Returned for correction	
Date Received	Proponent	Code	Section	Log Number	Description	TAG Action/ Recommendation	Committee Action	Council Action	Economic Impact
5/25/2018	Eric Vander Mey	WSEC‡	C101.2	EG001-2018 (R)	Scope - Group R sleeping units	Approve 6/15/18			
5/18/2018	Robby Oylear	WSEC‡	C103.6.1	<u>EG002-2018</u>	Record Documents	WITHDRAWN BY PROPONI	ENT		
5/25/2018	Eric Vander Mey	WSEC‡	C103.6.1	EG003-2018	Record Documents	Modified 6/15/18			
5/23/2018	Mike Kennedy	WSEC	C403, C404, C406, C407	EG004-2018	Renewable energy/site energy requirements	Modified 8/10/18			
5/25/2018	Nathan Miller, Rushing	WSEC‡	C104.2.2	Env005-2018	Thermal envelope in core & shell	Modified 6/15/18			
5/25/2018	Nathan Miller, Rushing	WSEC‡	C202 Bldg Entrance	Env006-2018	Def: building entrance	Modified 6/15/18			
5/25/2018	Nathan Miller, Rushing	WSEC‡	C202 MTDS	Env007-2018	Def: Mass transfer slab edge	Modified 6/15/18			
5/25/2018	Lisa Rosenow, NEEC	WSEC‡	C202 Roof	Env008-2018	Def: Single-rafter roof, roof assembly	Modified 6/15/18			
5/25/2018	Duane Jonlin, Seattle	WSEC‡	C202, CI	Env009-2018	Def: continuous insulation	Modified 6/15/18			
5/25/2018	Nathan Miller, Rushing	WSEC‡	C303.1.5 NEW	Env010-2018	Defaults for spandrel panels	Approve 6/15 / Modified 6/29			
5/25/2018	Eric Makela, NBI	WSEC	C402.1, C402.2	Env011-2018	Thermal bridging	Disapprove 6/15/18			Increase
5/25/2018	Lisa Rosenow, NEEC	WSEC	C402.1.1	Env012-2018	Greenhouses: heating	Disapprove 7/13/18			Increase
5/25/2018	Lisa Rosenow, NEEC	WSEC	C402.1.1	Env-013-2018	Greenhouses: envelope	Modified 7/13/18			
5/25/2018	Lisa Rosenow, NEEC	WSEC‡	C402.1.1.2	Env014-2018 (R)	Semi-heated bldg def/exception?	Modified 6/15/18			Increase
5/25/2018	Lisa Rosenow, NEEC	WSEC‡	C402.1.2	Env015-2018	Equipment building - Heat pump	Approve 6/15/18			
5/25/2018	Nathan Miller, Rushing	WSEC‡	C402.1.3 NEW	Env023-2018	Adds new section for elevator hoistway insulation	Approve 6/15/18			
5/25/2018	David Mann, ACC	WSEC	C402.1.3	Env016-2018	R-15+5 std framing	Approve 6/29/18			
5/25/2018	David Mann, ACC	WSEC	C402.1.3 & C402.1.4 above grade	Env017-2018	Add std framing values	Modified 6/29/18			
5/25/2018	Eric Lacey, RECA	WSEC	C402.1.3 & C402.1.4 above grade	<u>Env018-2018 (R)</u>	Increased values for above grade walls	Modified 6/29/18			
5/25/2018	David Mann, ACC	WSEC	C402.1.3 & C402.1.4 Mass	Env019-2018	Increased to IECC levels	Disapprove 7/13/18			
5/25/2018	David Mann, ACC	WSEC	C402.1.3 & C402.1.4 Mass 2	Env020-2018	Mod of Mass wall FN c	Modified 8/10/18		ned incomplete and is lue to Council policy	
5/25/2018	Tom Young, NWCMA	WSEC	C402.1.3 fn c	Env021-2018	Adds building types to FN c	Disapprove 6/129/18	disapproved e	luc to council policy	Increase
5/25/2018	Tom Young, NWCMA	WSEC	C402.1.3 fn h	Env022-2018	Mod of FN h for stainless	Disapprove 6/29/18			Increase
5/25/2018	Nathan Miller, Rushing	WSEC‡	C402.1.3/C402.1.4		Adds values for transfer deck slab edge	Modified 6/29/18			
5/23/2018	Mike Kennedy	WSEC*‡	C402.1.5	Env025-2018	corrects 2015 equation	Approve for action 6/15/18 Modified 7/13/18			
5/23/2018	Mike Kennedy	WSEC‡	C402.1.5	<u>Env026-2018</u>	Modification of equations	WITHDRAWN BY PROPON	ENT		
5/25/2018	Duane Jonlin, Seattle	WSEC [‡]	C402.1.5	<u>Env027-2018 (R)</u>	Modification of equations	Modified 7/13/18			
5/25/2018	Eric Vander Mey	WSEC‡	C402.1.5	Env028-2018	Adds Reference to C402.4.1.4, high performance mechanical	Approve for both 2015 and 2018			
5/25/2018	Lisa Rosenow, NEEC	WSEC‡	C402.1.5.1	Env029-2018	Adds Reference to C402.1.4.1, steel- framed walls	Approve 6/29/18			
5/25/2018	Eric Vander Mey	WSEC‡	C402.2.1	Env030-2018	Roof drains	Modified 6/29/18			
5/25/2018	Nathan Miller, Rushing	WSEC‡	C402.2.1.1 NEW	Env031-2018	Rooftop HVAC curbs	Modified 6/29/18			
5/25/2018	Nathan Miller, Rushing	WSEC‡	C402.4 T area w	Env032-2018	Add FN for area weighted calculations	WITHDRAWN BY PROPONI	ENT		
5/25/2018	Nathan Miller, Rushing	WSEC‡	C402.4 T orient	<u>Env033-2018</u>	Add FN defining orientation Modified 6/29/18	Modified 7/13/18			
5/25/2018	Eric Lacey, RECA	WSEC	C402.4 Table	Env034-2018	Only fixed and operable; deletes metal/nonmetal	Disapprove 6/29/18			

Date Received	Proponent	Code	Section	Log Number	Description	TAG Action/ Recommendation	Committee Action	Council Action	Economic Impact
5/25/2018	Eric Makela, NBI	WSEC	C402.4 Table	Env035-2018	Replaces current table; adds curtain wall & site built	Approve 6/29/18			Increase
5/25/2018	Dave Baylon, Ecotope	WSEC‡	C402.4.1.5 NEW	Env036-2018	Unlimited glazing option	Disapprove 6/29/18			
5/25/2018	Lisa Rosenow, NEEC	WSEC‡	C402.4.1	Env037-2018 (R)	Addresses window to wall area	Approve 6/29/18			
5/23/2018	Mike Kennedy	WSEC	C402.4.1.1	Env038-2018	Increase % within daylight zone to 50%	Modified 7/13/18			Decrease
5/25/2018	Lisa Rosenow, NEEC	WSEC‡	C402.4.1.1	Env039-2018	Net floor area	Modified 7/13/18			
5/25/2018	Nathan Miller, Rushing	WSEC [‡]	C402.4.1.1	Env040-2018	Visible transmittance	Approve 7/13/18			
5/25/2018	Eric Lacey, RECA	WSEC	C402.4.1.3	Env041-2018	Removes framing types	Diapprove 7/13/18			
5/25/2018	Jon Heller, Ecotope	WSEC‡ (Rev 6/22)	C402.4.1.4	Env042-2018	Deletes high perf mechanical fenestration allowance	Approve 7/13/18			
5/25/2018	Neall Digert, Solatube	WSEC	C402.4.2	Env043-2018	Tubular daylight devices	Modified 6/15/18			
5/25/2018	Lisa Rosenow, NEEC	WSEC‡	C402.4.2	Env044-2018 (R)	Minimum skylight area exception mod	Modified 7/13/18			
5/25/2018	Louis Starr, NEEA	WSEC	C402.5.1.2	Env045-2018	Tightens the air leakage testing	Modified 7/13/18			
5/25/2018	Mike Fowler, PHNW	WSEC	C402.5.1.2, C406.9	Env046-2018	Reduces leakage rate to 0.25	Modified 7/13/18			Increase
5/18/2018	Robby Oylear	WSEC	C402.5.7	Env047-2018	Small building exception/vestibules	Disapprove 7/13/18			
5/25/2018	Eric Vander Mey	WSEC‡	C402.5.7	Env048-2018	Exc. 4, smaller building areas	Modified 7/13/18			
5/25/2018	Nathan Miller, Rushing	WSEC‡	C202 Mech Cooling	EM049-2018	Def: mech cooling & heating	Approve 7/13/18			
5/25/2018	Louis Starr, NEEA	WSEC	C403.1.1 NEW	EM050-2018	Total system performance ratio	Modified 8/10/18			Increase
5/25/2018	Jeff Sloan, ASHRAE	WSEC	C403.1.3 NEW	EM051-2018	ASHRAE for data centers	Modified 7/27/18			
5/25/2018	Eric Vander Mey	WSEC‡	C403.10.1	EM052-2018	Cleanup of outdoor air req	Modified 7/13/18			
5/18/2018	Robby Oylear	WSEC	C403.10.3	<u>EM053-2018</u>	Pipe insulation	WITHDRAWN BY PROPONE	NT		
5/23/2018	Mike Kennedy	WSEC‡	C403.2.1	EM054-2018	Zone isolation	Modified 7/13/18			
5/25/2018	Jon Heller, Ecotope	WSEC (Rev. 6/22)	C403.2.2	EM055-2018	Ventilation with energy recovery	Approve 7/20/18			
5/25/2018	Eric Vander Mey	WSEC [‡]	C403.2.2 Ex 4	<u>EM056-2018</u>	Ventilation with energy recovery	WITHDRAWN BY PROPONE	NT		
5/25/2018	Eric Vander Mey	WSEC‡	C403.2.2 Ex 5	EM057-2018	Ventilation with chilled beams	Modified 7/20/18			
5/25/2018	Eric Vander Mey	WSEC‡	C403.2.2.2	EM058-2018	Exhaust rates	Modified 7/20/18			
5/25/2018	Eric Vander Mey	WSEC‡	C403.3.2	EM059-2018	Air to water heat pumps	Modified 7/20/18			
4/10/2018	Keith Coursin, Desert Aire	WSEC	C403.3.5	EM060-2018	DOAS	Disapprove 7/20/18			Increase
5/24/2018	Michael Baranick	WSEC‡	C403.3.5	EM061-2018	DOAS building types	WITHDRAWN BY PROPONE	NT		
5/25/2018	Jon Heller, Ecotope	WSEC‡	C403.3.5	EM062-2018	DOAS building types	Approve 7/20/18			
5/25/2018	Jon Heller, Ecotope	WSEC‡	C403.3.5	EM063-2018	DOAS air delivery	Modified 7/20/18			
5/25/2018 5/25/2018	Duane Jonlin, Seattle	WSEC‡	C403.3.5.1 C403.3.5.1	EM064-2018 EM065-2018 (R)	DOAS air flow rates	Modified 7/20/18			
5/25/2018	Jon Heller, Ecotope Jon Heller, Ecotope	WSEC‡ WSEC‡	C403.3.5.4	EMOSE 2018 (K)	DOAS Energy recovery DOAS supply air heating	Modified 7/20/18 WITHDRAWN BY PROPONE	NT		
5/25/2018	Eric Vander Mey	WSEC‡	C403.4.1	EM067-2018	DOAS supply all heating DOAS thermostat controls	Modified 7/20/18			
5/25/2018	Eric Vander Mey	WSEC+ WSEC‡	C403.4.1 C403.4.1.4	EM067-2018 EM068-2018	Conditioned vestibules	Modified 7/20/18 Modified 7/20/18			
5/25/2018	Eric Vander Mey	WSEC‡	C403.4.1.6 NEW	EM069-2018	Door HVAC control	Modified 7/20/18 Modified 7/27/18			
5/25/2018	Nick O'Neil	WSEC	C403.4.2.3	EM070-2018 (R)	Auto start & stop controls	Modified 7/27/18			Increase
5/25/2018	Eric Vander Mey	WSEC‡	C403.4.2.4 NEW	EM070-2018 (K) EM071-2018	Off hour controls - exhaust	Modified 7/27/18			mercase
5/25/2018	David Derse, Rushing	WSEC‡	C403.4.3.3.2	EM072-2018 (R)	Heat rejection - cooling towers	Modified 7/27/18			
5/18/2018	Robby Oylear	WSEC	C403.4.6	EM073-2018	Variable flow control reset	WITHDRAWN BY PROPONE	NT		
5/25/2018	Barry Jostol	WSEC	C403.4.6	EM074-2018	Variable flow control reset	Modified 7/27/18			
5/25/2018	Eric Vander Mey	WSEC	C403.4.7.1 NEW	EM075-2018	Controls, decorative appliances	Modified 7/27/18			Increase
5/25/2018	Eric Vander Mey	WSEC‡	C403.4.9, C403.4.10		Deadband requirements	Approve 7/27/18			
5/24/2018	Michael Baranick	WSEC‡	C403.5	EM077-2018	Exc for natural ventilation	WITHDRAWN BY PROPONE	NT		
5/24/2018	Robby Oylear	WSEC	C403.5	EM078-2018	Rewrite exception 9	Modified 7/27/18			
5/25/2018	Reid Hart, PNNL	WSEC‡	C403.5	EM079-2018	Revise economizer exceptions	Modified 8/10/18			Increase
5/25/2018	Jon Heller, Ecotope	WSEC‡	C403.5	EM080-2018	Revise DOAS exception	Modified 7/20/18			
5/25/2018	Reid Hart, PNNL	WSEC‡	C403.5.3.3	EM081-2018	High limit values for cycling fans	Approve 7/27/18			

Date Received	Proponent	Code	Section	Log Number	Description	TAG Action/ Recommendation	Committee Action	Council Action	Economic Impac
5/25/2018	Jon Heller, Ecotope	WSEC‡	C403.6.1	EM082-2018	VAV systems	Approve 7/27/18			
5/25/2018	Eric Vander Mey	WSEC‡	C403.6.10	EM083-2018	HE VAV systems	Modified 7/27/18			
5/25/2018	Jon Heller, Ecotope	WSEC‡	C403.7.1	EM084-2018	DCV & DOAS	Approve 7/20/18			
5/25/2018	Michael Baranick	WSEC (Rev. 6/22)	C403.7.2	EM085-2018	Occupancy sensors & DOAS	Disapprove 7/20/18			Decrease
5/25/2018	Eric Vander Mey	WSEC‡	C403.7.2	EM086-2018	Occupancy sensor controls	Modified 7/20/18			
5/25/2018	Eric Vander Mey	WSEC‡	C403.7.2 Exc	EM087-2018	Occ Sensors - exc to maintain ventilation during occupied hours	Modified 7/20/18			
5/7/2018	Mike Moore HVI	WSEC	C403.7.7.1	EM088-2018	Energy recovery for all Group R	WITHDRAWN BY PROPON	ENT		
5/25/2018	Eric Vander Mey	WSEC‡	C403.7.7.1	EM089-2018	ERV - remove ex 5	Disapprove 7/27/18			
5/25/2018	Eric Vander Mey	WSEC‡	C403.7.8	EM090-2018	Transfer air	Modified 7/27/18			
5/18/2018	Robby Oylear	WSEC	C403.7.9	EM091-2018	Shutoff dampers	Modified 8/03/18			Increase
5/25/2018	Eric Vander Mey	WSEC‡	C403.7.9	EM092-2018	Shutoff dampers	Modified 7/27/18			
5/18/2018	Robby Oylear	WSEC‡	C403.8.1	EM093-2018	Fan power in existing bldg mods	Modified 8/10/18			
5/22/2018	Robby Oylear	WSEC	C403.8.1	EM094-2018	DOAS/Terminal units	Modified 7/20/18			
5/19/2018	Robby Oylear	WSEC	C403.8.1(2) T	EM095-2018	Static air mixers	Disapprove 7/27/18			
5/24/2018	Michael Baranick	WSEC‡	C403.8.1(2) T	EM096-2018	Pressure drop adjustment	WITHDRAWN BY PROPON	ENT		
5/25/2018	Eric Makela, NBI	WSEC	C403.8.4	EM097-2018	Res fan efficacy	Approve 7/27/18			Increase
5/25/2018	Duane Jonlin, Seattle	WSEC	C403.8.5.1 T	EM098-2018	DX cooling systems	Approve 7/27/18			Increase
5/25/2018	Robby Oylear	WSEC	C403.9.8, C403.7.7, C403.5	EM099-2018	Heat recovery chillers	Modified 7/27/18			Increase
5/25/2018	Eric Vander Mey	WSEC‡	C404.13 NEW	EW100-2018	Water pressure booster systems	Modified 8/03/18			
5/25/2018	Eric Makela, NBI	WSEC	C404.2.1	EW101-2018	Service water heating	Modified 8/10/18			Increase
5/25/2018	Eric Vander Mey	WSEC‡	C202 Public Lav	EW102-2018	Def: Public lavatory	Approve 8/03/18			
5/25/2018	Eric Makela, NBI	WSEC [‡]	C404.3.1 T	EW103-2018	Pipe Length	WITHDRAWN BY PROPON	ENT		
5/25/2018	Eric Vander Mey	WSEC‡	C404.4	EW104-2018	Heat traps	Approve 8/03/18			
4/4/2018	Eric Vander Mey	WSEC*‡	C404.6	EW105-2018	Final pipe run exception	Approve for action 6/15/18			
5/25/2018	Eric Vander Mey	WSEC‡	C404.6 (Duplicate see 008)	EW107-2018	Final pipe run exception	Approve			
5/25/2018	Susanne Brown, Ecotope	WSEC	C404.6	EW106-2018	Thermal bridging/pipe insulation	Approve 7/27/18			
5/25/2018	Susanne Brown, Ecotope	WSEC	C404.7.1	EW108-2018	Demand based water recirculation systems	Disapprove 7/27/18			
5/25/2018	Eric Vander Mey	WSEC‡	C404.7.1	EW109-2018	Heated water circulation systems	Modified 8/10/18			
5/25/2018	Eric Vander Mey	WSEC‡	C404.9	EW110-2018	Hot water meters	Modified 8/03/18			
5/25/2018	Eric Makela, NBI	WSEC	C405.1	EL111-2018	High efficacy lamps - residential	Modified 7/27/18			
5/25/2018	Eric Vander Mey	WSEC‡	C405.1	EL112-2018	Residential lighting	Modified 7/27/18			
5/25/2018	Mike Kennedy	WSEC	C405.2	EL113-2018	Lighting controls - 90.1	Modified 7/27/18			Decrease
5/22/2018	Andrew Pultorak, PSE	WSEC	C405.2 C202‡	EL114-2018	LLLC	Modified 7/27/18			
5/25/2018	Duane Jonlin, Seattle	WSEC [‡]	C405.2.2.1	EL115-2018	Controls correction	WITHDRAWN BY PROPON	ENT		
5/25/2015	Duane Jonlin, Seattle	WSEC‡	C405.2.4	EL116-2015	Daylight responsive controls	Approve 7/27/18			
5/25/2018	CJ Brockway	WSEC	C405.2.7.2	EL117-2018	Decorative lighting	Modified 7/27/18			
5/25/2018	CJ Brockway	WSEC	C405.4.1	EL118-2018	Total connected lighting power	Approve 7/27/18			Decrease
5/25/2018	Mike Kennedy	WSEC	C405.4.2	EL119-2018	Interior lighting power	Modified 8/10/18			Decrease
5/21/2018	Maris Avots	WSEC	C405.4.2(2) T	EL120-2018	Space by space - hair & beauty salons	Disapprove 8/03/18			
5/25/2018	Duane Jonlin, Seattle	WSEC‡	C405.4.2(2) T	EL121-2018	Interior lighting power allowance	Approve 8/03/18			
5/25/2018	Eric Makela, NBI	WSEC	C405.5.1	EL122-2018	High efficacy lamps - exterior	Modified 8/03/18			Increase
5/25/2018	Eric Vander Mey	WSEC‡	C405.7	EL123-2018	Dwelling unit meters	Approve 8/03/18			
5/25/2018	Eric Vander Mey	WSEC‡	C405.8	EL124-2018	Electric motor efficiency	Approve 8/03/18			
5/25/2018	Eric Makela, NBI	WSEC	C406	EO125-2018	Options package table	Modified 8/10/18			
5/25/2018	Lisa Rosenow, NEEC	WSEC (Rev. 6/25)	C406.1	E0126-2018	Options package clarifications	Modified 8/10/18			

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5/25/2018	Nick O'Neil	WSEC	C406.10 NEW	E0127-2018	Enhanced kitchen equipment	Modified 8/10/18			Increase
5/25/2018	Jon Heller, Ecotope	WSEC [‡]	C406.10 NEW	EO128-2018 (R)	High performance DOAS	Modified 8/10/18			
5/25/2018	Eric Vander Mey	WSEC	C406.10 NEW	<u>EO129-2018</u>	Additional metering	WITHDRAWN BY PROPONE	ENT		
5/25/2018	Jon Heller, Ecotope	WSEC‡	C406.11 NEW	<u>EO130-2018 (R)</u>	High performance service water heating - multifamily	Modified 8/10/18			Increase
5/25/2018	Ronald Blasser	WSEC	C406.11 NEW	EO131-2018	Smart monitoring	Disapprove 8/10/18			Increase
5/25/2018	Susanne Brown, Ecotope	WSEC	C406.12 NEW	EO132-2018 (R)	Water system loss reduction	Disapprove 8/10/18			Increase
5/25/2018	Lisa Rosenow, NEEC	WSEC‡	C406.2	E0133-2018	HVAC & fan performance	Modified 8/10/18			
5/25/2018	Barry Jostol	WSEC	C406.2.2	EO134-2018	Min. efficiency - boilers	Disapprove 8/10/18			
5/25/2018	Eric Vander Mey	WSEC‡	C406.3.2	EO135-2018	Lamp fraction	Modified 8/10/18			
5/25/2018	Reid Hart, PNNL	WSEC‡	C406.4	EO136-2018	Enhanced controls - daylighting	Disapprove 8/10/18			
5/25/2018	Reid Hart, PNNL	WSEC‡	C406.4	EO137-2018	Enhanced controls - LLLC	WITHDRAWN BY PROPONE	ENT		
5/25/2018	Jon Heller, Ecotope	WSEC‡	C406.6	E0138-2018	Eliminates DOAS option for those required to meet DOAS	Disapprove 8/10/18			
5/25/2018	Eric Vander Mey	WSEC‡	C406.7	EO139-2018	Clarification of water heating option	<u>Modified 8/10/18</u>			
5/25/2018	Tom Young, NWCMA	WSEC	C401.2	EP140-2018	Add ASHRAE App G as alt compliance path	Disapprove 8/10/18			
5/25/2018	Michael Rosenburg, PNNL	WSEC (Rev. 2/28)	C407	EP141-2018	Adopt App G in place of C407	Modified 7/13/18			Increase
5/25/2018	Nathan Miller, Rushing	WSEC [‡]	C407	<u>EP142-2018</u>	Placeholder C407	WITHDRAWN BY PROPONE	INT		
5/23/2018	Mike Kennedy	WSEC	C407.3	EP143-2018	Limits envelope reduction	Approve 6/29/18			
5/25/2018	Eric Lacey, RECA	WSEC	C407.3	EP144-2018	Limitation on amount of on-site production credit	Modified 6/29/18			
5/25/2018	David Mann, ACC	WSEC	C407.4.2		Limitation on amount of on-site production credit	WITHDRAWN BY PROPONE	ENT		
5/25/2018	Treasa Sweek	WSEC	C202	EC146-2018	Modifies def. of bldg cx & certified cx professional	Approve 8/03/18			
5/25/2018	Treasa Sweek	WSEC	C403, C404, C405, C409	EC147-2018	Reinstates pointer sections	Modified 8/03/18			
5/25/2018	Treasa Sweek	WSEC	C408, C103.6.2	EC148-2018	Process changes	Modified 8/03/18			
5/25/2018	Treasa Sweek	WSEC	C408, C104.2.6	EC149-2018	Enforcment modifications	Modified 8/03/18			
5/25/2018	Treasa Sweek	WSEC	C408.1, C410, C501.7	EC150-2018	Increases scope of requirements	Modified 8/03/18			Increase
5/25/2018	David Derse, Rushing	WSEC‡	C408.1.4.2	EC151-2018	Phased acceptance	Modified 8/03/18			
5/18/2018	Robby Oylear	WSEC‡	C408.2	EC152-2018	Mechanical equip capacity clarfication	WITHDRAWN BY PROPONE	ENT		
5/25/2018	David Derse, Rushing	WSEC‡	C408.2.2	EC153-2018	Balancing & adjusting certification	Disapprove 8/03/18			
5/25/2018	Eric Vander Mey	WSEC‡	C409.1.3 NEW	E154-2018	Reference to dwelling meter requirements	Approve 8/03/18			
5/25/2018	Michael Baranick	WSEC (Rev 6/22)	C409.3	<u>E155-2018</u>	Add requirements from seattle code	Disapprove 8/03/18			Increase
5/25/2018	Eric Vander Mey	WSEC‡	C409.3, C409.4.3	E156-2018	Minor load exclusion	Approve 8/03/18			
5/25/2018	Eric Vander Mey	WSEC	C409.3.3 NEW	E157-2018	Vehicle charging stations	Modified 8/03/18			
5/25/2018	Duane Jonlin, Seattle	WSEC‡	C410.2.1	E158-2018	Glass insulation - walk-ins	Modified 8/03/18			
5/25/2018	Amy Wheeless	WSEC	C411 NEW	E159-2018	solar readiness	Approve 8/03/18			
5/25/2018	Lisa Rosenow, NEEC	WSEC‡	C501.4.1	<u>E160-2018 (R)</u>	Calculation of loads	Modified 8/10/18			
5/25/2018	Lisa Rosenow, NEEC	WSEC (Rev. 6/27)	C501.4.2	<u>E161-2018</u>	Envelope compliance	Modified 8/10/18			
5/25/2018	Lisa Rosenow, NEEC	WSEC‡	C502.2, C503.2, C505.1	<u>E162-2018</u>	Envelope compliance	<u>Modified 8/10/18</u>			
5/25/2018	Lisa Rosenow, NEEC	WSEC‡	C502.2.2	<u>E163-2018</u>	Skylight area	WITHDRAWN BY PROPONE	ENT		
5/25/2018	Michael Baranick	WSEC (Rev 6/22)	C502.2.3	<u>E164-2018</u>	Small additions exempt from DOAS	Disapprove 8/10/18			Decrease

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5/25/2018	Lisa Rosenow, NEEC	WSEC‡	C503.1, C503.4	E165-2018	Mechanical alterations	Modified 8/10/18			
5/25/2018	Lisa Rosenow, NEEC	WSEC‡	C503.3.2.1, C504.2	E166-2018	Replacement fenestration	Disapprove 8/10/18			
5/18/2018	Robby Oylear	WSEC‡	C503.4	<u>E167-2018</u>	Mechanical alteration fix	WITHDRAWN BY PROPONE	NT		
5/25/2018	Michael Baranick	WSEC	C503.4	<u>E168-2018</u>	Fan power exception	Disapprove 8/10/18			
5/25/2018	Lisa Rosenow, NEEC	WSEC‡	C503.4 T	<u>E169-2018</u>	Update Economizer table	Disapprove 8/10/18			
5/25/2010	Lisa Roschow, NEEC	VV3LC+	6505.41	<u>L105 2010</u>		Modified 9/6/18			
5/25/2018	Lisa Rosenow, NEEC	WSEC‡	C503.6	E170-2018	Lighting alterations	Approve 8/10/18			
5/25/2018	Mike Fowler	WSEC	App E NEW	E171-2018	Outcome based compliance	Modified 8/10/18			

Totals:

20 Withdrawn by Proponent 27 Recommend Disapproval 35 Recommend Approval 89 Recommend Approval as Modified