IDAHO DIVISION OF OCCUPATIONAL & PROFESSIONAL LICENSES

IN RE:)

ENERGY CODE)

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TRANSCRIPT OF RECORDED

ENERGY CODE COLLABORATIVE MEETING

JULY 27, 2022

TRANSCRIBED BY: JEFF LAMAR, C.S.R. No. 640 Notary Public

(Beginning of audio file.) 1 2 MICHAEL HYDE: ... food in the Board packet for the August 16th meeting. 3 With that time being said, I'd like to just 4 start off with the First Amendment to the Energy Code, 5 which is 403.5. Looking at the packet that we have 6 provided, there are copies of the packet at the back 7 8 table, along with a copy of the agenda. And we're just 9 going to go through amendment by amendment and allow 10 open forum and discussion. 11 If I could please ask that if you do speak, 12 so minutes can be transcribed accurately, if you could 13 please stand up, state your name, who you represent, 14 and then a detailed explanation of your comment, it 15 would be greatly appreciated. And with that, C-403.5, economizers. 16 What 17 this is is this requires that the method of mechanical ventilation be established through economizers. 18 This 19 amendment specifically allows for the code official to interpret whether or not there's foul air in the 20 21 atmosphere, and it would eliminate the need of an 22 economizer, not the need of mechanical ventilation. 23 So with that, I'll open it up for any 24 comments. 25 JASON BLAIS: Mr. Hyde.

Mr. Blais. 1 MICHAEL HYDE: 2 JASON BLAIS: Jason Blais. I remember when this went in -- in, I think 3 4 it was brought forward by industry probably, you know, a hazardous-type production facility or something. 5 This was meant to help out where they didn't need to 6 put the economizer in, so I think it's kind of a good 7 8 amendment to have for business when you're -- when you 9 have those air situations that are contaminated. 10 So I mean deleting it, not a good thing, 11 but I guess my understanding is you've proposed 12 deleting it just because it's mechanical; right? 13 MICHAEL HYDE: We're deleting it due to it 14 regulates -- it regulates the method of how you provide mechanical ventilation, not of whether or not --15 16 compassing with another section of 403, building 17 mechanical systems. Really all it is is an exception 18 JASON BLAIS: 19 to not having economizer [unintelligible]? MICHAEL HYDE: Correct. Correct. Mechanical 20 21 ventilation is still required. But the method on how 22 you provide that mechanical ventilation air, C-403.5 23 requires that it has to be done through an economizer. 24 This amendment is in addition to, as an exception, taking it a step further, but walking that back to say, 25

| 1 | you know, depending on your location, you do not have |
|----|---|
| 2 | to have an economizer. |
| 3 | JASON BLAIS: In this instance? |
| 4 | MICHAEL HYDE: In this particular instance. And |
| 5 | it kind of goes twofold with our first agenda item and |
| 6 | our third agenda item, so |
| 7 | JASON BLAIS: So why do you think that's not a |
| 8 | good exception, then? Because that was brought forward |
| 9 | by industry. |
| 10 | MICHAEL HYDE: I don't think it's a bad |
| 11 | exception at all. I just think we should we |
| 12 | shouldn't be regulating how mechanical ventilation is |
| 13 | to be achieved. I think that's appropriate for |
| 14 | industry to determine based on what the Mechanical Code |
| 15 | states, which says all occupancy shall be ventilated. |
| 16 | But the method of how that you know, we |
| 17 | don't want to regulate how they do it. And that's what |
| 18 | an economizer does. The equipment, the appliance, the |
| 19 | device that provides the mechanical ventilation is what |
| 20 | this is mandating, and then the exception is adding to |
| 21 | you don't have to utilize that route, but you're still |
| 22 | going to have to provide fresh air into the building. |
| 23 | JASON BLAIS: Because the Energy Code, it |
| 24 | doesn't say when economizers are required. The |
| 25 | Mechanical Code doesn't say that; right? |

| 1 | MICHAEL HYDE: Correct. Correct. Mechanical |
|----|---|
| 2 | ventilation is required, but not the regulation of what |
| 3 | appliance do you utilize. And so our approach is let's |
| 4 | defer that back to industry. That will encompass all |
| 5 | the different equipment or appliances and the methods |
| 6 | of providing mechanical ventilation, as it's not |
| 7 | necessarily life safety regulating that specific |
| 8 | appliance or piece of equipment. |
| 9 | JOE BARLOW: Joe Barlow, City of Meridian. |
| 10 | I believe that that should be left up to |
| 11 | the design professionals economizers should be at their |
| 12 | discretion with the with the clientele that they're |
| 13 | working with. It shouldn't be something that's |
| 14 | regulated by the State at all, in my opinion. |
| 15 | MICHAEL HYDE: Thank you, Joe. |
| 16 | JOE BARLOW: We've gone decades and decades |
| 17 | without it, and no one's been sick or died from not |
| 18 | having an economizer. And my experience in the field |
| 19 | doing repairs, half the time the economizer is not |
| 20 | working or functioning anyway, and the occupant doesn't |
| 21 | know it at all. |
| 22 | So we're making them put these devices on |
| 23 | that half the time aren't working anyway, and they're a |
| 24 | waste of their time and their money on it, so |
| 25 | MICHAEL HYDE: Okay. Any other comments? |
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| 1 | Hearing none, we'll go to the next |
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| 2 | amendment, which is the deletion of Table C-404.5.1 |
| 3 | replacing with the following, "This is about any type |
| 4 | of hot water supply piping and whether or not |
| 5 | insulation is required, the value of insulation, and |
| 6 | then also the size of pipe that we're dealing with |
| 7 | here." |
| 8 | This had been stricken due to the fact that |
| 9 | insulating hot water pipe we did not see as a |
| 10 | life-safety component or requirement of code, as well |
| 11 | as the Uniform Plumbing Code has been amended by the |
| 12 | Idaho Plumbing Code Board to delete this section out of |
| 13 | the UPC. |
| 14 | And I'll are there any comments or |
| 15 | questions, suggestions relating to this deletion? |
| 16 | JASON BLAIS: Mr. Hyde. |
| 17 | MICHAEL HYDE: Yes. |
| 18 | JASON BLAIS: Just again, a repeat. This was |
| 19 | another industry-brought-forward amendment, I know. |
| 20 | And I think it was even from one of our Mechanical |
| 21 | Board members. Might have been Bill Carter. |
| 22 | MICHAEL HYDE: Bill Carter? |
| 23 | JASON BLAIS: Yeah. But again, it just helped |
| 24 | out, especially in school designs where they had the |
| 25 | recirculating water. |

1 MICHAEL HYDE: Uh-huh. 2 JASON BLAIS: Help amended that table to make it easier, so that's just the history of that amendment. 3 MICHAEL HYDE: Okay. If I may just lead into 4 the next two, because they -- they're directly 5 correlated to the last two items we went over where 6 it's the deletion of Section C-403, which is commercial 7 8 building mechanical systems in subsection (d), which would be deleting Section C-404, service water heating, 9 10 which is mandatory. 11 The previous two amendments that we just 12 discussed would no longer be applicable because that 13 entire section of the Energy Code would be proposed --14 as proposed would be deleted. So I do recognize that previously if we didn't follow suit with these 15 16 deletions that those would be advantageous to industry 17 and prevent that -- provide that type of lax from what the 2018 Energy Code states. 18 19 What I'd like to do with these sections is I'd like to run through C-403 and C-404 just to get a 20 lay of the land. What do these sections really entail? 21 What would be enforced if we do not delete these and we 22 23 continue moving forward with the entirety of these 24 sections? 25 And I'm going to share my screen so those

1 online will be able to follow along. 2 UNIDENTIFIED SPEAKER: [Unintelligible.] MICHAEL HYDE: So diving into 403, when we talk 3 4 about commercial aspects only, mechanical systems, in this section essentially mechanical systems and 5 equipment serving building heating, cooling, 6 ventilation, and refrigerating needs shall comply with 7 8 this section. Heating load calculations, system design, zone isolation required, ventilation, which 9 10 defers back to the IMC, heating and cooling equipment 11 efficiencies. 12 I think that's a good thing to discuss. If 13 you look at it from a manufacturing standpoint, a lot 14 of these efficiency tables that you see in the Energy Code are mandated on manufacturers. Manufacturers can 15 16 only build a certain minimum of efficient equipment, 17 and that's regulated by, I would assume, the federal regulations and them as a manufacturer. 18 19 So what contractors here in Idaho even have access to have already set the framework for these 20 21 tables. So those requirements are being met, unless 22 somebody has in their shop a piece of equipment from 20 years ago that they haven't installed yet. I mean that 23 24 could happen, depending on how -- how many pieces of equipment an HVAC contractor may purchase in advance. 25

But what we're looking at is why regulate 1 2 something if it's already being regulated on another level. 3 JOE BARLOW: Joe Barlow, City of Meridian. 4 I would argue the point that at what point 5 do we want to regulate people and let it be a civil 6 If the contractor installs a 20-year-old piece 7 matter. 8 of equipment that isn't as efficient, shouldn't that be a situation where it's civilly dealt with between the 9 10 contractor and his client if they're unhappy with the 11 bills that they get charged for electricity or whatnot? 12 I just don't -- I don't feel like the State needs to 13 regulate people into these -- these situations like 14 this. I don't think that's a stance that we should 15 take. 16 MICHAEL HYDE: So you're saying we shouldn't 17 regulate the efficiency of an appliance? JOE BARLOW: No. And coming from industry, I 18 19 can tell you that if Idaho doesn't regulate this, Carrier is not going to build equipment that's less 20 21 efficient to just provide for Idaho. It wouldn't make 22 any sense. 23 MICHAEL HYDE: Okay. 24 JOE BARLOW: Their factories are designed and set up to pump out the efficiency that the general 25

| 1 | whis is on the senture tone installing and |
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| Ŧ | public is or the contractors are installing, and |
| 2 | it's already regulated. So it's not going to be |
| 3 | something that's going to be an issue, in my opinion. |
| 4 | MICHAEL HYDE: Thank you. |
| 5 | Any other comments? |
| 6 | Any online? |
| 7 | CHARLIE ALLEN: Yeah. Yeah. This is Charlie |
| 8 | Allen. |
| 9 | MICHAEL HYDE: Charlie. |
| 10 | CHARLIE ALLEN: So you're wanting to delete this |
| 11 | whole section? There's like 12 different parts in this |
| 12 | section; is that what you're proposing? |
| 13 | MICHAEL HYDE: That's correct, Charlie. That's |
| 14 | what I'm proposing, due to the |
| 15 | CHARLIE ALLEN: So |
| 16 | MICHAEL HYDE: Of non-life-safety parameters and |
| 17 | regulating consumer choice. |
| 18 | CHARLIE ALLEN: Non-life-safety. But then you |
| 19 | have the situations of heat loads and cooling loads |
| 20 | that equipment needs to be sized accordingly to be |
| 21 | efficient to reach efficient levels. I don't I |
| 22 | don't support it. I guess I'm questioning why you |
| 23 | would want to delete heating and cooling loads and the |
| 24 | requirements, the 12 different sections that this |
| 25 | covers. I don't understand, I guess, why we would want |
| | |

1 to do that.

| 2 | I think it would put Idaho in a bad light |
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| 3 | for you know, where we're at today in the heating |
| 4 | efficiencies that we really people want to try to |
| 5 | achieve in their buildings, I believe. I don't know |
| 6 | why we'd want to take the parameters out, I guess, |
| 7 | is I'm asking why would we want to do that? |
| 8 | MICHAEL HYDE: I appreciate the question, |
| 9 | Charlie. |
| 10 | When it comes to equipment sizing, it is |
| 11 | covered in the Mechanical Commercial Code and in the |
| 12 | Mechanical Residential Code. |
| 13 | CHARLIE ALLEN: So so the these very same |
| 14 | things are covered in that code? |
| 15 | MICHAEL HYDE: That's correct, Charlie. It's |
| 16 | written as such in a different way, but heating and |
| 17 | cooling load calcs in the commercial section, in |
| 18 | section, I want to say, 312, and then in the IRC it's |
| 19 | 1401.1 1401.3. |
| 20 | CHARLIE ALLEN: Yeah, I guess I have I've |
| 21 | looked at those through the Mechanical Code. It's not |
| 22 | nearly as extensive as this, I guess, is my concern. I |
| 23 | mean |
| 24 | MICHAEL HYDE: If that's the case, we I mean |
| 25 | that this is a family of codes. ICC writes both the |

| 1 | Energy Code and the Mechanical Codes. And if there's |
|----|--|
| 2 | an inconsistency between the equipment sizing |
| 3 | requirements, I mean that's a big situation. |
| 4 | CHARLIE ALLEN: Yeah. Well, not just in sizing, |
| 5 | but, you know, the amount of outdoor air, the |
| 6 | economizers that may be required in some situations, |
| 7 | the control systems, just parameters for water, for |
| 8 | boilers. I mean there's just a lot of a lot of |
| 9 | things in here that I'm not sure yeah, I guess we'd |
| 10 | have to look at that. But I don't think it covers it. |
| 11 | MICHAEL HYDE: Well, we were specifically in |
| 12 | that instance we're talking equipment sizing. |
| 13 | CHARLIE ALLEN: Yeah. But 403, it covers more |
| 14 | than just equipment sizing. That's what that was my |
| 15 | point. |
| 16 | MICHAEL HYDE: It does. Right now, we're just |
| 17 | on equipment sizing right now. But we can transition |
| 18 | to another section. |
| 19 | 403.3 is there any other comments on |
| 20 | equipment sizing? |
| 21 | JOE BARLOW: Joe Barlow, City of Meridian. |
| 22 | I would argue that the design professional |
| 23 | is responsible to size the system according to what |
| 24 | their consumers' needs are. It shouldn't be something |
| 25 | that's regulated through code. The design professional |

| 1 | is the stamped professional, and he should have the |
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| 2 | ability to design the system for what his his he |
| 3 | needs to it should be in their wheelhouse. It |
| 4 | shouldn't be regulated by the State, in my opinion. |
| 5 | MICHAEL HYDE: As it relates to equipment |
| 6 | sizing? |
| 7 | JOE BARLOW: As it relates to energy the |
| 8 | whole energy section in general. |
| 9 | MICHAEL HYDE: Yeah. |
| 10 | JOE BARLOW: It should be left up to the design |
| 11 | professional. |
| 12 | JERRY STAFFORD: Mr. Chairman, Jerry Stafford, |
| 13 | CWI. |
| 14 | I think federal feds regulate efficiency |
| 15 | on all this equipment already. And then your IMC |
| 16 | regulates the parameters of the equipment and that |
| 17 | are required and your ACC Manual J and Manual D cover |
| 18 | all this stuff pretty extensively, so I think it's |
| 19 | redundant, I guess. |
| 20 | MICHAEL HYDE: Okay. Thank you. |
| 21 | JUSTIN GOODWIN: Mr. Hyde. |
| 22 | MICHAEL HYDE: Yes, sir. |
| 23 | JUSTIN GOODWIN: Yeah. Justin Goodwin, City of |
| 24 | Moscow. |
| 25 | MICHAEL HYDE: Justin. |

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| 1 | JUSTIN GOODWIN: How's it going? |
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| 2 | So, you know, you stated Section 312 of the |
| 3 | IMC. |
| 4 | MICHAEL HYDE: Uh-huh. |
| 5 | JUSTIN GOODWIN: It also states in that section |
| 6 | using the design parameters specified in Chapter 3 of |
| 7 | the International Energy Conservation Code. |
| 8 | So are you proposing to also delete that |
| 9 | section of the IMC? |
| 10 | MICHAEL HYDE: No, sir. No, sir. We have not |
| 11 | amended Chapter 3 of the Energy Code, nor have we |
| 12 | amended Chapter 3 of the IMC. |
| 13 | JUSTIN GOODWIN: Okay. |
| 14 | MICHAEL HYDE: So those design conditions that |
| 15 | the IMC refers to, which is 75 degrees for cooling, and |
| 16 | I want to say 70 or 72 for heating that's written, we |
| 17 | have not amended. |
| 18 | JUSTIN GOODWIN: Okay. |
| 19 | MICHAEL HYDE: So that consistency |
| 20 | JUSTIN GOODWIN: I came in late, so I apologize. |
| 21 | I caught half the conversation. So I guess I should |
| 22 | have been a little more in tune of what exactly we're |
| 23 | talking about. |
| 24 | MICHAEL HYDE: No, I appreciate the comment I |
| 25 | appreciate the question. Thank you. |

| 1 | I can say from our town hall listening |
|----|--|
| 2 | sessions and my experience as the HVAC program manager |
| 3 | at one point in time, I received a lot of phone calls |
| 4 | and feedback on from homeowners. I know this is |
| 5 | commercial, but I received a lot of feedback from |
| 6 | homeowners that they they ask questions, "Why can't |
| 7 | I install a larger home or a larger A/C in my home? |
| 8 | Like why am I limited? This is my house. I'm spending |
| 9 | the money. I moved to Idaho so I can build my home the |
| 10 | way I want." And we get a lot of questions about why |
| 11 | is there sizing restrictions? Why isn't the |
| 12 | interpretation of the Manual J in sizing restrictions |
| 13 | consistent throughout the state? |
| 14 | And it's a challenging problem. And when |
| 15 | you throw two different code books reiterating closely |
| 16 | the same verbiage and you have two different |
| 17 | departments, building and mechanical, essentially |
| 18 | interpreting that, it creates a pathway for |
| 19 | inconsistency. And it I mean I have fielded a lot |
| 20 | of calls myself as a building mechanical inspector, |
| 21 | HVAC program manager, and even still today. |
| 22 | I mean like especially on days like today |
| 23 | when it's 104 degrees outside, people are like "Why is |
| 24 | my A/C not working? Why is it not meeting what I'm |
| 25 | setting it to?" |

| 1 | Well, a large part of that has to do with |
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| 2 | how the Manual J has been calculated and how it's sized |
| 3 | and that communication going to homeowners to let them |
| 4 | know that the Energy Code regulates this. The Energy |
| 5 | Code sets a limitation. So and a lot of that's |
| 6 | communication. But I've fielded a lot of calls on |
| 7 | this. |
| 8 | And I know we're discussing Energy Code |
| 9 | right now, and it is verbatim in the Mechanical Code, |
| 10 | but it's about interpretation. So I don't know how |
| 11 | other jurisdictions do it. |
| 12 | The way the State does it is we follow the |
| 13 | Manual J. We round up to the nearest ton and give a |
| 14 | half ton allowance to accommodate for health |
| 15 | conditions, certain demands, that I need my home a |
| 16 | little cooler, I need to account for more ventilation, |
| 17 | which increases my heating load during times of this |
| 18 | year during this time of the year. |
| 19 | So that's some of the comments that we've |
| 20 | received during the listening session, just to add |
| 21 | further comment to the discussion. And again, please |
| 22 | feel free, feel free to discuss further. I know this |
| 23 | is a hot topic, so |
| 24 | CASH: Mr. Hyde. |
| 25 | MICHAEL HYDE: Yes, sir. |

CACHE OLSON: If I may, this is Cache with the
 City of Nampa.

We've run into that situation quite often. But think about this for instance: Okay. So the individual or homeowner wants a 5-ton unit and yet the ductwork would only accommodate 3 tons worth of air. I mean we've got to really think about those things.

As far as oversizing, that can happen. 8 And 9 so what's the ultimate end of this? I mean so we get a 10 5-ton unit for a home that's 1200 square feet, and 11 because they want to be able to go hit the -- hit the 12 thermostat and be able to get instant cold within, you 13 know, five minutes. There's a lot of things that they 14 need to understand, then. And so I think there's more 15 to the argument than that.

16 But anyway, that's my two cents. I'm out. 17 MICHAEL HYDE: No, I appreciate that, Cache. And anything there on those items that you're referring 18 19 to, anything that specifically -- that you would consider life safety? 20 CACHE OLSON: As far as efficient amount of air 21 22 distribution, or as far as sizing? 23 MICHAEL HYDE: I mean any of the items that

24 you're referencing.

25

CACHE OLSON: Well, not off the top of my head

1 right now. 2 MICHAEL HYDE: Okay. But give me a little while, and I 3 CACHE OLSON: 4 can get back to you. MICHAEL HYDE: No, I appreciate that, Cache. 5 And we can't lose sight of M-1601.1 that 6 7 requires your duct system to be sized according to the 8 Manual D, which follows suit with the Manual J, that is adopted under the Mechanical Code. 9 10 MATT VANDERMEER: If systems -- Matt Vandermeer, 11 Momentum. 12 If systems are wrongly sized, it can cause 13 cracked coils, things like that, which bring carbon 14 monoxide in the home. So that is a health issue. Could you elaborate a little bit 15 MICHAEL HYDE: on how that -- how that occurs? Like what does that 16 17 airflow, how does that create a crack in the heat 18 exchange? 19 MATT VANDERMEER: It's just it's heating and cooling so fast, because you're heating and you're 20 21 cooling a system that's not meant to be that size. 22 MICHAEL HYDE: Just for aluminum coils --23 MATT VANDERMEER: Yeah. 24 MICHAEL HYDE: -- or stainless steel? 25 MATT VANDERMEER: Doesn't matter.

1 MICHAEL HYDE: Both? 2 MATT VANDERMEER: Yeah. 3 MICHAEL HYDE: Okay. JOE BARLOW: Joe Barlow, City of Meridian. 4 Now we're talking about apples and oranges. 5 So originally we were talking about air conditioning 6 systems and 5 tons. That's talking about heating 7 8 systems, which are two separate components. Your heat rise is different than the cooling system being able to 9 10 pump 5 tons of cooling through it. 11 And again, I would say that that's a civil 12 matter between a client and the contractor that they 13 hired to install the air conditioning system if it doesn't function the way that it's supposed to. 14 Ι don't believe that the State should -- should regulate 15 16 and enforce compliance on those types of matters. Ι 17 think that's civil, and it should be addressed through the civil system. 18 19 MICHAEL HYDE: Thank you, Joe. Okay. CHARLIE ALLEN: Mr. Hyde, Charlie Allen again. 20 21 Do you think we have any responsibility or 22 input in efficiency for the homeowners? Like they're going to be paying the utility bill. So I just think 23 that that needs to be part of the whole thought process 24 too. We don't want to be putting in an air 25

| 1 | conditioning unit that's oversized that's going to cool |
|----|---|
| 2 | the home down in five minutes when we know that and |
| 3 | you know that the air A/C units don't receive |
| 4 | ultimate efficiency until they run for ten minutes. |
| 5 | And they need to run longer. And so it's short cycles |
| 6 | once again. So those all need to be considered. |
| 7 | UNIDENTIFIED SPEAKER: Charlie, from your |
| 8 | perspective, how do you go about in your city |
| 9 | establishing that framework for efficiency in making a |
| 10 | decision of you feel like this is this is an |
| 11 | appropriate piece related to efficiency that we make |
| 12 | this a call versus this one isn't? |
| 13 | CHARLIE ALLEN: So we were one of the first |
| 14 | cities that started implementing heat-load |
| 15 | calculations. And we actually caught, you know, a lot |
| 16 | of contractors putting oversized units in, because |
| 17 | they'd been doing it forever, and they weren't doing it |
| 18 | maliciously or anything. But they we had a lot of |
| 19 | kickback at the start. |
| 20 | And as soon as we started, you know, going |
| 21 | out and working with them and requiring the balance |
| 22 | report, all these problems went away. What was |
| 23 | happening is they'd put in a unit that was, in their |
| 24 | mind, too small, but the system wasn't getting |
| 25 | balanced, so, you know, the portions of the home right |

| 1 | underneath the furnace were either too hot or not cool |
|----|---|
| 2 | enough or too cool, but the rest of house was hot or |
| 3 | cold, depending on the season. |
| 4 | The balance report solved our whole |
| 5 | problem. We really haven't had any issues. We do |
| 6 | allow it to be sized a half ton size larger if there's |
| 7 | no equipment available, you know, in that in that |
| 8 | load range, I guess. |
| 9 | So we haven't had any problems since we |
| 10 | started requiring the balance report, because that |
| 11 | really distributed the air where it needed to be in an |
| 12 | even manner, and we just haven't had any issues. We |
| 13 | try to work with the contractors, letting them oversize |
| 14 | a half size, like I say, or and the code lets you |
| 15 | oversize 40 percent. |
| 16 | And so it's been working for us, I guess. |
| 17 | We haven't had any problems since we balanced had |
| 18 | the balance reports turned in. |
| 19 | MICHAEL HYDE: Follow-up question, Charlie, if I |
| 20 | may. |
| 21 | CHARLIE ALLEN: Yeah. |
| 22 | MICHAEL HYDE: You know, you referred to a lot |
| 23 | in your statement about air balancing reports. |
| 24 | CHARLIE ALLEN: Uh-huh. |
| 25 | MICHAEL HYDE: When it comes to air balancing |

| 1 | reports and I'm just asking out of curiosity how |
|----|--|
| 2 | are they enforced? Like what code are you referring to |
| 3 | to enforce that on the contractors in your |
| 4 | jurisdiction? |
| 5 | CHARLIE ALLEN: So yeah, sure. So when they |
| 6 | turn in their their heat-load calculations, they |
| 7 | also turn in a duct design. And the Wrightsoft spells |
| 8 | all that out, how much load comes out of each register |
| 9 | or should be coming out of each register. |
| 10 | MICHAEL HYDE: Right. |
| 11 | CHARLIE ALLEN: And there's a form that they |
| 12 | fill out at the end of the project before we issue the |
| 13 | CO. They turn that in showing that their their |
| 14 | serviceman is or their installer has gone out and |
| 15 | put the duct blaster on there and tested it and |
| 16 | balanced so we require the damper. It's got to have |
| 17 | a damper, each register. |
| 18 | And and they fill that in. And we allow |
| 19 | that to pass if it's within certain parameter that the |
| 20 | code allows. You know, you can I can't remember. |
| 21 | Our mechanical contractor actually reviews those. But |
| 22 | we get those turned in by the contractor showing that |
| 23 | they've balanced it. And we review it and make sure |
| | they're within the parameters. |
| 24 | |

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| be maybe a little over or a little less. But there's there's a little wiggle room there. And we review those, and we just don't have issues. Most of them pass. JOE BARLOW: Mike Hyde, respectfully, I think we've kind of gone a little off topic. MICHAEL HYDE: Okay. JOE BARLOW: I believe we were discussing commercial energy. MICHAEL HYDE: Yeah. JOE BARLOW: This is MICHAEL HYDE: Residential. JOE BARLOW: We're deep into residential. We'r not even we're so far off topic it's not even funny MICHAEL HYDE: Thank you, Joe. I appreciate that. Sorry. Gone down a rabbit hole here. Charlie, I appreciate the information. I may circle back around to you when we get to the residential section of the Energy Code. |
|--|
| review those, and we just don't have issues. Most of them pass. JOE BARLOW: Mike Hyde, respectfully, I think we've kind of gone a little off topic. MICHAEL HYDE: Okay. JOE BARLOW: I believe we were discussing commercial energy. MICHAEL HYDE: Yeah. JOE BARLOW: This is MICHAEL HYDE: Residential. JOE BARLOW: We're deep into residential. We'r not even we're so far off topic it's not even funny MICHAEL HYDE: Thank you, Joe. I appreciate that. Sorry. Gone down a rabbit hole here. Charlie, I appreciate the information. I may circle back around to you when we get to the |
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| 19 may circle back around to you when we get to the |
| |
| 20 residential section of the Energy Code. |
| |
| 21 CHARLIE ALLEN: Sure. I would I would just |
| 22 say the same thing. We require the designer that |
| 23 designs the HVAC system for commercial, they come in |
| and do a balance report, too, same thing at the end of |
| 25 the project. |

| 1 | MICHAEL HYDE: May I ask just directly: What |
|----|---|
| 2 | code section? Where does that live in code, to require |
| 3 | such balance reports? |
| 4 | CHARLIE ALLEN: I'll send it to you in the chat. |
| 5 | I'll look it up and send it. |
| 6 | MICHAEL HYDE: Okay. Thank you. And if you get |
| 7 | it, I'll pull it up for everyone to see, so that way we |
| 8 | can have a discussion. |
| 9 | Is there anything else in the mechanical |
| 10 | building mechanical systems of the Energy Code that we |
| 11 | want to discuss that's being proposed to delete that |
| 12 | may be a life-safety issue that we need to consider |
| 13 | that I'm we may not be seeing? |
| 14 | JASON BLAIS: I just think there's a whole lot |
| 15 | in that chapter that's not duplicated again, Jason |
| 16 | Blais in the IMC. I mean if you're sizing and that |
| 17 | type of stuff is, there's a whole lot more in that |
| 18 | chapter that's not in the IMC. |
| 19 | MICHAEL HYDE: And we can we can go through |
| 20 | them. |
| 21 | JASON BLAIS: There's a lot of controls. |
| 22 | There's a lot of |
| 23 | MICHAEL HYDE: Controls. So like let's look at |
| 24 | all power controls, and what does this require. You |
| 25 | know, thermostatic setback. "Thermostat setback |

controls shall be configured to set back temporarily to 1 2 operate zone temperature between 55 and 85." I mean life safety? Anything there? 3 JASON BLAIS: Well, this is an Energy Code. 4 MICHAEL HYDE: I know. You're right. 5 And that's what we're here to discuss. 6 I mean efficiency of buildings can JASON BLAIS: 7 8 be life safety, health safety in certain circumstances. 9 So to parse every single section out on that, it's a 10 lot of work. 11 MICHAEL HYDE: And that's where we're -- I think 12 we're looking for industry to help us say okay, what do 13 we need to pull back. What is life safety? Because 14 through our analysis, we haven't been able to find 15 such. JASON BLAIS: Well, you're proposing just 16 17 deleting the whole thing. We -- I don't think 18 everybody has gone through and reviewed every section 19 in there. 20 MICHAEL HYDE: Okay. 21 JERRY STAFFORD: Mr. Chairman, Jerry Stafford, 22 CWI. 23 I got a little off on the residential, too, 24 when we were talking a while ago. But the only thing I can think of that would be life safety is just the 25

| 1 | ventilation requirements. I mean it's got to be a |
|----|--|
| 2 | certain amount of air changes. But other than that, I |
| 3 | can't think of anything that's life safety in that. |
| 4 | MICHAEL HYDE: And the mechanical ventilation, |
| 5 | Jerry, Mr. Stafford, is in the Mechanical Code. |
| 6 | JERRY STAFFORD: Right. |
| 7 | MICHAEL HYDE: The amount. So that's where we |
| 8 | kept that's where our conclusion kept driving us |
| 9 | back towards. |
| 10 | But open it up. If there's anything that |
| 11 | anybody sees upon reviewing 403, please feel free to |
| 12 | e-mail me, let me know, give me a call, and we'll |
| 13 | we'll discuss it. We'll add it to the third draft |
| 14 | proposal, and we'll discuss it on the next meeting. |
| 15 | And if we need to have another meeting between now and |
| 16 | the 16th, we can most certainly do so. |
| 17 | TIM FROST: Maybe the one piece to add from the |
| 18 | comment here of like their the comment there was |
| 19 | that efficiency can turn into a life-safety scenario. |
| 20 | As we're going through these deletions, if we feel |
| 21 | if you feel like there is a scenario within one of |
| 22 | these topics of the Energy Code where the efficiency |
| 23 | does correlate back to life safety, we want to hear |
| 24 | that, be able to discuss that. So that's definitely on |
| 25 | the table to have a conversation today. |

| 1 | JERRY STAFFORD: I guess I'd just say one more |
|----|---|
| 2 | thing, which has been said before. But when you're |
| 3 | dealing with commercial, you're dealing with design |
| 4 | professionals that have designed they're licensed |
| 5 | and they've designed a program to meet these |
| 6 | requirements. So I don't know that really it's |
| 7 | again, I don't know that there's an issue for deleting |
| 8 | all these things. There's no reason not to, I think. |
| 9 | PATRICK SULLIVAN: Yeah. So, Mr. Hyde, Patrick |
| 10 | Sullivan, City of Nampa. |
| 11 | MICHAEL HYDE: Uh-huh. |
| 12 | PATRICK SULLIVAN: I think that there I mean |
| 13 | this is a very dense chapter, as are most of the |
| 14 | chapters in the Energy Code. I think that and I |
| 15 | think I have expressed this in some written comments at |
| 16 | the last Board meeting that I think that a we need |
| 17 | to basically line up the different codes, mechanical, |
| 18 | electrical, and plumbing, with this code and figure |
| 19 | out, rather than just getting rid of it because on the |
| 20 | surface we think, Oh, yeah nothing's life safety. |
| 21 | The thing is is there's so many scenarios. |
| 22 | You could design any number of commercial buildings or |
| 23 | residential buildings that what we're coming up with at |
| 24 | this 30,000-foot meeting is not going to find the |
| 25 | intended consequences of leaving the entire chapter. |

Γ

| 1 | And I and in my comments I had said that rather than |
|----|---|
| 2 | taking this out in this legislative session, let's roll |
| 3 | up our sleeves and actually sit down and do an |
| 4 | analytical review with with all stakeholders, put a |
| 5 | task force together, and really vet what's what we |
| 6 | can keep and what we don't want to keep. |
| 7 | You're not going to find the unintended |
| 8 | consequences on all those situations until over time. |
| 9 | And the expectation of people moving from other states |
| 10 | to Idaho where they have adopted the entire Energy |
| 11 | Code, other than Wyoming, which is more of a where |
| 12 | they do it by jurisdiction, but Montana, Utah, |
| 13 | Washington, Oregon, they all adopt these codes. And |
| 14 | we're here we're going to pull out three-quarters of |
| 15 | the Energy Code, and people have the expectation moving |
| 16 | here that they're going to get they're going to be |
| 17 | buying a pig and a poke when they buy a house or when |
| 18 | they buy a commercial building because they're |
| 19 | expecting most people are expecting they're going to |
| 20 | get the same standard of care and the same level of |
| 21 | design. |
| 22 | And by pulling this out, people are not |
| 23 | going to be altruistic and start just, you know, |
| 24 | following these these things. People value-engineer |
| 25 | buildings, and everybody wants a you know, a 10 |

| 1 | building, but they only have 5 pounds you know, |
|----|---|
| 2 | enough to pay for 5 pounds. And I just think that it's |
| 3 | ill-advised to just have these meetings where we have |
| 4 | industry coming in very few industry. I mean I'm an |
| 5 | architect and I'm a building official, and there's less |
| 6 | than 25 people here. And we're talking about the |
| 7 | entire state. |
| 8 | I mean if we're going to do it right, we |
| 9 | need to have some engineers, architects, builders, |
| 10 | commercial and residential, and get everybody in a room |
| 11 | and really go through this. Because I think the thing |
| 12 | is is once these go away, they're gone forever. There |
| 13 | will not be the political will to pull any of these |
| 14 | sections back in. For all the good intentions that you |
| 15 | may have of we're going to take these out now and then |
| 16 | we're going to bring back the portions of the Energy |
| 17 | Code into the Mechanical, Electrical, Plumbing Boards, |
| 18 | I think that is wishful thinking or magical thinking. |
| 19 | And I don't think it's going to happen. |
| 20 | So that would be my recommendation is |
| 21 | let's let's actually look at this in some really |

20 30 that would be my recommendation is 21 let's -- let's actually look at this in some really 22 granular meetings and really do it right, because once 23 it's gone, it's gone. And then we're going to find --24 cherry-pick and find some things after the fact that we 25 want back in, and we're not going to be able to get it

in, because the legislature is not open-minded enough 1 2 to -- it will just -- yeah. So anyway, I just -- I think that there's 3 not enough time in a meeting like this to vet all of 4 the deletions that you're talking about. 5 Thank you for the comments, MICHAEL HYDE: 6 7 Mr. Sullivan. There's a couple things I want to back up 8 9 [unintelligible]. That was a broader, overarching 10 comment to everything we're doing today. 11 So like first, unintended consequences. We 12 know there's five to six states that don't have an 13 energy code at all adopted. And there's only a -- in 14 those states only a few of the local jurisdictions that have actually adopted it. So the vast majority of that 15 16 state doesn't have an energy code at all. And so when 17 you speak towards unintended consequences, we've got two decades of experience of some of these states not 18 19 having it at all. 20 So what are we pointing to that we need to be aware of and document? 21 PATRICK SULLIVAN: Well, if we had more -- if we 22 23 had more time to actually delve into it and compare --24 bring out the Mechanical Code and bring out the Energy 25 Code and see where the gaps are, there are some

| 1 | instances where some of the control sections in the |
|----|---|
| 2 | Energy Code really aren't fully developed in the |
| 3 | Mechanical Code. And they're filling the gap, because |
| 4 | when ICC put these together, they pulled out anything |
| 5 | energy out of Building, Mechanical, Electrical, and |
| 6 | Plumbing Code and put into this Energy Code, for good |
| 7 | or for bad, and what it did is it left gaps. If you |
| 8 | don't have the whole Energy Code, there are still gaps |
| 9 | in those other codes because they intentionally |
| 10 | pulled pulled those energy sections out so it would |
| 11 | all be housed in the Energy Code. And that's been |
| 12 | going on since they adopted when they first had the |
| 13 | first one in 2006. |
| 14 | MICHAEL HYDE: So question for you, |
| 15 | Mr. Sullivan. |
| 16 | Do you know why they pulled those out of |
| 17 | the life-safety code, the Mechanical Code? |
| 18 | PATRICK SULLIVAN: I don't know exactly why. |
| 19 | MICHAEL HYDE: Okay. |
| 20 | PATRICK SULLIVAN: But I would I would |
| 21 | imagine that they pulled them out so they could just |
| 22 | put everything having to do with energy, which is |
| 23 | building performance, starting from the envelope to the |
| 24 | mechanical, electrical, and plumbing systems with a |
| 25 | focus on as the buildings get tighter you're going to |
| L | |

| 1 | need to be able to have more sophisticated designs to |
|----|---|
| 2 | accommodate that to be able to have enough ventilation |
| 3 | and enough controlled ventilation. |
| 4 | That said, a lot of the Energy Code is an |
| 5 | energy standard. But what I'm saying is is there are |
| 6 | some health standards that we might want to retain some |
| 7 | of the control, some of the control items in here. |
| 8 | The other thing that comes to mind is |
| 9 | performance of the building. Do you really want to |
| 10 | have a building where over long term or since we had |
| 11 | COVID, we ended up saying, well, we don't need to have |
| 12 | insulated duct in the unconditioned areas. |
| 13 | But is that something we really want long |
| 14 | term for long-term performance of buildings where we're |
| 15 | losing a lot of heating or cooling into these |
| 16 | unconditioned areas? Is that really what we want to |
| 17 | do? |
| 18 | I mean that I mean I guess to me I think |
| 19 | that it's all kind of part and parcel. I look at a |
| 20 | building as as an integrated design. I don't look |
| 21 | at it as pieces, parts, life safety versus I look at |
| 22 | it the whole thing is going to perform |
| 23 | MICHAEL HYDE: Uh-huh. |
| 24 | PATRICK SULLIVAN: depending on what system |
| 25 | you have in it. |

| 1 | MICHAEL HYDE: Yeah. Is performance life |
|----|--|
| 2 | safety? Building performance, is it life safety? I |
| 3 | mean that's the conversation here. |
| 4 | PATRICK SULLIVAN: When you're building |
| 5 | performance with respect to moisture mitigation, you |
| 6 | know, being able to handle moisture that's coming off |
| 7 | of equipment or people in the building |
| 8 | MICHAEL HYDE: Is that |
| 9 | PATRICK SULLIVAN: being able to adequately |
| 10 | ventilate and control that. |
| 11 | MICHAEL HYDE: Uh-huh. |
| 12 | PATRICK SULLIVAN: And a lot of that's in you |
| 13 | know, we're having these tight buildings. We just |
| 14 | don't want unhealthy buildings. And what I'm saying is |
| 15 | I think they've pared down some aspects of the |
| 16 | Mechanical Code where we might want to look and see |
| 17 | what are we leaving on the table that's that we |
| 18 | really should bring back in. And I haven't taken the |
| 19 | time to lay the two together. |
| 20 | MICHAEL HYDE: We have. And that's where we've |
| 21 | come up with this draft. And that's what we're seeing. |
| 22 | And this is again, this is our opinion, |
| 23 | recommendation to the Board throughout that zero-based |
| 24 | regulation process, because we do see the ventilation |
| 25 | requirements for tight buildings in the Mechanical |

| 1 | Code, in the Building Code, or in a foundation, or in |
|----|---|
| 2 | unconditioned attic space that's within the envelope |
| 3 | but under insulated ductwork. Depending on the outdoor |
| 4 | temperatures, you could get moisture. How are you |
| 5 | supposed to ventilate those spaces? Are you required |
| 6 | to ventilate those spaces? |
| 7 | You know, but a lot of that's covered in |
| 8 | not in the Energy Code. This just the Energy Code |
| 9 | regulates what appliances, how efficient those |
| 10 | appliances are, and the controls of those appliances. |
| 11 | But just because they're not in the Energy |
| 12 | Code doesn't mean they cannot be achieved. I mean we |
| 13 | have licensed HVAC contractors, electrical contractors, |
| 14 | and plumbing contractors that have been in the industry |
| 15 | for years that know these systems like the back of |
| 16 | their hand. They're going to have the recommendations |
| 17 | and be able to market their opinion professional |
| 18 | opinions on how to resolve some of these building |
| 19 | performance issues. |
| 20 | And when we tie everything of what we're |
| 21 | doing back to the legislative intent of the Building |
| 22 | Code Board, it's centered around enforcing consistent |
| 23 | life-safety code. Code is a minimum. We've discussed |
| 24 | that earlier. Code is the very bar, very lowest bar |
| 25 | that you can achieve for a life-safety you know |

25 that you can achieve for a life-safety, you know,

| 1 | consumer occupant welfare type of an approach. |
|----|---|
| 2 | Anything above and beyond, should that be regulated? |
| 3 | You know, and at what cost? |
| 4 | And, you know, walking this back to a |
| 5 | comment that was made, I believe by Mr. Allen, you |
| 6 | know, it's not our intent to eliminate any efficiencies |
| 7 | that could be gained by any building owner in the state |
| 8 | of Idaho. If if there's an efficient way to do |
| 9 | something, we're all in favor of it. But should we |
| 10 | mandate that all contractors do that and make those |
| 11 | installations? That's what we're really trying to |
| 12 | engage and ask. |
| 13 | Is that a component of life safety, a |
| 14 | minimum life safety? Or is that a marketing tool for |
| 15 | businesses to market their their company as "Hey, |
| 16 | I'm I'm an efficient contractor. I install these |
| 17 | sets 90-percent only furnaces or water heaters," |
| 18 | things like that? |
| 19 | And then also if we look at some of the |
| 20 | studies that have been done by the Department of |
| 21 | Energy, specifically in relation to the state of Idaho, |
| 22 | there's some great material on this website that if you |
| 23 | look at the comparison between the code cycles of '12, |
| 24 | '18, and '21, it will delineate and project on an |
| 25 | average, basic home, you know, what the annual energy |

1 bill rates will be. 2 But one thing it doesn't really capture that we need to discuss is at what happen point are we 3 regulating consumer choice? At what point does an 4 Idahoan living in their home that wants to go change 5 the thermostat down, are these values lost? And are we 6 really gaining this if they go and touch that 7 8 thermostat or open their window and door when it's 9 104 degrees outside? Is it really being realized? 10 And that's a part of ZBR. You know, what 11 are we enforcing and is it being realized and should it 12 be regulated? So big conversation, getting off on a 13 tangent there. 14 JOHANNA BELL: Mike. 15 MICHAEL HYDE: Yes, ma'am. 16 JOHANNA BELL: If I may. 17 MICHAEL HYDE: Uh-huh. So it's -- I don't know if this 18 JOHANNA BELL: 19 is a helpful follow-up or not --20 Johanna, will you just state your TIM FROST: 21 name for the record. 22 JOHANNA BELL: Oh. Johanna Bell with the 23 Association of Idaho Cities for about another five 24 minutes. So -- so what I'm hearing, Patrick, Mike, 25

| 1 | what you're talking about is something that's been a |
|----|---|
| 2 | concern for me, and that is building performance. And |
| 3 | setting aside, you know, consumer information, |
| 4 | education, or protection, what I'm hearing is that |
| 5 | there are building performance components where you're |
| 6 | seeking to fill these gaps that in fact perhaps the |
| 7 | International Code Council may have filled them by |
| 8 | putting them in the Energy Code, you're looking at the |
| 9 | HVAC Mechanical Code and also looking at building |
| 10 | performance elements there. |
| 11 | And so to me it it sounds like a |
| 12 | follow-up for the next discussion meeting would be to |
| 13 | allow the stakeholders to see your analysis regarding |
| 14 | the HVAC Code and the building performance elements and |
| 15 | the removal of the Energy Code and how they might be |
| 16 | related to the building performance in order to get the |
| 17 | education get the conversation going further towards |
| 18 | building performance concerns. |
| 19 | And so if you're if you're talking |
| 20 | about I mean it sounds like there's an intersection |
| 21 | in concerns in the stakeholders regarding the building |
| 22 | performance. And I'm concerned that that might not be |
| 23 | being talked about as specifically because of all of |
| 24 | the other anxiety around, you know, putting together a |
| 25 | set of codes that are somehow dictating consumer |

1 preference.

MICHAEL HYDE: Johanna, I think the piece that we're trying to navigate here is less the crossover performance, the mechanical codes that our HVAC Board adopts are related to life safety. And so we know that we have those for governing the installations of life safety for HVAC systems.

The conversation that we're proposing here 8 9 today and the question we're putting out is, is 10 there -- if we use the example of HVAC, is there 11 elements of the Energy Code related to HVAC that are 12 life safety that we should be considering or efficiency 13 gain scenarios for performance that we can actually 14 draw and correlate back to the health and safety of the 15 occupant welfare.

JOHANNA BELL: But what I'm hearing is that it's -- it's the system of the building that carries the risk and the building performance. It's all of it coming together. It's not -- sure, there's a component within the HVAC and there's a requirement within the HVAC trade that is spelled out in code.

But everything I'm hearing is that is important for that to be informed by the structure so that it can -- it can be analyzed in the sizing and the power -- you know, whatever it is. The amount of

1 circulation that it's creating. 2 And so there's a -- there's a feedback that is important for -- is my understanding. You know, I'm 3 not an HVAC contractor. But the HVAC contractors --4 I've talked to a couple of them -- and they do like to 5 know what kind of a building they're installing in in 6 order for -- to get it balanced, because they don't 7 8 want to install something that's going to create hazardous indoor air quality or install something 9 10 that's going to -- that's going to crack, you know, 11 because of the operational strain, so... 12 MICHAEL HYDE: I appreciate the comments, 13 Johanna. 14 I mean I think the basis of this breakdown 15 turns into prescriptive versus performance requirements 16 of the Energy Code. And the draft you have before you 17 today starts with, in a way, the prescriptive requirements of saying these are necessary for life 18 19 safety. And what's open for this code collaborative or any of the negotiated rule-making hearings, both the 20 next one, as well as the two that come in the fall, 21 22 would be is if there's a performance-related item that 23 you think is necessary for the broader piece of the 24 health of the building that we can correlate to life safety, and we can actually account for the fact that 25

consumer decisions and consumer choices can be 1 2 calculated. So for example, in the DOE studies, that we 3 can account for those type of individual decisions to 4 actually say the total health of the building, we'll 5 give you these efficiency ratings, we are absolutely 6 open to having those conversations. 7 I think where we've initially struggled in 8 9 this review in looking at those studies is it doesn't 10 account for each of those individual decisions, but 11 some of the prescriptive requirements do. 12 And so I guess that's for today's point, 13 you know, when we're talking through each of these 14 deletions, each of these deletions have, you know, 15 three, four, five pieces in the code that we could 16 detail and talk through. Those are absolutely open for 17 the table. If you feel like within one of those 18 19 deletions there's one, two, or three or whatever the case items that are necessary for us to consider, let's 20 21 bring those up and talk through them. We'll be happy 22 to do that. 23 TERRY AUTENS: Terry Auten, Boise Building 24 Safety Professionals of Southwest Idaho. I agree with Johanna. Obviously you did do 25

| 1 | an analysis. Where is that? And this is a perfect |
|----|--|
| 2 | example of what happens when you do it in a vacuum and |
| 3 | you don't involve industry while you're doing that |
| 4 | analysis, because we wouldn't be having this |
| 5 | conversation if had we all sat down together and gone |
| 6 | through those codes and figured out what kind of goal |
| 7 | that we're reaching. |
| 8 | As for life safety, I think that has |
| 9 | different meanings for different people. To me, the |
| 10 | Energy Codes provide are life-safety codes. They |
| 11 | provide for better air quality, for better |
| 12 | environmental atmosphere for me to live in. In this |
| 13 | cases of disaster or extreme weather, they provide for |
| 14 | a safe haven. |
| 15 | I mean talk to the people in Texas right |
| 16 | now that are paying \$900 a month to try and |
| 17 | air-condition their homes because they're not properly |
| 18 | insulated. Those are all life-safety issues to me. |
| 19 | And I'm not sure how you're defining "life safety." |
| 20 | But I think you need to define it when you keep |
| 21 | emphasizing that these codes have to be life safety. |
| 22 | Because there's a lot in the Energy Code |
| 23 | that provides life safety. And I know we provided you |
| 24 | a list. It feels like you guys are you've done a |
| 25 | lot of work on this, and it feels like you guys are |

| 1 | tied to this. And I think to solve this, you take |
|----|---|
| 2 | Patrick's advice and Johanna's advice, share your |
| 3 | analysis, let us sit down and go through it in a normal |
| 4 | code process. You're going to be a lot happier; we're |
| 5 | going to be a lot happier. |
| 6 | MICHAEL HYDE: Terry, can you help me understand |
| 7 | a little bit what you mean by "normal code process." I |
| 8 | mean we're we've had nine listening sessions all |
| 9 | across the state in the last year. We're holding over |
| 10 | five negotiated hearings this year. We're willing to |
| 11 | hold any number of negotiated hearings. |
| 12 | And so I mean that's the opportunity to ask |
| 13 | any potential questions that you'd like to or advocate |
| 14 | for adding back in something that, for example, |
| 15 | performance related that you think is necessary. I |
| 16 | think that's what the goal of here today is, to bring |
| 17 | those topics to light. |
| 18 | TERRY AUTENS: And I do want to say I appreciate |
| 19 | the fact that you guys put this meeting together and |
| 20 | asked the advocates from each of the industry groups to |
| 21 | attend. |
| 22 | The normal code hearing that we've had for |
| 23 | the last decade has been it's on a regular code |
| 24 | cycle. It used to be every three years. Now it looks |
| 25 | like it may be every six because of the governor's |

| 1 | order. But we start a year or two in advance. And |
|----|---|
| 2 | it's a series of meetings with all the industry. And |
| 3 | we go through the code section by section, the new |
| 4 | codes that are being proposed section by section. And |
| 5 | all of the industry are at that meeting and we |
| 6 | negotiate and we talk about how is this going to affect |
| 7 | the HVAC people? How is this going to affect the code |
| 8 | enforcers? How is this going to affect the building |
| 9 | contractors? And then we come up with amendments. |
| 10 | And it hasn't been a perfect process. But |
| 11 | we were kind of getting there where it was a perfect |
| 12 | process getting to a perfect process. And it's |
| 13 | taken two years. It's not listening sessions. We're |
| 14 | not what you're saying is we've come up with a |
| 15 | proposal, and you need to listen to us. You're saying |
| 16 | to us that we need to listen to you. |
| 17 | That's not how it's gone. It's been a |
| 18 | negotiation it has been a truly negotiated series of |
| 19 | meetings where we actually negotiate between all of us, |
| 20 | and then we come up with a code that easily goes |
| 21 | through because everybody's already agreed to it. |
| 22 | That's the process that we're used to. And |
| 23 | nobody was expecting that we were going to have to deal |
| 24 | with codes this year. We just dealt with codes last |
| 25 | year. We thought we were going to get a three-year |

1 break and we wouldn't have to deal with all this stuff. 2 And now we're back to dealing with codes and changing 3 the codes. In my opinion, these codes are on a cycle. 4 We've adopted codes that all of the industry has agreed 5 to is fine, not perfect, but fine. And we should wait 6 for the next code process, which would be in two to 7 8 three years, and begin the negotiation process. 9 This is rushing it. And without your 10 analysis of the comparison between mechanical and 11 electrical and all the -- all the codes and the Energy 12 Code, we are way behind the eight-ball. I mean we 13 didn't even get a draft of this until what? Two months 14 ago. You guys may have been working on it for a year, 15 but we haven't seen it. So now we have maybe, what, five months to 16 17 try and change your minds on it, when it normally takes us over a year to go through these types of processes? 18 19 That's -- I don't understand what the problem would be with slowing the process down and doing it right. 20 21 And I'm sure the governor would complain --22 I know our conversations with the governor's office is 23 they're not really tied to seeing these code changes 24 this year. 25

So what's the rush?

| 1 | MICHAEL HYDE: Terry, I appreciate your |
|----|---|
| 2 | comments. I appreciate your concerns. I respectfully |
| 3 | disagree that we haven't had an open and very |
| 4 | negotiated process. |
| 5 | Negotiated rule making in a way starts when |
| 6 | you go proposed. That proposed for this Board is in |
| 7 | the September bulletin. So we'll have almost four |
| 8 | months of pre-draft negotiations prior to that |
| 9 | September bulletin. That's more than I can say for the |
| 10 | vast majority of negotiated rule making that happens in |
| 11 | the state of Idaho. So I do think that goes above and |
| 12 | beyond. |
| 13 | We started with the framework for ZBR to |
| 14 | not review code cycles, so we weren't reviewing whether |
| 15 | or not we're adopting a new cycle versus an old cycle, |
| 16 | things like that. We started with what is our current |
| 17 | rule chapter, and we're going to review the contents of |
| 18 | that rule chapter. |
| 19 | If you ask why did we go through it during |
| 20 | this timing, we scheduled for executive order 2020-01, |
| 21 | zero-based regulation. This is when the Building Code |
| 22 | Board went through it. |
| 23 | In addition, the legislature also made it |
| 24 | very clear that they are separating out Energy Code in |
| 25 | differentiation from Building Codes. That was House |

1 Bill 660 with the amendments this year. That also 2 pertained to local jurisdiction and local jurisdiction 3 control. And so I -- I recognize the comments. 4 Τ also recognize the situation that our division did not 5 run the legislation and our decision didn't make that 6 decision. But we also are stuck with now that the 7 8 decision related to Energy Code is stuck with the 9 Building Code, we have to go through it. 10 I think it would be unwise for us to not 11 consider the intent and what the legislature did in the 12 last session, and not consider the statements that the 13 legislators made related to the Energy Code. And I 14 think we're trying to do that, and we're trying to do that in a negotiated manner to then present these rules 15 16 back to the legislature next year. 17 And I certainly understand there are some individuals that are going to be fully supportive of 18 19 the direction that we're going. There are some individuals that aren't. But this absolutely is a 20 negotiation. And it -- you know, just like this 21 22 morning when we talked through the International 23 Building Code and International Residential Code, there 24 were multiple comments that were made that were relevant to life safety and relevant to clarification 25

of those rules, and we're making adjustments to this
 chapter on behalf of that.

And so I think I want to make sure as we continue through the conversation today that we -- I guess we dial back in to the actual elements of the IECC. And if there are items that you think are necessary to add back into these rules, we would love to hear that today and we'd love to talk through, you know, why you think that's the case.

10 TERRY AUTENS: That's what I hear you saying, 11 but I'm not sure you hear what we're saying. I hear 12 you saying that you want the process to be correct. 13 What we're saying is this is very technical. It takes 14 a lot of time, and there are a ton of groups involved.

And six months is not long enough to figure out the consequences of what you're proposing here. And you've heard it from almost everyone in the audience. So --

MICHAEL HYDE: Thank you, Terry.

19

25

20 TERRY AUTENS: -- it doesn't sound like you're
21 hearing what we're trying to tell you.

22 MICHAEL HYDE: We have heard the comments from 23 you, as well as Johanna, as well as Mr. Sullivan, and 24 related to the timeline. Thank you.

JERRY STAFFORD: Mr. Chairman, if I can speak.

| | Jerry Stafford, CWI. |
|----|---|
| 2 | Again, I think, you know, I've been in |
| 3 | several other meetings that they've had in rule making, |
| 4 | and basically they're presenting this information to us |
| 5 | now. Now it's our responsibility to say, okay, if I'm |
| 6 | concerned about, you know, mechanical building systems |
| 7 | in this section C-403, I better go look at it and make |
| 8 | my comment. |
| 9 | And they can we can e-mail our comments |
| 10 | to them. And then the next time we meet those can be |
| 11 | brought up and discussed. So I think it's basically |
| 12 | time for everybody to go do their homework if they've |
| 13 | got issues, and then get back with the with the |
| 14 | Board. |
| 15 | JOHANNA BELL: Yeah. |
| 16 | MICHAEL HYDE: Johanna. |
| 17 | JOHANNA BELL: I appreciate that comment, Jerry, |
| 18 | by the way, very much. |
| 19 | And thank you, Tim, for letting me speak |
| 20 | again. |
| 21 | So just what I'm hearing is that it would |
| 22 | be very helpful perhaps for the stakeholders to line up |
| 23 | the HVAC Code and the structural codes, take a look at |
| 24 | where the gaps are in performance, line up the |
| 25 | Electrical Code and the structural codes and look at |

| 1 | those gaps, and basically do what what we hear that |
|----|---|
| 2 | Michael's done and DOPL has done in getting ready for |
| 3 | these meetings. And because it sounds like we may |
| 4 | not be, as a stakeholder group, HEC, IBCA, Idaho, we |
| 5 | may not be able to put together effective comments |
| 6 | without doing that more comprehensive review across all |
| 7 | code. |
| 8 | MICHAEL HYDE: May I ask just historical |
| 9 | question: Because the 2018s we have just adopted two |
| 10 | years ago, almost; right? And if we had a 2018 Code |
| 11 | collaborative or even an Energy Code collaborative, I |
| 12 | dug through those minutes, and I was I failed to |
| 13 | identify where we did that code comparison. |
| 14 | JOHANNA BELL: It was |
| 15 | MICHAEL HYDE: So what did that look like? Did |
| 16 | we already do this work and I'm just not finding it? |
| 17 | Because I'd hate to re-create an analysis on from |
| 18 | that behalf if stakeholders already did this work. I'm |
| 19 | failing to see that Mechanical, Electrical, Plumbing |
| 20 | Code comparison to the Energy Code. |
| 21 | So was that done through the Energy Code |
| 22 | collaborative? |
| 23 | PATRICK SULLIVAN: Mr. Hyde. |
| 24 | MICHAEL HYDE: Yes, sir. |
| 25 | PATRICK SULLIVAN: Patrick Sullivan. |

I can answer that. I was involved -- a lot 1 2 of us were involved --3 MICHAEL HYDE: Uh-huh. PATRICK SULLIVAN: -- in that process. We did 4 not do a comparison of the trade codes --5 Okay. MICHAEL HYDE: 6 PATRICK SULLIVAN: -- with the Energy Code 7 8 because we were not faced with the prospect of deleting those sections of the Energy Code from -- from the 9 10 statute. 11 We were looking at significant changes from 12 the 2009 Energy Code for residential and the 2012 13 Energy Code for commercial, and we were concentrating on comparing the differences of requirements in code 14 cycle as significant changes to the Energy Code. 15 16 MICHAEL HYDE: Okay. 17 PATRICK SULLIVAN: But now that we're faced with 18 losing these sections of the code, it's incumbent upon 19 us to actually do that analysis so that we can see -you know, I can't tell you today where all the 20 21 life-safety or health-safety items are, that if you 22 took, you know, Section 403.11 out --23 MICHAEL HYDE: Uh-huh. 24 PATRICK SULLIVAN: -- what is that going to do. I mean it's -- you know, that's for calculation of 25

| 1 | heating and cooling loads; right? |
|----|--|
| 2 | MICHAEL HYDE: Uh-huh. |
| 3 | PATRICK SULLIVAN: And so, you know, there is |
| 4 | some language in the Mechanical Code as well. It begs |
| 5 | the question on are we you know, if we take out that |
| 6 | same those same mechanical portions in the |
| 7 | Residential Code |
| 8 | MICHAEL HYDE: Uh-huh. |
| 9 | PATRICK SULLIVAN: are we even going to look |
| 10 | at the mechanical system during plan review on |
| 11 | single-family residences, or are we just going to |
| 12 | it's just let the market bear out if the if the |
| 13 | heating and cooling system works and if the and it's |
| 14 | balanced. |
| 15 | You know, we won't be we won't be seeing |
| 16 | test and balance reports. We won't be reviewing to see |
| 17 | if the equipment is sized correctly, the ductwork is |
| 18 | sized correctly. We'd only go in the process to look |
| 19 | at branding. We wouldn't because we we would not |
| 20 | be reviewing during plan review a sizing of ductwork. |
| 21 | And at the end we really wouldn't care at |
| 22 | that point, because if we're not checking it at the |
| 23 | beginning, we're not going to inspect it at the end, |
| 24 | and we're relying on industry to put a system in |
| 25 | correctly. |

| 1 | MICHAEL HYDE: So, Mr. Sullivan, if we if the |
|----|--|
| 2 | comments here, the Energy Code collaborative didn't |
| 3 | look at or we don't know what the unintended |
| 4 | consequences of taking this out, what was the |
| 5 | justification for putting it in in the first place, |
| 6 | then? |
| 7 | PATRICK SULLIVAN: In, I think, 2007/'8, we |
| 8 | adopted the State adopted the 2006 Energy Code in |
| 9 | its entirety. And it would be the same question you |
| 10 | could ask me, why didn't we look at taking some |
| 11 | structural items out of the IRC. |
| 12 | I mean it never occurred to us to since |
| 13 | it was adopted by from the start it's been adopted |
| 14 | by the Building Code Board, along with the IRC and the |
| 15 | IBC. And it just made sense that if we're adopting the |
| 16 | entire thing. We did, you know, tear down for the |
| 17 | residential, you know, our values, air changes, you |
| 18 | know, things like that, in response to the Home |
| 19 | Builders Association being a major stakeholder. So we |
| 20 | did look at it with a critical eye their critical eye |
| 21 | there. |
| 22 | The feedback we had got from engineers in |
| 23 | the room on the commercial is this is all good, and |
| 24 | then we went through to see if there was any |
| 25 | significant changes that would be onerous or add too |

many costs to a project and if they were really 1 2 necessary or not. So I would have to say that we amended 3 4 the -- we basically amended the residential side. But the commercial side, you know, based on the design 5 professionals putting these designs together, they're 6 saying keep it in there. There's consistency when we 7 8 do jobs in this region to have -- have the same metrics 9 when we're doing design, you know. 10 If -- you know, if you do a design in one 11 state and you go to another state and -- and they're on 12 a different set of codes, maybe, you know, three to six 13 years earlier, it totally resets how you design. And 14 now you -- it's -- because you're used to designing in your hometown having the same thing all the time. 15 16 So no, we did not compare all those. Τ 17 mean it's necessary now. And that's why I'm saying if we had a little bit more time so we could do a critical 18 19 analysis on those sections or even have -- maybe the next step is actually running this by the Mechanical, 20 Electrical, and Plumbing Boards and see where they --21 22 those Boards feel like they need to pull in some of 23 this stuff that is -- or some of these provisions in 24 the Energy Code that really are critical to the install -- you know, the installation of those systems. 25

| 1 | And then and then pull it out of the Energy Code. |
|----|---|
| 2 | What I'm saying is I think it's going to be |
| 3 | an uphill battle or it will just fall by the wayside if |
| 4 | you get rid of it all and then try and piecemeal or |
| 5 | bring back, you know, a half dozen half dozen |
| 6 | requirements in each section, you know, down the road, |
| 7 | with separate boards, so |
| 8 | MICHAEL HYDE: Do we have a comment in the back? |
| 9 | TYLER PEROT: Just Tyler Perot, City of |
| 10 | Meridian. |
| 11 | I just think that the design professionals |
| 12 | under these deletions and things of that nature, the |
| 13 | design professional's still the one responsible. The |
| 14 | design professional's still the one trained to design |
| 15 | the systems and function within those sets of codes. |
| 16 | If they want to go above and beyond and |
| 17 | still operate within the parameters of what's deleted, |
| 18 | then they have the ability to choose that. |
| 19 | I think the reality of the situation is you |
| 20 | guys are working in the positive light of trying to |
| 21 | keep choice out there, rather than mandate an |
| 22 | overbearing government. And I appreciate that. And I |
| 23 | think that's very important, especially this day and |
| 24 | age for people to still be able to choose and get the |
| 25 | design or the result that they wish for their |

| 1 | circumstance, rather than having the State come in and |
|----|---|
| 2 | say no, you have to do all of this because we have all |
| 3 | of these codes in place. |
| 4 | Is it life safety? Does it pertain to |
| 5 | keeping people alive? Or is any of this going to |
| 6 | create a dangerous or bad situation? |
| 7 | From my experience, I'm a certified |
| 8 | mechanical inspector as well, but you're not going to |
| 9 | have those overbearing issues from these situations not |
| 10 | being enforced and mandated. |
| 11 | JOE BARLOW: Joe Barlow, City of Meridian. |
| 12 | I'd like to add to that. You could argue |
| 13 | the point that the mold issue has been exacerbated by |
| 14 | these codes in the angle of tightness. So are these |
| 15 | codes actually helping, or are they causing more of a |
| 16 | life-safety issue? I mean that's a that's a fair |
| 17 | and valid point to address. |
| 18 | TERRY AUTEN: So once again, if DOPL has indeed |
| 19 | done the analysis of these sections versus the |
| 20 | mechanical and other codes, can we get that so we don't |
| 21 | have to reinvent the wheel so that we can get |
| 22 | through all we're asking for I don't think |
| 23 | anyone's arguing for or against. |
| 24 | What we're saying is that there's |
| 25 | there's too much here to make a decision in this short |

| 1 | a period of time. But if you've already done that, if |
|----|---|
| 2 | you've already analyzed where everything is and how it |
| 3 | compares, each code compares, can we get a copy of that |
| 4 | so that we don't have to start from ground zero? Is |
| 5 | that possible? |
| 6 | TIM FROST: Terry, so I think I want to make |
| 7 | something clear. There are people arguing in the room |
| 8 | for or against these items. |
| 9 | TERRY AUTENS: No, I understand that. |
| 10 | TIM FROST: So the secondary part of that is |
| 11 | what when you're requesting something of us, what |
| 12 | are you looking for? Are you looking for in deleting |
| 13 | these, are some of these found in the other sections of |
| 14 | code adopted by those boards? Like which are and which |
| 15 | aren't? |
| 16 | TERRY AUTENS: Yes. Michael said that your |
| 17 | department did an analysis and compared all the codes |
| 18 | to these sections that you're you just said that not |
| 19 | too long ago. |
| 20 | MICHAEL HYDE: Prospective analysis. |
| 21 | Prospective analysis. I apologize. Let me clarify. |
| 22 | TERRY AUTENS: A what analysis? |
| 23 | MICHAEL HYDE: Zero-based regulation, |
| 24 | prospective analysis, looking at our IDAPA rule chapter |
| 25 | in answering the six questions on the codes that are |

1 enforced and regulated upon industry. I didn't do a 2 code-by-code comparison. So what we have for --3 TIM FROST: TERRY AUTENS: I thought that's what you just 4 said. 5 What we have for ZBR -- and this is TIM FROST: 6 consistent with all of our 14 boards -- is we are going 7 8 through, and the first question we answer is what is the statutory authority to adopt the rule. 9 The next 10 question is, what is the proposed problem this rule is 11 trying to address? Is there another way to approach 12 this problem outside of regulating it? How are other 13 states approaching this proposed rule? And if Idaho is 14 more restrictive than our surrounding states, including South Dakota and Alaska, what's the evidence-based 15 16 reason that we are justifying this? 17 And so part of the negotiated process of having these meetings is for us to actually gain 18 19 information from the stakeholders for the justification. In other words, right now we have --20 21 we're not proposing in all instances to delete the 22 Energy Code. We have elements in here that we're 23 keeping. We certainly have elements that we're 24 proposing deleting. But in our prospective analysis that we 25

| 1 | have to publish in August, you know, before we go |
|----|---|
| 2 | proposed, it has to include what's the evidence-based |
| 3 | reason that we are keeping the rules in place. Not why |
| 4 | are we deleting them. |
| 5 | And so part of this conversation is getting |
| 6 | feedback from stakeholders, if there's a particular |
| 7 | area in these rules that you think is appropriate and |
| 8 | is evidence-based that Idaho should have these |
| 9 | restrictions in place, we're trying to gather that |
| 10 | information so we can document that and present that to |
| 11 | the Board to see whether or not the Board agrees with |
| 12 | it. |
| 13 | Yes, sir. |
| 14 | MATT VANDERMEER: I'm Matt Vandermeer with |
| 15 | Momentum. |
| 16 | So yesterday I sent Mike |
| 17 | TIM FROST: Can you say your name again real |
| 18 | quick. |
| 19 | MATT VANDERMEER: Matt Vandermeer, Momentum. |
| 20 | TIM FROST: Thank you, sir. |
| 21 | MATT VANDERMEER: I sent Mike Knoll [phonetic] |
| 22 | and some others some life-safety issues when testing |
| 23 | homes either way, high or low. |
| 24 | TIM FROST: Yes. |
| 25 | MATT VANDERMEER: Where does all of that |

1 information go to? 2 TIM FROST: The information related to where you 3 sent --MATT VANDERMEER: Yeah. I sent it to Mike 4 Knoll. 5 How does it get distributed to everybody 6 7 else that sees it? 8 TIM FROST: Yeah, so that will -- all of that 9 will be in the public packet packaged for the next 10 Board meeting. So whenever we would get negotiated 11 comments -- for example, we received some from 12 Mr. Sullivan. We received some from the Association of 13 I think we have a few e-mails here and Cities. 14 there -- all of that will be pulled together within the public packet for the Board to be able to see and 15 16 review before they make a decision. 17 MICHAEL HYDE: This meeting is to add to that. 18 TIM FROST: Yeah. 19 MICHAEL HYDE: Anything that hasn't been captured in writing in allowing other industries the 20 opportunity to input. This meeting was sent to all the 21 22 boards in all the e-mail list specific to those three 23 industries outside of building. 24 And so we're trying to do our due diligence and have everybody at the table with a voice. 25

1 CHARLIE ALLEN: Mr. Hyde. 2 MICHAEL HYDE: Yes, sir. Charlie Allen again. 3 CHARLIE ALLEN: Hey, I understand that at your last 4 Mechanical Board meeting, they proposed to not take 5 Manual J and S and D out. 6 Is that -- is that still your plan, you're 7 8 going to leave those in? Those sizing and the duct design and the equipment sizing, that's all still going 9 10 to be required? 11 MICHAEL HYDE: Yes, Charlie. 12 CHARLIE ALLEN: Okay. So I quess my question 13 is -- and I agree that it should be. But what do 14 you -- what do you base it on if there's no -- because 15 I guess the energy conservation code gave the 16 parameters that okay, this is really out of line. 17 This -- you know, if you size it too big, it's going to be way out of line as far as efficiency. 18 19 What -- I guess what are you going to base the sizing off of? Where does it get too small or too 20 big? 21 22 MICHAEL HYDE: All of that is indicated in the 23 Air Conditioning Contractor Association's Manual J 24 referenced in Chapter 14 of the Mechanical Code, or ASHRAE if you're looking on the Commercial Mechanical 25

1 Code side. 2 So it is -- it's covered based on those parameters and those standards or requirements that 3 4 have been adopted by the HVAC Board, if I'm understanding your question. 5 UNIDENTIFIED SPEAKER: It's based on engineering 6 7 designs. It's all based on engineering designs; right? 8 MICHAEL HYDE: For commercial, yes. Yeah, I agree. And the 9 CHARLIE ALLEN: engineers base their design off their -- their 10 11 parameters. And if they have to meet an Energy Code, 12 then they may have to do something different. But if 13 they don't, they may do something they would --14 wouldn't normally do. 15 So -- but I'm glad to hear you're going to keep the sizing and all that in place. That's good to 16 17 know. 18 MICHAEL HYDE: John. 19 JOHN NIELSEN: Thank you, Mr. Hyde. John Nielsen, I'm the plumbing and 20 21 program -- or plumbing and HVAC program manager for 22 DOPL. 23 And it's just kind of my observation that 24 the Manual S, J, and D are there for the sizing of the equipment and all that. It's a package. People did 25

| 1 | realize they don't need to be putting in these huge |
|----|---|
| 2 | pieces of equipment in this little ductwork. |
| 3 | So along with it comes the efficiency from |
| 4 | the manufacturers forced on them by the feds, all that. |
| 5 | So and then they put it in the Energy Code. I think |
| 6 | industry across the board mistakes that just because |
| 7 | it's in the Energy Code that it's an energy thing. |
| 8 | I think it's vice versa. It was in the |
| 9 | Mechanical or the Residential Code and then, you know, |
| 10 | being a family the codes they threw it in here like you |
| 11 | can find a lot of sections throughout all the books. |
| 12 | So, you know, I don't believe Manual S, J, |
| 13 | and D is an energy product. And to Charlie Allen's |
| 14 | point, the code the Board is not looking to get rid |
| 15 | of it. I mean I think there was quite a fight to get |
| 16 | it in and going in the state. And once we did, people |
| 17 | did find they were getting less calls until we get hot |
| 18 | days and then, you know, depending on how they rated |
| 19 | everything. |
| 20 | And on another, if I may, a little |
| 21 | historical fact, I keep hearing that, you know, |
| 22 | plumbing I'll speak for plumbing and HVAC. Three or |
| 23 | four years ago, someone did go to the Building Board |
| 24 | and suggest that those trades take that upon them, take |
| 25 | the pieces of the Energy Code, and regulate them |

| 1 | through industry. And they were turned down, so |
|----|---|
| 2 | it's you know, there's a little history. We if |
| 3 | we would have done that four years ago, we wouldn't |
| 4 | have this conversation about now we're going to get rid |
| 5 | of it all and try to piece it back in. So I just |
| 6 | wanted to point out some of those. |
| 7 | MICHAEL HYDE: Thank you, John. |
| 8 | Warren. |
| 9 | WARREN WING: Yeah. Warren Wing. I'm the |
| 10 | electrical program manager. |
| 11 | And I can speak towards some of the concern |
| 12 | about, you know, have we compared these with Electrical |
| 13 | Codes and stuff. |
| 14 | The Electrical Code doesn't address the |
| 15 | Energy Code except in one place, and that just |
| 16 | basically says if someone does use an Energy Code or |
| 17 | does design to the Energy Code, it has to be the |
| 18 | Electrical Code. And and I mean the code |
| 19 | specifically when we're talking about this, it says, |
| 20 | "The code contains revisions that are considered |
| 21 | necessary for safety. Compliance therewith and proper |
| 22 | maintenance result in an installation that is |
| 23 | essentially free from hazard but not necessarily |
| 24 | efficient, convenient, or adequate for good service." |
| 25 | So our code doesn't even allow us to look |

| 1 | at efficiency, period. And our statute specifically |
|----|---|
| 2 | limits it to life safety and fire hazards. So if there |
| 3 | was anything that the industry discovers in the Energy |
| 4 | Code, they're going to have to take that to the |
| 5 | Electrical Board and the legislature and develop more |
| 6 | authority for us to even have that, because we strictly |
| 7 | can only look at fire and life safety hazards. And we |
| 8 | specifically our code, it doesn't even the |
| 9 | installation doesn't even have to work as long as it's |
| 10 | safe. |
| 11 | GINGER BITIGARY: Hi. Ginger Bitigary |
| 12 | [phonetic], and I'm a new face at the Building Safety |
| 13 | Professionals of Southwest Idaho. |
| 14 | Question for Mr. Frost: What are the five |
| 15 | states? I know Wyoming is one. What are the five |
| 16 | states that do not have an Energy Code, please? |
| 17 | TIM FROST: Maybe take another question. I'll |
| 18 | pull it up right now. |
| 19 | GINGER BITIGARY: Okay. |
| 20 | TIM FROST: It's on Department of Energy's |
| 21 | website. |
| 22 | GINGER BITIGARY: You had said five, so I just |
| 23 | figured you might have known. |
| 24 | TIM FROST: So if you go to Department of Energy |
| 25 | website energy codes, they've got a state breakdown. |

| 1 | GINGER BITIGARY: Okay. |
|----|---|
| 2 | TIM FROST: And it breaks it down, what the |
| 3 | states have adopted on a residential standpoint, what |
| 4 | they've adopted on a commercial standpoint. And it has |
| 5 | kind of a color coding that details it. |
| 6 | GINGER BITIGARY: Tell me what it is one more |
| 7 | time. |
| 8 | TIM FROST: Department of Energy, Energy Code. |
| 9 | It's the federal government website. |
| 10 | GINGER BITGARY: And DOPL and I think I |
| 11 | just want to because it sounded like there was a |
| 12 | little bit of miscommunication before, so I don't want |
| 13 | to attack anyone, because I think that a lot of people |
| 14 | in the room believe that you all had sat down and put |
| 15 | the two codes together. So I think there was a |
| 16 | miscommunication. I don't want that again. |
| 17 | You did did you say that you have sat |
| 18 | down DOPL has sat down and looked at and gone into |
| 19 | decades of those states that do not have an Energy Code |
| 20 | and seen that there hasn't been issue with the |
| 21 | adoption? |
| 22 | TIM FROST: No. That was my question of |
| 23 | Mr. Sullivan. |
| 24 | GINGER BITIGARY: Okay. |
| 25 | TIM FROST: If there are unintended consequences |
| L | |

| 1 | in these states that don't have an Energy Code adopted, |
|----|---|
| 2 | why aren't we seeing those or why aren't we hearing |
| 3 | from those unintended consequences? |
| 4 | GINGER BITIGARY: I hear you. So there |
| 5 | hasn't you haven't dissected that. It was we would |
| 6 | have seen something you would have expected to have |
| 7 | seen something if you |
| 8 | TIM FROST: Or we're asking |
| 9 | GINGER BITIGARY: Okay. |
| 10 | TIM FROST: is there any information that |
| 11 | you're aware of |
| 12 | GINGER BITIGARY: Okay. |
| 13 | TIM FROST: that we can look to. |
| 14 | GINGER BITIGARY: Okay. Awesome. Thank you. |
| 15 | TIM FROST: Joe. |
| 16 | JOE BARLOW: Joe Barlow, City of Meridian. |
| 17 | I think you need to ask yourself with the |
| 18 | mechanical section here in the Energy Code, does Idaho |
| 19 | want to regulate people to buy a Cadillac Escalade when |
| 20 | maybe you don't need that? You only need a station |
| 21 | wagon. This this code, the mechanical section of |
| 22 | this code is forcing people to put unnecessary systems |
| 23 | in their buildings. |
| 24 | Again I will state it again, it is the |
| 25 | design professional's responsibility to design what |

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| 1 | their client needs, and we should not be forcing and |
|----|--|
| 2 | regulating them to put things in that aren't necessary |
| 3 | for life and safety. |
| | |
| 4 | TIM FROST: Thanks, Joe. |
| 5 | MICHAEL HYDE: Just to move this along again. |
| 6 | So next item |
| 7 | JASON BLAIS: Before we move to service water |
| 8 | heating, Jason Blais, Boise. |
| 9 | MICHAEL HYDE: Yes, sir. |
| 10 | JASON BLAIS: I believe there is sections in the |
| 11 | mechanical in the ventilation, something about large |
| 12 | assembly occupancies. There's |
| 13 | MICHAEL HYDE: Okay. |
| 14 | JASON BLAIS: There's CO detectors when you hit |
| 15 | a certain occupant load or threshold in there for |
| 16 | kicking in ventilation. |
| 17 | MICHAEL HYDE: Okay. |
| 18 | JASON BLAIS: So you have your ventilation at a |
| 19 | certain level, and then when we fill the room with |
| 20 | people there's sensors and kicks it in. |
| 21 | MICHAEL HYDE: All right. I'll look into that. |
| 22 | JASON BLAIS: Yeah. |
| 23 | MICHAEL HYDE: And see where that and you're |
| 24 | saying that's in the Energy Code? |
| 25 | JASON BLAIS: It's in the Energy Code, yeah. |

That is what I need to --1 MICHAEL HYDE: Okay. 2 thank you. Jerry Stafford, CWI. 3 JERRY STAFFORD: But I'm not sure what's not redundant and 4 what's in the Mechanical Code. 5 JASON BLAIS: Yeah. 6 JERRY STAFFORD: I think it is. 7 JASON BLAIS: We need to look at both. 8 9 Yeah, I think it's redundant. JERRY STAFFORD: MICHAEL HYDE: If you're talking cfm, I know 10 11 it's in the Mechanical Code. But if you're talking 12 occupants in the sensor, we have to double-check. 13 JASON BLAIS: Yeah, [unintelligible]. 14 MICHAEL HYDE: Take a look. Any comments, additional comments on 15 Okay. the mechanical section of the Energy [unintelligible]? 16 17 PATRICK SULLIVAN: Patrick Sullivan. So after this meeting is there -- can we 18 19 submit some more written comments on these items? And what would be the deadline, then, for that so that you 20 21 can get into your package for the meeting, just so we 22 have a deadline on that? 23 So, Mr. Sullivan, our meeting is --TIM FROST: 24 August 16th. MICHAEL HYDE: 25 TIM FROST: The meeting is August 16th. Т

| 1 | expect us to get some comments almost all the way up to |
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| 2 | that meeting. I think as long as you give us probably |
| 3 | a three to four-day window. Our packet will go for |
| 4 | sure a week ahead of time. But I think we can probably |
| 5 | give a supplemental packet if we start |
| 6 | PATRICK SULLIVAN: So we can get it next week, |
| 7 | then you'll be able to have enough leeway? |
| 8 | TIM FROST: Absolutely. And keep in mind, this |
| 9 | is for the Board to vote to move it towards proposed. |
| 10 | PATRICK SULLIVAN: Right. |
| 11 | TIM FROST: When you move it towards proposed, |
| 12 | that's not a requirement to continue with proposed. |
| 13 | That's just a requirement to move proposed. The Board |
| 14 | could completely scale back any or any or small |
| 15 | parts or chunks of the entire rule making when you go |
| 16 | from proposed to pending. |
| 17 | So once it hits proposed rule making, that |
| 18 | will be published in the September bulletin. We're |
| 19 | required by statute to have two negotiated hearings |
| 20 | scheduled 60 days apart. And so we'll take public |
| 21 | comment again during that time frame. |
| 22 | And so there's an opportunity now to submit |
| 23 | some written comments. There's an opportunity as well |
| 24 | after the Board considers language and goes proposed as |
| 25 | well. |
| - | |

| 1 | PATRICK SULLIVAN: And will there be another |
|----|--|
| 2 | meeting after September, or is that it? Is it just the |
| 3 | August and September? You said 60 days. |
| 4 | TIM FROST: Yeah. So there will be an August |
| 5 | meeting, which the Board will vote to go proposed with |
| 6 | the rule chapter that will get published the first |
| 7 | Wednesday of September as proposed rules in the office |
| 8 | of rules coordinator administrative bulletin. |
| 9 | From that point of day it's proposed, we |
| 10 | would then have to schedule two negotiated hearings 60 |
| 11 | days apart, so I think you should expect a negotiated |
| 12 | hearing mid-September and can't do quick math |
| 13 | mid-November. |
| 14 | MICHAEL HYDE: Yes. |
| 15 | PATRICK SULLIVAN: Okay. |
| 16 | TIM FROST: And so those negotiated hearings |
| 17 | will be those dates, and then the Board will vote to |
| 18 | go after the November to vote to go pending with |
| 19 | that rule chapter. |
| 20 | PATRICK SULLIVAN: And then the rules would then |
| 21 | be in the '23 legislative session. |
| 22 | TIM FROST: That's correct. |
| 23 | PATRICK SULLIVAN: Okay. |
| 24 | TIM FROST: That's correct. Whatever the Board |
| 25 | votes to move to a pending status. So they can make |

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| 1 | adjustments according to the Administrative Procedures |
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| 2 | Act, within the framework of that, to make adjustments |
| 3 | from proposed to pending. And once they vote to go |
| 4 | pending, that is what gets packaged and presented to |
| 5 | the legislature to [unintelligible]. |
| 6 | PATRICK SULLIVAN: Okay. Thank you. |
| 7 | TIM FROST: You're welcome. |
| 8 | MICHAEL HYDE: Transitioning to the next section |
| 9 | here, C-404, service water heating, which is mandatory |
| 10 | whether, it's prescriptive or performance. We are |
| 11 | proposing to delete this section. |
| 12 | What this section entails is service water |
| 13 | heating equipment performance efficiency, so the |
| 14 | efficiency here again, for plumbing appliances or water |
| 15 | heating appliances. Heat traps for heat water storage |
| 16 | tanks. Again, the piping insulation and those |
| 17 | requirements. |
| 18 | And I may ask our plumbing program manager |
| 19 | to speak to what the Plumbing Board did in relation to |
| 20 | piping insulation. |
| 21 | It talks about heated water supply piping, |
| 22 | circulating and temperature maintenance systems, and |
| 23 | then demanding recirculation controls, and then drain |
| 24 | water heat recovery units. |
| 25 | So again, regulating the appliance |

1 efficiency of those equipments and the design or 2 methods of design for those type of installations. Are there any comments related to something 3 4 that we need to retain in relation to C-404 in these 5 requirements? John, would you be willing to speak to --6 JOHN NIELSEN: Sure, Mr. Hyde. 7 So the Plumbing Board adopted the 2015 8 9 Uniform Plumbing Code, which is the Idaho State -- is 10 based -- Idaho State Plumbing Code is based off of that 11 code. And back in 2015 the Plumbing Board felt that 12 insulation -- insulating the pipes, because there is a 13 section in there to insulate the hot water lines, was 14 not a life-safety issue, and it also incurred more cost 15 to not only the homeowners but to the plumbers or anybody that wanted it. It's not required. 16 I mean if 17 somebody wanted to insulate their pipes, they can. And when it comes to commercial side of the 18 19 house, the design professionals usually will call out what they want insulated. And actually the plumbers 20 21 don't do it. There's a third party now. They make a 22 living doing nothing but insulating pipe and ductwork, 23 so --24 UNIDENTIFIED SPEAKER: They can have it. 25 JOHN NIELSEN: Yes.

So that's how the Plumbing Board approached 1 2 the insulation side. And as far as in the 2015, I know there's 3 some requirements in the Energy Code that have pumps on 4 timers and everything, and the Plumbing Code does not 5 address any of that. But I can tell you from 6 experience the first thing anybody does with those 7 8 timers is try to make it so they're going 24 hours, because you never know when you want hot water and they 9 10 want it right then and there. 11 So that's how the Plumbing Board looked at 12 the -- specifically the insulation side of it. 13 MICHAEL HYDE: Thank you, John. 14 Any additional comments, suggestions? Anyone online? 15 16 Hearing none, I'll transition to C-405, 17 electrical power and lighting systems. What this section entails, just to go over 18 19 it in summary, lighting controls, interior lighting power requirements, exterior lighting power 20 21 requirements, dwelling electrical meter, electrical 22 transformers, electrical motors, vertical and 23 horizontal transportation system, equipment, and 24 voltage drop and feeders and branch circuits. 25 So again, these are mandatory, no matter if

| 2performance-based option. And I may ask Warren, our3electrical program manager, to add anything that he4found in his analysis of the electrical section of the5Energy Code as it relates to the NEC.6Do you have anything for us, Warren?7WARREN WING: Mr. Hyde, this is Warren, the8electrical program manager.9As I said earlier, you know, 220.12 of the10NEC covers a light load for specified occupancies. And11it's and the only reference it has is strictly12whether the building is designed and constructed to13comply with an Energy Code by local authority.14It says that they have to have a power15monitoring system. Power monitoring system has to have16an alarm value set on it, and certain demand factors17can't be applied.18The reason the reason that they're doing19that is to say if you're going to use the Energy Code,20you wires are sized differently. Right? You're21allowed to use let's say you're going to put all LED23lights in a building, well, you don't your overall24demand is not the same. So you can actually use25smaller wires. | 1 | it's prescriptive or prescriptive or |
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| | 23 | lights in a building, well, you don't your overall |
| 25 smaller wires. | 24 | demand is not the same. So you can actually use |
| | 25 | smaller wires. |

| 1 | But if you're going to do that, you have to |
|----|--|
| 2 | have ways to monitor that you're not pulling too much |
| 3 | current or overpowering those wires. |
| 4 | MICHAEL HYDE: Okay. |
| 5 | WARREN WING: That's that's about the only |
| 6 | place that I know of in the entire NEC that even |
| 7 | addresses it in the codes. |
| 8 | MICHAEL HYDE: Okay. Thank you. |
| 9 | Any additional comments relevant to this |
| 10 | section? |
| 11 | Yes, sir. |
| 12 | TYLER PEROT: Tyler Perot, City of Meridian. |
| 13 | My comments would just be along the lines |
| 14 | of same thing with the design professionals. I mean |
| 15 | these lighting systems, light harboring or light |
| 16 | harvesting and daylighting and things of that nature, |
| 17 | yeah, they are, you know, seen in light of efficiency |
| 18 | in terms of using power and eliminating the use of |
| 19 | power during certain times of the day. That makes |
| 20 | sense. |
| 21 | But again, shouldn't that be decided upon |
| 22 | by the person building the building or occupying the |
| 23 | space and having the design professional incorporate |
| 24 | that into their design, rather than say you absolutely |
| 25 | have to have this and you absolutely have to take on |

| 1 | the exorbitant costs of some of these systems that make |
|----|---|
| 2 | it very difficult to certain people to take certain |
| 3 | spaces or certain buildings? So it's up to the design |
| 4 | professionals. |
| 5 | MICHAEL HYDE: Thank you. |
| 6 | Jason, you had a question. |
| 7 | JASON BLAIS: Jason Blais. |
| 8 | Yeah, I mean there's just a lot there to |
| 9 | digest, I guess. And it is mostly lighting efficiency, |
| 10 | loss per square foot |
| 11 | MICHAEL HYDE: Uh-huh. |
| 12 | JASON BLAIS: lighting controls, you know, |
| 13 | occupant sensors, whatever timers, all that stuff. |
| 14 | MICHAEL HYDE: Yeah. |
| 15 | JASON BLAIS: So |
| 16 | MICHAEL HYDE: And that's what we're trying to |
| 17 | identify. Is that something we should be regulating? |
| 18 | I mean we're open to your feedback and suggestions. I |
| 19 | mean if it's especially from your perspective as a |
| 20 | building official. |
| 21 | JASON BLAIS: I think it's a great thing. |
| 22 | MICHAEL HYDE: Okay. |
| 23 | JASON BLAIS: I obviously value building |
| 24 | efficiency in these things, but it takes, you know, |
| 25 | some looking into to make it happen. |

| 1 | MICHAEL HYDE: Okay. |
|----|---|
| 2 | JASON BLAIS: Yeah, today's world we're seeing |
| 3 | very efficient lighting systems in new construction, |
| 4 | compared to where we were ten years ago. That's for |
| 5 | sure. |
| 6 | MICHAEL HYDE: Do you think it's due to the |
| 7 | products that are available, or do you think it's due |
| 8 | to code requirements? |
| 9 | JASON BLAIS: I think it's a little of both. |
| 10 | MICHAEL HYDE: A little of both? Okay. |
| 11 | DAMON WOODS: This is Damon Woods, professor at |
| 12 | University of Idaho and licensed mechanical engineer. |
| 13 | Focusing on how buildings using energy, I |
| 14 | just wanted to make a short comment, Mr. Hyde, if I |
| 15 | might, that it looks like, you know, we're taking these |
| 16 | things in piecemeal and perhaps missing the larger |
| 17 | picture on life safety, which is that efficient |
| 18 | buildings use less energy. |
| 19 | And so in a resiliency setting, it's much |
| 20 | faster for building with low energy requirements to |
| 21 | bounce back from power outages, from issues like power |
| 22 | lines going down, from wildfires and the like, and |
| 23 | being able to have you know, for just one example, |
| 24 | LED lightbulbs that require, you know, very low |
| 25 | wattage, being able to turn back on more quickly than a |

| 2 | component. |
|----|---|
| 3 | But if it's into the whole picture of |
| 4 | building performance, and I think if we remove each one |
| 5 | of these, then there are larger life-safety |
| 6 | consequences from a resiliency perspective that might |
| 7 | get missed by tossing each one and not seeing each |
| 8 | individual as a life-safety component rather than the |
| 9 | whole thing. |
| 10 | Thank you. |
| 11 | MICHAEL HYDE: Mr. Woods, for a follow-up, if I |
| 12 | may. |
| 13 | DAMON WOODS: Yes. |
| 14 | MICHAEL HYDE: When you you know, in your |
| 15 | expertise when you look at building performance and |
| 16 | Energy Code requirements related to performance, where |
| 17 | do you think the State of Idaho, in your opinion, |
| 18 | should draw the line on requirements in the Energy Code |
| 19 | to get the performance that you're looking for and the |
| 20 | resiliency that you're looking for? |
| 21 | DAMON WOODS: I I think that's where the |
| 22 | negotiated process that's been followed for the last |
| 23 | ten years comes into play, where there is a dialogue |
| 24 | back and forth with industry that plays out over the |
| 25 | three-year code cycles. |

1 MICHAEL HYDE: Thank you. 2 DAMON WOODS: Thank you. Any other comments on lighting 3 MICHAEL HYDE: 4 controls or lighting power systems? CHARLIE ALLEN: I would just say a me -- this is 5 Charlie Allen again. 6 I would just say a me too to these are 7 8 important. I mean these are in place to try to save 9 building -- energy in buildings. And -- I mean if you 10 take a wholistic approach or a long-range look, the 11 more we can do to conserve energy, the more our energy 12 prices are going to stay low. 13 So if we don't have any controls on it, I 14 think we're shooting ourself in the foot. But yeah, if -- a lot of building owners aren't aware of the 15 16 requirements. They're depending on the codes and the 17 contractors to make sure they're getting built right. And if you don't have to put occupancy 18 19 sensors in, sure, you're going to save a lot of money up front, but you're going to end up spending more in 20 21 lighting over the life of the building. So I think 22 they're important. 23 MICHAEL HYDE: Thank you, Charlie. 24 So the next two sections I'd like to lump 25 together just to continue progress where the

| 1 | explanation in the outlook or the way that we looked at |
|----|---|
| 2 | these next two sections were we want to stick to |
| 3 | prescriptive requirements, and anything above and |
| 4 | beyond or in supplement to as a performance as |
| 5 | optional, rather than mandated, if they choose to go |
| 6 | that route. Prescriptive was our outlook of what's |
| 7 | mandatory. Anything above and beyond is optional. |
| 8 | So we looked at Section C-406 and then |
| 9 | C-407 under those under that light. And so I open |
| 10 | it up for further conversation if they if there's |
| 11 | anything that you feel like by doing so we create any |
| 12 | potential issue. Because performance would still be |
| 13 | allowed, it's just not required. Prescriptive would be |
| 14 | required. Performance is optional. It's above and |
| 15 | beyond, relevant to these specific two sections. |
| 16 | MATT VANDERMEER: Matt Vandermeer, Momentum. So |
| 17 | when you do the energy rating of 68, would you say the |
| 18 | prescriptive app is the same score, close to it? |
| 19 | MICHAEL HYDE: I would not say that, no. I |
| 20 | would say it's not close. I think 68 is a phenomenal |
| 21 | score. If you're asking me if I was wearing my HERS |
| 22 | rater hat today, I would say no, 68 is a great score. |
| 23 | I would say it's above and beyond, in my opinion. |
| 24 | Prescriptive is much less. It's more minimum based. |
| 25 | But that's my interpretation of the Energy Code. |

1 Jason. 2 JASON BLAIS: Mr. Hyde, Jason Blais, City of Boise. 3 The total building performance currently, 4 as in the code, is optional. It's not a -- it's not a 5 mandate. 6 MICHAEL HYDE: 7 Okay. JASON BLAIS: It's already optional. We don't 8 9 see very many, but we see it once in a while. 10 MICHAEL HYDE: We do see it once in a while. 11 And I appreciate that comment, because when I interpret 12 the -- you know, the very beginning of this section, let's say of the Energy Code, commercial chapter, you 13 14 get a couple different pathways to choose from. And what we wanted to do is set the minimum 15 16 bar to say minimum is prescriptive, and that's what 17 we're going to amend to. Anything above and beyond is acceptable. So that's the outlook. If you think it's 18 19 irrelevant to amend --JASON BLAIS: It outlines parameters if you 20 21 choose that performance; right? 22 MICHAEL HYDE: It does. It does. It sets some 23 quidelines that people can follow. I would agree. 24 JASON BLAIS: Could we update the screen to show e-show where we're at, then? 25

MICHAEL HYDE: I think there's a delay, but - but -- there it goes.

So these are your performance simulated 3 software documentation, whether -- in this application 4 COM checks, you know, when they're working properly and 5 the system's updated. I know COM checks have been an 6 issue over the past few years, you know, depending on 7 8 how it's broken down and which performance route that 9 an architect chose or designer or a building owner 10 chose.

11 So it covers those type of software tools 12 and equipment. LEED, LEED certs, LEED programs, those 13 type of things. But all of that, we're not saying is 14 not acceptable by this deletion. It's just saying you don't have to go down the performance route. What we 15 16 want to set the baseline for is prescriptive. That's 17 the code minimum. Anything above and beyond is more 18 than acceptable.

JASON BLAIS: Yeah, any of these large commercial, like downtown-type ones with lots of glass, they're going to want to use that.

MICHAEL HYDE: Agreed.

22

25

23 JASON BLAIS: They're not going to meet 24 prescriptive.

MICHAEL HYDE: Correct. Agreed.

| 1 | Do you think by deleting it it may present |
|----|--|
| 2 | an issue? |
| 3 | JASON BLAIS: Yeah, I think you just leave it |
| 4 | because it's already optional. |
| 5 | MICHAEL HYDE: Okay. |
| 6 | JASON BLAIS: If somebody wants to choose it as |
| 7 | an option, the parameters are there. |
| 8 | MICHAEL HYDE: Would you say the same for C-406, |
| 9 | for the package options? |
| 10 | JASON BLAIS: So C-406, what that says is you |
| 11 | meets the prescriptive, and then you got to go into |
| 12 | C-406 and pick one of those, I think. |
| 13 | MICHAEL HYDE: For an option. |
| 14 | JASON BLAIS: For an option. |
| 15 | MICHAEL HYDE: Yeah. It gives you that variance |
| 16 | between |
| 17 | JASON BLAIS: So they're options, but at least |
| 18 | one of them is supposed to be mandated, but you get to |
| 19 | pick. |
| 20 | MICHAEL HYDE: Okay. |
| 21 | JASON BLAIS: And most people like to pick like |
| 22 | lightings. They can get lighting efficiency really |
| 23 | good using LED. |
| 24 | MICHAEL HYDE: Really easy. I appreciate that |
| 25 | feedback. |

| 1 | TIM FROST: So, Jason, just so I understand, for |
|----|--|
| 2 | C-406, C-407, because this is providing options to the |
| 3 | builders, you're not you don't view it as a mandate, |
| 4 | and so therefore just give some clarity towards what |
| 5 | those options are or |
| 6 | JASON BLAIS: C-407 for sure. C-406 is options, |
| 7 | but the code does say you have to pick one. |
| 8 | MICHAEL HYDE: Yeah. |
| 9 | JASON BLAIS: So you meet prescriptive and then |
| 10 | go pick one out of that list. |
| 11 | TIM FROST: Okay. |
| 12 | MICHAEL HYDE: Any additional comment on these |
| 13 | sections? |
| 14 | Anybody online? |
| 15 | CHARLIE ALLEN: I would Charlie Allen. |
| 16 | I would just say yeah, leave 406 in there. |
| 17 | You pick one of those options. One that's easily |
| 18 | achieved is the lighting, exceeding lighting compliant |
| 19 | controls, you know, or even lighting. It's easily |
| 20 | achieved, so it's a good option. |
| 21 | MICHAEL HYDE: Okay. Thank you, Charlie. |
| 22 | Okay. Next section's maintenance |
| 23 | information and system commissioning. |
| 24 | Our my initial review, it's definitely |
| 25 | hard to achieve these code requirements. I'm going |

| 1 | to I'm going to stick to what I know, HVAC. Looking |
|----|---|
| 2 | at designing and commissioning these systems in both |
| 3 | summer design conditions and winter design conditions |
| 4 | prior to C of O would take some time before issuing a C |
| 5 | of O, in my opinion. |
| 6 | We would have to create TCOs in order to |
| 7 | actually fulfill this commissioning requirement when it |
| 8 | comes to the design of the mechanical systems. So I |
| 9 | look at it as something that's really strongholding us |
| 10 | issuing C of Os, and only getting a portion or a |
| 11 | picture of the commissioning requirement, where there's |
| 12 | got to be some follow-up later in the year when winter |
| 13 | design conditions occur. |
| 14 | So the thought process here, tying it back |
| 15 | to is this really life safety, is this something that |
| 16 | we should be regulating? I I point back to our |
| 17 | prospective analysis set of questions. And I think |
| 18 | this is best suited by industry and contractors and |
| 19 | businesses as a marketing tool. But that's my initial |
| 20 | opinion. |
| 21 | And I open it up for any comments or |
| 22 | recommendations, specifically commercial buildings |
| 23 | here, again. |
| 24 | PATRICK SULLIVAN: Mr. Hyde. |
| 25 | MICHAEL HYDE: Yes, sir. |

PATRICK SULLIVAN: Patrick Sullivan, City of 1 2 Nampa. I think commissioning is a good thing. 3 Ι 4 mean being on the design side, you're right. It does take 12 months after you get your C of O to do that. 5 Ι think the way we've been doing it is we have been 6 actually just wanting to know up front who your 7 8 commissioning agent is, and then basically we just get 9 the test and balance report. Uh-huh. 10 MICHAEL HYDE: 11 PATRICK SULLIVAN: And we approve that, issue a 12 C of O, and then it's just an honor system for them 13 just to finish out the commissioning. 14 MICHAEL HYDE: Okay. PATRICK SULLIVAN: Because it's really incumbent 15 16 upon the design team and the contractor to really 17 finish it out over that 12 -- 12-month warranty period, really. And then that way they can -- at the end of 18 19 that period, they can fix anything or make adjustments, things like that. 20 21 MICHAEL HYDE: And if I may just ask a more 22 pointed question to the City of Nampa. 23 Is that something -- have you ever followed 24 up on that to see, hey, did they really do it? PATRICK SULLIVAN: 25 No.

1 MICHAEL HYDE: No. And I --2 PATRICK SULLIVAN: We have not. MICHAEL HYDE: Just [unintelligible] --3 PATRICK SULLIVAN: But if we know -- if we know 4 we have design professionals --5 MICHAEL HYDE: Uh-huh. 6 PATRICK SULLIVAN: -- and we know they have a 7 8 commissioning agent involved --9 MICHAEL HYDE: Uh-huh. PATRICK SULLIVAN: -- and it's in their spec, 10 11 it's going to happen. 12 MICHAEL HYDE: Okay. PATRICK SULLIVAN: I mean they're not going 13 14 to -- you know, it's -- they have somebody under 15 contract. 16 MICHAEL HYDE: Okay. 17 PATRICK SULLIVAN: So anyway, yeah. I think it just -- it's a self-performing type of thing. 18 It's not 19 something that a year from now -- we don't have the 20 manpower to go back. 21 MICHAEL HYDE: Right. I don't think any of us 22 do. 23 PATRICK SULLIVAN: [Unintelligible.] 24 MICHAEL HYDE: If I may, Jason, before -- I just want to go back to the -- my line of questioning is, 25

| 1 | you know, I looked at it as, you know, there may be |
|----|---|
| 2 | some benefits, of course, when you're talking building |
| 3 | performance. I recognize that. I'm not ignoring that |
| 4 | fact. But I'm basing everything back to ZBR |
| 5 | legislative intent, all of those questions. |
| 6 | And when it comes to the commissioning of a |
| 7 | building, for the example of heating and cooling |
| 8 | systems, if the building is cold during the winter, |
| 9 | they're going to get a phone call. That designer, that |
| 10 | contractor, they're going to get a phone call. And |
| 11 | usually you're under a warranty for so much time in a |
| 12 | commercial setting to where it was like it's going to |
| 13 | be addressed one way or the other. Maybe we're not |
| 14 | saving every cent, you know, 4 cents per square foot |
| 15 | like the 2018 per DOE says we gain by adopting the |
| 16 | 2018, but I thought from a life-safety perspective and |
| 17 | occupant welfare that will be addressed through |
| 18 | callbacks, if applicable. |
| 19 | So I mean we're recognizing that in this |
| 20 | building here now. So but no, I appreciate the |
| 21 | comment. I just wanted to know if anyone, City of |
| 22 | Boise, you know, City of Meridian, anybody's ever |
| 23 | followed up between summer and winter design conditions |
| 24 | or anything like that. |
| 25 | Jason. |

| 1 | JASON BLAIS: Mr. Hyde, Jason Blais. |
|----|---|
| 2 | Yeah, I believe commissioning is very |
| 3 | important. |
| 4 | MICHAEL HYDE: Okay. |
| 5 | JASON BLAIS: You know, people are always in a |
| 6 | hurry. They're always trying to get that occupancy. |
| 7 | But what the code says is you don't have to have the |
| 8 | final commissioning to get your CO. You just need to |
| 9 | have that preliminary commissioning document and know |
| 10 | that it's ongoing. |
| 11 | We do sometimes get e-mailed the final |
| 12 | commissioning report. |
| 13 | MICHAEL HYDE: Uh-huh. |
| 14 | JASON BLAIS: But it's just because they do it. |
| 15 | But the code says that you just need the preliminary |
| 16 | prior to issuing. |
| 17 | MICHAEL HYDE: Document. |
| 18 | JASON BLAIS: So when you get that preliminary, |
| 19 | you're still getting a good chunk of it dialed in |
| 20 | MICHAEL HYDE: Yeah. |
| 21 | JASON BLAIS: which is the intent of the |
| 22 | commissioning, right, make sure everything's running |
| 23 | [unintelligible]. |
| 24 | MICHAEL HYDE: Yeah. |
| 25 | JASON BLAIS: Yeah. |

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| 1 | MICHAEL HYDE: And I don't disagree with you. I |
|----|--|
| 2 | just I'm going back to why are we asking for this? |
| 3 | You know, like I know it's important. |
| 4 | JASON BLAIS: You should see the lists I see |
| 5 | some of these preliminary commission being reports. |
| 6 | Some of them are like whoa. |
| 7 | MICHAEL HYDE: Yeah. I mean |
| 8 | JASON BLAIS: Nothing's working or everything's |
| 9 | wired backwards or, you know, the controls aren't |
| 10 | there. |
| 11 | MICHAEL HYDE: Things that were overlooked |
| 12 | throughout the process that weren't necessarily |
| 13 | inspected by us. |
| 14 | JASON BLAIS: Exactly. |
| 15 | MICHAEL HYDE: Yeah, I hear you. And I get |
| 16 | that. I'm just trying to look back back it up to |
| 17 | the intent. If it's all preliminary, what are we |
| 18 | really asking for? Is this just another regulatory |
| 19 | burden that we're asking for with where we really |
| 20 | don't have any teeth because we're not following up to |
| 21 | do anything about? I mean could we? What does that |
| 22 | look like? |
| 23 | I mean there's a lot of things when we |
| 24 | adopted this, because this is fairly new to the Energy |
| 25 | Codes. You know, it's evolved over probably the '15 to |

| 1 | now. And we did, you know, look at the '15 commercial |
|----|---|
| 2 | back a couple years ago. |
| 3 | But I just for discussion sake, this was |
| 4 | the start. This gave us the opportunity to have this |
| 5 | discussion, so I know it's significant. I mean I |
| 6 | hear just trying to see how it fits into what we do. |
| 7 | PATRICK SULLIVAN: Mr. Hyde, Patrick Sullivan. |
| 8 | I think that you could tie this back to |
| 9 | life safety |
| 10 | MICHAEL HYDE: Okay. |
| 11 | PATRICK SULLIVAN: in that the larger |
| 12 | systems unless you have a large, you know, huge |
| 13 | auditorium or something, the larger the larger |
| 14 | systems are going to be more technical |
| 15 | MICHAEL HYDE: Uh-huh. |
| 16 | PATRICK SULLIVAN: more complicated. And if |
| 17 | you don't get it right or don't have some type of |
| 18 | assurance that somebody is doing an extended startup |
| 19 | MICHAEL HYDE: Okay. |
| 20 | PATRICK SULLIVAN: whether it be a full |
| 21 | commissioning or, you know, a 12-month finish January, |
| 22 | even an extended startup, if we don't at least know |
| 23 | that somebody's going to go through that process, we're |
| 24 | basically leaving leaving the building open to the |
| 25 | ventilation system, the fresh air requirements |

aren't -- whether it be natural ventilation or 1 2 mechanical ventilation, you know, they may have some significant problems. 3 So I think there's just -- I think it's 4 incumbent upon us as a life-safety portion to at least, 5 you know, put the boat in the water and push it away 6 from the shore and hopefully --7 MICHAEL HYDE: If they --8 9 PATRICK SULLIVAN: -- if they make their 10 destination, you know. 11 MICHAEL HYDE: I hear you. Yeah, I appreciate 12 the comment. That may be one we'll have to detail 13 further as we proceed. 14 Joe. 15 JOE BARLOW: Joe Barlow, City of Meridian. 16 So when was -- when was the commissioning 17 started in Idaho? I -- obviously I don't know when 18 MICHAEL HYDE: 19 the code actually incorporated. I want to say the '15. 20 UNIDENTIFIED SPEAKER: The '15. JOE BARLOW: So the '15. So the centuries 21 before the '15 we didn't do commissioning, how many 22 23 problems did we have? Is this really -- is this really a life-safety issue? Is this -- and I don't -- I'm not 24 saying that it's not, but I think that they need to --25

| 1 | it needs to be really evaluated. We do have historical |
|----|--|
| 2 | data of decades and decades of buildings being put up |
| 3 | without being commissioned, and I don't see people |
| 4 | falling over dead from noncommissioned buildings. |
| 5 | So just just my opinion and something |
| 6 | that I thought that I'd throw out there. |
| 7 | MICHAEL HYDE: I mean I appreciate that, because |
| 8 | it's a segue into the next section of the next one, |
| 9 | two, three, four, five six code items, which is |
| 10 | existing buildings, reiterating everything we just |
| 11 | discussed, but applicable to existing buildings. |
| 12 | And I |
| 13 | CACHE OLSON: Mr. Hyde. |
| 14 | MICHAEL HYDE: Yes, sir. |
| 15 | CACHE OLSON: Sorry to interrupt you, and I |
| 16 | apologize. This is Cache with the City of Nampa. |
| 17 | MICHAEL HYDE: Uh-huh. |
| 18 | CACHE OLSON: In reading Section C-408, you need |
| 19 | to understand it's not for every commercial building. |
| 20 | It says right in here that it has to be over 600,000 |
| 21 | BTUs. So it was specifically designed for a big |
| 22 | occupant. |
| 23 | UNIDENTIFIED SPEAKER: Yeah. |
| 24 | CACHE OLSON: So I think we need to keep that in |
| 25 | mind in this discussion. But I think it's important |

| MICHAEL HYDE: I appreciate that comment and point of clarification, Cache. Thank you. I mean that's a valid point. PATRICK SULLIVAN: I have one more comment. MICHAEL HYDE: Okay. PATRICK SULLIVAN: 100 years ago I would wager to guess the air changes per hour were not as tight a the 2018 envelope requirements. So I guess I think it's part and parcel. We've had some comments that, you know, are making them tighter. You know, there's | |
|---|----|
| 4 that's a valid point. 5 PATRICK SULLIVAN: I have one more comment. 6 MICHAEL HYDE: Okay. 7 PATRICK SULLIVAN: 100 years ago I would wager 8 to guess the air changes per hour were not as tight a 9 the 2018 envelope requirements. So I guess I think 10 it's part and parcel. We've had some comments that, | |
| 5 PATRICK SULLIVAN: I have one more comment. 6 MICHAEL HYDE: Okay. 7 PATRICK SULLIVAN: 100 years ago I would wager 8 to guess the air changes per hour were not as tight a 9 the 2018 envelope requirements. So I guess I think 10 it's part and parcel. We've had some comments that, | |
| MICHAEL HYDE: Okay. PATRICK SULLIVAN: 100 years ago I would wager to guess the air changes per hour were not as tight a the 2018 envelope requirements. So I guess I think it's part and parcel. We've had some comments that, | |
| 7 PATRICK SULLIVAN: 100 years ago I would wager 8 to guess the air changes per hour were not as tight a 9 the 2018 envelope requirements. So I guess I think 10 it's part and parcel. We've had some comments that, | |
| 8 to guess the air changes per hour were not as tight a 9 the 2018 envelope requirements. So I guess I think 10 it's part and parcel. We've had some comments that, | |
| 9 the 2018 envelope requirements. So I guess I think 10 it's part and parcel. We've had some comments that, | |
| 10 it's part and parcel. We've had some comments that, | 5 |
| | |
| 11 you know are making them tighter You know there is | |
| you know, are making them tryitter. Tou know, there's | |
| 12 moisture mitigation problems. There's been mold | |
| 13 problems. There's always appear that you know, if | |
| 14 you have this really tight building, are you going to | |
| 15 then have an adequate ventilation and heating and | |
| 16 cooling system that can keep the the interior | |
| 17 environment safe and safe and healthy. | |
| 18 So I guess the upshot is yes, we have had | |
| 19 over the last, you know you know, probably the | |
| 20 you know, from the middle of the 20th Century on, you | |
| 21 know, tight, you know, enclosed mechanically ventilat | əd |
| 22 heated and cooled buildings. | |
| 23 However, I think that we're having much | |
| 24 tighter buildings, so I think that keeping the | |
| 25 commissioning in there is is essential for those | |

1 larger [unintelligible] --2 MICHAEL HYDE: Due to the ventilation systems and requirements? 3 PATRICK SULLIVAN: Yeah, right. They're more 4 complex. 5 MICHAEL HYDE: Okay. 6 PATRICK SULLIVAN: They have to bring in more --7 8 you know, less air changes per hour you have for on 9 your envelope, you know, now -- now we have a more 10 complex system to figure out how to balance your --11 your air in there, whether it be your fresh air 12 requirement or your natural ventilation requirement. 13 Depending on the use. I mean there's all kinds of 14 occupancies. 15 TIM FROST: This is for you, Mr. Sullivan. 16 Do you think this is a scenario that we're 17 applying it to the commercial type setting because of that exchange, or do you also think that falls over 18 19 into residential as well? PATRICK SULLIVAN: I think -- I think it falls 20 21 under residential. I've -- I've always thought that 22 the tighter we get with our buildings, I don't know if 23 we're as sophisticated with the -- you know, the 24 furnaces we're putting in there and if we're really adequately bringing enough fresh air in, et cetera. 25

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| 2 house with, you know and which with a lot of 3 changes per hour, so I don't have to worry about 4 But anyway, I think that these very to | chat. ight ly or |
|--|------------------------|
| | ight Ly or |
| 4 But anyway, I think that these very t | ly or |
| | - |
| 5 residential structures, whether they be multifami | c at |
| 6 single family, I think that we really need to loop | |
| 7 that as we go forward, even if we get to the point | : |
| 8 where we're just going to be static at four to find | 7e, |
| 9 six air changes per hour going forward and over t | ime |
| 10 MICHAEL HYDE: Uh-huh. | |
| 11 PATRICK SULLIVAN: in that when you | jet |
| 12 down to that low of air changes per hour, and depe | ending |
| 13 on what people do in their house, I mean I'd haza: | d to |
| 14 guess that there's many people that don't open the | eir |
| 15 windows hardly at all; right? | |
| 16 MICHAEL HYDE: Yeah. | |
| 17 PATRICK SULLIVAN: I mean we're always oper | ning |
| 18 windows. We rarely use the mechanical systems in | the |
| 19 shoulder seasons. You know, we do it kind of old | |
| 20 school | |
| 21 MICHAEL HYDE: Uh-huh. | |
| 22 PATRICK SULLIVAN: where you capture the | at. |
| 23 But a lot of people rely on mechanical systems be | ause |
| 24 they were brought up where you you relied on you | our |
| 25 air-conditioner or your furnace to heat or cool yo | our |

| 1 | house. And you really didn't open up the windows a lot |
|----|---|
| 2 | because you're living in a subdivision and |
| 3 | MICHAEL HYDE: I agree. |
| 4 | PATRICK SULLIVAN: So it the thing is is it's |
| 5 | more complex than it seems, I think, sometimes. And |
| 6 | it's case by case. |
| 7 | MICHAEL HYDE: So in this scenario, you know, |
| 8 | outside the commercial setting in a residential world, |
| 9 | how do we track that? I mean when we're looking at, |
| 10 | for example, you know, the Department of Energy studies |
| 11 | on, you know, air exchanges in a residential setting, |
| 12 | how do we account for, you know, the brand-new builds |
| 13 | at the highest level of the Energy Code versus the 1953 |
| 14 | houses and the reality that, you know, consumers can |
| 15 | open and close their doors and open and close their |
| 16 | windows whenever they want, and there goes the entirety |
| 17 | of your calculations? |
| 18 | PATRICK SULLIVAN: Right. Except people aren't |
| 19 | going to be bringing in fresh air between December and |
| 20 | March or December and February. You're not going to |
| 21 | have a lot of people leaving their opening their |
| 22 | door and leaving their screen door open or opening a |
| 23 | bunch of windows to bring in fresh air. It's those |
| 24 | real those seasons. |
| 25 | And then the cooling seasons too. I mean |

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| 1 | you've got, you know, cooling on you know, we're |
|--|---|
| 2 | going through 100 degrees for you know, in the 90s |
| 3 | to a hundred for, what, three months. You know, those |
| 4 | are the seasons when you're very tight. So anyway. |
| 5 | MICHAEL HYDE: And, you know, I you mentioned |
| 6 | something. And I not to not to age Idaho or say |
| 7 | anything derogatory towards Idaho, but, you know, we |
| 8 | have vast differences in homes and how people utilize |
| 9 | their homes. And when you're talking about not opening |
| 10 | the door in the wintertime. I mean I know I grew up |
| 11 | with a wood stove. And that door was open a lot, |
| 12 | because we needed to get some airflow in that home. |
| 1 2 | And it's a 1910 house. |
| 13 | |
| 13 | So I just you know, this code, again, I |
| | |
| 14 | So I just you know, this code, again, I |
| 14 15 | So I just you know, this code, again, I just want to point to the fact that we have vast |
| 14 15 16 | So I just you know, this code, again, I just want to point to the fact that we have vast difference in construction, in utilization of |
| 14 15 16 17 | So I just you know, this code, again, I just want to point to the fact that we have vast difference in construction, in utilization of residential homes here in Idaho, from the Canadian |
| 14 15 16 17 18 | So I just you know, this code, again, I just want to point to the fact that we have vast difference in construction, in utilization of residential homes here in Idaho, from the Canadian border down to the Utah border, and both ways east and |
| 14 15 16 17 18 19 | So I just you know, this code, again, I just want to point to the fact that we have vast difference in construction, in utilization of residential homes here in Idaho, from the Canadian border down to the Utah border, and both ways east and west, to where it's different, but this code is |
| 14 15 16 17 18 19 20 | So I just you know, this code, again, I just want to point to the fact that we have vast difference in construction, in utilization of residential homes here in Idaho, from the Canadian border down to the Utah border, and both ways east and west, to where it's different, but this code is supposed to be adopted statewide. And there's a lot of |
| 14 15 16 17 18 19 20 21 | So I just you know, this code, again, I just want to point to the fact that we have vast difference in construction, in utilization of residential homes here in Idaho, from the Canadian border down to the Utah border, and both ways east and west, to where it's different, but this code is supposed to be adopted statewide. And there's a lot of jurisdictions. |

25 we look at residential building structures in these

| 1 | counties, and it's like I mean I'm not reading on |
|----|---|
| 2 | the news massive house fires or people dying due to |
| 3 | mold or poor indoor air quality. |
| 4 | And so it's a factor that we're hearing, |
| 5 | maybe not in today's setting, but as we as we go |
| 6 | through this process, people are chiming in from |
| 7 | literally the woodwork to say "Hey, this isn't going to |
| 8 | be done up here. This we're not going to build to |
| 9 | this." |
| 10 | So I mean I appreciate these comments, but |
| 11 | we're we're working with two different groups with |
| 12 | two different voices, and they're on vast ends of the |
| 13 | spectrum that we have to account for. |
| 14 | TIM FROST: We had a gentleman from Grangeville |
| 15 | that showed up at our last Building Code meeting, but |
| 16 | he also showed up at I know at least half of our code |
| 17 | collaboratives that, you know, the county doesn't have |
| 18 | a building program at all or an enforcement. You know, |
| 19 | adoption of those building codes or enforcement of |
| 20 | those buildings codes. |
| 21 | And, you know, he just wants to see the |
| 22 | basics of those codes implemented so he can have a |
| 23 | normal, competitive environment. So he's supportive of |
| 24 | having the codes, but he also, you know, has a strong |
| 25 | opinion related to the Energy Code as well. And so I |

1 think that's the balance we're trying to strike here. 2 And I don't think it's a perfect -- perfect balance, if 3 you will. And, you know, House Bill 660 removed 4 that -- we'll call it the balance of the local 5 variation and jurisdiction control. And so that is --6 that puts us in a scenario where a Building Code has to 7 8 make a decision that impacts the entirety of the state. And I mean I definitely want to be respectful to that. 9 10 But that's -- that's the scenario we're operating 11 under. 12 And all those positions are represented in BEN: 13 the legislature, by the way. 14 MICHAEL HYDE: Valid point. Thank you, Ben. 15 So okay. Well, I'd like to -- we can go 16 through existing buildings, but it is a reiteration of 17 mechanical systems, electrical systems, plumbing systems that we just discussed, not as intensive, but 18 19 it's applicable to any existing commercial structures. But I want to maybe take a five-minute 20 21 break, if that's okay, if we could. 22 TIM FROST: Yeah. I think we can take a 23 ten-minute bio break. 24 MICHAEL HYDE: Ten-minute. TIM FROST: Come back at 3:10. 25

| 1 | |
|----|--|
| 1 | UNIDENTIFIED SPEAKER: Thank you. |
| 2 | MICHAEL HYDE: 3:10. |
| 3 | (Recess taken from 1:55:31 to 2:07:50 of |
| 4 | audio file.) |
| 5 | MICHAEL HYDE: Okay. Residential provisions of |
| 6 | the Energy Code. Starting with our First Amendment |
| 7 | I'm sorry. Starting with our First Amendment to the |
| 8 | definitions. This is new to this draft, version two. |
| 9 | We are looking to modify the definition of |
| 10 | "conditioned space" by adding the following to the |
| 11 | definition, "which shall not apply to garage spaces |
| 12 | where supplemental heating or cooling is installed." |
| 13 | The reason why we put this amendment to |
| 14 | this definition in is so that those wanting or wishing |
| 15 | to put a ductless mini split, a suspended unit heater |
| 16 | in their residential garage or shop or woodworking or, |
| 17 | you know, after-hour purposes, not looking to really |
| 18 | condition the garage, but just give a little heat or a |
| 19 | little cooling, they can do so. |
| 20 | It's not on there? |
| 21 | UNIDENTIFIED SPEAKER: Well, I don't know |
| 22 | where are you at? |
| 23 | MICHAEL HYDE: I'm sorry. |
| 24 | UNIDENTIFIED SPEAKER: Page 7. |
| 25 | MICHAEL HYDE: Page 7, letter (o). |
| | |

Subsection (o). 1 UNIDENTIFIED SPEAKER: 2 UNIDENTIFIED SPEAKER: Okay. Thank you. 3 MICHAEL HYDE: Sorry about that. TIM FROST: So R-202 definitions, add the 4 following definition of condition space. 5 "This definition shall not apply to garage spaces where 6 supplemental heating or cooling is installed." 7 8 MICHAEL HYDE: Thank you. So we've received a lot of concerns and 9 10 questions throughout the state of Idaho where there are 11 certain jurisdictions that if you condition the garage, 12 it has to adhere to the building envelope insulation 13 requirements, whether that be ceiling, floor, 14 perimeter, foundation. And in an existing residence, that can pose quite the project, cost -- costly, 15 16 depending on what components are insulated. 17 Depending on whether or not the amount of surface area you have in the insulation behind the wall 18 19 or ceiling, you may be able to get it to pass a REScheck, but there's no guarantee. 20 21 So what we're looking to do is trying to 22 create an exception for those wishing to install a mini 23 split or any type of heater in their garage and allow 24 it here in Idaho, rather than say no, you need to insulate your perimeter foundation because it doesn't 25

have it. You only have R-13 in the walls and maybe 1 2 R-19 in the ceiling, depending on the depth of the blown-in insulation. 3 So rather than -- what we've heard is that 4 it encourages people to install these appliances 5 without getting permitted and inspected, because they 6 know it won't pass code and they'll get told no by the 7 8 inspector. So what we're trying to do is we're trying 9 to make an exception here to say yes you can. You can 10 install a heating or cooling system in your garage if 11 you're not trying to condition it to the Manual J 12 standards, you're just adding a little heat, a little 13 cooling, so that way people get permits and we get 14 inspections and homes can be insured and the clearances to combustibles are met and all the life-safety 15 parameters that go with installation that is addressed 16 17 by the Mechanical Code and/or Electrical Code. So that's the thought process here. 18 Not 19 sure if we've captured all of the sections of the Energy Code, but we thought we'd start with the 20 definitions. 21 22 Mr. Burgess. 23 KEN BURGESS: Mr. Hyde, Ken Burgess on behalf of 24 the Idaho Building Contractors Association of Home Builders. 25

First of all, I -- I did not realize this 1 2 was in here. And I will tell you, I think my guys would very much appreciate having that definition --3 MICHAEL HYDE: 4 Okay. KEN BURGESS: -- or that exception. 5 Because you're correct, we are hearing from a lot of different 6 places around the state where the interpretations vary 7 8 from one jurisdiction to another. And there's been some minor battles along that route as it relates to 9 heating and cooling garage space. So we would very 10 11 much support the -- conceptually. I need to look at 12 the words. But we appreciate it. 13 Thank you, Ken. MICHAEL HYDE: 14 PATRICK SULLIVAN: Mr. Hyde. 15 MICHAEL HYDE: Yes, sir. 16 PATRICK SULLIVAN: I would add "shop space" 17 there as well. 18 MICHAEL HYDE: Shop space? That was one that I 19 wanted to consider, but I didn't know if it was appropriate based on definition. 20 If -- does the IRC have that definition? 21 22 Because I had it in there, but then I took it out. 23 PATRICK SULLIVAN: I don't think it does have 24 shop space in there. UNIDENTIFIED SPEAKER: I think there's garage. 25

1 MICHAEL HYDE: Garage. 2 PATRICK SULLIVAN: There's garage. UNIDENTIFIED SPEAKER: Parking of motor 3 4 vehicles; right? Uh-huh. 5 MICHAEL HYDE: PATRICK SULLIVAN: Yeah. 6 UNIDENTIFIED SPEAKER: I don't know for shop. 7 MICHAEL HYDE: But I -- I thought about detached 8 9 shops, you know, secondary-type structures. You know, 10 what -- how far do we want to go here? I thought good 11 start to have the conversation. 12 PATRICK SULLIVAN: I mean -- I mean in practice 13 we have rather -- we would rather issue the mechanical 14 permit and not have them [unintelligible] Energy Code, just so we make sure it's safe. So we've been doing 15 16 that for years. 17 MICHAEL HYDE: Have you? 18 PATRICK SULLIVAN: Yeah. 19 MICHAEL HYDE: Okay. That's good to know. PATRICK SULLIVAN: But I think a lot of times 20 21 it's in detached shops. 22 MICHAEL HYDE: Yes. 23 PATRICK SULLIVAN: You know, somebody puts in a 24 little pole barn. MICHAEL HYDE: 25 Uh-huh.

1 PATRICK SULLIVAN: It's not conditioned, and 2 then it's --3 MICHAEL HYDE: Yeah. PATRICK SULLIVAN: And then they put some --4 put, you know, a unit heater in there or something or 5 it has a wood shop, they're redoing cars or something. 6 MICHAEL HYDE: Has anybody ran into any 7 8 instances -- and I'll get to you just after -- on man-sheds, she-sheds, anything like that with mini 9 10 splits in requiring Manual J? Like do we consider it 11 conditioned space? Do I need to incorporate those 12 detached accessory-type structures but it's not an 13 accessory structure? 14 PATRICK SULLIVAN: It would not be an 15 accessory --16 MICHAEL HYDE: Right. 17 PATRICK SULLIVAN: -- accessory dwelling, so it would not apply to accessory dwellings, because we 18 19 would want those to meet the envelope requirements. The requirements. Okay. 20 MICHAEL HYDE: Yeah. 21 PATRICK SULLIVAN: 22 MICHAEL HYDE: I mean that adds something that I 23 think this is the appropriate platform to have a 24 collaborative discussion on. How do we encompass that? 25 Should we encompass that? Those type of -- if it's

1 over 200 square feet. 2 PATRICK SULLIVAN: Right. MICHAEL HYDE: So I mean those are getting very 3 4 popular. You can buy them at Costco, and somebody may want to throw a mini split in there. And they're 5 significantly sized. They're much greater than 200 6 7 square feet. 8 Sorry, sir. BRYAN GILBERT: Oh, you're good. 9 10 Bryan Gilbert, Ada County building 11 official. 12 I just wanted to start by saying thank you. 13 MICHAEL HYDE: You're welcome. 14 BRYAN GILBERT: And I would agree that maybe a detached and attached as part of the definition or 15 16 shop --17 MICHAEL HYDE: Okay. BRYAN GILBERT: -- would be beneficial as well, 18 19 because we get these detached and attached. MICHAEL HYDE: I know. Do you think, you know, 20 from a -- if the code doesn't have a definition for 21 "shop," would we have to or would the Building Code 22 23 have to define "shop" in IDAPA rule? 24 UNIDENTIFIED SPEAKER: The question is is there an ordinary meaning for it? Because that's what it 25

| 1 | would default to is the plain meaning |
|----|--|
| 2 | MICHAEL HYDE: Ordinary. |
| 3 | UNIDENTIFIED SPEAKER: for what a shop is. |
| 4 | MICHAEL HYDE: Okay. And it specifically I |
| 5 | mean this in the definition it applies to both |
| 6 | no, there's an R-202, there's two sets of definitions. |
| 7 | So we know it's residential. |
| 8 | UNIDENTIFIED SPEAKER: Yeah. |
| 9 | MICHAEL HYDE: Maybe "shop." Throw "shop" in |
| 10 | there, just see. |
| 11 | CHARLIE ALLEN: Michael, this is Charlie Allen. |
| 12 | MICHAEL HYDE: Yes, sir. |
| 13 | CHARLIE ALLEN: Residential Code does have a |
| 14 | term called "detached accessory building." You could |
| 15 | just use that maybe. |
| 16 | UNIDENTIFIED SPEAKER: Detached accessory |
| 17 | building. |
| 18 | MICHAEL HYDE: Okay. |
| 19 | TIM FROST: I guess to throw it out there, if |
| 20 | anybody has a suggested definition of that, we'd |
| 21 | appreciate that. |
| 22 | MICHAEL HYDE: Yeah. |
| 23 | UNIDENTIFIED SPEAKER: [Unintelligible.] |
| 24 | UNIDENTIFIED SPEAKER: That might be it, garage |
| 25 | and detached accessory. |

| 1 | MICHAEL HYDE: Okay. But just for conversation |
|----|--|
| 2 | sake, we are not considering she-sheds, he-sheds? |
| 3 | CHARLIE ALLEN: But those could be detached |
| 4 | accessory buildings in some cases; right? |
| 5 | MICHAEL HYDE: I mean |
| 6 | CHARLIE ALLEN: It can't be habitable; right? |
| 7 | It can't be sleeping, living, can't be your everyday |
| 8 | use. |
| 9 | MICHAEL HYDE: Uh-huh. |
| 10 | CHARLIE ALLEN: Have to be used as your |
| 11 | MICHAEL HYDE: Some people are getting creative. |
| 12 | CHARLIE ALLEN: hangout hobby area. |
| 13 | MICHAEL HYDE: They're starting to put some |
| 14 | sinks and the bathroom. And I don't know about a |
| 15 | bedroom. I haven't heard of a bedroom, but |
| 16 | PATRICK SULLIVAN: I think we run into a lot of |
| 17 | people putting these small small shops in their back |
| 18 | yard and everything. |
| 19 | MICHAEL HYDE: Uh-huh. |
| 20 | PATRICK SULLIVAN: And, you know, we make them |
| 21 | figure out how to either put it on a slab on grade or |
| 22 | be able to actually anchor it to the ground with earth |
| 23 | anchors or whatever it would be. We just have to have |
| 24 | an approved system if they're going to actually |
| 25 | actually put power to it or put a heater in it, that |

| 1 | kind of thing. You know, you just can't have something |
|----|---|
| 2 | on skids and run a subpanel to it. |
| 3 | MICHAEL HYDE: Makes sense. |
| 4 | PATRICK SULLIVAN: So anyway. |
| 5 | MICHAEL HYDE: Okay. And I thought the City of |
| 6 | Boise's document on these tiny homes in similar type of |
| 7 | structures was very informative. But we had a point |
| 8 | I had to point somebody in that direction. But just |
| 9 | throwing it out there for conversation. |
| 10 | But I'll add, Charlie, that detached |
| 11 | accessory building to the language, and we'll kick it |
| 12 | around and see if it encompasses what we're trying to |
| 13 | achieve here. |
| 14 | CHARLIE ALLEN: Yeah, if you have detached |
| 15 | accessory building and garage, that's going to help |
| 16 | more than what we have now. |
| 17 | MICHAEL HYDE: Okay. Agreed. |
| 18 | PATRICK SULLIVAN: But not a dwelling, not a |
| 19 | detached accessory dwelling. |
| 20 | MICHAEL HYDE: Okay. |
| 21 | PATRICK SULLIVAN: Or a tiny house where you |
| 22 | have somebody living there. |
| 23 | MICHAEL HYDE: So you're saying |
| 24 | PATRICK SULLIVAN: It's just garage and shop |
| 25 | use. |

1 MICHAEL HYDE: Okay. 2 PATRICK SULLIVAN: It's not if somebody -- it's not it's a mother-in-law's quarters or something. 3 MICHAEL HYDE: Okay. Like a secondary 4 5 structure. What if it's -- you know, we get this a lot 6 on these new barn-dominiums, you know, that have living 7 8 quarters, living spaces up above the shop. 9 CHARLIE ALLEN: They usually insulate those. 10 MICHAEL HYDE: Okay. Okay. 11 CHARLIE ALLEN: If they're living there. 12 MICHAEL HYDE: So we're covered on what we're 13 trying to achieve. 14 PATRICK SULLIVAN: As long as the dwelling is covered. I think I'm more concerned with the dwelling 15 16 unit being covered --17 MICHAEL HYDE: Okay. PATRICK SULLIVAN: -- or being insulated. 18 But I 19 mean if you have a -- if it's attached to a butler building or inside a butler building, it's got its own 20 21 envelope. Okay. So we're good there. 22 MICHAEL HYDE: 23 Sam, you had a... 24 Yeah, Sam, building program SAM ZAHORKA: 25 manager.

I would say "detached accessory 1 2 structure" --3 MICHAEL HYDE: Okay. SAM ZAHORKA: -- as not defined as a dwelling 4 unit possibly, to incorporate what Patrick and Jason 5 were stating. Because dwelling unit is defined in the 6 7 IRC. MICHAEL HYDE: Okay. Thank you. 8 9 Any additional comments online? 10 Ken. 11 KEN BURGESS: I just want it to be noted that 12 you're actually adding something. MICHAEL HYDE: There's a lot of red underline in 13 14 I was nervous presenting it to Mr. Frost. here. 15 UNIDENTIFIED SPEAKER: That's just the high 16 point. 17 MICHAEL HYDE: Okay. We'll go ahead and transition to the next page here. And the next item on 18 19 our agenda is 402.4.1.2, air leakage floor door tests. The thought process here, as we've 20 21 discussed over the past few meetings, what we're looking to do is, you know, really looking at the '09 22 23 code and where it transitioned from, mandating blower door tests on 80 percent of the homes built now to 24 where we came from, where it was optional. And we 25

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| 1 | tried over the years tried to incorporate that |
|----|--|
| 2 | option, and then fine tune it little by little and |
| 3 | require more and more and more, leading up to where we |
| 4 | are today. Out |
| 5 | UNIDENTIFIED SPEAKER: It's 20 percent today. |
| 6 | UNIDENTIFIED SPEAKER: Yeah, it's 20. |
| 7 | MICHAEL HYDE: 20 percent. 80 percent can be |
| 8 | visual option. Thank you for that clarification. |
| 9 | So with that being said, what I did, |
| 10 | looking at this section, if you turn back a few pages |
| 11 | in your IDAPA handout that you have and we go to |
| 12 | page the top of page 4, and I want you to look at |
| 13 | Section I, if you would, please, where the Building |
| 14 | Code Board throughout the 2018 code collaborative |
| 15 | process amended section R-303.4. |
| 16 | And I'm going to pull up R-303.4 out of the |
| 17 | IRC really quick so we can show how it reads and what |
| 18 | the Building Code Board did to delete the requirement |
| 19 | of air changes per hour. |
| 20 | So the Building Code and the Energy Code |
| 21 | are almost verbatim when they say what air changes per |
| 22 | hour must be met. So the Building Code Board deleted |
| 23 | this section per that amendment that you're looking at |
| 24 | where the code says "every dwelling unit set shall be |
| 25 | five air changes an hour or less conducted with a |

| 1 | blower door report." The Building Code Board deleted |
|----|---|
| 2 | that, per letter I. |
| 3 | And they said, "Replace with the following: |
| 4 | 'Mechanical ventilation. Dwelling unit shall be |
| 5 | provided with whole house mechanical ventilation in |
| 6 | accordance answer with M-1505.4.'" |
| 7 | So they took that approach on the Building |
| 8 | Code side, the IRC, but left it in the Energy Code to |
| 9 | say 20 percent of your homes have to be blower door |
| 10 | tested. And then 80 percent is okay with a visual |
| 11 | option. And I don't understand why. I don't |
| 12 | understand why the contradiction. Why not take the |
| 13 | same approach in both aspects? |
| 14 | If the house is being mechanically |
| 15 | ventilated, we've covered the ventilation in indoor air |
| 16 | quality concerns, as well as made the home tight. Why |
| 17 | require the blower door report? |
| 18 | JASON BLAIS: They amended out the blower door, |
| 19 | right, on the |
| 20 | MICHAEL HYDE: Correct. |
| 21 | JASON BLAIS: because we weren't at the time |
| 22 | doing it? |
| 23 | MICHAEL HYDE: Correct. At the time it was you |
| 24 | can meet anywhere from seven air changes to five, which |
| 25 | then didn't initiate or trigger a blower door report. |

| 1 | But when we adopted the '18s, all that came into play |
|----|--|
| 2 | and they amended this. |
| 3 | So I'm trying I can't extract from the |
| 4 | minutes and the history what the conversation was. I'm |
| 5 | failing to identify it. |
| 6 | JASON BLAIS: Well, I think, too, they knew that |
| 7 | it was going to change to five coming up, too, right, |
| 8 | on the Energy Code? Because it did change to five or |
| 9 | less |
| 10 | MICHAEL HYDE: I think |
| 11 | JASON BLAIS: on the air change. |
| 12 | MICHAEL HYDE: I think the '15 and the '12 I |
| 13 | think the '12 had five, because that's why we had five |
| 14 | to seven. |
| 15 | JASON BLAIS: Uh-huh. |
| 16 | MICHAEL HYDE: So the '12 is what changed it. |
| 17 | And so we amended "we," the Building Code Board and |
| 18 | the industry through the code collaborative amended |
| 19 | five to seven, but then said we're not going to even |
| 20 | discuss or even initiate air changes or blower door |
| 21 | reports out of the Building Code, and we're just going |
| 22 | to say "all homes shall be mechanically ventilated." |
| 23 | And I can't identify why. |
| 24 | Why did we do that? |
| 25 | TIM FROST: Mr. Sullivan. |

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| 1 | PATRICK SULLIVAN: On the you know, the item |
|----|---|
| 2 | H that's crossed out, the 20 percent testing |
| 3 | MICHAEL HYDE: Uh-huh. |
| 4 | PATRICK SULLIVAN: that was those are |
| 5 | discussions that happened during the code |
| 6 | collaborative or Energy Code collaborative, like |
| 7 | 1920, something like that, and where we actually |
| 8 | discussed, you know, as we get tighter and tighter on |
| 9 | these, we need some kind of metric to be able to see |
| 10 | where we're at. |
| 11 | MICHAEL HYDE: Okay. |
| 12 | PATRICK SULLIVAN: And I think there was a |
| 13 | negotiation between the home home builders and the |
| 14 | building officials to figure out how are we going to |
| 15 | how are we going to ensure that, you know, we know how |
| 16 | tight these are, so then we know what to do |
| 17 | mechanically with them. |
| 18 | MICHAEL HYDE: Okay. |
| 19 | PATRICK SULLIVAN: And then we weren't going to |
| 20 | do all of them. It's every fifth one. And then it |
| 21 | would be an educational opportunity if you where we |
| 22 | would be able to give a punch list of, hey, on your |
| 23 | next one try this, this, or this or on this one there's |
| 24 | some low-hanging fruit you can do that's not |
| 25 | destructive |

| 1 | MICHAEL HYDE: Uh-huh. |
|----|---|
| 2 | PATRICK SULLIVAN: to improve your air |
| 3 | changes per hour. You don't have to retest. And I |
| 4 | think that's how the conversations went. |
| 5 | MICHAEL HYDE: Okay. |
| 6 | PATRICK SULLIVAN: And with the goal over time, |
| 7 | as we get to maybe the next code |
| 8 | MICHAEL HYDE: Uh-huh. |
| 9 | PATRICK SULLIVAN: where it might even be |
| 10 | tighter, people are used to doing the blower door |
| 11 | testing. They're used to being able to figure out how |
| 12 | to you know, what to do during the construction |
| 13 | process to make the envelopes tighter. |
| 14 | MICHAEL HYDE: Okay. I'm just I do you |
| 15 | have a question? |
| 16 | TIM FROST: I guess just as we talk through |
| 17 | this, I'd also like to hear from local jurisdictions, |
| 18 | how are you handling that 20 percent test, or if you're |
| 19 | doing more than 20 percent test. What are we doing on |
| 20 | instances that they don't pass that test? Do you fail |
| 21 | the inspection? Or you know, what's the next steps? |
| 22 | JASON BLAIS: Mr. Frost, Jason Blais. |
| 23 | Yeah, I know Idaho had sent out like a |
| 24 | checklist of some things that you can just run through |
| 25 | and improve at the end without being destructive that |

Γ

| 1 | might help, then you don't have to retest. But no, you |
|----|---|
| 2 | don't fail the inspection. But you put down the score |
| 3 | and what they got. |
| 4 | TIM FROST: Is there any |
| 5 | JASON BLAIS: It's got to be consistent with |
| 6 | that. |
| 7 | TIM FROST: Is there any jurisdictions that |
| 8 | we're aware of that does actually fail the blower door |
| 9 | test of the whether they do 100 percent of the test |
| 10 | through their local ordinance or 20 percent, one out of |
| 11 | five. |
| 12 | MATT VANDERMEER: Matt Vandermeer, Momentum. |
| 13 | Might get called back on City of Boise |
| 14 | occasionally saying this house failed, that we need to |
| 15 | go and make corrections. It depends on the inspector |
| 16 | and what day it is. |
| 17 | JASON BLAIS: I think there's some if they're |
| 18 | like scoring like seven or eight, sometimes we get |
| 19 | tests where like they're testing, and there's like a |
| 20 | window out or something, and we're like with whoa. |
| 21 | MICHAEL HYDE: Yeah. |
| 22 | JASON BLAIS: That's not a great score; right? |
| 23 | We may have to retest that and get a more accurate |
| 24 | score. |
| 25 | MICHAEL HYDE: Yes, sir. |

| 1 | BRYAN GILBERT: Bryan Gilbert, Ada County. |
|----|--|
| 2 | Speaking for Ada County, most of our blower |
| 3 | door test results are lower or better than the code |
| 4 | minimum anyway, so we're not seeing many failures, if |
| 5 | any. I don't remember seeing any failures. |
| 6 | MICHAEL HYDE: Okay. |
| 7 | BRYAN GILBERT: So either these guys are doing a |
| 8 | really fantastic job or they're fudging their numbers. |
| 9 | I'm not sure which. |
| 10 | MATT VANDERMEER: Usually what we'll do is we'll |
| 11 | go back. |
| 12 | BRYAN GILBERT: Yeah. No, but seriously |
| 13 | MATT VANDERMEER: And that's why that's why |
| 14 | they build it. |
| 15 | BRYAN GILBERT: most of them are down. I |
| 16 | mean we're seeing them at three, three-and-a-half air |
| 17 | changes per hour. |
| 18 | UNIDENTIFIED SPEAKER: Yeah. What would you say |
| 19 | the average is? |
| 20 | MATT VANDERMEER: Me? |
| 21 | UNIDENTIFIED SPEAKER: Average number. |
| 22 | MATT VANDERMEER: The average is between four |
| 23 | and six. And we've had some as high as eight this |
| 24 | year. And we haven't been called back to those homes. |
| 25 | TIM FROST: So in these scenarios, you know, it |

| 2 jurisdiction will use it as an op 3 but in most instances they're not 4 average they are passing. | t failing or on the getting as a result of |
|---|--|
| | getting as a result of |
| 4 average they are passing. | |
| | |
| 5 What is the consumer | |
| 6 that, of paying for the blower do | oor test, if we're not |
| 7 making them change something as a | a result of that? In |
| 8 other words, there's a cost incur | rred with that test, |
| 9 whether it's 150 bucks, up to 500 | 0 bucks or so, |
| 10 depending on the testing service, | , what is the consumer |
| 11 getting, and is that can we ju | ustify that? |
| 12 UNIDENTIFIED SPEAKER: I'd | d like to add |
| 13 additionally, what about the 80 p | percent that aren't |
| 14 getting tested that we don't ever | n know where they're |
| 15 at? What are those consumers get | tting? Are we a |
| 16 regulatory body or are we an educ | cation body? |
| 17 My feeling is is that | t this was poorly |
| 18 written. It never ever, ever sho | ould have been entered |
| 19 this way. We either regulate it | or we don't, in my |
| 20 opinion. | |
| 21 MICHAEL HYDE: Okay. | |
| 22 KEN BURGESS: Ken Burgess | on behalf of the Home |
| 23 Builders again. | |
| 24 First of all, I did h | have a chance with our |
| 25 IBCA Board meeting on July 7th to | o talk about this and a |

number of other issues related to the amendments to the
 code at length.

And the history that Patrick Sullivan put out is correct. I mean that was the negotiated deal. I think the argument was we can at least do a statistical sampling of various homes in order -- with an assumption that, you know, the other 80 percent are probably going to be in that same range.

9 And you won't be too surprised to learn 10 that the Idaho Building Contractors Association is very 11 supportive of eliminating all this language, as you 12 have in here.

However, the question that I would have is of those that are being tested today -- because I think our guys would argue, you know, we're building to such a standard now that I think we are -- we're getting there most of the time.

But my question would be, of those that are tested, how many -- how many homes do technically fail? MATT VANDERMEER: [Unintelligible] do most of the testing. So I would say ten -- anywhere from 10 to 20 percent fail. So with that, then we educate the builder who we're working with, and they say "Oh, do I have to pass code?"

25

We say, "It's up to the jurisdiction.

These are the changes you need to make." 1 2 When we go back they've made those changes. And we -- and that's why the numbers are lower because 3 we've gone back and self-educated them. 4 But I mean there are some areas. 5 Like I said, I had two houses in the last month that were 6 [unintelligible] eight air changes per hour. 7 MICHAEL HYDE: How big were --8 9 MATT VANDERMEER: How does that benefit -- 2,000 10 square feet. 11 MICHAEL HYDE: Okay. 12 MATT VANDERMEER: How does that benefit the 13 homeowner? Health, safety, and pollutants coming into 14 the home. And it wouldn't be coming into the home if 15 the house was a little bit tighter. 16 Is there a case when houses are too tight? 17 But you're never going to know that unless the Yes. 18 house is tested. 19 MICHAEL HYDE: And this is where I get hung up a 20 lot. And I -- I appreciate what you said, because to a 21 degree you want to keep the bought air in. I get it. 22 And you also, to a degree, you want to keep the 23 contaminant air out. 24 But when we're mandating every home have mechanical ventilation, that outside air is being 25

1 brought in no matter what we -- no matter how tight the 2 home is. MATT VANDERMEER: But is every house having 3 4 mechanical ventilation? 5 UNIDENTIFIED SPEAKER: Yeah. MATT VANDERMEER: I haven't seen it in every 6 7 house. MICHAEL HYDE: I would check with the -- I mean 8 9 It's in the amendment that every new it's in code. 10 construction home has a fresh air inlet. There's no 11 exception for natural ventilation, unless there's an 12 ordinance out there that I haven't heard of. 13 JASON BLAIS: We're seeing it all --14 MICHAEL HYDE: Yeah, the only natural ventilation that's allowed is in a commercial setting. 15 16 So no matter what, you're bringing that outdoor air in, 17 however -- through the mechanical system, one way or 18 another, or a gravity air inlet. 19 And so I -- I just -- I'm having a hard And I know historically since '06 we've gone 20 time. back and forth on this item. We went fresh air, 20 21 22 square inches -- or one square inch per 20 square feet 23 of house to what the code says. And I think there's 24 some practical sense to keeping the bought air indoors. 25 I do.

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| 1 | But should it be if we can demonstrate |
|----|---|
| 2 | that we've done it through on-site inspection and |
| 3 | quality checklists that we can do on the front end |
| 4 | maybe, and eliminate the testing requirement and that |
| 5 | cost, because you go up and I won't speak for Moscow |
| 6 | or Coeur d'Alene, but I know in some of the other rural |
| 7 | jurisdictions that have a program up in northern Idaho, |
| 8 | they're like "What is a blower door test? Who do I |
| 9 | call?" |
| 10 | I mean even in eastern Idaho, they have to |
| 11 | call people in from Washington up in the panhandle, and |
| 12 | they got to call people in from Utah down in the |
| 13 | eastern Idaho region. |
| 14 | So I mean if Charlie Allen, if you have any |
| 15 | comments on this, I'd love to hear from you and what |
| 16 | you're doing there in eastern Idaho. |
| 17 | But I mean this is a conversation that |
| 18 | we're hearing, you know, and like, hey, this is a big |
| 19 | problem that we need to get grasped and figure out what |
| 20 | we're going to do consistently, tying it back to what |
| 21 | Mr. Barlow said. |
| 22 | JASON BLAIS: It definitely is regional too. |
| 23 | MICHAEL HYDE: It is very regional. And there's |
| 24 | some jurisdictions that they they know it's there, |
| 25 | but they're just electing not to enforce it, which then |

| 1 | creates a problem for the Board, because now we have |
|----|---|
| 2 | inconsistency. And our whole mission, per the statute, |
| 3 | is to develop consistent code enforcement. |
| 4 | Matt. |
| 5 | MATT VANDERMEER: Yeah, I was just thinking, |
| 6 | when you do have a house with mechanical ventilation, |
| 7 | the house air change per hour is higher. So you're |
| 8 | bringing in air in from natural resources |
| 9 | [unintelligible]. |
| 10 | MICHAEL HYDE: And that makes and I mean that |
| 11 | makes sense, because you have a 6-inch to a 10-inch |
| 12 | hole with no backdraft damper in there, unless they |
| 13 | chose to install one or there's an ordinance for such. |
| 14 | Charlie, were you going to comment? |
| 15 | CHARLIE ALLEN: Yeah. So I would take exception |
| 16 | to that we are having to bring people in from Utah. |
| 17 | We've got two testers in Idaho Falls and one in |
| 18 | Pocatello, and have never had anybody tell me that they |
| 19 | had to bring anybody in from out of state or had a |
| 20 | problem getting tested. |
| 21 | MICHAEL HYDE: I'll just clarify, that came from |
| 22 | a building inspector slash official down in the |
| 23 | southern area. So I I'm just going off of that |
| 24 | comment. |
| 25 | CHARLIE ALLEN: Maybe Bear Lake, yeah. |

| 1 | UNIDENTIFIED SPEAKER: Maybe, yeah. |
|----|---|
| 2 | CHARLIE ALLEN: So anyway, yeah, we our I |
| 3 | guess we're pretty fortunate, because the guy that does |
| 4 | a lot of testing in Idaho Falls here in our area is |
| 5 | contracted by some of the contractors to meet some of |
| 6 | his tax deductions through the federal programs, and |
| 7 | they they've just educated a lot of contractors over |
| 8 | here on how to achieve tight air balance, plus bring |
| 9 | fresh air into their home and how to do it correctly. |
| 10 | And and as a matter of fact, we had one |
| 11 | builder that's building 98 homes, it's a tract home, |
| 12 | and we when we told him he wanted we needed |
| 13 | 20 percent of his homes tested, he contacted this |
| 14 | individual. The guy came out and said, "Look, I want |
| 15 | to work with you from the ground up so we can make sure |
| 16 | you're going to pass." |
| 17 | And this guy's been willing to go out and |
| 18 | educate and meet with the contractor on site, even |
| 19 | before he does the test. So we're pretty lucky to have |
| 20 | some pretty good people over here that do that. |
| 21 | We have had a couple of houses just over |
| 22 | three. I mean most of ours are under three. But we |
| 23 | also require whole-house ventilation, and it's on a |
| 24 | timer and a damper. So it opens and, you know, you got |
| 25 | fresh air changes you know, you have to meet the |

Γ

| 1 | code requirement of I can't remember what it is |
|----|---|
| 2 | 3,000 cfm of air or bringing in fresh air three times a |
| 3 | day or something like that. But anyway, it just works |
| 4 | for us. |
| 5 | MICHAEL HYDE: Okay. Thank you. |
| 6 | CHARLIE ALLEN: And if we have somebody who |
| 7 | fails, we will have them go in and seal any exterior |
| 8 | penetrations with some 30-year caulk and can lights. |
| 9 | If they have a lot of can lights, they can seal around |
| 10 | those. And that's really all we do. |
| 11 | But the education process has gotten us to |
| 12 | where we hardly ever see any over three. |
| 13 | MICHAEL HYDE: Thank you, Charlie. |
| 14 | TIM FROST: Quick comment before Ken. |
| 15 | I think one of the, you know, questions |
| 16 | we've tried we've really struggled internally on |
| 17 | this is if 80 percent of the homes aren't being tested, |
| 18 | how do we handle this? And then on top of that, if |
| 19 | this is a scenario that we're generally approaching |
| 20 | from a jurisdictional level of education only, can we |
| 21 | leave it towards designers to use that as a market |
| 22 | marketing tool that they utilize blower door testing to |
| 23 | check the air exchanges in the house, and it being a |
| 24 | permissive piece? |
| 25 | And homeowners that are wanting to build at |

| 1 | a much higher standard than maybe what we have, at a |
|----|---|
| 2 | 2021 standard or even in the future, the 2024 standard, |
| 3 | that again, that becomes their choice and they have the |
| 4 | ability since they have the knowledge related to |
| 5 | wanting to build that to energy efficiency and the |
| 6 | willingness to pay for that cost, at that point |
| 7 | wouldn't they also be willing to pay for the cost of |
| 8 | the blower door test? |
| 9 | And so I think that's another part of this |
| 10 | is is this example a scenario that we should require in |
| 11 | rule, enforceable in law, versus allow it to be a |
| 12 | competition piece between the consumer and the |
| 13 | individual builder? |
| 14 | KEN BURGESS: Ken Burgess again. |
| 15 | I appreciate what Charlie was just saying |
| 16 | about what they've done over there. But it still |
| 17 | remains, there is very much an inconsistency across the |
| 18 | state in terms of availability of testers, in terms of |
| 19 | how the jurisdictions choose to whether they do |
| 20 | require a test or not. And so I I like the |
| 21 | permissive concept, because I do think we there are |
| 22 | builders who would still choose to do that, I think, |
| 23 | and do that test as a sales ploy, as a marketing tool. |
| 24 | So for whatever that's worth. |
| 25 | TIM FROST: Thank you. |

Johanna.

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3

JOHANNA BELL: Johanna with the Association of Idaho Cities.

So in taking the other step -- or the other 4 side of the coin, same coin, for a building that where 5 the practice is and the construction is having a 6 building that is having very low air changes per hour 7 8 and is very tight, but basically that may or may not be known, do the HVAC design and installation requirements 9 10 protect the homeowner if it is -- if it's not tested 11 and if it is under say four hour -- you know, air 12 changes per hour, does the HVAC design just 13 automatically compensate and ensure that the tight 14 building will have sufficient air intake? Is that just baked into the HVAC codes? 15

16 MICHAEL HYDE: It is. In 1505.4, based on the 17 amendment that the Board took when they deleted blower door requirements and just said every home will have 18 19 mechanical ventilation. So how tight the home is? No. But when it comes to providing --20 21 JOHANNA BELL: Okay. 22 MICHAEL HYDE: -- air changes and --

23 JOHANNA BELL: So every home --

24 MICHAEL HYDE: -- fresh air.

25 JOHANNA BELL: -- has [unintelligible]

1 ventilation? 2 MICHAEL HYDE: Correct. Okay. Thank you. This is 3 JOHANNA BELL: 4 helpful. Thank you. MICHAEL HYDE: New homes. New homes. 5 JOHANNA BELL: Right. Right. 6 7 MICHAEL HYDE: Jason. JASON BLAIS: Mr. Hyde, Jason Blais, City of 8 9 Boise. 10 One thing to remember is when you look at 11 the code as published --12 MICHAEL HYDE: Uh-huh. JASON BLAIS: -- it mandates blower door test, 13 14 period. 15 MICHAEL HYDE: It does. 16 JASON BLAIS: There is no other option; right? 17 MICHAEL HYDE: Uh-huh. JASON BLAIS: And so these discussions we've had 18 19 over the years, we had visual inspection and we had both. 20 Uh-huh. 21 MICHAEL HYDE: 22 JASON BLAIS: Then we went to okay, at least do 23 one out of five just to see what the score is. That's 24 where we're at today. So if that -- if we're saying that doesn't 25

| 1 | work, then we need to at least go back to allow both, |
|----|--|
| 2 | right, and have the builder pick, at least? You |
| 3 | shouldn't because I think the proposal just says |
| 4 | visual inspection; right? |
| 5 | MICHAEL HYDE: It does. And the code that says |
| 6 | it's required is the Building Code, the R-303.4, and |
| 7 | they amended it. If you look at the Energy Code |
| 8 | section I'm going to pull it up really quick it |
| 9 | has under 4.2 the installations and ceilings. So you |
| 10 | have your installation requirements. |
| 11 | JASON BLAIS: Uh-huh. |
| 12 | MICHAEL HYDE: And then you have your testing. |
| 13 | JASON BLAIS: Uh-huh. |
| 14 | MICHAEL HYDE: And then |
| 15 | JASON BLAIS: Got rid of the visual. |
| 16 | MICHAEL HYDE: the 2018 got rid of the visual |
| 17 | option. So I can see, you know, the Board at the time |
| 18 | carrying over that visual option for a short period, |
| 19 | and then the transition, like Mr. Sullivan was saying, |
| 20 | once people got acclimated to testing, I just don't |
| 21 | think that ever came to fruition. |
| 22 | TIM FROST: So for clarity, Jason, are you |
| 23 | saying the by deleting this we're deferring to |
| 24 | mandatory blower door testing, or by deleting this |
| 25 | we're accomplishing I guess I'm trying to |

I think in your proposal it 1 JASON BLAIS: No. 2 just says visual only is the only option. MICHAEL HYDE: 3 Uh-huh. JASON BLAIS: Where you should have visual and 4 blower door as both options for air [unintelligible]. 5 MICHAEL HYDE: And I just want to let you know I 6 7 wrote that based on the amendment of R-303.4 where they 8 got rid of testing and just said mechanically ventilated. So I made the Energy Code consistent with 9 10 that to say "you shall air seal from a visual 11 perspective," and eliminated the testing, to be 12 consistent between the IRC and the Energy Code. 13 JASON BLAIS: Because Ken's right. There are 14 builders that still are going to do blower door, and 15 they market that. So I think it needs to be in there 16 as an option. 17 MICHAEL HYDE: And again, by not having it in there doesn't make it not an option. Because as an 18 19 inspector, you do your rough and you're still looking at air seal. You're just not mandating the test. 20 21 JASON BLAIS: Look, the testing does have 22 parameters. If you read that, you're going to 23 [unintelligible] ICC 380 and --24 MICHAEL HYDE: And we took all of -- that would be contracted -- based on -- yes, he's right. 25 It would

1 be extracting all those testing requirements. 2 TYLER PEROT: Tyler Perot, City of Meridian. I come from another jurisdiction where they 3 4 require blower door tests, but even as a mechanical inspector there, we never collected the tests. 5 They turned the paperwork in, and it basically went into a 6 file cabinet. I mean it wasn't something that was 7 8 holding up the house or occupancy or a determining 9 factor in getting into the house --10 MICHAEL HYDE: Okay. 11 TYLER PEROT: -- costs [unintelligible]. But 12 you're saying what do you get out of that cost. I mean 13 again, it's an option. You want to do it, you want to 14 know, that's great. But do we need to hold anything up 15 to that point or make it part of an inspection or 16 something? 17 MICHAEL HYDE: Yeah. I don't -- I mean I think you're 18 TYLER PEROT: 19 better off where you're going, kind of the direction of 20 leaving it as an option. 21 MICHAEL HYDE: Okay. 22 JASON BLAIS: And are you writing it on the 23 energy certificate [unintelligible]? 24 UNIDENTIFIED SPEAKER: Yeah. 25 UNIDENTIFIED SPEAKER: [Unintelligible.]

1 MICHAEL HYDE: Interchange. 2 JASON BLAIS: On that energy certificate, you know, the panel, mechanical engineers [unintelligible]? 3 MATT VANDERMEER: And we have to give them a 4 5 report now. MICHAEL HYDE: So I think this is a good 6 7 conversation that we're going to continue with the 8 Building Code Board and ask the question, what is the 9 intent here? Why did we amend it out of the Building 10 Code and left it -- the testing component, not the fact 11 that we need to seal the home, but the testing 12 component, why did we amend 303.4 the way we did during 13 the code collaborative? What are the thoughts here? 14 Why should we keep R-303.4 where it says "delete everything" and then just reiterate "mechanical 15 16 ventilation shall be required"? Because whatever we do 17 here, we need to do there. Because I think the language as 18 JASON BLAIS: 19 printed in the ICC in the Building Code, if you have mandatory blower testing in the Energy Code, they both 20 21 match up. 22 MICHAEL HYDE: They do. 23 UNIDENTIFIED SPEAKER: The Building Code Board 24 said, "Wait, we're not doing mandatory blower door tests on everything, so we need to amend that." 25

1 MICHAEL HYDE: Okay. Any other comments on 2 blower door air leakage? Jumping into residential log --3 UNIDENTIFIED SPEAKER: Hold on, Michael. 4 Yes, sir. 5 MICHAEL HYDE: UNIDENTIFIED SPEAKER: I just want to clarify. 6 7 If you make it permissive --8 MICHAEL HYDE: Uh-huh. 9 UNIDENTIFIED SPEAKER: -- who decides -- who 10 decides whether the test is going to be done or not? 11 Is it the inspector? Or is it the builder? Or is it 12 the potential homeowner? 13 MICHAEL HYDE: I think based on our -- our 14 meetings that we've had since April, having this discussion, I think the Building Code Board should set 15 the requirements on what this looks like. 16 And I 17 believe there was feedback, and I -- I don't know who, so I apologize for that, but it was we didn't want to 18 19 leave it up to interpretation, and we didn't -- it was recommended that we didn't have it optional. 20 It was one or the other. And so because of the fact of the 21 22 inconsistency. 23 And that was either at our April or July 24 meeting. So I'd have to dig into the minutes. But I

25 think this is a decision for the Board. I think this

| 1 | is what the Board needs to hear is what direction do we |
|----|---|
| 2 | need to go with this, and is it lifesaving. |
| 3 | JASON BLAIS: Mr. Frost, prior to this code |
| 4 | addition where we had both in there, it was really up |
| 5 | to the builder or the homeowner, which option they |
| 6 | wanted to do. |
| 7 | MICHAEL HYDE: If you look at the '09, it said |
| 8 | verbatim. It's an "or" clearly, '09 Energy Code. So |
| 9 | in that day's permissive, it would come back to the |
| 10 | builder. |
| 11 | TIM FROST: And, Jason, you're just asking for |
| 12 | us to do the "or" to essentially revert to that between |
| 13 | the builder and the homeowner, to have that option? |
| 14 | MICHAEL HYDE: But also to ensure that the |
| 15 | testing requirements meet the correct standards. |
| 16 | JASON BLAIS: You have to have parameters for |
| 17 | that testing. |
| 18 | MICHAEL HYDE: Okay. |
| 19 | TIM FROST: And I think to answer your question, |
| 20 | Ken, of, you know, at this point if you look at the |
| 21 | statute the way it was adopted in House Bill 660, if |
| 22 | the Building Code Board sets the frame up as a visual |
| 23 | or blower door testing, it is an option to the |
| 24 | homeowner at that point, because that is then Idaho |
| 25 | State Code, and it doesn't vary on a local level. |

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| 1 | MICHAEL HYDE: Residential log homes, new |
|----|--|
| 2 | subsection (t). What we are looking to do here is to |
| 3 | maintain the general requirements of the Energy Code, |
| 4 | the air leakage requirements, and then eliminate, you |
| 5 | know, your mechanical, electrical, and performance |
| 6 | requirements. |
| 7 | REScheck is an option already. I don't |
| 8 | think you have to state it because of what the thermal |
| 9 | envelope and the total UA alternative allows for |
| 10 | already. So I don't think we have to state REScheck, |
| 11 | but that's my assessment and analysis of this code. |
| 12 | So log homes, they have to be insulated per |
| 13 | the table, but I think you still have the parameters |
| 14 | of, okay, if you want to vary from the prescriptive |
| 15 | table requirements, as if it read in the Energy Code, |
| 16 | you have that total UA alternative route, which here |
| 17 | comes REScheck. That's how you get that toted total UA |
| 18 | alternative. |
| 19 | But that's just my opinion. I'm open to |
| 20 | your suggestions if we need to leave REScheck in there |
| 21 | based on our last conversation. That I took a look |
| 22 | at it, and that's my opinion. It's still an allowance. |
| 23 | PATRICK SULLIVAN: Can you can you go to that |
| 24 | language that you think is sufficient |
| 25 | MICHAEL HYDE: Yeah. |

| 1 | PATRICK SULLIVAN: in the envelope portion? |
|----|---|
| 2 | MICHAEL HYDE: Uh-huh. |
| 3 | PATRICK SULLIVAN: I think it says "approved." |
| 4 | MICHAEL HYDE: Does it? |
| 5 | PATRICK SULLIVAN: It doesn't say specifically |
| 6 | REScheck. It has to be an approved approved method. |
| 7 | MICHAEL HYDE: So log homes designed in |
| 8 | accordance with that section. Factor alternative. |
| 9 | So 402.1.5. I would have to share my |
| 10 | screen. That would be why. Give it a sec to pull up |
| 11 | here. |
| 12 | So again just deferring back to the thermal |
| 13 | envelope, it's still prescriptive, but it allows for |
| 14 | the REScheck. UA alternative, I mean that's what the |
| 15 | REScheck does. It calculates your totes UA alternative |
| 16 | so no one has to do it by hand. Converting your R |
| 17 | factors over to U, adding them all up, dividing by your |
| 18 | area, converting it back to an R value. That's what |
| 19 | REScheck does. |
| 20 | So I in my opinion, if I were the |
| 21 | building official and somebody with a log home |
| 22 | submitted a REScheck, I would accept it, based on this |
| 23 | language of the code. |
| 24 | But if we if we feel like we need to |
| 25 | include that in this amendment specific to log homes, I |

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| 1 | will add it back in. I just from our last |
|----|---|
| 2 | conversation that was recommended, I looked at it, I've |
| 3 | just given you my interpretation. And I can amend it |
| 4 | accordingly, depending on what the consensus is. |
| 5 | CHARLIE ALLEN: Charlie Allen here, Michael. |
| 6 | MICHAEL HYDE: Yes, sir. |
| 7 | CHARLIE ALLEN: I'm not so sure that people know |
| 8 | how to get a UA number out of a log home. And I know |
| 9 | REScheck doesn't do it for you. There's no section in |
| 10 | there for the size of log you're using or whatever that |
| 11 | will convert it. It's that's my understanding, that |
| 12 | that's why we came up with this log home graph table, |
| 13 | because somebody did the research and got the UA |
| 14 | numbers for the log homes. |
| 15 | MICHAEL HYDE: But that's not written in the |
| 16 | amendment, though. If you pull up the amendment, it |
| 17 | just says No. 3, "REScheck would be allowed." It's not |
| 18 | the actual U value of the log, which is out there. |
| 19 | CHARLIE ALLEN: Are you so are you talking |
| 20 | about whether we should leave the log home or the or |
| 21 | the REScheck in? |
| 22 | MICHAEL HYDE: So if you look at the section |
| 23 | there's a delay here I'm looking at top of page 9, |
| 24 | subsection (t), "add the following section R-402.6, |
| 25 | which is applicable to residential log home thermal |

1 envelope."

| So we can enforce this table of insulation requirements for log homes under the last item No. 2 or I'm sorry, item No. 3. It just says you can use this table or a REScheck. I don't think you need to add REScheck, because it's already covered. The only thing we're amending here is the prescriptive envelope table. CHARLIE ALLEN: Right. So if I understand what you're saying and I'm not seeing what you're talking about, I don't think, but MICHAEL HYDE: I don't know why my screen CHARLIE ALLEN: But yeah, a REScheck is an alternative already, so a UA. So it's automatically allowed. We allow that to be used; correct? You're good with that? You're on board with that, that REScheck is an allowable alternative already? MICHAEL HYDE: Okay. And I agree with that. That's that was my CHARLIE ALLEN: Yeah, so but I was talking about that log home table that was deleted. MICHAEL HYDE: Well, it was deleted and then amended down below. And it's still there. CHARLIE ALLEN: Okay. Now I see it. Now. Can you scroll up just a little. | | |
|--|----|--|
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| | 23 | amended down below. And it's still there. |
| 25 you scroll up just a little. | 24 | CHARLIE ALLEN: Okay. Now I see it. Now. Can |
| | 25 | you scroll up just a little. |

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Carlotta, I transition back to 1 MICHAEL HYDE: 2 My sharing isn't working. you. Yeah, yeah, that's look fine. 3 CHARLIE ALLEN: TIM FROST: Carlotta, when we're on the rules, 4 just zoom in a little bit so they can see. Just slide 5 your finger. 6 MICHAEL HYDE: 7 Jason. JASON BLAIS: Jason Blais, City of Boise. 8 9 From what I remember on this one --10 MICHAEL HYDE: Uh-huh. 11 JASON BLAIS: -- was when we first 12 [unintelligible] the Energy Code way back when, we had 13 problems with log homes; right? 14 MICHAEL HYDE: We did. 15 JASON BLAIS: And the log home industry came to 16 us --17 MICHAEL HYDE: Uh-huh. JASON BLAIS: -- with these amendments and said 18 19 "Hey, we'll do this, a little extra here, do a little here, and then we can make it all work," and that was 20 21 part of the -- that was part of the -- kind of the 22 amendment; right? 23 MICHAEL HYDE: Okay. 24 JASON BLAIS: Was you look at some of that -some of those sections are referenced that are being 25

struck, because it says -- it says, "comply with these 1 2 three options." From what I see you're doing is just saying 3 4 you only want the prescriptive option; right? 5 MICHAEL HYDE: Correct. JASON BLAIS: And they were asking for three 6 7 options, and then they wanted their own table --8 MICHAEL HYDE: Uh-huh. 9 JASON BLAIS: -- with some footnotes that gave them, you know, extra stuff if they had more efficient 10 11 furnaces or this. 12 MICHAEL HYDE: Uh-huh. 13 JASON BLAIS: So... 14 MICHAEL HYDE: So what I -- what this draft does and these deletions is essentially we would eliminate 15 their requirements outside of this table for U factor 16 17 and solar heat gain. And I think it's covered in this That's why I deleted it. 18 table. When it comes to controls, I didn't think 19 that the mechanical, electrical, or plumbing energy 20 21 section should be applied here for log homes. Same 22 consistent reason as to why. We're going to go over 23 them here in a minute. 24 And then also, you know, any of the insulation requirements for mechanical systems, 25

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| 1 | lighting systems, simulated performance, and then |
|----|---|
| 2 | REScheck. But REScheck, in my opinion, because of our |
| 3 | last discussion, it was like we should leave REScheck |
| 4 | in there. I didn't think we needed to because it's |
| 5 | covered under the total UA alternative that's already |
| 6 | written in code. |
| 7 | But it's not a hill I'm going if we want |
| 8 | to add that back in here and it helps for ease of |
| 9 | enforcement purposes, I can add the REScheck back in |
| 10 | there. I just wanted to provide a report on from |
| 11 | our last discussion. Looking at it, I think it's |
| 12 | there, in my opinion, code interpretation. |
| 13 | JASON BLAIS: So what about the other one, the |
| 14 | simulated performance [unintelligible]? |
| 15 | MICHAEL HYDE: Again, here's taking the same |
| 16 | performance approach consistently throughout the entire |
| 17 | Energy Code, I didn't think simulated performance was |
| 18 | life safety. I didn't think it was mandatory to even |
| 19 | reiterate, because if it's added, it's above and |
| 20 | beyond. And we're looking at prescriptive minimums. |
| 21 | So |
| 22 | JASON BLAIS: Yeah. It's again, just an option. |
| 23 | MICHAEL HYDE: Okay. It's an option. Right. |
| 24 | Like we discussed before. |
| 25 | CHARLIE ALLEN: Yeah. |

1 MICHAEL HYDE: Yes. so. 2 UNIDENTIFIED SPEAKER: Yeah, I would add the REScheck in, just for clarification. 3 MICHAEL HYDE: 4 Okay. 5 CHARLIE ALLEN: People know that they can still use it, I guess. 6 MICHAEL HYDE: Okay. Next section of 7 8 amendments, if we scroll down to page 10, now we get into what was existing for mechanical installation 9 10 requirements, which was duct insulation and the 11 amendments we did last June due to -- or to -- was it 12 two years ago now? No, it was last year, due to the 13 COVID shortage of supply of flex duct, and literally 14 residential construction coming to a complete halt. That, the hot water pipe insulation, very similar to 15 what we did with commercial, just applying it here to 16 17 residential, including R-404.1 for lighting equipment, where it says 75 percent of all lights in a residential 18 19 home shall be LED. So looking at it here, is it a -- a couple 20 21 questions: You know, is this the right rule chapter to 22 enforce these regulations? Are they life safety? 23 Those are the type of questions that we're looking at. 24 And so we added V, W, and X, which was delete those sections of the Energy Code, very similar 25

to our discussions earlier on the commercial side, but 1 2 now on a residential application. So I open it up. Any discussions on these 3 sections here relevant to mechanical, electrical, 4 plumbing requirements out of the Energy Code for 5 residential structures? 6 Yes, sir. 7 TYLER PEROT: Tyler Perot, City of Meridian. 8 9 Electrically I would -- I'm all for keeping it up there as deleted for that. I don't think that we 10 11 need regulatory bodies telling us what type of lights 12 to put in our homes. 13 MICHAEL HYDE: Okay. 14 TYLER PEROT: That's all I'm saying. 15 MICHAEL HYDE: Any other comment? 16 JOE BARLOW: Joe Barlow, City of Meridian. 17 As far as insulation is concerned, that should be handled through the Manual J. 18 19 MICHAEL HYDE: Okay. 20 TYLER PEROT: The Manual J designer should indicate on his Manual J what -- what he designed for 21 22 insulation values on the ducting. And it should be 23 mitigated in that manner, not through code regulation 24 like this. 25 UNIDENTIFIED SPEAKER: Mr. Hyde.

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1 MICHAEL HYDE: Yes, sir. 2 SCHULTZ: [Unintelligible] Schultz [phonetic], City of Nampa. 3 Hey, I have a question in regards to the 4 insulation for the duct that we excluded. 5 MICHAEL HYDE: Uh-huh. 6 SCHULTZ: Do we happen -- do we happen to know 7 8 on an industry basis if we're back into having the 9 availability of the flexible duct in the proper 10 insulated? 11 MICHAEL HYDE: I may defer to others in the 12 I'm not as closely associated with that program room. 13 I haven't heard of anything, so I open it right now. 14 up to the floor. I haven't heard of any changes, that it's just in definite supply, so --15 The reason I do ask is I've heard from 16 SCHULTZ: 17 guys that are in the industry, and they're saying that they're not having any troubles obtaining DR-8 ducting. 18 19 MICHAEL HYDE: That's a good thing. That's the only reason I'm asking. 20 SCHULTZ: 21 MICHAEL HYDE: Okay. 22 SCHULTZ: That's just a question. It's not a 23 fact. It's just a question. 24 MICHAEL HYDE: I'll open it up for conversation, 25 if anybody's hearing anything. I have not heard any

1 changes, so... 2 SAM ZAHORKA: Sam Zahorka, building program 3 manager. I've heard the same thing in a former life 4 at the City of Meridian. 5 MICHAEL HYDE: Okay. So I know the discussion 6 has been in the past, you know, why didn't we have to 7 8 take that to the Building Code Board. Why didn't the HVAC Board have a say or weigh in on the subject 9 10 matter? You know, so a lot of the -- the general 11 contractors just heard from their subs, like we're 12 short on products. 13 And so bringing that to the Building Code 14 Board, they were like "What?" You know, and so we had to explain a lot in detail. 15 16 But I just want to say N and O we deleted, 17 but we also added the deletion of Section R-403, which is essentially mechanical systems. So I don't want to 18 19 imply that by deleting these Energy Code N and O amendments, that O insulation's back based on this 20 21 proposal. No, it wouldn't be. It's also deleted under 22 subsection (d). Full disclosure. Thought being it 23 could be addressed by the HVAC Board if they saw fit from a life-safety perspective. Same with electrical 24 on the lighting and plumbing on the hot water pipe 25

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insulation, just to be consistent here. 1 2 And I'll open that up for conversation. I know we're two minutes over, but this is 3 4 the -- this is the last -- oh, simulated performance. 5 JASON BLAIS: Another option. MICHAEL HYDE: Other option, right. 6 UNIDENTIFIED SPEAKER: You know, I think it's 7 8 important that I say at this stage that I -- the conversations I had with the builders on July 7th, I 9 asked a couple questions of them. One was, do they 10 11 feel generically that the reduction of words and, you 12 know, and the kind of trimming all this down, was that 13 going to cause them any trouble, substantial trouble in 14 terms of their building or constructing a home? 15 Their answer was no. 16 But then we got into the question of the 17 deletion of some of those energy provisions; right? 18 MICHAEL HYDE: Uh-huh. 19 UNIDENTIFIED SPEAKER: The mechanical, HVAC, and that kind of thing. Just so you know, that board is 20 21 made up not only of general contractor people, but 22 there are subcontractor guys that are also a part of 23 There were HVAC guys in the room. that. There were 24 electricians in the room. And -- and their -- their general conclusion was that from a practical 25

perspective in terms of doing a construction of a home 1 2 and meeting the energy conservation provision requirements, that the feeling was that each of those 3 subcontractors, HVAC, electrical, and everything else 4 know what it is that they have to do in order to meet 5 their portion of the energy conservation provisions 6 generally. 7 And so from a practical perspective of 8 9 actually building a building and still meeting those 10 standards by builders or that the Board came to the 11 conclusion that to eliminate some of these is not, in 12 their opinion, (a) problematic, nor does it necessarily 13 cause an issue where you're not necessarily meeting the 14 energy conservation provisions as we know them today. And so I don't know that I said that very 15 16 eloquently, but that's -- that was in the comments that 17 we submitted to DOPL on this, that was the basic gist, 18 I think, that they came up with. So recognizing that 19 from an inspector's perspective, I could see where it could cause a little bit of challenge; right? 20 21 UNIDENTIFIED SPEAKER: There's no minimum; 22 right? 23 MICHAEL HYDE: Not yet. 24 TIM FROST: John.

JOHN NIELSEN: Thank you.

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John Nielsen, plumbing and HVAC program 1 2 manager. One of the issues we're missing, too, is 3 4 when a plumbing and a mechanical inspector goes out there, these requirements aren't in their code books. 5 So we sign it off as meeting code per the mechanical 6 IRC, all parts five and six of the Plumbing Code. 7 Then 8 the building inspector comes in and enforces the Energy 9 Code on them. 10 And it's not a good conversation from the 11 enforcement side to be like "Well, you did it on our 12 side, but now go talk to the building inspector because 13 they're doing the Energy Code." So --14 UNIDENTIFIED SPEAKER: Left and the right hand 15 don't know. 16 JOHN NIELSEN: Yes. I mean, you know, if we 17 want to talk consistency and everything, this is one of the big issues out there on the residential side. 18 19 UNIDENTIFIED SPEAKER: Okay. And I haven't heard so much on 20 JOHN NIELSEN: 21 commercial, but with the equipment and everything, that 22 could really get into a cost. 23 MICHAEL HYDE: And I -- I appreciate that 24 comment, because I think that's a discussion that we need to have and we need to capture. A lot of the 25

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| 1 | state isn't ran by the same department head, whether |
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| 2 | it's city, whether it's county, whether it's state. |
| 3 | There's a lot of area in the state of Idaho where it's |
| 4 | all three, and depending on the trade. It may be |
| 5 | building. It may be electrical state. It may be |
| 6 | plumbing and HVAC county, city. You know, so you have |
| 7 | multiple facets where that communication doesn't exist, |
| 8 | because it's not under the same umbrella. And it's |
| 9 | creating, "Well, they passed it. Why why am I |
| 10 | having to change it?" |
| 11 | So, Johanna, you had a question. |
| 12 | JOHANNA BELL: Oh, I was just curious about, if |
| 13 | I may |
| 14 | MICHAEL HYDE: Uh-huh. |
| 15 | JOHANNA BELL: Johanna with the Association of |
| 16 | Idaho Cities. |
| 17 | Just a brief follow-up questions for Ken |
| 18 | and his discussions with his members regarding whole |
| 19 | system just building system analysis of did any of |
| 20 | the discussion touch on the needs to look at the how |
| 21 | the building is operating on whole, or assessing that? |
| 22 | KEN BURGESS: Assessing that in in what form? |
| 23 | Because that is that going back to the blower door |
| 24 | test? |
| 25 | JOHANNA BELL: Well, not even I don't even |

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| 1 | know about that. |
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| 2 | KEN BURGESS: Just energy efficiency? |
| 3 | JOHANNA BELL: Or anything. I don't |
| 4 | KEN BURGESS: No. |
| 5 | JOHANNA BELL: I don't know. Just talking |
| 6 | about actually, it's not necessarily the blower door |
| 7 | necessarily. It's just the if there are issues with |
| 8 | mold and issues with insufficient ventilation, that's |
| 9 | all. And if there's something that if that |
| 10 | conversation came up when you guys were reviewing the |
| 11 | edits. That's all. |
| 12 | KEN BURGESS: On that particular point, no. |
| 13 | However, you know and again, I would say that the |
| 14 | assumption was that each of those subs and each of |
| 15 | those elements of the energy conservation provision |
| 16 | would very likely continue to build at the you know, |
| 17 | build at the standard that we're building today, and |
| 18 | that in their view it was not it would not be |
| 19 | necessarily problematic again, from a construction |
| 20 | perspective; right? They didn't think it would be |
| 21 | problematic in trying to adhere to those provisions if, |
| 22 | for example, they were either eliminated out of the |
| 23 | Building Code or put back put into specifically the |
| 24 | HVAC or electrical or plumbing or whatnot, recognizing |
| 25 | again, that from an inspection standpoint I can see |

| 1 | where it might be a little problematic. |
|----|--|
| 2 | But from a construction standpoint, they |
| 3 | felt that it was not it would not be problematic, |
| 4 | nor did they feel that it would compromise the |
| 5 | standards. |
| 6 | MICHAEL HYDE: I appreciate that. And I think |
| 7 | that does go back to John's point a little bit on the |
| 8 | inspection side. I mean I think everyone's feeling a |
| 9 | little bit of this could be a potential issue. |
| 10 | Yes, sir. |
| 11 | TODD GREENWELL: Todd Greenwell [phonetic], |
| 12 | senior engineer Idaho Power. |
| 13 | Just curious where you see this going with |
| 14 | respect to things we didn't talk about, like R values |
| 15 | in floors and ceilings and walls and U values on |
| 16 | fenestration. How did that not come up in this grand |
| 17 | scheme? |
| 18 | MICHAEL HYDE: I mean I appreciate that |
| 19 | conversation or that comment and question, because |
| 20 | when I looked at it, you know, looking at it from a |
| 21 | perspective, I had a hard time arguing to take it out. |
| 22 | I thought it was easy to answer the |
| 23 | prospective analysis on the thermal envelope as to why |
| 24 | we have those values in place. I didn't I didn't go |
| 25 | down the line of amending, because we're not on the |

1 2018 when it comes to those values and the thermal 2 envelope. I mean DOE even performed the assessment on 3 where we're at residential-wise, and they classify us 4 on the 2009 code. So -- and commercial maybe the '12, 5 I believe. 6 So I -- I thought it was easy to answer the 7 8 prospective analysis, at least, you know, initially to where I didn't add any redlines or deletions or 9 anything like that from a thermal envelope perspective 10 11 at all. 12 TODD GREENWELL: Thank you. 13 MICHAEL HYDE: You're welcome. 14 JASON BLAIS: Mr. Hyde, Jason Blais. 15 And I know I've been talking before, 16 because when the Energy Code was kind of talked about 17 getting rid of in the past --18 MICHAEL HYDE: Uh-huh. 19 JASON BLAIS: -- you know, the realtors had come forward and said "Hey, what about our FHA loans and our 20 21 VA loans?" Those require verification of 2009 Energy 22 Code minimum, I believe. And that's all facets; right? 23 TIM FROST: Yeah. I appreciate the comment, 24 Jason. We're in active conversations with both the 25

| 1 | realtors and the bankers on qualifications for FHA and |
|----|---|
| 2 | VA. Our initial research that we've done is, you know, |
| 3 | that's a requirement that the builder, the homeowner |
| 4 | have to agree to to qualify for. |
| 5 | We haven't found it as a prerequisite of |
| 6 | the State has to have it adopted on the State level or |
| 7 | the local has to have it adopted on a local level. But |
| 8 | we are reviewing to make sure that we're not missing |
| 9 | that point of that we would somehow indirectly |
| 10 | misqualify individuals for those loans. |
| 11 | One of the scenarios that I know the |
| 12 | realtors had brought up in our conversations is, you |
| 13 | know, if we have four counties that don't have building |
| 14 | programs, don't have these energy codes adopted, and |
| 15 | they're currently qualifying for the loans. And so how |
| 16 | are they doing it in that instance? |
| 17 | And so I think it's a relevant piece that |
| 18 | we're trying to make sure we're not losing sight of, |
| 19 | that we're not missing and somehow creating a problem |
| 20 | for individuals on their on their mortgages. |
| 21 | The other thing I would add is with the |
| 22 | infrastructure plan, the federal I guess it would be |
| 23 | Department of Energy has an energy I'll just call it |
| 24 | an Energy Code grant. It's \$225 million that goes |
| 25 | towards the states. |

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| 1 | And they have initially talked through I'll |
|----|---|
| 2 | call it like what the details of what you may qualify |
| 3 | for the grant, but it hasn't I haven't yet found |
| 4 | details that there's a requirement to have a certain |
| 5 | threshold in the state, but I think that's a |
| 6 | possibility that could that the Department of Energy |
| 7 | and the federal government could require over the next |
| 8 | six to eight months as a part of that qualification. |
| 9 | So we're trying to get information on that. |
| 10 | I don't know if anybody on a local level is applying |
| 11 | for that. And if DOE has shared any information with |
| 12 | you of is there something related to qualifications for |
| 13 | that federal grant on a local level, that you have to |
| 14 | have a certain threshold, whether it's in code cycle or |
| 15 | threshold of just overall adopted code? |
| 16 | So we're trying to be aware of both the |
| 17 | lending requirements in the state, as well as local |
| 18 | jurisdictions looking into the new federal federal |
| 19 | funding. |
| 20 | So that's definitely on our radar. And if |
| 21 | you come across information that would be beneficial to |
| 22 | us or the Board regarding either of those items, please |
| 23 | do please do share. |
| 24 | MICHAEL HYDE: Thank you, Tim. |
| 25 | JASON BLAIS: And it did happen in the past when |

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| 1 | we went to the '09, there was another similar type of |
|----|--|
| 2 | federal thing where jurisdictions and the State got |
| 3 | money. But we had to show verification that the State |
| 4 | had at least 2009 Energy Code. |
| 5 | MICHAEL HYDE: That energy database |
| 6 | JASON BLAIS: Yep. |
| 7 | MICHAEL HYDE: that we recorded. |
| 8 | JASON BLAIS: There was a database. |
| 9 | MICHAEL HYDE: All of us recorded. |
| 10 | JASON BLAIS: Yep. |
| 11 | MICHAEL HYDE: It's still on their website that |
| 12 | says we're doing so from DOE. But it still calls us |
| 13 | Division of Building Safety and three building program |
| 14 | managers of the past. So it's definitely something we |
| 15 | got to clean up. |
| 16 | I appreciate. We're about 13 minutes over. |
| 17 | I appreciate everyone's attendance here today in |
| 18 | sticking out and having this conversation. I just I |
| 19 | want to let everyone know here that my analysis, maybe |
| 20 | it not be as detailed or thorough in a crosswalk-type |
| 21 | format, is these redlines with my comments added in |
| 22 | version two. |
| 23 | I'm going to add version three based on |
| 24 | today's discussion, get it out there, get it open and |
| 25 | available to the public. |

Recorded Energy Code Collaborative Meeting - July 27, 2022 158 Audio Transcription

| 1 | If there's any questions that you have for |
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| 2 | me on how I got to this or what did my analysis look |
| 3 | like that led us to here that's not provided in this |
| 4 | document and these comments, please feel free to reach |
| 5 | out to me via e-mail, text, phone. Happy to sit down, |
| 6 | have conversations. |
| 7 | If there's anything I didn't capture that |
| 8 | we need to address, please let me know. I feel like |
| 9 | there's a lot of codes out there that may need to be |
| 10 | tweaked relevant to Idaho, just based on phone calls. |
| 11 | But I'd like industry's opinion. |
| 12 | So again, thank you for your time. If you |
| 13 | have any questions for us, please reach out. We're |
| 14 | here. We're available. |
| 15 | If you'd like another meeting, let me know |
| 16 | as soon as possible before the August 16th meeting. |
| 17 | And like Tim said, we do have time. We're |
| 18 | going to go through this whole negotiated rule-making |
| 19 | process again in the fall. |
| 20 | So but thank you for being here today. |
| 21 | We appreciate your feedback, your comments, and your |
| 22 | suggestions. |
| 23 | The minutes will be transcribed, and we'll |
| 24 | get them available as soon as we can to the public and |
| 25 | to the Board at our next meeting. So thank you. |

Γ

| 1 | UNIDENTIFIED SPEAKER: Thank you. |
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| 2 | (End of audio file.) |
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|----|---|--|--|--|
| 1 | REPORTER'S CERTIFICATE | | | |
| 2 | | | | |
| 3 | I, JEFF LaMAR, CSR No. 640, Certified Shorthand | | | |
| 4 | Reporter, certify: | | | |
| 5 | That the audio recording of the proceedings was | | | |
| 6 | transcribed by me or under my direction. | | | |
| 7 | That the foregoing is a true and correct | | | |
| 8 | transcription of all testimony given, to the best of my | | | |
| 9 | ability. | | | |
| 10 | I further certify that I am not a relative or | | | |
| 11 | employee of any attorney or party, nor am I financially | | | |
| 12 | interested in the action. | | | |
| 13 | IN WITNESS WHEREOF, I set my hand and seal this | | | |
| 14 | 12th day of August, 2022. | | | |
| 15 | | | | |
| 16 | | | | |
| 17 | | | | |
| 18 | | | | |
| 19 | | | | |
| 20 | In | | | |
| 21 | JEFF LAMAR, CSR NO. 640 | | | |
| 22 | Notary Public | | | |
| 23 | Post Office Box 2636 | | | |
| 24 | Boise, Idaho 83701-2636 | | | |
| 25 | My commission expires December 30, 2023 | | | |

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