



State of Idaho

Division of Occupational and Professional Licenses Idaho Building Code Board

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Draft Minutes of 09/13/2022 – Public Hearing

Board Members:

Andrew Bick, Chairman
Nick Guho
Kent Soelberg
Kelly Daniels
John Cotner
Jeremy Maxand
Ron Johnson
Rob Brooks

DOPL Staff:

Tim Frost, Deputy Administrator
Michael Hyde, Executive Officer
Yvonne Dunbar, Legal Counsel
Renee Bryant, Board Support Supervisor
Linda Pratzner, Board Support Specialist

Chairman Bick called the meeting to order at 9:01 a.m. (MT)

Public Hearing – Negotiated Rulemaking

Overview of Proposed Amendments to IDAPA 24.39.30 Rules of Building Safety (Building Code Rules)

– Executive Officer Hyde stated, today is our first negotiated rulemaking hearing; one of two. Starting July of 2021, the Building Code Board began fulfilling the Executive Order through nine townhall listening sessions that occurred throughout the state meeting with all aspects of the construction industry. DOPL has had many meetings throughout the past year trying to extract the information needed from the industry in order to reduce barriers and taken a permissive and pragmatic approach for the enforcement of codes throughout the state along with identifying any areas within our rule chapter that are duplicative between rule and statute that are unnecessary, as well as trying to go through the rules with a fine-tooth comb to make all rule amendments, clear and concise and easily to enforce without creating any type of inconsistency and interpretation, where we could control. Therefore, outlining the IDAPA rule chapter and the changes that were made in the proposed packet that you see before you today, starting with the International Building Code (IBC), we made amendments to the previous existing amendments that set requirements that were inconsistent with the International Fire Code (IFC). We deleted those existing amendments and went with the current language that is in the 2018 IBC to be consistent with the IFC in the Idaho's Fire Marshal's office, as it relates to the International Residential Code. We've made amendments to flood hazard areas, removed old amendments that conflicted with the national standard requirements based on the feedback we received from the Department of Water Resources, and then with the 2018 energy code, we've made amendments. Particularly with the mechanical, electrical, and plumbing design requirements to allow a more permissive and pragmatic approach to not only licensed installers, but also design professionals that are designing these mechanical, electrical, and plumbing systems in areas that regulate consumer choice and consumers needs based on occupancy classifications. We've also modified the definition of residential conditioned space to allow Idaho homeowners the ability to install supplemental heat or cooling in a garage, or a shop area without having to adhere to overall building envelope requirements and interior design conditions. We've also made amendments to the air leakage requirements to the residential blower door test walking that back to the 2009 requirements, which allows for a visual option, and also it adheres to 80% of the homes that are being constructed currently and amended that rule. Overall, with the energy code. We took the approach of setting the 2018 energy code at a prescriptive level. Any performance pathways or options would be above and beyond code and setting the minimum.

Deputy Administrator Frost - The September 7th bulletin published the clean new proposed rule chapter, which was voted by the Board at the last meeting to move to a proposed status. I did want to note to the public, if you want to follow the red line copies, we still have those available. That's on our Division website and under our rulemaking tab specifically, the Idaho Building Code Board, and details the versions that we went through. According to the Administrative Procedures Act, the Idaho Building Code Board has a specific statute that requires two hearings be held 60 days apart. This is the first of those two hearings. There'll be a second hearing that is already noticed in the bulletin and scheduled for November 15, 2022. That will be a second opportunity for stakeholders to provide a public comment. Another venue outside of verbal comments at these two hearings is written comments. The timeframe for these comments are September 7th to November 15, 2022. The Board will have a regularly scheduled meeting on October 18th, where we expect discussion of the rule chapter

Public Comment

Bruce Graham, Quality Heating & A/C - We've had problems addressing the International Energy Codes. Rural Idaho is not governed the same as Boise. We don't have building inspectors in Idaho County. We do have a building inspector for the city of Grangeville who inspects structural only. HVAC seems to be the whipping post for the energy codes. The house is constructed, heating systems installed, and we don't have a plan review. How are we going to enforce the energy codes through the HVAC if there is no requirement for a building inspection throughout the state. We keep enforcing these energy codes, but yet the code allows for one gas stove placed in the center of the house; however, if we do a four-star system, we have to size the duct for air conditioning whether they want air conditioning or not. If Manual J requires two registers in the room, but the homeowner puts in cabinets and there is only one place to put a register, there is no common sense for the inspection. They will require two registers in the room or completely redo Manual J, D and S and resubmit. The paperwork is meaningless because a Manual J can be manipulated. A lot of steps here that are meaningless. There's a lot of people that profit from these extra steps, but I don't believe it is the state's responsibility to make jobs. We need a lot more affordable housing; we don't need more rules and regulations. Thank you.

Chairman Bick - You're saying the Manual D and J are important for residential. At a previous meeting didn't you mention the need for stricter HVAC controls in the commercial arena?

Bruce Graham - Yes, both are correct. Currently, a building inspection does not include a temperature rise done on the furnace, which would immediately tell whether the furnace is working properly or not. I have been told in the past that DBS didn't want to take that liability. So, they will ding you on not having enough registers, but they don't want to inspect for the safety issues. I feel we have been going away from checking all the safety items.

Board Member Brooks - Does the code, specifically R403.1, currently provide for alternative means?

Bruce Graham - Not really. We end up having to turn in our Manual J, D and S to get our permit.

Board Member Brooks - But the code provides for other approved methods. If we get rid of this, we will use the other approved methods.

Executive Officer Hyde - The ACCA Manual; the S and J requirements are verbatim to the mechanical code in R401.3 so they wouldn't go away. They are not being proposed to be removed.

Board Member Brooks - The point I am trying to make is we provide for other approved methods.

Executive Officer Hyde - Currently, what those other methods are is heat loss calculations typically performed by mechanical engineer, heat transfer calculations, done by hand. There's a platform of about eight other software programs that are approved by ACCA, Manual J. Those are other approved methodologies.

Board Member Brooks - But if we eliminate these provisions, what is it we're making room for?

Executive Officer Hyde - We're not eliminating these permit provisions.

Board Member Brooks - Four or three is going away.

Executive Officer Hyde - Because they're duplicated. They still will exist and apply just not from the energy code perspective. It will be from the residential mechanical code section, which is adopted and enforced.

Chairman Bick - We're deleting this because it's duplicated. I was under the impression it now goes to the HVAC Board and they're in charge of the mechanical code and that's where they would have any changes they would make to Manual D and J. Is that correct?

Executive Officer Hyde - That is correct.

Teri Ottens - The issue has come up about the financing and the 2009 Energy Code Standards and having to meet the minimum standards. I have submitted the documentation from both HUD and IFHA. New residential construction does have to meet those minimum standards to receive federal insurance financing. It doesn't say the state has to adopt a minimum standard. It just says that those homes must be built to that minimum standard and I've laid out in my testimony why I think that's going to be extremely difficult if you remove those minimum standards. We don't have a very good education system here for builders. In other states where there's licensing or registration, theirs also require continuing education, which means you can reach out to all the registered or licensed contractors. No requirement in Idaho. The BCA does provide continuing education, but their membership is less than five percent. They don't have any direct way of getting information that even though these codes have gone away, you still should be building to these minimum standards to protect financing options. It's been suggested builders will automatically and voluntarily build to these standards. I have met a lot of good builders, residential builders, but I can tell you in my experience in over 30 years, the majority, probably 80%, will build to the minimum standard. You won't have code officials anymore telling them what their options are because code officials can only inspect minimum standards. It's not their job to educate and you might not get financing if you don't build to this higher standard. I think the minimum standards need to remain for the energy code and I believe the suggested changes would reduce us below the 2009 Energy Standards. I am asking you keep the requirements in the energy code. It's been suggested that a lot of this language is in other codes, but I have not seen any analysis from DOPL or anyone else that says everything being proposed to be cut is in another code. I have seen lots of details submitted to DOPL that says there's a problem if you cut this. It's nowhere else, but I haven't seen any response from DOPL. In fact, I think somebody requested. What are you doing with all these details DOPL staff has received, and I believe the answer was we need more time to analyze them. Every single request you've gotten from almost every industry group has said why the rush. The other thing I would like to just point out from my previous testimony is there's been a lot of talk about life safety, but we have not seen the attorney's interpretation of why life safety suddenly is the only criteria that we can look at. We haven't seen anything from DOPL that explains that in writing. We also haven't seen any definition of what life safety contains and it seems to change with each meeting. I think DOPL needs to be straightforward and transparent and give us the attorney's opinion on why life safety is the only consideration and put that in writing and define what life safety is. As for the process that's taken place, there is no ZBR analysis. How do you do a ZBR analysis after you've already cut the words? Don't you do that first and figure out what words you need to cut based on that analysis. So that process is backwards. The process of the listening sessions, I'm sorry, but no records were kept. I've done a public records request of minutes, recordings, or even employee notes of what went on during those listening sessions. So we are taking, and I'm not questioning the word of the employees, but we're taking their word on what was testified in these listening sessions supports what they're doing. I have talked to people who were in those listening sessions who have a whole different views of what was said. It would've been much better to have minutes so can we even count those listening sessions as part of the process of what got us here? The bottom line is we need more time. Every group that's written has asked for more time, and we are still working our butts off trying to get you details you should have been giving to us in justifying these changes. If we could delay this, maybe do the ones everybody agrees on like the condition space in the garage, but delay the rest, and then one more thing, the previous speaker talked about problems in his county, and he does have problems because those counties have chosen not to adopt the energy codes. The problem he has affects less than five percent of the population. So that's an issue the state must solve. The building codes should

be mandatory for everyone because of all the reasons we have building codes, which is health, safety, and welfare of our occupants. Finally, the audience we should be addressing with these code changes, it's the occupants of the building and the state statute says that. DOPL's job is to make sure the health, safety, and welfare of the occupants of the building are your priority, and I don't believe these proposed amendments, particularly as they apply to the energy code, do that.

Board Member Guho - One of your arguments on HUD financing was a study done on how many houses are HUD financed. It said ten percent. My question is if only ten percent, why do the other 90% have to build to that standard.

Teri Ottens - It comes down to your philosophy on whether you want energy efficiency in homes or not. The state legislature might not like energy codes and some builders might not like energy codes, but I can tell the people who are occupying those buildings. I am willing to bet 80% support energy codes. People expect energy codes. Forty-eight states have energy codes and they build to those standards. This makes the home more resilient and comfortable and for people that qualify for FHA and VA loans that don't end up with \$900 dollar a month energy bills. That's the reason you support energy efficient standards. If you don't make it mandatory, you must educate the consumers and the builders. There are no processes in place to be able to do both of those. The code process in Idaho is we spent three long years talking to every group to come up with a minimum standard code for the nation. After those three years are over, we traditionally have spent another two years here in Idaho with that same group of people locally to make sure we are not stuck with national standards. We have made numerous amendments so that all parties find it acceptable for Idaho builders. So why are we suddenly, after the industry says this is great, the public says it's great, and the legislature says it's great, are we back here a year later saying no, it's not great. We're going to get rid of it.

Board Member Brooks - We have regulations right now to tell you how to build this level of energy efficiency that we currently have in the statutes. If that's taken out, if someone decides voluntarily to build, what is the impact of having that unregulated, in your opinion.

Teri Ottens - I think you can look to the counties that don't have building codes. You'll get everything from golden standard to nothing. My feeling with builders, they will build to the minimum standard. You will see the energy requirements go away unless a builder puts it out there and says we have this package option for \$4,000 more to get an energy efficient home, which by the way is the standard for everywhere else in the country.

Board Member Guho - It's not against the law to build at minimum standard. I don't know why if there's a minimum standard, why this must be to an elevated standard.

Teri Ottens - Most of the Idaho Energy Code is at the 2009 standard.

Board Member Guho - You keep on stating that everybody's going to build to the minimum standard and there's nothing against the law to build to a minimum standard.

Teri Ottens - Correct but what I am testifying to is industry, the legislature, the Governor who signed the bill, and the public feel the minimum standard needs to be the 2018 energy codes with the 2009 amendments.

Board Member Brooks - Is a tradeoff to get consistent enforcement and removing regulations will effectively get inconsistent practice in construction. That's the tradeoff. You have a consistent regulation that's applied across the state but you get an inconsistent construction.

Teri Ottens - That probably happens now. You get your top end builders that build way beyond minimum standards. I think you probably will get consistency, and that is the majority of builders will build to a minimum code. So, if you allow the minimum code to go below the 2009 standard, you'll not only lose the financing but you'll lose all the other benefits to come with the energy code, that I believe has embedded over and over again for the last 15 years by all groups.

Patrick Sullivan, City of Nampa - We issue around 1,100 single family permits a year. We review that many Manual J and Ds prior to having the energy code. What would happen is the sizing of furnace equipment was all over the Board and verifying that the equipment was working properly was hard to do without a minimum code to the performance of the systems. That said, we get great success rate now and

the consistency of most of our systems are forced air gas furnace with standard a/c systems. Before we had a consistent energy code, we used to get complaints consistently about houses not being comfortable. If we pull out the scaffold of having just a basic minimum energy code that basically has a performance standard that a furnace for a house needs to be sized in this way, and we need to have some type of documentation to prove that somebody at least has done the calculations and without that it will go back to the old way, and jurisdictions will be blamed for the failures of the contractors to put in sufficiently sized systems. I'm the Director of Building Safety for Nampa and the main person that hears most of the complaints, both from industry and also from the homeowners. I really think if nothing else from the building code, we at least need to have some type of performance standard so that residential contractors can size HVAC equipment properly and so mechanical engineers can size to some sort of standard for commercial HVAC systems and ventilation systems. The proposal on the table is keeping well insulated and very tight structures with very few air changes. The average air changes we are seeing out there for the most part is less than five air changes per hour, which makes it a very tight building and if we don't get the HVAC sizing right and don't get fresh air intake right, what we are going to find ourselves with mold in buildings. We need to look at these buildings as entire systems. The energy code has the metrics that somebody working on the mechanical code needs to properly size this mechanical equipment for buildings. If you are going to get rid of the energy code then you better pick a standard everybody's going to design to because it's going to be all over the board and we're going to get complaints. Unfortunately, there is not a lot of advocacies for homeowners in Idaho. Once we issue a C of O in a house, and if there is something wrong with the house, they deal with the builder for a year and then it becomes a tort claim after that and it's settled in court. We really need some type of minimum code standard. I would also like to address the issues in the rural areas. If the state is unwilling to enforce all of the state adopted building codes in these areas, then maybe don't enforce codes in none of those jurisdictions because it doesn't serve anybody by halfway enforcing all of these codes that interrelate to build a cohesive building which works together as a complete system. We have very tight buildings we need to effectively heat and cool.

Deputy Administrator Frost - Mr. Sullivan, at the last meeting you gave a letter from BSPSI with concerns and opposition, but you also noted the city of Nampa will be needing to discuss the edits. Has the city decided on the proposed edits at this point?

Patrick Sullivan - No, the city of Nampa will be holding a workshop in October. So, we will have those finalized comments for the November meeting. We have not had the bandwidth to compile the data because we're actually going through the energy code, mechanical code, and building matrix where we show what the essential parts of the energy code. We would recommend keeping that would ensure we have those minimum standards that interrelate with help using the mechanical code. We will be meeting the third Thursday of October and then we will have a letter for public comment to present at the November 15th Building Code Meeting.

Bob Ticker, Ticker Engineering - I'm a mechanical consulting engineer and I design HVAC and plumbing systems for commercial buildings in the state. There are four sections to the energy code; building envelope, HVAC systems, lighting systems, and plumbing systems. In my opinion, to get rid of the energy code entirely, this is a one size fits all code that is adopted nationwide. It doesn't mean I'm going to abandon the principles that are in here at all. It just means now I have the option, because a lot of times we need these good options for building owners. We enjoy some incredibly low power rates here. Well, that's not the same in New York City or Los Angeles. Why do we have a code that applies to those jurisdictions? Let me ask you guys on the Board a question. If you had to pay 10,000 more for a car, they got 33 gallons, three miles a gallon or more. Would you do it? What if you're forced you to do it? You had to pay \$10,000 more for your vehicle next year because they mandated some increased energy efficiency requirements. Is it worth ten thousand dollars? Your saving energy? Your conserving energy. Should you be forced to pay? My thought is, no, do let the free markets decide these things, and as design professionals, we are not going to abandon the energy codes. So, what we're seeing in these codes is we're seeing a lot of stuff that doesn't make any economic sense whatsoever, at least in my opinion, we're seeing a lot more people who have an agenda. Maybe it's a green agenda. So, that gets adopted into this code where there's a lot more

energy savings. Letting the free markets decide these things and getting rid of the code doesn't mean the engineers are going to abandon, nor the architects. I just think we'll get more intelligent design, and we'll get more affordable designs too.

Board Member Guho - Bob, as a designer, the market ability for a lead certified building now is sort of lost with the mandatory energy code, and if someone wants to capture the marketability of the lead certified building, it would be more marketable if they were offering something over and above with the minimum standard. Do you agree with that?

Bob Ticker - Yes, 100 % I agree with that. I love doing lead buildings and one of the reasons is because there's some marketability. If I can market, the increased comfort, the increased energy efficiency, the increased ventilation requirements, if more natural daylight, if I can market those things and say I've got a more marketable building.

Travis Thompson - I've been primarily concerned about energy efficiency. The overall structure and integrity because both of those things go hand in hand. It takes a lot of energy to build a structure. You want to build a structure that works within the environment and conserves energy. What I've found with the codes is they've got a premise towards trying to increase the energy efficiency by adding insulation, and different aspects of the code is focused on one thing, but it misses the mark, and we know this because we have a tremendous amount of mold and mildew problems and overall house health problems that result from the way we are building. One of the problems we have with the codes is they operate on the nation three design premises, and this has to do with the way the heat transfers from the inside of the structure to the outside, or the reverse when we're relying on air conditioning, and so those three premises don't work across. So when you take three premises for an entire country and then in Idaho one premise and try to apply it to different regions, it doesn't work. That's where we run into the problems we have. So it gives consumers a false sense of security because they think its going to meet the energy code so its good, but it doesn't. The energy code doesn't deal with the moisture in the wall and it reduces the health of the structure itself, plus it destroys the structure prematurely. I am not for continuing to adopt more energy codes. What the industry needs to do is take the market approach. The consumer needs to become educated as to what they're getting, and then decisions need to be made regionally on how to apply building science so we can create structures that last. This is my experience. Real life experience. I've seen major failures and major problems of trying to apply codes in areas that don't work.

Damon Woods, Professor at University of Idaho - If you look at the proposed revisions between the total energy code, and the part that remains the envelope requirements, but nearly 57 pages of the mechanical, electrical, and plumbing section are all slated to be removed. This is very significant. The majority of industry generally has supported either taking more time or preserving 57 pages. I would encourage the Board to watch recordings of the previous listening sessions or read detailed minutes to get a full sense of the comments that have been made. In my written comments, I noted that even in low regulation states, Wyoming, North Dakota, Utah, most residents live within a district that requires the 2018 IACC, but those states can have different jurisdictions with different requirements, and we can't do that in Idaho after HB 660. I appreciate the consistency, but to take away most of this code for the whole state, I think is rather unprecedented and I think you could just have large consequences down the line. I don't think this code is locking builders into one brand.

Board Member Brooks - What do you think the impact to the consumer with the removal of 57 pages?

Damon Woods - I think you will initially get cheaper buildings, but higher long-term costs on utilities. Removing the full mechanical and electrical sections, I think you will have a wide variety. You will have buildings built by high quality engineers, and you will have buildings built without regard to the consumer, and people will be stuck with a building that may not function well and have very high utility bills.

Board Member Brooks - Are you aware of any analysis on what savings we would get from eliminating these regulations?

Damon Woods - I believe the Northwest Energy Efficiency Lines has done some of that analysis.

Board Member Guho - I am hearing conflicting comments. They're saying they're getting rid of the energy code, but I'm also hearing it's already in the mechanical code. How much of the energy code is getting eliminated that's not already in the mechanical code.

Executive Officer Hyde - There's a large amount that isn't in the mechanical code that is being proposed to be removed, but from the life safety aspect of requiring ventilation, heating, and cooling low counts, they live in the mechanical code. Those two items specifically. Now, how you operate and design a system, those requirements based on consumer needs have been removed and that's in the proposed rule chapter, and that's one area we're attempting to focus on is telling building occupants how they can utilize their building or structure.

Jonathan Oppenheimer, Idaho Conservation League - I just wanted to address a couple of topics that came up. The section of code that establishes the Building Code Board provides the intent of the legislature with regards to the duties, and we heard some reference to life safety here and some of the discussion you've had previously has really been focused on that aspect of ensuring life and safety are protected. To quote from 39-4101, which is the chapter establishing the legislative finding and intent for the Building Code Act, it states it is, and I'm quoting here, "It is the intent of the legislature to: promote the health, safety and welfare of the occupants or users of buildings and structures subject to this chapter." And also, "Establish, for jurisdictions enforcing building codes pursuant to this chapter, minimum standards and requirements, in terms of performance, energy efficiency, effect upon construction costs and consistency with nationally accepted standards.", and so I think this is a really key component to remind yourselves of as you consider what are the effects here and what is the role of the Building Code Board. There has been a lot of legislative discussion over the energy code and the building codes over the last five years. I served as the lobbyists for the Idaho Conservation League; representing our members from across the state and have been involved and testified in those meetings. At the conclusion of last year with HB 660 passing, and effectively locked in the 2018 codes with the amendments, some of the sections to the 2009 level, we really felt like that settled the debate and established clarity. If there is a need to go and look at some local refinements relative to the energy code, let's do that instead of throwing out the whole code from our perspective. I would guess that upwards of 95% of people renting, purchasing homes or leasing spaces are not familiar with how to evaluate insulation around pipes, insulation in wall, but minimum standards are set to the level. They are not designed for the best actors in the state. They are designed for those who would seek to take advantage of consumers, and particularly lower income consumers who would really bear the brunt of these heightened electrical and utility costs for years to come. It's going to impact welfare if you are spending a lot of your income on utilities. Finally, by ensuring high energy efficient homes, we are contributing to that grid resiliency and flexibility over the long term that is providing for that life safety and welfare.

Ken Burgess, Idaho Home Builders Association - I just want to reiterate we do support the elimination of the mandatory blower door test as it is currently inconsistently applied and very difficult to enforce. There are main concerns regarding the energy conservation provisions and it is opinion to adopt these amendments will not take us back to the stone age as it relates to construction, nor will it take us back to 2009. We do not foresee a point where our builders will abandon these principles as it relates to energy conservation provisions, and today, manufacturers are producing elements that are at 80% efficiency or greater and that is in reaction to what happens at the International Code Council. The whole cost versus efficiency goals scenario. In the end the builders don't bear the burden of those increased costs. That burden is passed on to the consumer. The last point I'll make is to point out the irony of some entities who are really pressing for these energy efficiency standards and ultimately get to a net zero kind of scenario, but then the next thing that's on their agenda item for their meetings is how we're going to address the affordability crisis we're experiencing right now in this state.

Board Member Brooks - Do you have any idea what the cost impact would be to consumers if we eliminate 57 pages?

Ken Burgess - No, I was speaking more generically about the continued movement for higher energy efficiency and the cost benefit analysis that needs to occur.

Board Member Brooks - I don't have any grid on this to understand what the impact of these regulations are. We're saving something, but it's going to cost something else and so I can't assess. I'm sensing the politics, I'm sensing strong opinions, but I don't have numbers to get my head around it.

Board Member Guho - And a lot of the cases, the payback period of what the additional cost for that 90% efficient unit versus 80% wasn't even paid back over the lifespan of the 30 years of the unit itself, so you were replacing that 90% efficient unit in 20 years when it was used up and the payback period was 30 years.

Ken Burgess - That's the point I'm trying to make. So if it takes you the entire life of your 30 year mortgage to get that payback from a cost benefit scenario now, again, I don't have the analysis right but that's generically the argument I hear from a lot of.

Ryan McGoldrick, Conservation Voters of Idaho - I wanted to point out a few weeks ago Governor Little signed the National Clean Energy Week Proclamation which states, "I encourage all municipalities and individuals to implement the cleanest, lowest emitting energy technologies available." It feels a bit like we're kind of going the opposite direction of that, so just as we're considering the will of legislators, we should also look to the Governor's Office.

Eric Lacey, Chairman of the Responsible Energy Codes Alliance - I did want to speak to a couple of issues that have been raised here today. There's been a lot of talk about just allowing the market to make all the decisions, and to let homeowners decide whether they want efficiency or not. This is the role of the state to step in and help make these decisions and ensure a level of safety is incorporated. Once the home is built the upgrades can be extremely expensive. The Energy Infrastructure Administration did a study that found in the year 2020 34 million U.S. households, that's 27% of all the households, reported difficulty paying energy bills or reported they've kept their home at unsafe temperatures because of energy cost concerns. The decisions that are made today in building homes are going to basically lock in generations of Idahoans with these building types. I want to give you a couple of examples where the energy code helps make good decisions that homeowners will make themselves. Those two examples are duct testing and air leakage testing. I looked at the residential field study that was conducted in Idaho where they ran duct tests and blower door tests on homes built in Idaho. There were homes that achieved the required amount of tightness, but there were homes that were leaking. These are homes that are going to be extremely uncomfortable. They're going to have systems that won't work properly, and, in the end, they're going to cost homeowners money and cause all sorts of problems. This is something that could be fixed with the duct test. That might cost two or \$300 at the initial time the home is built, but it could prevent a lifetime of problems for the home. The other example is air leakage testing, which is being proposed to be deleted. Idaho has a concession allowing some builders to test 20% of the homes, but I would recommend 100% of the homes should be tested. If you want to prevent problems with mildew and other indoor air quality issues, air leakage testing will help. The requirements in the ICC are there for a good reason. I recommend the Board to take a very careful look at these rather than swiping whole sections and taking them out of code.

Tyler Perot, City of Meridian - I know everybody makes the relationship between costs of energy and energy efficiency, but the actual cost of the energy does not come out by the influence of an energy code. They do make structures more efficient. Certain people can save money with certain energy codes. Some of these things become much more costly to the consumer as we've also heard without a direct relationship to reducing any energy costs. Products are made more efficient all the time like lighting. That's a product that's industry driven. People want it, people buy it, and it grows and keeps continuing because we all see the direct benefit of that. I've seen in my own house changing light bulbs and you can see your bill go down and so there with the product where you can see that direct relationship, there's a benefit to energy costs and you can relate that in your own life, but some of these other codes that incorporate more equipment can be beneficial in certain situations, but I think they should be left up to the consumers and the design professionals for what they want and what they need in those situations and for those buildings. Residential codes cover pretty much everything in the energy code. There's a couple of instances between the two, but a lot of it is duplicative and we see the energy code duplicating things that are already there that all the builders are already following. Just to reiterate the fact that all our codes are all minimum standards. So,

pretty much everything's built to a minimum. Certain people will want more things and pay for better products. We have those choices, but we should be allowed to make those choices and not have it be forced upon us by more regulation and more codes. So, more energy codes is not necessarily the answer, but coming up with more energy efficient solutions as a society will definitely have a benefit.

Board Member Brooks – So, we don't have a code, how does a new homeowner get the knowledge.

Tyler Perot – So, knowledge is always passed down by those before us. I don't think an energy code will give someone more experience. They're going to give them guidelines and certain restrictions, but the consumer themselves is going to have to pay for the things that are being forced upon them. They must provide and pay for it and put into a structure that don't necessarily reap a benefit to them, and I think right now we're kind of under this notion that the energy code is the answer because it's being given to us by the state.

Ginger B, BSPSI - I just want clarification. There seems to be a notion that we are adding to the energy code. I think there is some miscommunication and I just want that stated on the record.

Deputy Administrator Frost – Specifically, what we have proposed, we have some requirements that were more stringent, so we're proposed to have more stringent fire codes and defer back towards what the State Fire Marshall has done. We also are deferring back towards the National Flood Plain requirements and so that would be more stringent. On the opposite side, as it relates to the energy code, we are relaxing many of the requirements; specifically, deleting the mechanical, electrical, and plumbing provisions, the 2018 IECC, and keeping the requirements the Board worked on related to the envelope in 2018 and 2019.

Ginger B, BSPSI - Thank you for that clarification, and I just wanted it stated for the record that we are not adding to the energy code.

Jerry Stafford, College of Western Idaho - I think the things being proposed and removed from the code are probably in the best interest of the consumer and the state. If I'm following this correctly, it basically comes down to how do we enforce the energy code and do we need to enforce these certain aspects of code, and my answer would be probably not. I think what the Board is proposing here is good. It just simplifies things. We are still enforcing the HVAC codes, we have our manual J, D and S still intact, and life safety is the main issue and everything else should be consumer driven.

Rob McQuaid, Association of Idaho Cities - There's an analysis done by the Department of Energy that will show these savings in dollars from the 2018 amendments versus the 2012 amendments, and we will submit that more fully in the coming weeks. There was one point I wanted to bring up, and it looks like the average savings is about \$122 a year for the consumer if they use that higher 2018 energy code.

Board Member Guho - In that study, is the cost of all that additional energy code that drives that \$122, are you recouping that initial investment?

Bob McQuaid - It looks like the payback period is less than a year. I don't know if that answers your question, but hopefully when we get that report to you, you can have a chance to dig into those numbers.

Chairman Bick - In that savings, and the payback period, is that a national study.

Bob McQuaid - It is my understanding that it was specifically to our state.

Travis Thompson - I want to clarify that I am 100% for energy conservation. Is the adoption of these codes going to guarantee the safety of the occupants' relationship to mold and mildew, and if so, why are we seeing more problems as we continue to try to tighten our homes up.

Board Member Brooks - When someone makes the comment that this synergy code isn't working and my next question is why, and what needs to be changed, but that's the kind of information that has helped me.

Travis Thompson – So, what we have is we have a condition space, say 70 degrees with 40% humidity, and then we have a temperature outside, and as we know, as we go the warmer the air, the more moisture the air will hold, and as we cool off, as we travel to a lower temperature, we reach a dew point. To prevent moisture build up in a home you have to keep the condensing surface warmer than the dew point, and as the moisture transfers from the inside of the home to the exterior or outside, it reaches its dew point in the wall, and our basic design premise is the wall dries faster than it wets. It's a complicated problem and we are trying to put a band-aid on it.

Eric Lacey - I would just start by saying our experience has been the homes that are built to the most current codes, and not just the energy code, all the codes are not only more efficient, but they're healthier and they last longer. The international codes are updated every three years and so is ASHRE standard 90.1. They represent the latest knowledge and experience of the nation's builders, architects, building scientists and policy makers. They're updated very regularly. If you're seeing problems with moisture management in homes, there might be a disconnect somewhere between these codes. Each code doesn't contain all the requirements for all aspects of the building. The mechanical code isn't going to contain everything that has to do with the mechanical system, the energy code is going to have a piece of that as well. I'm very concerned when we start striking whole sections from the energy code without very carefully analyzing what's being lost there. Now, the two examples I raised in my comments, the blower door test, and the duct test, can you guarantee there won't be these problems with indoor air quality? You can't guarantee any of that, but what you can get as an objective test, and that's far better than you're going to get from a visual inspection. It's going to be very inaccurate. It's impossible to tell with your eyes how tight a building envelope is, and if you don't understand that and you don't know how mechanical ventilation needs to be brought in. Same thing with the duct test. You could look at the ducts all day long and you're not going to be able to tell how tight those ducts are, and so having these objective tests in the code not only protects the homeowner, but it also protects the builder. These sorts of tasks, these specific requirements, are very important to the wellbeing of the occupants of the home and the building itself. There were also some questions about cost effectiveness. I put a couple of links in the comments to cost effectiveness analysis specifics to Idaho from the 2018 version of the IECC and the ASHRE standard 90.1, 2016. I hope there's an analysis done showing what would be lost if Idaho eliminated these standards.

Chairman Bick - I am hearing building homes are so tight and now we got to spend money to add fresh air into this home. Are we overburdening ourselves with additional costs of trying to fix how tight we've gotten these houses when we really should be questioning does it make good sense.

Eric Lacey - I would say having a tight envelope is a design feature, not a flaw. You want fresh air to come into your home, you don't want air to be sucked into the garage separation wall or the attic. The whole reason why you have mechanical ventilation is to bring fresh air and healthy air into your home.

Board Member Brooks - The vapor retarder provisions in the IREC are what controls the condensation potential in walls. If you get that section right, you shouldn't have any more extra problems in your walls. The assumption is there's not an unreasonable amount of air flowing through that assembly. So what we do in the energy code, by requiring the air tightness in homes, is you keep from overwhelming that vapor retarder with a large volume of air coming through carrying moisture, and the second the amount of insulation that is required in the envelope is energy efficiency above and beyond the minimum required to prevent the condensation. Simply stated the IRC controls the condensation, the energy code controls the amount of air leakage. If you want technical resources, go to applybuildingtechnologies.com. That was the reports that established the provisions that was in the code. So that's the data that backs up what I'm saying and that's where you can find that.

Bruce Graham - We are building houses so tight now we are relying on mechanical systems to bring in fresh air and relying on it to be maintained. That is a problem. The fact that we don't have the same standard throughout the state is because we don't have state building inspectors and we can't get a standardized envelope. The state can't even regulate the schools, so, we got sick building syndromes throughout our school districts all over the state. What I'm trying to say is, let's not jump into codes until we can standardize and enforce them.

Teri Ottens - I just want to point out that all codes, including the energy code, has an alternative alternate method section, which means if you don't want to follow the code, and you have a better way to do it or a cheaper way to do it that meets the intent of the code, you can turn that in and building departments will consider them. So, all this talk about we're stuck with these minimum standards. That's not true. If you have a better way to do something, you can turn it into the building department, and I don't know a building department that won't consider an alternative method. They're just as concerned as you are about the cost to the consumer. My second point is this, all this discussion we've had for the last six meetings, this would

have all taken in place in the building code collaborative meetings, up to the adoption of a new code. It would have all taken place and we would come to compromises so when we came to the Building Code Board, we would have most of the issues resolved and you wouldn't have to sit through hours and hours and hours of testimony when all this work could have been worked out ahead of time, and I just want to make that point.

Board Business

Review of Written Comments Regarding Amendments Received to IDAPA 24.39.30 – Executive Officer Hyde presented the written comments received since the last Board meeting on August 16, 2022.

Board Discussion and Feedback

Executive Officer Hyde - I'd like to allow this opportunity for the Board, even if within the discussion, if you have any request for me of what you'd like to see moving forward, report wise or anything. If you'd like me to specifically work on and provide either at our October meeting or the next negotiated rulemaking hearing, I am open to your feedback and suggestions.

Board Member Brooks - I have been struggling on the rationale on why the blower door test will be taken out, and we're using the rationale, but inconsistent application of requirements as a reason to remove the performance requirements. That's the exact opposite of the reason they were implemented in the first place. So, we wanted, instead of testing 100% of homes to the blower door test, we are only testing 20% of the homes. This has created a massive inconsistency, but the idea was let's allow that inconsistency so we can get the data to see how we are doing with air leaks in Idaho. So, that's the question I'm struggling with right now is we put those regulations in place to gather information and we're not taking the step of analyzing the information. I think we must do a little bit more homework by looking into data on blower door testing. I propose to take the opportunity to learn more about the ICC resources and develop a plan to assess the information. We need to investigate this a little bit further and not just say, yay or nay, but let's get some numbers and some data and get our heads around this.

Board Member Johnson - Is there a way you can show us the stuff we're taking out that is duplicative versus is not.

Executive Officer Hyde - I can certainly develop some type of crosswalk that will show what lives in another code versus what will not exist at all and why.

Adjournment

With no further comments or questions, Chairman Bick adjourned the meeting at 11:52 a.m. (MT)