

ATTACHMENT C

In January 2009, SBCC Chair John Neff called a special meeting to consider options for rule making in 2009, a regular adoption year.

MINUTES STATE BUILDING CODE COUNCIL

Location: 1st Floor Conference Room, Davis-Williams Bldg., Olympia

Date: January 29, 2009

Council Members Present: John Neff, Chair; Peter DeVries, Vice Chair; Kristyn Clayton; John Cochran; Mari Hamasaki; Donald Jordan; Tom Kinsman; Melvin Mangum; Pat McBride; Jerry Mueller; Jon Napier; Dale Wentworth

Council Members Absent: John Chelminiak

Audience Present: Paul O'Connor, Maureen Traxler, Dave Cantrell, Dwight Perkins, Dan Gladwill, Pete Crow

Staff Present: Tim Nogler, Krista Braaksma, Sue Mathers

John Neff called attention to a document in which Tim Nogler outlines two options for the Council's consideration in its adoption of 2009 codes. He said Option #1 adopts all 2009 codes according to the Council's normal schedule. What is atypical about this option is that the March 1 deadline for code change proposals is changed. Tim talked to Sandra Adix, Assistant Attorney General for the Council, and she said the same WAC rule that establishes the March 1 deadline allows the Council to consider actions of the model code organizations. Since those national actions delay publication of the model codes after the March 1 deadline this year, the Council may adopt a resolution changing that March 1 deadline. Option #2 postpones adoption of the major codes for one year, focusing attention on the energy code and the historic building code.

Kristyn Clayton expressed concern about the volume of work that will face the Council in 2010 if it delays action this year. John Neff said the Council will know by the end of April 2009 whether HB 1747[companion to SB 5854] is adopted by the Legislature. If it is, he said that bill will have a substantial impact on the Council's workload. Kristyn said by April 2009, when the fate of HB 1747 is known, the Council will already have closed the submittal period for energy code change proposals. As a result, she believes emergency rulemaking will be the only course of action open to the Council. John Neff said that's not true. He said the Council can do anything it wants to open up code sections until the time it files the CR-102 in June. He said either the Energy Code TAG may recommend changes, as it sees what is happening with HB 1747, or the Council may recommend changes until June 2009. Kristyn expressed

concern about the public's opportunity to comment about code changes. John Neff answered that the public may comment through the TAG or by directly contacting a Council member. John Neff and Kristyn both agreed there will be legislative action on HB 1747.

Jon Napier spoke in favor of Option #1. He agreed with Maureen that if the Council gets out of its regular three-year code adoption cycle, making time up will be very difficult. He believes that changing the regular process based on unknown legislative action this session would be a mistake. Energy issues will continue to be important in coming years. Next year's session may produce some major energy legislation. John Cochran agreed with Jon. He said architects he spoke with unanimously favor moving forward with adopting the 2009 codes this year.

Motion #1:

Jon Napier moved Council adoption of Option #1. John Cochran seconded the motion. By a vote of 9 aye to 2 nay, Option #1 was adopted by the Council.

NOTE: Option 1 established an April 1 deadline for statewide amendment proposals except for energy code, which deadline remained March 1.

MINUTES STATE BUILDING CODE COUNCIL

Date: March 12, 2009

Location: City of SeaTac Council Chambers

Council Members Present: John Neff, Chair; Peter DeVries, Vice Chair; Kristyn Clayton; John Cochran; Angie Homola; Donald Jordan; Tom Kinsman; Mel Mangum; Pat McBride; Jerry Mueller; Jon Napier; Dale Wentworth

Council Members Absent: John Chelminiak, Mari Hamasaki, Robert Koch

Visitors Present: Kraig Stevenson, Mac Sheldon, Gary Nordeen, Larry Vance, Pete Crow, Sakhawat Amin, Charles DeMontigny, Brandon LeMay, Joe Andre, Maureen Traxler, David Baylon, Tom Nichols, Tien Peng, Diane Glenn, Gary Schenk, Dave Cantrell

Staff Present: Tim Nogler, Krista Braaksma

ENERGY CODE PROPOSALS

Kristyn Clayton said there are 172 proposals to amend the Washington State Energy Code (WSEC). She said many of the proposals are sweeping changes, intended to move the WSEC forward. Kristyn thanked Krista for her quick, hard work organizing this multitude of code change proposals.

Kristyn said in addition to reviewing the 172 energy code proposals, the Energy Code TAG will reconsider the International Energy Conservation Code (IECC).

Beginning March 20, the Energy Code TAG will meet every Friday, each meeting lasting four consecutive hours, until the July deadline is met. Since there will be no lunch breaks, Kristyn encouraged TAG members to pack their lunches to eat during the meetings.

Last Friday the Energy Code TAG had a brainstorming session to prioritize the immense amount of work facing the TAG. Priorities include a 30 percent increase in WSEC stringency per the Climate Action Team. Based on her work on the TAG since 1998, Kristyn felt confident that the July deadline likely can't be timely met.

Maintaining a parallel path between the WSEC and IECC was voted down by the TAG by a large majority vote. However, Kristyn said, there is a lot of interest among users of the energy code to move to the IECC. In support of such a move is the American Institute of Architects and the Washington Association of Building Officials.

Kristyn stated her understanding of the motion at the Energy Code TAG meeting against a WSEC/IECC parallel path: Should increased stringency in code change proposals be tracked in both the WSEC and the IECC? The answer was no. Kristyn said code change proposals will be taken through the priority filter, minus administrative proposals. At the same time, the deadline for IECC proposals will continue to be met.

John Neff asked the maker of the TAG motion, Gary Nordeen, to explain his motion. Gary said the motion was that the Energy Code TAG recommend to the State Building Code Council that a parallel path not be pursued due to time constraints reviewing 172 proposed energy code change amendments.

Kristyn said it's been suggested that the Council hold a special meeting to hear public comment about the energy code. At this meeting, testimony will be accepted, limited to three minutes per speaker. Tim suggested April 9 as a possible date, since it was a proposed meeting date, if necessary, in the published schedule. Kristyn and John Neff both agreed such a meeting will generate a lot of interest. Therefore time is needed to notify all interested parties. Kristyn said she's comfortable with the meeting date of April 9.

Pat asked the purpose or intent of the meeting, what Kristyn hopes to accomplish. Kristyn said the meeting will be informational and educational, what people think about the WSEC and IECC. She said while still not equally stringent, the 2006 WSEC and 2009 IECC are as close as they've ever before been. While acknowledging that, Kristyn said some pretty major philosophical differences still have to be resolved.

John Cochran asked if April 9 is soon enough. Kristyn said an earlier meeting date is fine as long as interested parties are notified. March 26, two weeks from this meeting date, was proposed. Tim said the notification requirement for a special meeting called for in the Administrative Procedures Act is 72 hours.

Motion #3:

Peter DeVries moved that the Council hold a special meeting to receive public comment on the energy code on the date of March 26. Kristyn Clayton seconded the motion.

Between the March 12 and March 26 meeting, Ray Allshouse, city of Shoreline building official, was appointed to replace John Neff. Peter de Vries acted as chair of the Council until formally elected in May 2009.

MINUTES STATE BUILDING CODE COUNCIL

Date: March 26, 2009

Location: Seattle Pipe Trades, Renton

Council Members Present: Peter DeVries, Acting Chair; Ray Allshouse; Kristyn Clayton; John Cochran; Mari Hamasaki; Jerry Mueller; Tien Peng; Dale Wentworth

Council Members Absent: John Chelminiak, Angie Homola, Donald Jordan, Tom Kinsman, Robert Koch, Mel Mangum, Jon Napier

Visitors Present: Kraig Stevenson, Chuck Murray, Gary Nordeen, David Baylon, Duane Jonlin, Maureen Traxler, Scott Sherman, David Cohan, Jim Muir, Paul Burckhard, Don Brubeck, Joe Andre, Kim Drury, Todd Currier, Michael Barth, Sakhawat Amin, Stan Price, Pat McBride, Chris Ricketts

Staff Present: Tim Nogler, Krista Braaksma

CALL TO ORDER

Peter DeVries called the meeting to order at 10 a.m. Introductions were made.

INTRODUCTION

Peter stated the purpose of the meeting is to receive testimony about Washington State continuing to use the Washington State Energy Code (WSEC) or switching to the International Energy Conservation Code (IECC). He said each person who wishes to testify his/her thoughts and/or concerns will be limited to three minutes, generously timed. Following the testimony of each speaker, Council members will have an opportunity to ask questions that arose during the testimony.

Kristyn Clayton, current Chair of the Energy Code TAG and TAG participant since 1996, said the TAG completed a study in 2006, comparing the IECC with the WSEC at the behest of the Council. The intent

of the study was to potentially switch to the IECC in 2009. However the TAG found that 147 amendments need to be made to the IECC to achieve equivalent stringency.

Between 2006 and 2009, the IECC has increased its stringency closer to the WSEC's. While still not equivalent, the two codes are closer than they've ever been. Sentiment about Washington moving to the IECC has been voiced more strongly in recent months.

Kristyn said she doesn't think testimony received by the Council today will impact the work of the Energy Code TAG. Its work is determined by a directive from the Climate Action Team and a request from the Governor's Office to achieve a 30 percent stringency increase to the WSEC by early July.

Kristyn requested that testimony today be educational, respectful, professional and factual.

Tim added that testimony is being recorded and will be transcribed. Written testimony will additionally be distributed to Council members and interested parties with the minutes.

PUBLIC TESTIMONY

Kraig Stevenson, International Code Council (ICC)

For a number of years, I've attended the technical advisory group, the Energy Code TAG, as an ex officio member. Obviously, I've followed with interest, for more than six years, the opportunity and possibility for Washington State to move to the IECC. Having said that, it's obvious I'm going to advocate for a national set of coordinated codes that have nationally recognized consensus.

But like my colleagues, I'm also an advocate for energy efficiency. We just happen to see a different solution. We happen to see that by going to the IECC there are national resources available to help support that. It's been the implementers, the building officials, who have pointed out that they need tools. And this is one of the tools that they want. It would help fulfill the goals of the Climate Action Team in increasing energy efficiency, by being able to implement it at the local level with the support that they need.

Now I need to ask a question: Why are we moving so fast in this issue? The Energy Code TAG is the only TAG that's really writing an entire code. They are essentially drafting an entire code. And it's a very difficult task. So my hat is off to everybody who serves with me on the TAG, and especially the chair, Kristyn Clayton.

So I ask myself certain things that just don't seem to make sense, when we've announced that we wanted to evolve to the IECC, why we haven't made a little bit more progress. And yet I think people think it's easy or easier to make amendments to the WSEC, when in fact we have this huge step before us, with the two codes essentially equal. You can make that step, working to the 30 percent, the Governor's directive, with either code.

So the question is why is it that we have chosen essentially one code without fully examining the other? There are philosophical differences in the form of proposals before the TAG that are to the WSEC. Obviously 170 proposals are a lot of work. But there's a huge philosophical change in more than one of these proposals before the Council.

Thirty percent stricter – I ask why a 30 percent increase in efficiency? There are current things in the code that we have right now, that we could actually capture in large steps towards that 30 percent. So my proposals that I brought to the TAG currently are asking to eliminate certain conflicts that exist between the WSEC and other adopted codes, to streamline regulatory efficiency, to make sure we're using the right design maintenance. My purpose is to capture better design.

I've been reviewing a number of documents from sources outside of ICC. One of them happens to be strategies for improving HVAC efficiency with quality installation and service. It has some really interesting predictions. It says that 50-70 percent of HVAC have improper air flow and refrigeration charge if there is air conditioning or a heat pump. It goes on to say that energy efficiency, even though you've had a lot of incentives to go to equipment with high efficiencies, that policy only captures a small portion of the potential savings. Forty to 60 percent of HVAC suffers from insufficient refrigeration charge and air flow, resulting in 10-20 percent lost efficiency. Average air flow is often 20 percent less than required for efficiency.

Properly sealing ducts only yields five-eight percent energy savings. This information indicates that residential ducts, as a total volume of energy use in the system, are leaking 17 percent of total volume, whereas light commercial leaks 26 percent of total volume.

This paper goes on to talk about the proper use of Manual J, which in reference is one of the documents that ICC recognizes, one that I wanted to make sure a TAG proposal aligns with. It says that proper sized coils improve the capacity and efficiency of split systems. Proper use of Manual J can increase the efficiency 10-15 percent.

I don't see why we should continue with the WSEC. Right now is the time to move to the IECC.

John Cochran asked what tools the IECC offers that the WSEC doesn't. Kraig answered that in addition to ICC's regular support of its codes with training, manuals and commentaries, there are resources from other agencies such as the Department of Energy that make training very competitive. When neighboring states, such as Idaho and Montana, use the IECC, there is also consistency in training.

Chuck Murray, Energy Policy Division, CTED

CTED is an executive agency that reports directly to the Governor's Office. Our work is to provide research and develop energy policy recommendations for the Governor and the Legislature. We're also asked to articulate these policies.

On a personal note, I've been involved in state energy code development for 15 years or more. And I also consider myself an expert on the IECC. Over the last three code cycles, I've successfully moved more proposals through that process than anyone else in the country.

The WSEC is alive and well. In a review conducted last year by the American Council for Energy Efficient Economy, the state-developed energy codes in California, Oregon and Washington were recognized as the top three energy codes in the nation. Washington was specifically recognized in this report for superior code implementation, ahead of everyone else in the country.

I credit this accomplishment to a long-term commitment to local code development, a comprehensive code infrastructure support program, and a commitment of the building professionals and code enforcement personnel throughout the state. The current code works very well.

Both the Governor's Office and the Legislature are asking for more from the WSEC. In a January 29 news conference, Governor Gregoire announced actions to stimulate green jobs and fight climate change. This included asking the State Building Code Council to improve building energy efficiency by 30 percent beyond the 2006 standard.

In the Legislature, HB 1747 directs the Council to "adopt state energy codes from 2013 through 2031 that incrementally move towards achieving a 70 percent reduction in annual net energy use." For the 2012 code cycle, this targets 45 percent improvement above where we are right now. This [bill] has made its way well through the process. It passed 74 to 5 in the House, for example. And, barring any quite frankly budgetary issues, this one's a done deal.

If the state plan was to adopt the IECC and just make a few local modifications, I have to agree it would make sense. But to meet the immediate goals asked for by the Governor and meet the efficiency targets proposed by the Legislature, more than a few modifications will be required. The U.S. Department of Energy, for example, has goals of improving the IECC by the 2012 edition by 30 percent improvement in space and cooling energy only. That's quite different than the Legislature's goal of 45 percent net energy. Just limiting your improvements to space heating and cooling is about half the value that the state Legislature's after.

The selection of the IECC is also more complex than it appears. Selection of the IECC also includes selection of an alternative commercial building code. As well as using the IECC, you're gonna layer on there ASHRAE Standard 90.1 as an alternative. So now you've got two code books you have to keep track of. You have to amend them to meet the state goals as you move forward.

More than a few of the modifications would be required to both codes. The changes required won't be as simple as setting different R values in a table in a different code book. The scope will need to change to capture the whole building energy efficiency specified in the pending legislation. The Code Council will also need to consider any discrepancies between IECC and 90.1. These codes are on different trajectories. They're organized by people with different motives. And quite frankly there's a fair amount of difference between those two codes. So you're going to have to live with those or with having people cherry pick the code book to get a specific thing they want.

In conclusion, I think maintaining the WSEC as an independent code is the best course moving forward. I think it's the simplest and most direct, and will achieve the best energy efficiency outcomes for our state.

Gary Nordeen, Washington State University (WSU) Extension Energy Program

I previously worked for the Washington State Energy Office back in the 1980s and was on the technical advisory group when the 1991 full model conservation standard codes were written for the state of Washington. I'm also a former building official, so I've been out in the field too.

I usually come up and wing it here. But today I wrote down stuff. So I'll actually read the statement, because I think it's very important that I get the right words out here today.

I'm going to talk about training and compliance, because that's what I do. I coordinate training for jurisdictions in the state of Washington. We provide training to anybody who wants it.

Washington State has been a leader in developing and implementing national leading energy codes for nearly 30 years. To ensure that codes produce the desired energy savings, compliance assistance has been provided to building departments, builders, designers, and other associated industries since the mid-1980s.

Washington has received excellent code compliance ratings through several evaluations conducted by the Northwest Power Planning and Conservation Council and the Northwest Energy Efficiency Alliance. I believe this success is partly due to the comprehensive support that has been provided.

I recently listened to some testimony at a Senate hearing regarding language within a bill about the IECC. It was stated that if the IECC was adopted as this state's energy code, money would flow from the U.S. Department of Energy to state and local jurisdictions for enforcement support. I must point out that millions of dollars in enforcement money has been provided to Washington State for over two decades. That is exactly why we currently have well trained plans examiners, inspectors, designers and builders.

Washington State University Extension Energy Program, and previously the Washington State Energy Office, has provided compliance training with funding from the U.S. Department of Energy, Northwest Energy Efficiency Alliance, Bonneville Power Administration, and other grants. Compliance assistance has been, and currently is, provided at no cost to participants.

Compliance support includes the following:

- Classroom training sessions for the WSEC and the Ventilation and Indoor Air Quality (VIAQ) code requirements. Hundreds of trainings, reaching thousands of participants, have been conducted. WSU is fortunate to have funding to provide these training sessions at no cost to jurisdictions.
- Ongoing maintenance and publication of the WSEC Builder's Field Guide. The Builder's Field Guide was developed in 1991 and has been updated and maintained since then. The current version of the Builder's Field Guide is the seventh edition.
- Prescriptive compliance forms for jurisdictions. Many, if not most, jurisdictions use the compliance forms provided by WSU.
- Component performance worksheets. These are Excel-based forms that allow WSEC compliance through the component performance approach. These forms also size heating systems for the user.
- A question and answer newsletter with over 1,000 subscribers.
- Telephone and e-mail technical assistance. We receive over 1,000 calls annually in our office.
- Current funding allows staff to meet with building department staff at specific locations to assist them in resolving problems encountered with enforcement issues.

In addition, we provide specialized, on-site training for various topics, such as Blower Door operation and operation of duct testing equipment. We are currently developing a duct testing training program to support the duct testing requirements approved by the State Building Code Council in the last code cycle. And that would be a statewide effort at no cost.

Finally, copies of the WSEC and VIAQ code books are provided for free, rather than the fees charged for IECC and ASHRAE standards. They can be downloaded from either the Council or WSU Energy Program websites.

Finally, I'm concerned about the hidden cost of changing code formats. As a former building official, I know the challenges involved. A change would require a massive training campaign for the entire building community in Washington State. It would require reconstruction of all the compliance documents that most building departments depend upon. It is clear that the standard support package and materials available to jurisdictions that adopt the IECC are not sufficient to meet the level of support at the Washington State building community has come to expect.

Kristyn asked Gary if he's thought about how WSU will participate if the Council were to adopt the IECC. Given their goal of saving energy for the citizens of Washington State and the region, Gary said he expects that WSU will still play a role in training.

Dave Baylon, Ecotope

I'm a member of the Energy TAG and have been the owner of a small energy consulting firm for 30 odd years. I'm going to try and limit my remarks here strictly to technical issues associated with comparing and developing the IECC versus the WSEC.

In order to look at the question of how you go about developing performance in energy codes and change those performances so they meet energy goals of the Governor and the state, and for that matter the regional energy policy planning and utilities, we've developed over decades now various tools for evaluating the energy use in buildings, and particularly in this case, energy use in residential buildings.

So what I'll discuss today is some of that. For purposes of the new code requirements that are being reviewed by the TAG, we have reviewed many of them to try and establish which ones actually go how far in terms of the Governor's goal. That's a convenience for this purpose because it was relatively simple to adapt that analysis to the IECC, even though we didn't do it at the outset.

So the first thing to discuss here is "Well, what did happen?" When you actually take the WSEC 2006 code and compare it to the IECC, what happens? How much do we save? Well, there are two answers to this question. The first is "How much do we save if we take the 2006, as it was passed in 2005, and implement it?" And the second answer has to do with what we do with the additional amendments that have been made in 2006 since that time, notably the duct sealing requirements that were passed last year.

So, to summarize quickly, if you ignore the duct sealing aspects of the WSEC, the IECC in its current form, 2009 released about three weeks ago, has two major differences with the WSEC on the plus side. It requires an improved lighting power density and an improved lighting system in effect for residential houses. For the first time, it does actually ask that builders or developers deliver a better lighting system to residential buildings. The second thing it does is it requires duct sealing. That was not in our original 2006 code.

On the minus side, it has several areas where it has reduced insulation levels as compared to the WSEC. This is particularly true in the Zone 2, Spokane and Wenatchee areas.

Looking at all the possibilities, it turns out that under certain circumstances, the IECC is 11 percent better than the WSEC as passed in 2006. Under different circumstances, it's about 12 percent worse. When you actually look at what kinds of buildings get built and how these heating systems get evaluated, it turns out, on the whole, to be about three percent worse in Zone 1, Seattle and the Puget Sound, and about six percent worse in Zone 2, Spokane, when you take the 2006 code by itself.

When you take the 2006 code with amendments, however, in which case you add the duct sealing differences, the difference between the WSEC and the IECC become more noticeable, 10 percent in the Seattle/Puget Sound climate zones and 15 percent in the Spokane climate zones. I can go through some of the details of how that happens, but we don't have the time for that today.

Now, the next question is "Okay, so we put this money into compliance. What happens? Do we comply?" This is all kind of a theoretical issue. Well, the answer is that over the years, unlike just about everywhere else in the country, we have actually maintained a compliance review of our codes. In the case of residential codes, the most recent one dates from roughly 2005. It's a very hard job to do this, because you have to go to the field and find out how the building did and so on. It's not easy to do. But

the last time it was done was 2005, reporting roughly 88 percent [compliance] for the state of Washington. It actually compares to a similar number in Oregon, and 62 percent in Idaho, the IECC jurisdiction much wanted.

On the commercial side, things are a little harder to do, because obviously energy savings in say lighting make a bigger difference in the retail store than they do in a warehouse. So I don't have those kinds of numbers today. They've been done for the WSEC but not yet for the IECC. It just hasn't been done.

But to roughly summarize, on first glimpse there is relatively little difference between the IECC in its 2009 current form and the WSEC in 2006. The lighting codes are almost identical, with the exception of display lighting and the retail sector. You could make an argument either way on that point. The envelope is slightly better, actually quite a bit better in the IECC with the glazing systems, but it's nowhere nearly as good in the updated wall requirements. So for warehouses, the WSEC would be much better here. But in offices, the IECC might be much better, depending upon who designed them.

Mechanical systems are seldom different between any codes, because they all refer to the same basic efficiency tables for equipment. In one major respect, however, the WSEC is extremely different. And that is that we have commissioning requirements. Where we heard about how there are many things that can be done to save energy in properly installing and commissioning buildings and equipment, we actually have a commissioning code. It does exist. It is part of our code, and has been for a decade. That does not happen to be the case in the IECC. In the 2009 process, it was not accepted as one of the amendments.

So, at least at this point, I would say it's a push on the commercial sector, although there's some chance it wouldn't come out quite the same. When compared to the 30 percent or any kind of improvement in the WSEC, it will not be similar.

We did do a compliance review on at least aspects of the WSEC in the 2004 building stock. [There was] eighty percent compliance in lighting, 94 percent compliance in building envelopes, and 85 percent compliance in at least efficiency requirements and economizer requirements in the code. That's a poorly reduced list.

I can probably stop there. I would like to say that we are trying to make, in the TAG, a 30 percent improvement in the WSEC. It's a heroic effort. It makes it much, much easier to do this if you actually use a code that we've been using for this purpose for a long time, so that actually making changes can easily be understood in terms of what's already been done and where in the code process.

John Cochran asked David for confirmation that the IECC doesn't have commissioning provisions. David answered that's correct, except by reference in the ASHRAE Standard. John Cochran asked if commissioning could be enhanced if Washington State were to adopt the IECC by amendment. David said absolutely. He said every difference he mentioned and many, many hundreds that he didn't mention could easily be handled in an amendment process.

Duane Jonlin, NBBJ, Member of Building Code TAG

[Duane said he's speaking today as a code committee representative of the Seattle Chapter of the American Institute of Architects (AIA)]

Tuesday I was given a copy of the 2009 IECC. And I spent more time than my boss should know about doing a line-by-line comparison with the nonresidential part of our state energy code. I even went through all the mechanical and lighting tables and checked each value. So here's what I found.

The content of the two codes is strikingly similar. I heard that ICC modified a number of sections partly in response to our 2006 critique. And you can see those vertical stripes along the margins where they extensively modified this code and inserted language about swimming pools, heat recovery, dead man controls, and the like.

Some of their envelope values are more stringent than ours. And some are less stringent. And in general, since the glazing U-values are a bit lower, I'd say that a building envelope under the IECC, commercial code once again, would use slightly less energy than one under the current WSEC.

Most of the mechanical table values are identical to ours. Pipe insulation values are simplified but equivalent. Lighting power allowance values are mostly the same, although five of the Washington State values are one-tenth of a watt lower per square foot.

One thing our state code does better, which was already mentioned, regards testing and commissioning requirements. So I would want to amend the IECC with some of our state language. And there are also probably several amendments we'd want to make regarding economizer use and reheat restrictions.

In summary, however, I found that the 2009 IECC (at least the nonresidential part) is largely equivalent to the current WSEC and would need only modest amendments to have the same impact on building energy use. Note that we don't need to make each line of the IECC identical to our current state code. We need to amend it to have the same overall impact on constructability and energy use. The writing and the organization of the IECC is clearer, in my opinion, which will result in better compliance and less confusion about code requirements.

As a practicing architect and the code geek around our office, I have to say that understanding and implementation of the energy code is a really difficult thing for most designers.

This code has the great advantage of being a national standard. Familiarity with this code will make all of us in the local design, construction and consulting fields more competitive elsewhere around the country and on federal agency jobs. We'll be able to take advantage of seminars, software and other resources as they're developed for this national code.

Finally, use of the IECC would give us more direct influence over an increasingly prevalent standard around the country, maintaining Washington State as a national leader in energy conservation.

After some conversations with a few of the opponents of this change late last night, I'd say that it might make sense to delay the implementation date for an extra year, in order to have an orderly process for writing our state amendments. But it seems to me that this is a golden opportunity, since we're going to do a massive change anyway, to step off of the state energy code, which has served us well for a long time, get on to the national standard and begin the process of modifying the document forward. I'd love to offer to help in any way I can in that.

Maureen Traxler, City of Seattle

I'm just here to mostly express our opposition to adoption of the 2009 IECC. The important issue here is energy conservation. And the choice of code, I think, has pale importance in comparison.

The "Efficiency First" legislation that Chuck referred to passed both the House and the Senate. It requires the Council to adopt state energy codes from 2013 through 2031 that incrementally move towards achieving 70 percent reduction in net energy consumption by 2031 and sets another goal of "building zero fossil-fuel greenhouse gas emission homes and buildings by 2031." That's a very ambitious goal.

And I'm going to defer to Chuck and Dave Baylon with regard to how similar the IECC and WSEC are. But I just want to emphasize that this, I think, is the wrong time to be adopting the 2009 IECC.

All of the 2009 energy code change proposals, except those submitted by ICC, were submitted using the current WSEC as the base. These are the proposals that make significant progress towards achieving the Legislature's goal for 2031. Furthermore, it's just not fair to change the rules after the deadline has passed. All the work that went into those proposals will be wasted. And the opportunity to achieve the reductions in energy used will also be wasted. And that's true regardless of whether you adopt it next year or this year, as Duane suggested. There was an opportunity to make this decision last year. It was proposed by the TAG, discussed by the TAG. The Council took no action.

The other point I want to make is that I think the picture of nationwide consistency in energy code is a mirage. Even if we adopt the IECC, there will always be a lot of Washington amendments. And I admit that I am a bit cynical about this, but I've been involved in the ICC code development process since the

beginning, since before ICC even existed. And I don't think the ICC will ever accept the 2030 challenge, or at least not any time soon. The ICC code development process is a very conservative process, rightfully so. It's very heavily weighted towards the status quo. And the reason for that is so that bad code changes don't get adopted easily. And I think that's the right way to go, because the advantage of that is that big, important changes are very hard to get approved through ICC. And I think that big code changes are going to be necessary in order to bring the IECC on line with the 2030 challenge. So there will always be a lot of state amendments necessary.

So I think if you want to adopt the IECC, you need to take a measured approach and look at it for adoption of the 2012 edition. This approach will give you the opportunity to take advantage of the creativity of everyone that's involved in the state code process, to devise ways to move towards meeting the 2030 challenge. And to summarize, I think the state's leadership in energy conservation and accepting the 2030 challenge are of paramount importance in this decision. You can accomplish both by staying with the WSEC.

Kristyn said it's pretty widely acknowledged that Seattle's current code amendments are more stringent than state amendments generally are. She asked if Maureen knows how much more stringent they are. Maureen said a quick answer is 20 percent more stringent than ASHRAE 90.1. The WSEC is about half that. Seattle's goal for the future is to be 30 percent beyond its current stringency.

Scott Sherman, Puget Sound Chapter of ASHRAE

I'm here to not talk so much about the technical issues.

Either code could be elevated and raised and lowered, even down to be essentially equivalent. And if most of that happens, then the IECC's going to look an awful lot like the current WSEC. And to bring it up to the current amended level, I think, takes no less than 140 amendments to have that happen.

That looks like a cost burden to the state that doesn't seem warranted. It wouldn't give us a better product than we already have. It would give us a product that we already have. And I don't see a necessary, profound reason to change for equivalency. It should be that we get something from that.

The Washington State University training on the WSEC kind of negates the benefit of going with the nationally available one. The amendment process would take a lot of state time. And the City of Seattle has its own amendments to the WSEC. They would have a hassle with trying to convert those over to the IECC. And I'm sure there are jurisdictions all through the state that would face the same kind of burden of their own agencies.

The process involved in such a change needs to be evaluated. And you need to look at what the advantage is to the state to make that change. That's primarily what my point would be here.

John Cochran asked Scott to confirm that 140 amendments are needed to make the IECC equivalent to the WSEC. Scott said that's his understanding. John asked if those amendments would be to the 2006 or 2009 editions. Scott said they would be needed to achieve equivalency with the current (2006) WSEC as amended. John asked if most of the 140 amendments are major, editorial or correlative. Scott answered that it varies.

Tien Peng noted that those 140 amendments don't address the Governor's directive. An additional 172 amendments are needed to achieve the 30 percent increase in stringency.

Kristyn said a 2006 comparison was made of the 2006 IECC with the amended WSEC, rather than the 2009 IECC worked in the last round of hearings, which saw significant changes. Data heard so far compares the 2009 IECC stringency versus the 2006 WSEC stringency. The 147 amendments came from older versions. While there weren't many changes to the 2006 WSEC, there was one big one, duct sealing.

David Cohan, Senior Manager for Codes & Standards, NW Energy Efficiency Alliance

We support energy codes around our northwest states on behalf of electric utilities in the Bonneville Power Administration and public benefits administrators. We've been by far the largest supporter of energy code training and education during the last 10 years in the region.

I just want to make a few quick points. The main one is to ensure this body and everyone else in the state of Washington that regardless of the code moved forward, we will continue to fund energy code education and training as part of our mission. So if you stay with the WSEC, we will support it. If you move to the IECC, we will support that.

Also, we are the ones who fund the evaluation studies that have shown compliance levels that are the most generally cited nationally. So we'll continue to do that. That will become more of a necessity. The American Reinvestment & Recovery Act of 2009, generally known as the stimulus bill, requires states to show 90 percent compliance after eight years. We will continue to do that also.

And the last thing I want to say, again in terms of supporting the energy code - you can take this either way - there were some comments made that there was a lot of national support. But there's a lot of regional support. And there's also national support. I'm in very close touch with people from the Pacific Northwest National Laboratories, which are the U.S. Department of Energy's main contractor for code support. They are happy to support the WSEC itself. They don't just have to support the IECC.

So I just want to leave you with the idea that whether you maintain your own state energy code or go to a different one, there will be support in the state, as there has been for decades.

Jim Muir, Chief Building Official, Clark County

I'm also representing the Washington Association of Building Officials (WABO).

Just a little bit of background: I've been a building codes professional for 17 years. But I started my career in energy and insulation 40 years ago and was an insulation and energy contractor on my own for many of those years. So I've worked at various versions of energy throughout the Northwest, what we've gone through in the 70s, the 80s and 90s, and now we're into a new century. And we continue to try to improve it.

And I really think one of those improvements could be adopting a nationally recognized code that is maintained on a national level, and has the support of the national market in general.

And I fully understand that these policy decisions are not the responsibility of building officials or inspectors, but we are responsible for implementing these policy goals. And, as local government implementers, we have to consider the opinions of architects, who must use the code to make their designs; the opinions of those who must enforce the codes with regard to what tools we need to implement the goals efficiently and effectively. And we're required to enforce the building, fire, mechanical, plumbing, accessibility and energy codes. To be effective, we need all of the resources that are available. And we need the regulations to be straight-forward and as easy to implement as possible.

We appreciate the advantages offered Washington citizens in having an energy code for many years. And the WSEC, as has been stated, is a national example. But it's not integrated with any of the other codes adopted by Washington State, as well as the IECC would be. Without integration, there is a significant effort and therefore a built-in inefficiency associated with local government to independently identify conflicts, reconcile them and then implement those parts of the various codes where there are conflicts.

And the same issue will arise again and again in each jurisdiction across the state. And we believe such a process is very time consuming for local building officials, architects, and developers, and is somewhat unnecessary. We know that the U.S. Department of Energy provides considerable resources for implementation of the IECC. If the state adopts the IECC, they will be able to take advantage of those resources.

And we appreciate the fact that the state agencies have supported us and various other entities have supported energy. And we think those things will be on-going. Training, education and support for the codes will be on-going. That part of it's not going away. But having a consistent code model is where we ought to head in the future.

And, as local code officials, we need the resources that not only DOE can provide, as our budgets are strained beyond belief. I've gone from 25 inspectors to four inspectors in a very large county. And we're trying to do everything we can do. And one thing we can't afford to do is to continue to follow a code that's not consistent with the remainder of the state-adopted codes.

So, even without counting on federal stimulus money, the current level of DOE support for those that adopt the IECC is far beyond what the state can ever hope to provide. You may hear that the state policy people will take care of that, but be assured this is not the case. Nor does it make sense to turn our backs on already available resources that can help us improve our implementation of the conservation code.

We need access to all the resources we can get. We are content to let policymakers do what they do. But we ask that those of us who must implement these policy decisions be heard with regard to the tools that are needed to reach the very important conservation goals.

Again, we applaud the support and the policy goals. We just ask that the IECC be named in statute, just as the IBC, IFC, etc. are named, so that we can get on with an efficient and effective implementation of the goals we are considering adopting today. And the IECC and the technical support it already enjoys gets us there.

Paul Burckhard, Lozier Homes

I've been a local home designer for about the last 40 years. I'm also a member of the IRC TAG.

I would like to speak first to adoption of the energy conservation code provided by the ICC. I think the State Building Code Council should take a serious look at adopting the IECC in place of proposed amendments to the WSEC.

The key word I'm thinking about is **uniformity**. Lozier Homes, the company I work for, builds primarily in two counties, King and Snohomish. But in those counties, we do work in eight different jurisdictions: Bellevue, Redmond, Sammamish, Issaquah, Renton, Bothell, Mukilteo and Mill Creek. Can you imagine how much more difficult our job would be if each of these cities had their own version of the building code? Now think about a national builder, such as Centex or D R Horton, and the issues they face when building in different states around the country.

This is the beauty of a national or international set of consensus-derived building and energy codes that can and should be adopted across the country. A uniform playing field with a group of codes that is easy to work with, provides flexibility and choice for designers such as myself and takes into account regional differences in climate and needs.

One of the major responsibilities of this Council, as I understand it, is to provide oversight and uniformity in the adoption and implementation of the building codes in our state. I feel your time would be better spent and our state better served if you would spend the time to consider and adopt the 2009 IECC rather than continuing to revamp and rewrite a stand-alone WSEC.

When the WSEC was first written and adopted, there was certainly a need for it, as no other appropriate code was available. And it has served us well for many years. But today, from what I understand, that is no longer the case. Today we have the opportunity to join the majority of other states across our country to adopt an energy code based on national standards and supported by the U.S. Department of Energy.

The IECC should become the base code for our state's energy conservation efforts.

Kristyn asked Paul if he was speaking for himself. Paul answered that his comments are made on behalf of homebuilders.

Tien Peng asked Paul to confirm his statement that the IECC offers more flexibility and choice than the WSEC. Paul gave the example of climate zones. He said he recently reviewed some amendments to the WSEC and noted it no longer considers Washington State as having two climate zones. By comparison, the 2009 IECC breaks down climate zones throughout the country by counties.

Don Brubeck, American Institute of Architects (AIA)

I'm Chair of the Washington Council of AIA's Codes and Energy Resource Group. I'm speaking on behalf of architects throughout the state.

The AIA, nationally and in our state, supports the adoption of national consensus codes, as opposed to custom-crafted local and state codes. We have consistently advocated for adoption, with appropriate amendments, of construction codes developed by the national consensus process. This has included a long period of advocacy for adoption, with amendments, of the International Building, Fire, and Mechanical Codes, and the change from our custom barrier-free access code to use of the IBC for barrier-free access requirements. It seems logical and advantageous to all users of the energy code that we join the 39 other states and the District of Columbia that use the IECC as the basis for our state energy code, with appropriate amendments to meet the conservation targets that we're after.

Our state energy code is in a very similar position to where we were with barrier-free access. We were leaders in the nation. But the national process is catching up, and thanks in no small part to involvement of people from Washington State, including a good number who are here in this room today. This drive to a common standard was similarly achieved earlier with the life safety and fire safety aspects of three model codes nationally, regional codes which have merged to become one national model building code.

The same is happening with energy codes, with aspirations for energy conservation and with action to reduce fossil fuel use and global warming. The nation as a whole is really committed now to energy conservation goals such as the 2030 challenge. We think we can have more effect and be less likely to be derailed by narrow, parochial interests if our code efforts are part of a national effort and made in that context, using a common language rather than a sometimes hard-to-understand local dialect.

See these advantages of adopting the IECC as the basis. And it doesn't necessarily need to be this year. We're not trying to derail the process that the TAG is going through.

- First of all, seamless integration with the other ICC codes adopted by Washington: building, fire, residential and mechanical.
- Technical assistance from the U.S. Department of Energy to modify the code to meet any energy policy goals and climatic requirements that might be unique to Washington.
- Common language and framework for practice in the other states and the District of Columbia, which will make it much easier for those of us practicing across state lines. We can be more competitive.
- Training has been mentioned. As a disincentive to adopt, the problem is right now. If we operate across more than one state line, we have to be trained already in the IECC, and in the WSEC. We're looking to simplify our lives and achieve the energy goals.
- Federal funding, training materials and software for technical assistance to building officials, architects, engineers, builders and contractors is available.
- We'll work to achieve harmony with the LEED energy credits. These are projects that are required to be LEED certified. Currently we have to perform wasteful dual modeling and two separate sets of analyses of projects that seek LEED certification in Washington State.

As has been noted, right now the WSEC and the IECC are relatively close together. Ed Mazria's 2030 challenge group in June 2008 estimated that to get to the initial 50 percent reduction target of the 2030 challenge, the WSEC still has 25 percent to go for commercial buildings and 25-30 to go for residential, depending upon the zone. And they estimate the 2006 IECC has 30 percent to go. So the current editions, at least according to that analysis, are already close and it would not be a huge stretch to amend to make the IECC equivalent. There hasn't really been a better time to make a switch. As has been noted, the 2009 IECC is more stringent than the 2006 and has taken into account Washington State's amendments, and should require fewer amendments this time.

We've heard a number of objections to adopting the IECC. Ms. Rosenau, a mechanical engineer on ASHRAE's local board, sent me a list. I think you just heard some. If there's time, I'll respond to [some of those concerns]. It's been noted that the IECC would require amendments. And no one from AIA or any other organization I've heard from is proposing a straight-out adoption. But the IECC can be made equivalent to the WSEC.

Another objection is that the current level of adoption of the IECC across the nation is not uniform and the portion of the IECC adopted from state to state varies, so the idea of reaching a truly nationalized code in the near future is an ambitious goal. I think the resolution is to work through the national process to achieve that ambitious goal, and in the meantime enjoy the advantage of 90 percent harmony instead of none. This is really not an all-or-nothing choice.

Also, another objection is the current IECC has some climate specific provisions, but they're limited compared to Washington, Oregon and California energy codes. The resolution for that is again that there can be amendments. But the IECC has three zones instead of our state code's two. By amendment, we could reduce it from three to two. We could make the table provisions equal by the usual process of amendment, which we're going through now.

Another objection is that in the state of Washington, there are energy efficiency minimum mandates defined by the WAC, and future energy efficiency targets that our state must follow. Again, we can amend the codes to changing targets. And it's good to know that the current "Efficiency First" legislation has eliminated most of the prescriptive requirements of past legislation. So the State Building Code Council will have much greater flexibility in the code development process.

I'll stop here, submitting written comments with a few more items.

John Cochran asked how many states have adopted the IECC. Don answered 39 states and the District of Columbia. Some of those states have local rather than statewide adoption. For example, Arizona, Phoenix and several other large cities have adopted it.

Joe Andre, National Electrical Manufacturers Association (NEMA)

I want to make it clear that NEMA does not have a policy or a preference here. I'm here simply to offer some observations on the process. I want to state that I'm a neophyte here in the energy code world. And I'm a bit intimidated by the expertise here in this room. So I'm not going to talk about technical aspects of it.

We have been involved in code development since NEMA's inception over 80 years ago. Primarily that's the electrical code. Only recently have a few of us convinced NEMA that we need to be involved in the International codes, and have gotten very involved in IECC, because there's many products that NEMA produces, NEMA members produce, that are affected. NEMA consists of over 400 manufacturers of domestic electrical equipment. So we touch just about everything that happens in a building.

The last code cycle for the 2009 edition of the IECC, NEMA spent a fair amount of resources to put me on the IECC committee. I'm proud of that, even though I don't understand half of it.

Probably like a lot of organizations, NEMA covers a number of states. In fact, we sell products in all 50 states and many, many other countries. It's in our best interest to be able to put resources where they do the most good. That would be to influence and participate in a single adoption of a single code that would be fairly consistent around the country. When we have to build products and build them to be installed in different ways across state borders, it confuses the issue.

When we get calls about how to install a particular product with the energy code, we have to ask what state you're in. Then we might have to modify our answers. Being neophytes in the International code process, I and a few other people who have been involved in it have had to educate NEMA members on how that process works. And now I'm finding that I have to educate NEMA members on how the Washington State process works.

It's a long process for us logistically that we have to go through. I have to look at what happens in this state. I have to get it back to my organization. They have to talk to the people who have got products involved. It has to go from their recommendation to a codes and standards committee. We can't react quickly enough to participate in this process in the way we'd like to.

The deadline for proposals is long since past. We had one that was put in. And I did that, hoping that I was going to get approval. And luckily I did. We probably had the opportunity to participate much more, had we had a little bit more time, and a little bit more resources to put into it.

The amount of time and resources NEMA put into me just being on the IECC committee probably is going to pale compared to the amount of time I'm putting into Washington. That wouldn't happen if I hadn't been a resident here and fairly close to where the meetings are happening. I don't have

the ability to participate in Oregon and California, which product-wise make Washington look pretty small. And that's unfortunate.

So I guess I'm just going to close this fairly briefly by saying, in our opinion, the best codes are going to come from the most participation. And whether it's NEMA or whether it's other organizations that have a national presence, that have a real difficult time participating at a local level, we feel that it's advantageous to base a code at least on the national consensus where everybody can participate equally, where we have a much longer time period to make proposals and to respond to proposals.

Kim Drury, Northwest Energy Coalition

The Energy Coalition is a nonprofit organization that's been around since 1980. We represent about 110 progressive utilities, businesses and environmental organizations throughout the Pacific Northwest. We focus on clean energy. We focus on keeping energy prices affordable. And right now our first priority is energy efficiency.

I might also mention that many years ago I also was part of the Washington State Energy Office, when the state of Washington was developing its first energy code. So I feel very proud that Washington State does have such an effective energy code. I think that's the first point that I would like to make. I have three points I would like to emphasize here very briefly today.

One is that Washington's energy code is effective. And I think that's what we really have to keep reminding ourselves. The reason we have an energy code is for energy efficiency, energy savings. Washington has an excellent reputation in the country, as being one of the best states in the country for energy conservation.

You may know that the Pacific Northwest since about 1980 has saved enough energy to power three cities the size of Seattle. That's enormous energy savings. And it's enormous cost savings for utilities and for consumers. It keeps the dollars here in the Pacific Northwest. About 30 percent of those savings are due to the energy codes that we have here in Washington and Oregon. Neither one of those are the IECC. And the code is working. And that's something we should be proud of.

The second point that I would like to make is that our policymakers, our elected officials, have endorsed this direction of increased energy efficiency. The Governor has already set a target for the current round of changes in the energy code to be 30 percent greater than where we are today. The legislation you've heard about this morning already says that we need to be 70 percent more energy efficient than where we are today. Those are both really strong, ambitious goals that we need to achieve. And the fact that our policymakers, our elected officials, have endorsed this is, I think, really important to keep in mind here. During the last six weeks of the legislative session, a lot of legislators have heard a lot about this issue, IECC versus the WSEC. I can't emphasize that enough. A lot of legislators have heard from folks on this issue. They decided, they made the decision not to move to the IECC. They did not include that in the legislation. And that was a very deliberate decision. I think that's important to keep in mind here.

Another point that's a part of this, in terms of the policy direction that we're going in, Oregon and California have their own energy codes too. And they are also regarded as among the leaders in the country on energy efficiency. There's no indication that they will be moving to the IECC. And so, when we hear about the need to maintain some competitive parity by the architects and engineers, or whomever, I think the fact that Washington, Oregon and California are all leaders in energy efficiency, all have their own energy codes, is a really important point to keep in mind.

And the third point that I would like to just emphasize here is that "if it ain't broke, let's not fix it." I mean, we have a code that's working. It's keeping us where our policymakers want to be. It's saving us energy. It's saving us money. We have good compliance. We have a lot of studies that show that we have good compliance levels. Why would we want to revert to a different code at this point in time?

We've heard a lot about the uniformity and parity and things like that. But when people think comparing the two to each other, I think it's important to really listen closely to what's being said. And that is they're comparing the code that was just adopted by the IECC to our state code. They're saying, "Well, they're just about the same." But they forget that we're now in the process of moving our own code up 30 percent. So within six months or a year, depending upon the adoption and implementation, we will again be a leader if we stay with our own state energy code, not the IECC. So equivalency is not really accurate. A year from now, we should be another 30 percent above IECC. We lead; IECC follows.

I agree with the point made earlier that the sense of uniformity is a mirage. Because it's true, we could adopt the IECC and make all those amendments to get it as energy efficient as we need to be in order to comply with our policy directives. That's true. But where is all that uniformity and ease of administration then, because it's just a whole layer of amendments. And it's just complicated. So I'm not sure what that really gains us.

The final point I'd like to make is that two weeks ago the Energy TAG, the people that you directed to work on the changes to the energy code, voted nine to one against moving to the IECC. That's just two weeks ago. These are the people who are doing all the work, who are the technical experts on the code. And I think that's an important indicator.

Todd Currier, Washington State University Energy Program

I'll put it up front – I am an energy efficiency advocate and have been for a really long time. I've been involved in code work since 1984, so I go back to the early days of the first strong energy codes in Tacoma. So, I am an advocate, that's kind of where I come from.

I'm impressed by the amount of enthusiasm for the discussion about code format change. And I think you all are too. Part of the reason that we are in the efficiency advocacy arena is because we're interested in what Kim just said, and what others have said. We're interested in the move forward, not a move sideways.

And there has been a lot of discussion about opportunities to modify the IECC. And I think that's true. There are a lot of opportunities to make it equivalent to whatever we want to make it look like. But it's not necessarily going to be consistent with where the ICC goes eventually when they try to develop a code that is 30 percent beyond.

So my perspective is that we make a better choice now by making our big step with the code framework that we have, and look at the IECC as a format once they figure out how their 30 percent or 40 percent or whatever beyond code looks. Because I think that will give us a better understanding of where we can find that kind of commonality and uniformity with the International codes.

I also want to make sure that we all remember that the International codes do provide a lot of support and technical resources. But they still fall short of what we have in Washington and what we are committed to continuing to provide in Washington. So, if you like what you've been getting, as far as technical support as a builder, developer, designer, building official, person in the trades, then we'll be there and we're already capable of doing that, with not only the code that we have but the proposals that are in front of the TAG right now.

The final thing is I think it is important to think about the question, as has been the topic of discussion in our office a lot, about consistency with the other codes. We feel some pull that way, no question about it. But, as Kim Drury said before me, it is a bit of a mirage at this point to say that there's national consistency with the International codes. And, if you're working in the west, particularly as a designer or engineer or whatever, if you want to make an argument for consistency, probably the big dog code is Title 24, California. And I don't think anybody advocates bringing that here.

So I think we're in a good position where we are now to move forward, and then consider the International code structure once they get to the point where they've got something that's equivalent to where we're going, not where we've been.

Pat McBride, a builder and architect, representing the Master Builders of King and Snohomish Counties and BIAW

We provided you a letter that you should have in front of you. I'll just hit some key points here.

The U.S. Department of Energy supports the IECC and through the energy code's website provides software, compliance tools, training, technical support and other resources for our builders.

The national green building standards benchmark the IECC as a minimum for certification. Homebuilders in this state have spent a good deal of their hard time and effort developing a voluntary "build green" program that spins off of this certification. And these efforts to improve the energy requirements will start to undercut those marketing efforts and diminish their ability to market their homes to the public as anything different and above and beyond what's currently being provided.

The IECC is a national standard for manufacturers to gauge their product, as you heard earlier this morning. That's important, so that everybody's on the same standard. The ICC nationally vets this

IECC process. And they have an annual review process that everyone participates in on a consensus basis. The IECC uses only nationally recognized consensus building standards, which allow building interests to participate fairly.

The IECC is named in the American Recovery Investment Act recently adopted by the Obama administration. And Congress passed this as a standard to meet for the stimulus funds.

The building industry strongly supports the ease of use, and the flexibility offered in the IECC, which the WSEC does not offer.

If these codes are really going to be beneficial, they not only need to refer to new construction, but existing construction. Conservation is our key element in energy conservation and getting ahead of the curve. And it's kind of unfortunate that both the Governor and others in this state in their 2030 program say nothing about retrofitting existing construction.

As a past State Building Code Council member, many times we've amended these codes. So I don't think that that's really an obstacle for this Council.

Please allow consideration of the IECC and direct the Energy Code TAG to look at the effects of the new energy code side by side with the IECC.

Stan Price, Executive Director, Northwest Energy Efficiency Council

I didn't actually plan to testify today. An opportunity to come up to say hello to some of my old colleagues was just too tempting.

I served for 10 years on the State Building Code Council, chaired the Energy Code TAG and the Plumbing Code TAG during my tenure at the Council, and chaired the Council for two years during the tumultuous period in which the state made the change to the International code series through the legislative process. So I certainly empathize with all of you here today in terms of the ping-pong

between well-intentioned and, I think, well-spoken articulations of the various sides of this particular issue.

My organization, the Northwest Energy Efficiency Council, is an industry association representing companies that provide efficiency products and services. And I couldn't help but notice all the service vans in the parking lot outside, which is most of my members actually, including design build contractors, mechanical contractors, and energy services companies throughout Washington State.

And our position on this particular issue is we think the state ought to maintain the WSEC. I won't go into a number of the issues today because the Chairman rightly observes my favorite line, "It's clear that all points have been made today. It's just everybody hasn't had the chance to say them." So I won't reiterate all the arguments today, but just underscore one point that I think is a really important one that Maureen Traxler brought up. I think sometimes the issue of timing is paramount.

The process that the Council has used for as long as I can remember has been one in which people of good faith bring ideas to the table in relationship to a code change during the regular code cycles as established by the Council. That process concluded on March 1 of this year. And a whole lot of work went into that effort by individuals across the state to offer amendments specific to the language of the WSEC. So regardless of the decision that goes forward, a decision right now to move to the IECC, I think, wouldn't be fair play in relationship to the work and effort that has been done by those folks who proposed code change amendments in good faith in this process, as well as, I think, create a very difficult and chaotic process going forward in terms of figuring out how to meet our legislative mandates in relationship to stringencies that are being proposed for the 2009 cycle, in the midst of also changing the foundation document.

So I would just close again with thanks and best wishes to my former colleagues here on the Council with this difficult decision.

Chris Ricketts, King County Building Official with DDES

You've already heard a lot of great testimony. So I won't spend too much time up here. But I want to say that King County is a strong supporter of all the climate change work that's being done out there. I've worked on a lot of different projects over my years here at King County, on very interesting stuff.

Right now is the time to move forward on adopting the IECC. The state's not ready to step forward on some major changes over the next several years. And we need a good base work as far as getting into the IECC. This would be the time.

The Washington State University Energy Extension Service, Gary Nordeen, has provided great support over the years. And we really appreciate that. We hope they can continue.

It looks at this point very similar to the point we were at several years back, with the barrier free, the accessibility codes that the state had. And those were folded into the International Building Code very successfully. We appreciated that.

So I know it's going to be a real challenge. I heard what Maureen said about all the different code changes that have been proposed out there that are on the table. Trying to phase those code change proposals in, along with the 30 percent increase by 2012, is going to be a real challenge for the state, for you. But all the support we can give you, we'll try to do that.

But now is the time to do it. Now is the time to do the IECC. And we're looking forward to that.

Peter ended the public testimony and called for comments by Council members.

Mari Hamasaki asked Kristyn about parity between the IECC and WSEC. Kristyn noted the voting process between the two is extremely different. She said if she had to name one major concern with the IECC, it would probably be with their voting process.

Kristyn said Washington State has had global experts on energy issues advise the Council which way to go. She believes the Council feels informed and trusts the TAG to advise it appropriately.

The IECC process, on the other hand, begins with a hearing before a committee. Then the committee decides whether or not to support the issue. If supported by the committee, the issue moves forward and is voted on by building officials. It's a much more political process than in Washington. Kristyn said state control is lost in the national process. She also said the voting population in Washington State would have to be encouraged to actively participate in the ICC process, because full-force participation is the only way Washington can influence that process the way that Washington needs it to go.

Kristyn said there is a lot of support now for the IECC, as that code's beginning to catch up. She believes it will continue to improve. However she said the IECC is not adopting the 2030 initiative.

Mari asked Kristyn how many years she thinks are needed to achieve parity. Kristyn said it depends radically on whether the IECC adopts the 2030 initiative.

John Cochran asked Kristyn her thoughts about adopting the 2009 IECC but delaying enactment until 2011. He asked if that would be an appropriate timeframe to deal with the amendments that are currently on the table. Kristyn said the Energy Code TAG is reviewing all 172 proposed code changes to the WSEC. The TAG voted nine to one not to disrupt that process with a WSEC/IECC parallel path at this time. Without distractions, the TAG realistically probably won't be able to address all amendments until this fall. In answer to John's question, Kristyn said 2011 is much more realistic. With some help, she said the TAG can spend 2010 looking at a parallel path.

STAFF REPORT

Tim said the next meeting, published as Friday, May 8, should actually be held on May 7, Thursday, because the Council has been meeting on Thursdays this year rather than Fridays. He added that committee meetings will likely be needed for the May session, since reports are expected from the Building Code TAG and the Fire Code TAG. In addition, testimony from this meeting will also be distributed at the beginning of the May meeting.

Peter asked if Tim anticipates a two-day or a one-day meeting in May. Tim suggested the Council hold a two-day meeting on May 6, Wednesday, for committees, and May 7, Friday, for the Council. He said since the regular legislative session ends on April 26, legislative issues affecting the Council's workload should be known.

Peter thanked the audience and people who testified for keeping their remarks succinct, factual, short and professional.

ADJOURNMENT

Lacking further business, Peter adjourned the meeting at 11:50 a.m.

MINUTES
MECHANICAL, VENTILATION AND ENERGY
CODES COMMITTEE

Date: May 6, 2009

Location: SeaTac City Council Chambers, SeaTac

MVE Committee Members Present: Peter DeVries, Chair; Mari Hamasaki, Vice Chair; Kristyn Clayton; Jerry Mueller; Dale Wentworth

Other Council Members Present: John Cochran, Angie Homola, Tom Kinsman, Jon Napier

MVE Committee Members Absent: Don Jordan

Visitors Present: Bob Eugene, John Hogan, Gary Schenk, Kraig Stevenson, Brian Minnich, Paul O'Connor

Staff Present: Tim Nogler, Krista Braaksma, Joanne McCaughan

Energy Code TAG

Kristyn said because energy code proposals this year are so sweeping, the process for reviewing them prior to developing Energy Code TAG recommendations differs from the process just gone through for Mechanical/Ventilations Codes TAG code change proposals.

Energy Code TAG progress to date includes reviewing one-quarter to one-third of the proposals. Review has been restricted to residential proposals at this time. Proposals have been organized into Loop 1 and Loop 2. Loop 1 proposals are presently being reviewed. They consist of very large changes, philosophical changes or changes that impact other proposals. Lighting proposals are almost finished, and review of commercial proposals will soon begin.

Glazing is one large issue that's been addressed by the TAG. That issue, as it's always been, represents a "hot button" for small window manufacturers, wood windows, custom windows.

Of the third proposals reviewed by the TAG to date, about one-third have been tabled.

Loop 2 probably won't begin until after July.

John Hogan added that he feels the Council needs to review and act on all 172 energy code change proposals.

Kristyn said the plan is to deliver the Loop 1 package of energy code change proposals to the Council in July. Then the TAG moves on to Loop 2 and hopefully delivers those proposals to the Council in October. In addition to Loop 1 and Loop 2 proposals, there is a third potential package of IECC alignment proposals the Council may direct the Energy Code TAG to work.

In total, Kristyn said the above represents at least one and one-half years of work. She said if the TAG gets direction to work a parallel path with the IECC, many proposals will be amendments to that code. For that reason, it's not useful to discard any proposals without thorough consideration and bringing them to the Council.

The bottom line is that it takes time. Many of the proposals are controversial in nature, requiring lengthy TAG discussion and debate.

Tim added there is a directive from the Governor's Office and the Climate Action Team to improve the 2006 WSEC by 30 percent. He said most people are aware that the TAG's been asked to work toward that significant improvement. Kristyn said her understanding is that a letter is forthcoming to provide that direction in writing.

Tim said SB 5854 passed this session and is expected to soon be signed by the Governor. This bill directs the Council to work with the Energy Policy Division to convene a strategic committee and address energy conservation measures by 2030. Tom asked if the Governor's 30 percent directive is independent of that legislation. Tim answered that it's complimentary. He said signing of the legislation and the correspondence soon to be received from the Governor's Office will explain the intent of how SB 5854 correlates with the Climate Action Team's directive.

Kristyn said the TAG currently is addressing the Governor's suggestion, based on the work of the Climate Action Team, to achieve 30 percent stringency above the 2006 WSEC.

Another question to which Kristyn wants Council direction tomorrow is how to handle green proposals. While not energy conservation proposals, she said green proposals are important. Clarification might have come from ASHRAE, had its Standard 189 finalized, but the third round of review comments has just started.

Mari asked for an example of a green proposal. Kristyn cited the dark sky initiative, dealing with the type of lighting fixtures that can be used outside. It basically says there will be no light shining up. Debate surrounds whether such proposals save energy. Another green proposal Kristyn recalls is plumbing flow rates, proposed by John Hogan.

Tim said the TAG recommended disapproval of the dark sky initiative, Proposal #162. Kristyn agreed, saying she believes it was disapproved because the TAG felt it isn't an energy conservation issue. She would like Council direction about how to handle such proposals.

Peter said the dark sky initiative appears to be a light pollution issue rather than an energy issue. He suggested including green proposals in an addendum. John Cochran said he believes much of the dark sky initiative is outside of buildings. Thus it's really a zoning issue. Kristyn agreed. Tim noted that roadways and public rights-of-way are outside the scope of the Council's authority.

Kristyn encouraged everyone to read and understand SB 5854. She noted two important elements of that legislation are requiring the Council to reconsider the IECC and increasing the stringency of the energy code by 70 percent by the year 2030.

Peter asked the future direction of the Energy Code TAG. Kristyn answered that the TAG will continue to review the 172 code change proposals to the WSEC because of the 30 percent increase directed by the Governor. To Peter's question when the IECC will be considered by the TAG, Kristyn answered after review of the 172 proposals.

Kristyn thinks it's crucial to consider all 172 proposals. They drastically change the WSEC, and many will, at the outset, be proposed amendments to the IECC. Peter asked for confirmation that the TAG is presently traveling down a single path rather than a dual path. Kristyn answered the TAG is on a single path.

Peter asked if Kristyn has a recommendation for the Council tomorrow. Kristyn said, based on her background, a quick jump, changing the base energy code from the WSEC to the IECC, is very difficult. However, when people who use the code every day, such as architects and building officials, start thinking it's a good idea to jump, then the TAG has to seriously consider it.

Peter anticipated a vote at tomorrow's meeting, whether or not to change the base energy code. Kristyn agreed, saying it would have been at the last meeting save for lack of a quorum. She said she reads SB 5854 to essentially call for redoing what was done four and one-half years ago, comparing the

WSEC to the IECC line by line, noting conflicts and stringency differences. But she noted that process can't begin until all 172 energy code proposals have been reviewed.

Kristyn said the Council heard testimony that during the past few years there have been good stringency increases at the International Code level. She said the 2006 WSEC probably is no longer 20-30 percent better than the IECC. After adoption of code change proposals recommended by the Energy Code TAG this year, the gap between the two codes will probably widen again. Kristyn noted that a parallel path is going on at the federal level, increasing the stringency of the IECC at the same time. It's still a pretty new code, and it's not life, safety, health.

Tom Kinsman asked if the Council will vote tomorrow whether to proceed with the 172 code change proposals to the WSEC or to move to the IECC. Kristyn said she believes the vote will be to adopt the IECC as the base code starting at a future date certain. She said a third party would likely have to be hired to integrate current WSEC requirements into the IECC before doing the 172 proposals. Peter expects tomorrow's discussion to be very interesting.

Jon Napier asked if there's been a bench mark established for energy savings of the WSEC versus the 2009 edition of the IECC. Kristyn answered there are different bench marks from different sources. The TAG tried to look at a consensus of that. PNNL is presently doing comparisons, including the WSEC, for the U.S. Department of Energy. Information from that study, which is a modeling effort, is expected to be available by the end of June.

Angie said she doesn't understand, assuming the Council adopts the 2009 IECC tomorrow, why the 172 code change proposals to the WSEC would continue to be reviewed. Her second question is if the Council has time to amend the 2009 IECC, again assuming its adoption tomorrow, to make it comparable to the WSEC. Kristyn answered no, there is not enough time. That's why she believes tomorrow's motion will be for a future enactment of the IECC.

Angie said she shares Kristyn's concern about green proposals. She said the City of Oak Harbor recently adopted a new lighting ordinance that permits lighted signs on Highway 20, a scenic highway corridor. Angie spoke in favor of a state standard providing oversight of such actions.

Kristyn said the third thing she is looking for is suggestions on how to package the 172 code change proposals for presenting them to the Council in July, so they're organized in a workable fashion. She emphasized that these proposals are really critical to many manufacturers, particularly small business manufacturers. The breadth of the proposals is sweeping. They touch on almost every issue in the WSEC.

Kristyn said for the Council to vote in July or later in the year as an informed body, much technical digging, understanding and discussion needs to occur on these proposals. It will require a concentrated effort and lots of homework on everyone's part. The Council needs to be able to claim due diligence under the law, because Kristyn expects litigation may occur as a result of some of the proposals adversely impacting some small businesses. It's important that the Council feel knowledgeable about, and comfortable voting for, the energy code change proposals. The final Council vote needs to be thoughtful and informed, reflecting each constituent group.

Peter noted that the Council vote tomorrow will dictate the work of the Energy Code TAG for at least the next year. Kristyn agreed. She said it would be a minimum of a year.

Tim said he believes it will be necessary for the Council to meet in July, potentially for a two-day meeting, similar to this two-day meeting and what's scheduled for June. Meeting in July is necessary to meet the August 5 deadline for filing proposed rules. Tim also suggested that the Mechanical, Ventilation and Energy Codes Committee may wish to make a recommendation to the Council about energy code adoption. Doing so might ease the way for a Council vote tomorrow. Kristyn agreed. She said she would like three recommendations from the Council:

1. Residential redefinition.
2. How to handle green proposals.
3. A discussion about moving the IECC forward.

Kristyn said the bottom line for her about the WSEC and IECC is the vetting and voting process. The process is handled in a radically different way, national versus state. At the national level, issues are vetted in an open forum before everyone. Then a committee of professionals in the industry votes on them, giving an informal yes/no. Issues may then come back for modification. When issues are voted on, there's one to four minutes of discussion before a vote by the IECC voting body. Kristyn said it's difficult to get things through the national process.

Peter asked Kristyn who could best brief the Council tomorrow if she isn't able to call in. Kristyn answered that probably Krista or Tim would be best, since they've both attended all meetings. While Don Jordan is co-chair of the TAG, he hasn't attended all meetings. Tim said Don will chair the next Energy Code TAG meeting. He also noted that Tien Peng has attended about half of the TAG meetings. Kristyn added that John Hogan will attend the Council meeting tomorrow, to answer questions and address issues.

Kristyn said the national process is not as flexible as the state in increasing the stringency of the IECC. She asked what happens if the Council votes to move to the IECC and then its stringency lags because it's not under the 2030 initiative like the WSEC. That is the bottom line to Kristyn. What can the state of Washington do then? Kristyn would like to adopt the IECC with the clear understanding that if stringency lags significantly behind what's called for in the 2030 initiative, Washington State can easily move back to the WSEC without creating a whole new energy code.

Angie asked Kristyn when a decision has to be made. Kristyn answered that a decision has to be made now in order to meet anything close to 2012. Angie asked if amendments to the WSEC will be simultaneously considered. Tim said generally the TAG is aware of how the 172 proposals relate to both the WSEC and IECC. In addition to the WSEC and IECC, there is also ASHRAE 90.1, which is the commercial energy code baseline. Moving base codes results in major reformatting of all chapters, tables, numbering systems.

Angie asked, assuming IECC adoption, if state control is lost. Kristyn answered yes. She said an element of control is lost when new things are introduced at the national level. John Cochran said that negative is balanced by the positive of increased consistency with a complete family of International Codes. Kristyn agreed.

Tom Kinsman said the group of people who adopts the WSEC every year at the state level is virtually the same. It's difficult for industry to be involved in the process. On the national level, by comparison, the process is much more open and less controlled by a small group. While agreeing, Kristyn noted the energy code is **extremely** technical. She said many people who've been in the industry for 10-20 years don't have the knowledge of the Energy Code TAG.

Angie asked if the IECC can be amended to meet Washington's stringency requirements. Kristyn said that research was done four years ago. At that time, the outcome was 147 amendments were needed to make the IECC comparable to the WSEC's stringency and to match different philosophies, such as climate zones and energy modeling techniques. In order to meet a deadline for 2012 adoption, Kristyn said the 147 amendments to the IECC would have to be worked after the 172 code change proposals to the WSEC.

Kristyn said some IECC and IRC energy provisions are more stringent than the WSEC. On the other hand, other provisions are less stringent. If Washington State adopts the IECC for both commercial and residential, stringency will be lost. That's a violation of Washington statute. Amendments to the IECC will have to be made. But the amendment process is very lengthy. It took nine months to compare the 2006 WSEC with the proposed IECC 2006 edition four years ago to compile 147 amendments. During those nine months, the TAG didn't wordsmith. It simply labeled provisions as comparable or not and noted what was needed to achieve comparability.

Brian Minnich questioned whether adopting the IECC would truly be a stringency violation because statute only sets a baseline for original creation of the WSEC. Tim said there is no restriction in statute for the Council to adopt or not adopt the model code. However it requires that the state maintain the level of energy efficiency that is presently in effect in the state of Washington. Amendments to the IECC are necessary to meet that requirement.

Dale spoke in favor of staying with the WSEC until 2012 and, at that time, consider moving to the IECC.

Motion #4:

Dale Wentworth moved that the Mechanical, Ventilation and Energy Codes Committee recommend that the Council stay with amending the 2006 WSEC until 2012, at which time it will consider moving to the International Energy Conservation Code. Also included in the motion was a recommendation to not muddy the waters of energy code consideration with the question of green proposals. Jerry Mueller seconded the motion.

Mari asked if the IECC will be worked on from 2009 to 2012. Kristyn answered no, not unless the Council votes tomorrow to set a date for adopting the IECC as the baseline. In that case, transitioning will begin.

The question was called for. The motion received a tie vote, 2 aye to 2 nay. The Chair broke the tie by voting nay. Therefore the motion failed.

MINUTES STATE BUILDING CODE COUNCIL

Date: May 7, 2009

Location: City of SeaTac Council Chambers

Council Members Present: Peter DeVries, Chair; Jon Napier, Vice Chair; John Chelminiak; Kristyn Clayton; John Cochran; Mari Hamasaki; Angie Homola; Don Jordan; Tom Kinsman; Jerry Mueller; Tien Peng; Dale Wentworth

Council Members Absent: Ray Allshouse, Robert Koch, Mel Mangum

Visitors Present: Anjela Pimentel, Diane Glenn, Garrett Huffman, Kraig Stevenson, Matt Todd, Bob Eugene, Chris Winslow, Mike Cockrill, Dave Cantrell, Jeff Peterson, Paul Burckhard, Tom Young, Kim Drury, Mark Fallgatter, Tom Nichols, Gregory Staats, Brian Minnich, Tim Sommers, Paul O'Connor, Patrick Hayes, Richard Swanson, John Williams, Frank Hertzog, Mike Wheeler, Maureen Traxler, Dan Salinas, Michael Lane, Victoria Lincoln, Ben Fergusen, Chuck Murray, Pat McBride, Gary Schenk

Staff Present: Tim Nogler, Krista Braaksma, Joanne McCaughan

RESULTS OF SPECIAL HEARING ON ENERGY CODE

Tim said the March 26 meeting minutes contained testimony presented at the hearing on the energy code. In addition, attached to the minutes were copies of written testimony submitted to the Council.

Submitted today is an additional letter from the Master Builders Association. The issue involves the International Energy Conservation Code and Council policy on adoption of the energy code.

Washington State has historically had its own unique energy code, filed under Chapter 51-11 in the Washington Administrative Code. The format was originally based on the model energy code published by the Council of American Building Officials in the early 1980s. Subsequently the Legislature modified the code several times for residential and nonresidential buildings

As discussed yesterday at the committee, the Energy Code TAG is in the process of reviewing code change proposals based on the base code being the 2006 Washington State Energy Code (WSEC). The TAG has made significant progress toward review of amendments.

The question at this point is “What is the next step?” Tim suggests that future Council action be based on what was discussed at the committee yesterday.

PUBLIC TESTIMONY ABOUT THE ENERGY CODE

Kraig Stevenson, International Code Council (ICC)

I’m going to ask you as a council to consider very seriously the adoption of the International Energy Conservation Code (IECC), 2009 edition, and to amend it to meet the state’s energy policy goals. As you know, the ICC offers up for consideration many model codes that jurisdictions and states and state agencies all across the country amend to fit their statutory requirements.

Currently pending, I guess, governor’s signature we have HB 5854 that takes us into new realms that we’ve never been before, as far as getting to net 70 percent energy efficiency. That’s interesting to compare that to draft legislation that’s before our federal government known as the American Clean Energy and Security Act, which also purports to have measures to increase energy efficiency to net zero energy. And it’s interesting to compare that. Both the American Clean Energy and Security Act and the American Reinvestment and Recovery Act of 2009 benchmark the 2006 IECC and require energy efficiency increases from that base model document to occur.

Now whereas the American Clean Energy and Security Act of 2009 is draft legislation, it’s very, very clear that the Department of Energy and the federal government take energy independence very, very seriously. And they’re taking steps to make sure that we’re on the path to hopefully accomplish net zero.

And so I can only assume from that, that in some form very similar to the draft, there will be new requirements before us. And so aligning ourselves with a model energy code that uses the same format, albeit amended, to meet Washington needs allows architects, builders, and code enforcers to avail

themselves of the training materials that are well supported by the Department of Energy, the BCAP Program and other nonprofit associations outside of ICC in the spirit of that training.

There's been questions of loss of control if the Washington State code goes away and you adopt a model [code]. Imagine, if you will, at least in my thinking, that if there's a federal government mandate to be on a code, they want consistency across the state. Upon passage of the act, editions of codes after 2012 will have to be 30 percent more energy efficient than the 2006 IECC. And model codes released after 2016 will have to be 50 percent more efficient than the 2006 [IECC].

But the Secretary of Energy will be given the authority to also set supplemental goals so that the maximum level of energy efficiency that is technologically feasible and life-cycle cost effective and on the path to achieving net zero energy buildings is accomplished. That's interesting to compare that to Title 5854, wherein these proposed changes, and I assume they will be passed into law, that the State Building Code Council is being asked to construct increasingly energy efficient homes and buildings that help achieve the broader goal of building zero fossil fuel greenhouse emissions in homes and buildings over 2030. But in this bill, it only talks about getting to 70 percent, not net zero.

I realize that I'm comparing draft legislation at the federal level to past legislation. But I think it's in the state's best interest to participate in the model code development process, because we truly have some experts in energy efficiency here that can help take this model energy that's better and improved for the nation to meet these goals. In that way, we set leadership by laying out a path, showing how Washington would take the model document, showing what we would do with it, accomplishing our own state's energy goals, but providing a leadership path for other states to look at. I encourage you, as a state building code council, to provide proposals to the ICC to meet the June 1 deadline, so that Washington State's influence can be reflected in the 2012 document.

Thank you. I really seriously believe that this is the best course of action for Washington.

Diane Glenn, Construction Consultants of Washington

I am a construction consultant. I'm also a built-green verifier and an ENERGY STAR verifier. I have clients throughout the state of Washington. So I'm speaking from that direction.

The building industry has had the expectation for some time now that this code cycle we would be looking at adopting the IECC. The statement that the Washington State Energy Code (WSEC) is a familiar code can be refuted now, because there are so many proposed amendments that we are talking about a new code anyway. So this is absolutely the ideal time to be looking at the adoption of the IECC.

Builders have the expectation of a reasonable path to follow. And the IECC provides that pathway. The IECC is set up in the same format as the other International codes, the family of I codes that we're currently building under. And the building industry is very familiar with that pathway. So this would be in the same format. What that means to the building industry is better compliance to this code, because it's better understood. Better compliance means better performance to the code, which means better energy efficiency. In all, we're getting better efficiency through a better performing code.

There is an amendment proposed through the IRC. It was briefly mentioned previously. This addresses the adoption of Chapter 11, which is the residential portion of the IECC basically. This can be adopted also very easily to where we're at in the process. So I wanted to throw that out, that that is out there.

Educational classes throughout, such as the National Association of Homebuilders has quite a few educational classes on green and energy; and these classes are being taught with the curriculum to the international codes. And I teach one of those. In fact, I'm going to teach one next week. And it gets really confusing when we have to introduce the Washington State code into these educational opportunities. And they're growing each year. So, as we go along and they increase, it's really important to be able to gear toward the international codes.

Lastly I want to say it would really be irresponsible of us to just push a code through with so many amendments and we haven't even really addressed any amendments to the IECC. So how can we really intelligently adopt a code. So what we're asking is just a fair and equal review of the IECC for serious consideration of its adoption.

Maureen Traxler

At this moment, I'm not speaking for my employer. But I want to object to what's going on right now. This agenda item is billed as "Results of a Special Hearing on Energy Code." And it's turning into another hearing on the energy code. The notice of that was not made public.

Second, I want to object...I'm kind of appalled that you're even considering adopting the 2009 IECC so long after the deadline for code changes. It was March 1. Lots of people have spent a lot of time relying on your decision not to adopt the IECC this time. The TAG has spent days reviewing code change proposals to the state energy code, not to the IECC.

If you want to consider adopting the 2012 IECC, now would be a good time to do that, give people a chance to review, to submit proposals to the IECC. To adopt the 2009 now, I think it's irresponsible.

Brian Minnich, Building Industry Association of Washington (BIAW)

I want to thank you for the opportunity to address this issue. The BIAW, and I spoke briefly to this issue yesterday during your committee meetings, supports adoption of the IECC. We think now is the time to do it. If you consider specifically the legislation that was passed this year, 5854, and look at the specific language and the goals within the bill, which says that essentially starting in 2013 that the Council shall adopt state energy codes from 2013 through 2031 that incrementally move toward achieving the 70 percent. And I won't read the rest of that. But I think it gives you that window to adopt the IECC. Certainly the Legislature thoroughly debated this bill. I assume that the Governor will be signing this legislation shortly. But in this legislation and revisions, the Council put the state on course starting in 2013, with the end goal of 2031 hitting the end goal of the legislation, which was the 70 percent number, which I believe does give you the ability to put yourself on a track this year to adopt the IECC.

From the builder's perspective, what we see at the federal level, talking to the National Association of Homebuilders, Kraig indicated earlier in terms of what's happening with the federal legislation, a lot of what is being geared to at the federal level, in terms of an energy code strategy, is being tied to the IECC. And it seems to make sense that the state of Washington would be part of that effort. Otherwise we're going to be in this continual Catch 22 of comparing apples to oranges, and that is our WSEC comparing it to what other states and the federal government is doing in regards to energy efficiency requirements across the country. And we're always going to be in this, as I said earlier, the Catch 22 of trying to compare our state energy code to what may be required in federal legislation. And it just makes sense to us that, you know, let's go with the IECC. It makes sense to do that. As you discussed yesterday, that's certainly not an easy process. We understand that. But we think that, based on the fact that the legislation passed with this specific wording, the Council has some window to do that and some flexibility now to put the IECC in place and be able to accomplish that and meet the goal of this legislation.

Kim Drury, Northwest Energy Coalition

I too participated in the public testimony in late March, and appreciate how well and accurately it was represented in this very long document. I could reiterate the same points I made then, but I hope you've all had an opportunity to read the actual testimony that was delivered then during the public testimony that actually had public notice.

I'd like to just speak to a couple of points that I think were not quite accurate. The legislation that was just adopted hasn't been signed by the Governor, but we anticipate it will be. Respecting the 70 percent target, there's also another target that the Governor has set for the current code cycle to achieve a 30 percent improvement. All that work is underway, as Maureen Traxler just mentioned. The TAG's been working very hard on meeting that target. So the 70 percent wasn't meant to nullify that by any means, because I've been very closely involved in the legislation that the Governor's about to sign. So that's certainly not correct.

So I would just like to reiterate that there's been a lot of work already done to meet the current target of 30 percent that the Governor has requested by the TAG. And I think that work needs to be respected.

And the other point that I would like to make is that the federal recovery stimulus dollars that's out there is available to states who have adopted the IECC **or codes that are comparable or better**. So that's not an issue for Washington State or Oregon or California, who do not have the IECC.

Tom Kinsman asked Kim to speak more about the Governor's request. He asked if that request is channeled through the Legislature. Kim answered that Chuck Murray will address that more directly.

Chuck Murray, Energy Policy Division of CTED

You know, I think all the smaller arguments that go along with whether or not you adopt the I codes and when you adopt the I codes, I think are well covered in a printed document you've all had time to read.

The main concern here for us is that we carry through with the current 2009 WSEC amendment cycle. This is the direction that the Council gave people that were proposing energy code provisions for the

state of Washington early this year. I went over the minutes, and the Council seemed very intent on working on the WSEC prior to the March deadline.

With respect to, you know, all the legislation that's been bantered about here, nothing in any of that legislation really directs the State Building Code Council to do anything different than they could have done before any of that legislation went forward. There are suggestions, if you look at it, but ultimately the decision is still in your hands. And, quite frankly, it was in your hands before. So nothing much really changed.

I guess one component that I'd like to address specific to the adoption of the I codes, is that I've heard no discussion whatsoever about the accompaniment of the commercial ASHRAE Standard 90.1. It's a package deal. You get that with the I codes. You end up with two energy codes then. And I think you should have a thorough discussion about that particular provision before you move forward.

And finally to talk to Tom's question, the Governor's Office has stated in public forums, several press releases and public events, that she will be requesting that the State Building Code Council consider a package of code changes that achieves 30 percent improvement in the coming code cycle. Once again, you know, the Governor can't tell you what to do. The Legislature does. However this is her quest for follow-through on a policy decision to move the energy code forward. It's based on a lot of work done by a large committee, the Climate Action Team. And just to speak to why going early is very important, we're trying to reduce the carbon emissions in our state. And you don't do it by in 2030 achieving a 70 percent improvement in the state energy code. You do it by building a population of buildings over time, over the 20-year time period we're looking at, that do as well as we can do. And this 30 percent, while we can talk about how much of that's achievable in this particular code cycle, it's the target that's most typically talked about in public and the federal government. It's the target talked about at ASHRAE meetings. And that's why it's been referenced by the Governor and the CAT.

Chuck asked Tom if that answers his question. Tom said the Governor has spoken about that. But she hasn't directed the Council to consider it. There's no formal communication. Chuck agreed. He said he's been involved in writing a draft. Tom asked if that's pending. Chuck said he expects the Governor to deal with it after all bills from this session have been signed.

Pat McBride

Thank you for taking the time to hear our comments. I presented a letter to you, in front of you, from the Master Builders of King and Snohomish Counties. I think that's similar to what we presented at the IRC [TAG]. I think there are some items I just wanted to highlight.

Many of our member companies have expressed a great concern due to the unknown costs associated with adopting these energy code requirements. Therefore I think that the following points you should consider as a State Building Code Council, having been a member of your group and enjoyed that association a great deal.

Right now the IECC has been adopted by 40 states. Idaho just recently adopted; updating 39 to now 40. It's supported by the U.S. Department of Energy, which provides software, compliance tools, training, technical support, etc. And I think that's very important.

All the time that I spent on the Council, I heard many times how great it was to have a compendium of codes prepared for us to review, rather than launching off into the wilderness on developing codes. And I think that it's time for us to adopt the IECC.

This is a national code. It's developed on a consensus basis. It brings to the table large numbers of concerns that our state can't possibly reach, because we don't have the breadth and staff support and resources to be able to do it. And I think that that's a very important issue that you should consider. Having national codes and having them reviewed. And the transparency of that process is very important.

It's also important that the national green building standards establishes the minimum for certification and they reference the IECC in these processes. Many of the national manufacturers gauge their products to these efficiencies. So we're kind of off the gold standard. We're out here doing our own thing. And it's another good reason for us to get aboard with the national code.

The IECC is named in the American Recovery and Reinvestment Act that was passed by Congress. And that standard meets the stimulus fund requirements.

It is advantageous for builders, competitively in this economic downturn, to have common standards. It's important not to add additional pressure to the housing sector of our economy by raising the bar and placing affordable housing even that much farther beyond the reach of the families that are looking for

housing, whether it be their first-time house, or their move-up buy house, or their dream house. We just keep moving the bar.

We presented this letter to you. There's a couple of additional comments that I want to make that I think is critical in your thought process in decision-making. If we really wanted to reach the kind of goals that the Governor has made us in her statements, why are we not including existing construction? Why are we not improving existing construction, even to a percentage of those standards that were stated for new construction, which is going to be a very slow contributor to the housing sector in the next three years. I'm hearing that it won't turn around in our state until 2012. That's a very long time to continue to add added pressure and to keep the housing affordability away from our families.

If we adopted the IECC and we placed these requirements on existing construction, and we placed incentives to adopting it like we did in the Energy Star programs, etc. in the past, it would be a huge stimulus to the housing sector of our state.

I think these are matters that you want to consider as Building Code Council members. What's the best for our state? What's the best for our residents? How do we get people in homes and home ownership? How do we get them in other rental and leasehold conditions? Housing starts and generates the biggest portion of our economy. It's time to really consider them.

So thank you for your time. Appreciate the opportunity.

Tien Peng said, as a homebuilder, he's very sensitive to cost considerations. He noted that if Washington State adopts the IECC, it will be substantially amended, so much so that it won't even resemble the document supported by the Department of Energy. Pat said the reason why Washington isn't considering the IECC for adoption now is because it was published late. However, he continued, that doesn't mean that it shouldn't be considered. It is a current, proactive energy code compliance document that's relevant and has had tens of thousands of hours of input to reach its current stage. In Pat's opinion, not considering it is not in the best interests of the citizens of Washington.

Mari Hamasaki questioned Pat about his statement in the MBA letter, "already includes a twenty percent energy efficiency improvement above what Washington currently uses." She asked if the comparison was to the 2009 IECC, the 2006 WSEC, involved residential or commercial. Pat answered that the comparison was limited to residential.

Matthew Todd

I come to you as a representative of the Air Conditioning Contractors Association of America. And I'm also a practicing professional engineer in Washington and Oregon States. And I'm an elite accredited AP. So I have a perspective to draw to the marketplace issues involved with the energy codes.

My main thesis is that the code shouldn't be a market driver. It should be a standardization. And what it appears to be is Washington State, being recognized as a leader in energy efficiency, wants the code to drive that, where we already have several other initiatives in place nationally that are doing that separately, the primary one being LEED in the commercial environment, which is also stretching into the residential environment.

The problem is that by getting ahead of the curve, if you will, because the rest of the nation has caught on to this. The LEED is working. The rest of the country is starting to get the idea. And by being too far ahead, you're outpacing the technology. In HVAC, we see that more than anybody else. Right now the current Energy Recovery Act is paying for 15 SEER equipment. A lot of that equipment is estimated to not be operating as well as the 13 SEER equipment because it's not installed properly. And the reason for that is the higher efficiencies require a lot more fine-tuning on the refrigerant charge and the installation. And there's nothing in the code that's really ever going to address that. So code doesn't necessarily get the job done. It's thought that even if the existing systems were operating correctly and maintained correctly, we would gain more energy efficiency by far than establishing new energy requirements for new equipment.

So that's the reality in terms of us getting the actual energy savings at the meter. I'm not sure we can mandate that with code. And the one fear that we have as contractors and engineers is there's a very subtle difference between being on the leading edge and being on the bleeding edge. And Washington State doesn't want to be that, I don't think.

You need to have access to the technology. We all know that new technology is going to be higher dollars. That's accepted. I think there's an understanding that there's going to be a little bit more money involved in order to get these efficiencies. But we don't want to be so far outstretched that we can't ever get the stuff to work. And that's one of the things that's being discovered right now. LEED is a market initiator. That's the purpose that it had, to come out and try to drive the market in a direction. It's already working. But there's many, many LEED gold and platinum projects that are having issues right now because they were initiating new technologies. It's not to say they can't make them work. It's just there's additional cost above and beyond the energy to actually keep them working. And I think we need

to recognize that. It's great to go ahead and throw in a very expensive system and make our consumers buy that and pay for it. It's a whole other thing to keep it operating.

And then I'll talk about the effect on LEED. There's another subtle effect that I think affects all of us as taxpayers. Washington State has mandated that its funded buildings need to be LEED silver certified. In the new LEED Standard 3 is 110 points available within LEED. Nineteen to 21 of those points are driven by optimization of energy performance. If we're out ahead of ASHRAE 90.1 so far as our initiator, the only reference in the LEED standard is to ASHRAE 90.1 as the associate **or** the local code, if it's more stringent. Which means, if we lead ahead of ASHRAE 90.1 too far, we are already having to take points away from our opportunities to meet that LEED Silver. That means the taxpayers of Washington and the people who are using these buildings have to pay for that. And it's easier to get those points if we're in synchronization with the national codes than it is if we're way ahead of them.

The national codes are being pushed forward. There's an initiative already nationally to make that happen. I'm not sure we want to be that far ahead, because it's going to cost us money that we can't necessarily have. And investing in these new technologies that are far ahead of everything is a lot harder to implement and install. So I think we need to be very cautious about that.

Secondly, it affects the permit process. If we, on the average installation, decide that we're going to be this far out, what's going to be tending to happen, and already is occurring, there's a general knowledge that in the permitting process, we're driven away from the permitting process because of dollars. There's going to be two choices, either to meet this standard or to ignore it altogether. And the two ways of ignoring it are avoiding the permit process and operating illegally or to not build. I don't think either of those options are options that we really want to entertain. But we might force them by staying too far ahead of the processes.

Tien asked for clarification that increasing energy efficiency by 30 percent has detrimental ramifications. Matthew answered that's correct. He said Department of Energy studies indicate right now if we just ran the buildings we have under their current status the way they're supposed to be, we could get as much as 30-40 percent energy savings right now today nationwide. And that's not even happening. And that's because the technologies in those existing buildings are beyond what the people operating them are willing or able to operate. So if we jump ahead another quantum leap, think about how far we've taken that body of knowledge away from the possibility of running them correctly. What tends to happen is people decommission advanced technologies that they can't make operate correctly. And the whole point of these designs is to keep more people more comfortable and keep them in buildings. Well, at the end of the day, a building owner is going to keep his tenants in a building before he's going to worry about the energy costs, because that's a much higher cost to him than the energy is."

Michael Lane, Lighting Design Lab

I'm not going to speak whether you should or shouldn't adopt the 2009. I'm going to strongly recommend, as a member of the 90.1 Committee for the last eight years, that you seriously consider adopting one of the national codes from the standpoint of the current process.

I submitted six proposals, and most likely all six in some form will go through. There isn't the checks and balances that ASHRAE goes through in a public review process. It's a very slow process because of what they go through. A proposal is submitted. It goes out for public review. The public has 45 days to submit written comments. That isn't something that happens in the review process right now in the state of Washington. It happens at the TAG meeting. The information gets out there. There really isn't this checks and balances.

There're also fairly large committees. Some committees at ASHRAE work very well; and some committees at ASHRAE don't work very well together. The Lighting Subcommittee is one of those that does work well together. And there's a dozen or so people on that committee. And so, if something does get up, again, even at the committee level, there're those checks and balances.

The Lighting Subcommittee in 90.1 has done a very good job of keeping the IECC looking very similar to ASHRAE 90.1. I can't say that for the other disciplines.

Basically what I'm saying is, whether you do the 2009, if you don't seriously look at the 2012, get into a process where there are some of these checks and balances, especially as we push the envelope - I'm not sure what the lighting metaphor would be on that - to get these 30 percent and 60 percent, 50 percent, 70 percent savings. We need some of those checks and balances in place that we can get from a nationally recognized standard.

Paul Burckhard, Lozier Homes Corporation

I'm also a sitting member of the Residential TAG, representing homebuilding designers.

Last month, I spoke at the Building Code Council meeting and asked that the Council take a serious look at adopting the IECC in place of the proposed amendments to the WSEC. At that time, I spoke about the need for uniformity in our building codes.

Since that meeting, I've taken the time to attend a number of Energy Code TAG meetings and have come to realize that the Energy Code TAG is really in the process of writing a new code for the state of Washington. They've taken the policies from the energy efficiency and green building implementation work group of the Governor's Climate Action Team, that recommended that our state improve its energy efficiency, and used them as a mandate to rewrite the code, including a 30 percent energy savings in this current code cycle.

Because of this, I feel the process and the mandate they have been working towards is flawed for the following reasons:

1. The current TAG process, although open to public input, does not encourage input from the industry groups that will be impacted by these proposed changes.
2. Many of the new proposals are going to cost the homebuilding industry thousands of dollars to implement at a time when we are struggling to survive a desperate economic downturn. It will mean fewer buyers able to afford new or already more efficient homes. I've attached here a copy of some studies our company did regarding a proposed chapter in the new energy code, Chapter 9, that would be used as a chapter above and beyond the normal energy code requirements as a pick and choose to improve mechanical efficiency. The cost can be substantial, depending upon what you choose to earn the number of points required.
3. The Washington State Legislature took up the issue of energy efficiency this year and passed Senate Bill No. 5854 that, among other things, mandated that the Council should adopt energy codes from 2013 through 2031 that **incrementally**; and I want to note the word "incrementally," move towards achieving 70 percent energy reduction in annual net energy consumption as specified.

The way I look at this, if we started with the 2006 state energy code as our baseline, from 2006 to 2031, we've got 25 years to obtain a 70 percent improvement. With three-year code cycles, that gives up about 8.3 code cycles to achieve a 70 percent improvement. That would average about an 8.5 percent improvement per code cycle. And we're trying to attempt a 30 percent code increase in this one cycle.

The 8.4 percent increase is certainly something the industry could live with. And the IECC already provides more than this in its current form.

Again, from the bill 8554, if the Council determines that economic, technological or process factors would significantly impede adoption of or compliance with this subsection, the Council may defer the implementation of the proposed energy code update and shall report its findings to the Legislature by

December 31 prior to the year in which those codes would otherwise be enacted. This seems to me to give the Council opportunity to step back and, at this time, study the IECC.

Finally, from bill 8554, the State Building Code Council shall evaluate and consider adoption of the IECC in Washington State in place of the existing state energy code. That was an amendment that was added to this bill prior to passage, which says that this Council **shall**, not may, but shall, consider adoption of the IECC.

In conclusion, I feel the current direction the Energy Code TAG is taking is very one-sided and flawed and not facing the reality of the economic condition of our state and its construction industries are facing. A more incremental approach to improve the energy efficiency is needed. The best for accomplishing this is the new IECC.

Peter invited Kristyn Clayton, the Chair of the Energy Code TAG, to comment.

Kristyn Clayton

Kristyn said, given the number of energy code issues to discuss, the length of the discussion may be an hour or longer, especially with questions and answers. She asked if the Council wants to get something else out of the way first.

Tim said there is a committee recommendation about the energy code. It was discussed at the committee yesterday. A public hearing has previously been held. Thus, Tim said the issue can be deferred.

Peter announced the vote at the May 6 meeting of the Mechanical, Ventilation and Energy Codes Committee about the IECC versus the WSEC. He said a motion was made to retain the WSEC until 2012, at which time the IECC would be reviewed. That motion failed, 3 aye to 2 nay.

It was decided to take a break from energy and discuss the recommendation of the Mechanical, Ventilation and Energy Codes Committee, excluding energy.

ENERGY

Tim commented that the same procedure isn't applicable to energy. The package will not be moved forward at this time, until after the policy issue is decided.

Kristyn commented on some of the previous testimony. She said the percentage of the built environment stock that existing buildings represent at any given time is 95 percent or greater. As buildings are audited, Kristyn said it becomes clear existing buildings don't operate the way they were designed. Despite how good a code is, the fact remains that existing buildings don't operate efficiently. Kristyn said she's in favor of changes made to the built environment for climate change and energy conservation including existing buildings.

Kristyn confirmed Tim's comment that energy code proposals won't be voted forward today. She said one of the questions she'll ask the Council later is how to package energy code proposals that are moving forward in a way that's manageable for the Council to work with.

There are three distinct paths for energy conservation that are simultaneously converging:

1. A 30 percent increase in the stringency of the WSEC. Code change proposals were prepared and submitted with this goal in mind.
2. The IECC, including energy provisions of the International Residential Code and the commercial IECC that includes ASHRAE 90.1, and the focus of Washington State moving to the IECC. Such movement has been considered for many years. Four years ago, a study concluded that the IECC would have to be so heavily amended to achieve comparable stringency with the WSEC that it was in the state's best interests to continue on with the WSEC. Kristyn said while there were some suggestions, testimony, opinions offered back then, it was **nothing** like what's heard today. She thanked the public for participating in the process. One voice not repeating today after the public hearing a few weeks ago is the ASHRAE voice. That person, as well as the local ASHRAE representative, recommended against not moving to the IECC.
3. The green and climate change path. Green is becoming mandated. It's becoming a consideration that touches so many other things, similar to the built environment.

Kristyn asked everyone to mentally separate those three paths as the Energy Code TAG moves forward.

The number of proposals facing the Energy Code TAG is 172. Kristyn said those proposals initially underwent a filter process to prioritize them. Given the enormous task facing a voluntary group of

TAG members meeting once a week, it appeared impossible to get a package to the Council and the Legislature by the August 5 deadline.

So far, the Energy Code TAG has looked at 25-30 percent of the code change proposals referred to it. Kristyn said the TAG is making progress. It's identified the loop and big ticket items that answer the Governor's request for 30 percent increased stringency this code cycle. Those proposals also make big philosophical changes to the code.

Speaking to the small business concerns that suggest the Energy Code TAG needs a more indepth process to address small business concerns, Kristyn said those concerns are valid. She said because the energy code is so highly technical in nature, it's not possible for the Council to pick apart every technical aspect of every proposal before it's moved forward. There would be no WSEC if it were continuously reviewed in public hearing.

Kristyn said the Energy Code TAG will be requesting an economic impact survey from the custom window manufacturers that have been present at the meetings. But the TAG has to get through the bulk of the code proposals to identify which affect those manufacturers before that economic impact can be determined. The TAG's not quite there yet. Kristyn expects the bulk of the proposals to be done by June. Residential proposals will be addressed first, followed by commercial proposals.

Kristyn said the TAG has not quite yet identified those code change proposals it would like to move to the ICC. She said the TAG is aiming toward the June deadline for submitting proposals amending the IECC. Because between now and that deadline there is no Council meeting, Kristyn asked if the Energy Code TAG can move proposals to the ICC on behalf of the state of Washington.

Tim said it's been the policy of the Council to move changes forward to ICC that have been through the Council process and identified by TAGs as appropriate to move to ICC. He said the Energy Code TAG has authorization to submit those proposals directly to ICC on behalf of the state. Kristyn thanked Tim for the clarification. She said the TAG will send the Council an e-mail notifying them before such submission.

As discussed yesterday, Kristyn said there are code change proposals that are predominately green in nature, affecting water and night sky. While such issues are important, particularly since legislation dealt with them this session, Kristyn withdrew her suggestion made at yesterday's Committee meeting to continue discussing them now. She noted that a Distributed Generation TAG has been approved by the Council but has yet to meet. Either the scope of the Distributed Generation TAG

may be broadened or a new Sustainability TAG may be requested in the future. Kristyn repeated that while these issues are important, now is not the time to address them.

Many of the proposals before the Energy Code TAG rely on a redefinition of residential construction in Washington State. Kristyn said Council direction is needed today, whether or not to continue on the path already started by the Energy Code TAG, to redefine residential construction similar to how the International codes define it. Tim suggested a motion. Mari asked that the IMC and VIAQ be included in the motion. Tim agreed.

Motion #6:

Don Jordan moved Council approval of the Energy Code TAG continuing with a “residential” redefinition aligning with the International codes. Residential buildings in the residential chapters of the Washington State Energy Code apply to buildings built under the International Residential Code, and other residential buildings built under the International Building Code will be addressed in the nonresidential chapters of the Washington State Energy Code. The same “residential” redefinition would also apply to the Ventilation and Indoor Air Quality Code. Tien Peng seconded the motion. The motion was unanimously adopted.

Kristyn thanked the Council for its patience. She said this is an unprecedented effort that will be historic in nature. Our present environment is undergoing drastic climate and energy conservation changes.

The goal of the Energy Code TAG is to submit a package of code change proposals at the July Council meeting that the TAG proposes move forward to public hearing.

Kristyn said today’s discussion has helped her identify five really distinct typologies in which to separate energy code change proposals:

1. Basically administrative, to generically clean up, refresh, ensure the most updated versions. These proposals will be forwarded from the TAG to staff.
2. Relating to the 30 percent stringency increase in the WSEC this code cycle.

After today's testimony, the Council needs to consider whether 30 percent is too large an increase.

3. Philosophical changes, such as the "residential" realignment.
4. Highly controversial proposals that lack TAG consensus.
5. Small business impact.

Kristyn suggested using these five typologies as a way to organize energy code proposals for Council consideration. She welcomed changes or additions, saying this list is flexible.

Peter said the question is which direction the TAG should proceed, Kristyn said the current direction is to address all 172 code change proposals, if not by July, at least this year. She said she heard earlier to continue with the primary goal of achieving a 30 percent increase in WSEC stringency this code cycle.

Mari asked Kristyn if she agrees with the previous comment that the voluminous number of energy code change proposals equals rewriting the energy code. Kristyn agreed that it does, since the proposals encompass almost all sections of the WSEC.

Angie Homola raised a point of order. She expressed concern because today's meeting was not publicized as a public hearing. Despite that, the agenda item, "Results of Special Hearing on Energy Code," turned into a public hearing. It's probable that because there was no publication, many people wishing to testify about the energy code missed an opportunity to present their testimony. Angie said that's important because the Council will make a decision based on public comments that are incomplete.

Kristyn asked for Angie's indulgence in postponing the question of public process until later in the meeting. Angie agreed, saying her concern was prompted by Maureen Traxler's testimony. Angie said the later publication of the 2009 edition of the IECC made it impossible for the Council to consider adopting it this year.

Kristyn said some energy code proposals were written to amend the IECC rather than the WSEC. But she said many code change proposals align sections with ASHRAE 90.1, with the IECC, or with the IRC

If the IECC is adopted by the Council in the future, Kristyn said that code won't be a stand-alone baseline because the Washington statute doesn't allow an energy code in this state that is less stringent than the WSEC. So any code package the Council goes with will basically be a new code, requiring retraining by

designers, building officials and inspectors. That is true unless the Council decides today to not entertain the 30 percent stringency increase in the WSEC.

Tien said that is the essential question, whether the WSEC today must achieve a 30 percent stringency increase. He noted that increase isn't a mandate. Rather it is a request from the Governor, a suggestion. Tien said the Council's answer to that question will determine whether or not the IECC needs to be adopted now.

Angie said she doesn't believe the question is adopting one or the other, the WSEC or the IECC. She said the Council absolutely needs to adopt a revised energy code that moves in the direction of the 30 percent increase this year.

Tien questioned whether the Council has to move any energy code proposals forward this year. Tom Kinsman said the bottom line is: codes will move forward, getting more stringent, whether at the national or local level. He said the important question is whether code users face two enormous code changes, one closely after the other. Going with the 172 WSEC proposed code changes that substantially amend the WSEC represents an enormous retraining for energy code users. Then when the IECC is adopted in 2012 or later, there will be another enormous retraining of code users. Tom said it's a real problem doing two big code changes too closely together. Ideally they should be 10 or 15 years apart.

Motion #7:

John Cochran moved Council adoption of the 2009 International Energy Conservation Code, delaying enactment until July 2011 and maintaining the 2006 Washington State Energy Code during the interim period. Of the 172 proposed code changes amending the Washington State Energy Code, only those applying to the IECC will be acted on.

John said that gives the Energy Code TAG and Council an additional year to consider how the 172 code change proposals relate to the 2009 IECC.

Tien Peng seconded the motion.

Dale asked if the Energy Code TAG will still review the 172 code changes to the WSEC, so that the WSEC, as amended by however many of those 172 code changes are adopted, will be brought forward to amend the IECC in 2012. Dale expressed concern that if the current process isn't continued, energy code provisions will be lost.

Kristyn said the volunteer Energy Code TAG meets every Friday for about six hours. She anticipated continuing that work every week into fall 2009 probably won't happen. If the July deadline set for submission of energy code change proposals to the Council is eliminated, TAG members will probably back off and meet every other week.

Kristyn said there is different terminology used in, as well as different philosophies between, the IECC and WSEC. Therefore amending the IECC to meet WSEC stringency involves both wordsmithing and reformatting changes. Kristyn believes there is a good likelihood the Council will have to pay a third party to have an amended IECC presented to the Council by June of 2010. It will then be possible to hold public hearings in the fall of 2010 and adopt an amended IECC by July 2011. However Kristyn said the motion needs to be amended to hire a third party to complete the work after the Energy Code TAG reviews the 172 code change proposals.

Tim said, based on the motion on the table, in order to make amendments to the 2009 IECC, the Council is obligated to open up a period to accept code change proposals. Following the traditional submittal date of March 1 of each year and the standard three-year code cycle, the deadline for proposed code changes to the 2009 IECC would be March 1, 2010.

Angie spoke to the philosophies involved. She said she was a contractor, a builder and an architect. Now she's looking at her children and grandchildren. She said climate change is a very, very important issue facing today's world. Washington State is currently on a path to do something about it. The state has been a leader in energy policy. On the other side of the coin, Angie recognizes the importance of standardization from her background as an architect and someone who has to work with codes. Making the IECC comparable to the WSEC involves a tremendous amount of work. Angie pointed out that the energy code is a minimum code. She said she would hate to see the Council move down in a minimum code.

Practically speaking, Angie said adopting the IECC in 2011 isn't possible. She advocates 2012 adoption instead. Angie recommends following the current process, determining if a 30 percent increase this cycle is reasonable and involving the building industry in that decision. She also suggested that the Energy Code TAG concentrate on only those code change proposals out of the 172 that most closely relate to the IECC, allowing an easier move in 2012. But Angie favors adopting the 2009 WSEC now.

John Cochran said he understands that the WSEC and IECC are presently closer together than they've ever been. He's concerned that if the 172 proposed amendments are made to the WSEC, the two codes will again grow apart, and this discussion will repeat in three years. He questioned Washington State's leadership, reminding everyone that 40 states are using the IECC. He suggested leading at the national level, rather than rewriting and reinventing a state code.

Amendment to Motion 7:

Tom Kinsman moved enactment of the International Energy Conservation Code in July 2012. John Cochran accepted that as a friendly amendment.

Don concurred. He said the huge number of differences between the WSEC and IECC make meeting a July 2011 deadline very difficult, if not impossible. The impact on the Energy Code TAG workload is significant.

John Chelminiak asked for clarification of the process, with the adoption of Motion 7, for considering the 172 energy code change proposals currently before the Energy Code TAG. Further, he asked what the process is for future amendments between now and 2012 when the IECC is implemented.

Kristyn offered her opinion. She spoke in support of Tom's friendly amendment to move adoption of the IECC to 2012. She suggested that the Energy Code TAG continue to look at the 172 code change proposals because they tighten up the WSEC. She believes it would be a disservice to everyone not to continue to consider those proposals in their current state with respect to the WSEC. Noting the discussion has veered off the question of whether a 30 percent stringency increase is attainable this code cycle, Kristyn said she assumes that's still a valid goal. Again, she predicted fall completion of the review. If the July deadline for Council submission is changed, that would allow additional breathing room. After reviewing the 172 code change proposals, Kristyn said the 147 from 2005 have to be revisited to see if they still apply.

Kristyn noted that Washington State doesn't align with any national code on climate zones. She said that may require legislative action in 2010. And there may be other issues that also require legislation.

Kristyn said she strongly believes that a third party will have to be hired to reformat the IECC and set it up so the Energy Code TAG can amend it for all the proposals relating to that code. That process likely means Energy Code TAG work every other Friday through the end of 2010.

Angie said trying to pick the appropriate code doesn't eliminate the responsibility of updating the current code to increase efficiency, windows, insulation, mechanical systems, everything moving toward the 30 percent goal and ultimately the 70 percent goal. Because she hates to see that lost for three years, Angie proposed a friendly amendment.

Amendment 2 to Motion #7:

Angie Homola moved to reduce the 172 code change proposals amending the Washington State Energy Code to those that relate to the International Energy Conservation Code, incorporating those into the 2006 Washington State Energy Code and updating that edition to the 2009 Washington State Energy Code, then subsequently adopting the International Energy Conservation Code in 2012. Dale seconded the motion.

Kristyn objected to that friendly amendment, saying amendments relating to the IECC don't have anything to do with the Governor's request to achieve a 30 percent stringency increase in the WSEC. She said the current path of the Energy Code TAG, that it's been on for eight months or so, has been to review stringency and philosophy differences between the WSEC and IECC. Approving the above friendly amendment negates all work done to date on achieving the 30 percent stringency increase.

Jerry Mueller asked why the Council doesn't adopt the 2012 IECC instead of adopting the 2009 with amendments. Kristyn said that's a good question. John Cochran answered that adopting the 2012 code in 2012 makes the effective date 2013.

The question was called for on Amendment 2 to Motion #7. The amendment was adopted, 10 aye to 1 nay.

The question was called for on the original, amended Motion 7. The motion was unanimously adopted.

MINUTES
ECONOMIC & REGULATORY
ASSESSMENT COMMITTEE

Date: June 15, 2009

Location: Seattle Area Pipe Trades, Seattle

Economic & Regulatory Assessment Committee (ERAC) Members Present: Dale Wentworth, Chair; Tom Kinsman, Vice Chair; Jon Napier

Visitors Present: Tom Young, Tom Nichols, Greg Staats, Paul Burckhard, Chris Winslow, Eric Lohnes, Garrett Huffman, Chuck Murray, David Baylon

Staff Present: Tim Nogler

CALL TO ORDER

Dale Wentworth, ERAC Committee Chair, called the meeting to order at 10 a.m.

REVIEW AND APPROVE AGENDA

The agenda was reviewed and approved as written.

Tim explained the process of the Economic Committee, a standing committee established in the Council by law to review items identified by the TAG as having a more than minor economic impact. The first phase of the economic review occurs prior to filing the proposed rules, as required by the Regulatory Fairness Act. In this phase, the committee reviews any items that have a disproportionate economic impact on small business.

Dale indicated a number of people in attendance came to speak about code amendment items. Tim suggested the committee begin with the energy code.

Greg Staats said he would speak for small window makers. He thanked the Energy Code TAG for having a special meeting to address concerns. He said a modified small business compliance table was developed. He said a big problem for them will go away if the Council moves the proposals forward. He addressed the air infiltration table, and a footnote that will mitigate the problem. If these proposals move forward without any significant modification, he said the small business concerns will be addressed.

Tom Nichols said if the Council does not move the table forward, it will be catastrophic for the industry. Without this table, small window makers cannot achieve compliance. There is no way to comply without it.

Dale asked about enforcing the code without the table, for building inspectors. Tom Nichols said for at least the past 15 years they have had an alternative table. He said it will be a lot easier for inspectors. Tom Kinsman asked about consensus, if it was beyond door and window manufacturers. Chuck Murray answered that they also support this. Jon Napier asked Tom Nichols about small piece work on small commercial, does the table account for aluminum framed windows? Tom Nichols said the way it is now, it works. There is a way to get there. Chuck said the table was developed to be consistent with all the other changes moving forward.

Motion #1:

Tom Kinsman moved to support the two items, small business table, and air infiltration footnote. Jon Napier seconded the motion.

Chris Winslow commented that the special meeting addressed a level of frustration the industry feels in the code process. He said there is a lot of impact that is not necessarily represented.

Dale thanked participants for their input.

The question was called for. Motion #1 was unanimously adopted.

Dale asked Tom Young, with the Concrete Masonry Association, to address mass walls. Tom Young said members of his organization include small business suppliers and installers. He described an integral insulated wall, including the design advantage of such a wall. Energy Code Change Proposal #031 increases the insulation requirement by about 175%, requiring an additional wall to be constructed, which may mean a loss of business for the industry. Tom Young said the code change is not cost effective. He wanted to bring forward the impact on the industry and the building owners. When

certain types of facilities such as warehouses or a tire center want to use concrete block, the cost of additional insulation is not cost effective.

Tom Kinsman asks what the intent of the proposed change is. Tom Young said saving energy is driving the proposal. Tom Young said the wall portion of the envelope is a small part of the energy use.

Chuck Murray said no national standard allows a CMU wall with integral insulation only. He said the proposal uses the U-value from the 2009 IECC. Tom Young said in Zone 2 the value is lower, more stringent than ASHRAE.

Dave Baylon said the CMA claims some mass value for concrete block walls. The focus in the last two decades has been to evaluate what that mass value is. He said the focus has been on all materials, to provide the ability to trade off in an accurate way. He said the use and occupancy of the building could be many things. The proposals bring forward a mandatory furring for concrete buildings. Tom Young responded that for most of the buildings they construct, the use and occupancy is known. He cited COSTCO as an example. They modeled walls compliant with the 2006 code and compared it to a wall compliant with the proposal. The energy savings were about \$1,000 per year. The cost is \$100 to \$200 thousand.

Jon asked Tom Young about using a different construction method. Tom Young said that is where the impact on their industry comes into play. He said if a veneer was used to achieve the same look, it would definitely increase the cost. Jon asked about the difference between the proposal and the 2009 IECC. Tom said the IECC has one zone, and allows the ASHRAE 90.1. He said it makes more sense to follow ASHRAE as the most stringent values. He said the proposal does not line up with walls that are actually built. Jon asked about mitigations, to lessen some of the impacts. Tom Young said there is logic in allowing the integral insulated walls.

Tom Kinsman asked if Chuck has seen the COSTCO study. Chuck answered he has not seen that one yet. He is interested in looking at it. Dave Baylon said the models he is familiar with show a savings of \$8 to \$10 thousand. Dave said of all the proposals, this one is the most cost effective.

Tom Young responded that the energy use data shows that the walls don't make a difference. Jon asked about the modeling Dave referred to, if it's based on the 2006 or 2009 codes?

Dale asked about occupancy classification, could the insulation requirement be based on the use of the building? Jon suggested using the ASHRAE values.

Tim suggested the committee determine whether or not there is a small business economic impact. Jon asked about the ASHRAE value, whether that would constitute an energy savings to the state. Chuck also talked about the ASHRAE values. He said there would be energy savings. Tom Kinsman asked if the ASHRAE values are a compromise.

Chuck suggested that the committee refer the issues back to the TAG. Jon asked about 2012, and using the mass values.

Jon spoke in favor of moving the issue back to the TAG to evaluate the mass wall values. Tom Young spoke about the cost analysis. He said the proponent should show that the proposal is cost effective. Dale asked Tom Young if a compromise is to use ASHRAE. Tom Young wanted the committee to pay attention, that there are conflicts with the policy of increasing energy efficiency and achieving cost effective savings. Jon asked if CMA members are small business?

Motion 2:

Jon Napier moved to send the proposal back to the TAG to consider the mass values in ASHRAE and the economic impact of modified values. Tom Kinsman seconded the motion. The motion was unanimously adopted.

Dale asked if there are any more energy issues. Paul Burkhardt brought up chapter 9. He presented an analysis that his company did. He described the proposal, the point system created in Chapter 9. His analysis showed that the cost for points range from \$1,477, to \$2,485 per point.

Dave Baylon said that an alternative cost analysis has been done. He said when he did the analysis, the cost was about \$1,000 per point. He talked about different combinations of measures. For instance, a heat pump upgrade is more expensive than envelope measures. He handed out testimony on costs.

Jon asked if Dave's costs include taxes, commissions, other factors that will make the comparison apples to apples. Dave said he was assuming that the costs would include taxes.

Paul said his "job costs" are actual costs from his subcontractors. Dale asked if the cost addresses the manufacturer of the equipment. Paul said he is not sure type of manufacturer. Dale asked for more information, because it will make a difference.

Paul said the Council will need cost data before a decision is made. Dale tabled the issue for a future meeting, for more information and after the Energy Code TAG report is finished.

Tom Kinsman asked about the Energy Code TAG economic analysis on proposals. Chuck described the cost analysis that was done.

Tim reported the cost issues identified at the IBC TAG and IRC TAG. Both codes contain an amendment related to small business, including a definition of small business.

Paul presented information on fire sprinkler costs, because there are a lot of numbers floating around. He wanted the Council to have available the cost information. Dale asked about the assumptions. The figures are for stand-alone systems. Paul said he wanted to include all the costs to be sure it represented all the costs. Jon asked about meter costs.

Dale said he has heard conflicting information on insurance costs. Paul said the insurance costs are neutral. Jon agreed. Dale asked if the costs agree with what was in the State Building Code Council's 2008 Residential Fire Sprinkler Study.

Tim asked about the plumbing and fire codes. Dale said there is one more meeting of the Plumbing Code TAG. He does not have anything at this time. Jon talked about the fire code. He said there are

several items with a minor cost impact, such as fire extinguishers, fire alerting systems, and major savings for not installing type I hoods in group R2 boarding homes. Dale asked about how many residents? Jon answered that the limit is 16 residents. Dale asked what kind of equipment is being installed. Jon answered that commercial equipment such as deep fat fryers are not being installed.

Jon talked about the means of egress requirements in Chapter 46 for existing buildings, and providing an exception to allow a cost savings for buildings.

Garrett Huffman asked about the purpose of the Committee and what they are planning on doing. Dale explained that the Committee will make recommendations to the Council. Garrett asked about what the recommendations will be. He asked who will get the information. Dale said that it will be a combination, the TAG members with the help from staff to bring information forward. Garrett talked about the costs associated with water meters, and how much they vary. The districts all have their own rules. He said the energy code is going to have a lot of impact. MBA has drafted a letter for the governor showing all the costs that are added up.

Tom Nichols said all the costs have to be added up to show what the consumer will end up paying.

Eric Lohnes said the 172 energy code proposals are an impact and it is important to look at the economic situation, the loss of jobs, construction permits are down from 40 thousand issued annually statewide to 15 thousand. All this is coming at the same time, on an industry that is very cost sensitive. The cost is passed on to the consumers. Thousands of people in Washington are going to be priced out of the market.

Chris Winslow said that costs have to fit in the big picture, if the increase in cost for one measure is \$200 thousand, how does that fit with the whole building. The building may not be built.

Tom Kinsman said it would be good to grab on to the total cost, but it is a mystery. It is a huge cost to consider all the regulations. He suggests making a motion to advise the Council to consider all the costs associated with the full package. Jon said we are not looking at the total costs of the full package. Tom said this year is unique, and it is needed to look at the additive effect, and it would be good to remind the Council. He moved that the Committee remind the Council on the cost impacts of the all the changes, specifically energy code and sprinklers. (No action on this motion).

Chris asked if anyone knows what effect a 20 percent decline in the economy has on the 30 percent reduction in energy use. Garrett suggested the council review an economic analysis that is available. Dale expressed interest. Eric talked about an analysis that takes a multi tiered look at the costs. He said for each residential construction job created there is 1 job created in the economy. He would like to share this analysis.

ADJOURNMENT

Dale adjourned the meeting at 12:15 p.m. Next meeting, July 13, Pipe trades, 10 AM.

MINUTES

ECONOMIC AND REGULATORY ASSESSMENT COMMITTEE

Date: July 13, 2009

Location: Seattle Area Pipe Trades, Renton

ERAC) Committee Members Present: Dale Wentworth, Chair; Tom Kinsman, Vice Chair; Jon Napier.

Staff Present: Joanne McCaughan, Tim Nogler.

Guests: Eric Lohnes (BIAW), Paul O'Connor (Fire Sprinkler Advisory Board), Chuck Murray (CTED), Jarad Maadanion (utilities), John Hogan (City of Seattle), Garrett Huffman (King/Snohomish Master Builders).

CALL TO ORDER

Dale called the meeting to order at 10:12 a.m.

REVIEW AND APPROVE AGENDA

The agenda was reviewed and approved.

REVIEW AND APPROVE MINUTES

Minutes of the June 15, 2009 committee meeting were reviewed. Tom Kinsman said he reviewed the cost documents submitted by Chuck Murray and Dave Baylon. Murray noted that was a draft and there will be a more precise document provided soon; he is working on a new analysis. He added that savings are developed based on energy efficiencies; the cost estimates are primarily collected from on-going utility programs. Most research has been done with electric utilities. Some independent research has been done on gas systems through the Building America program. He noted that Baylon used an analysis based on a 30-year mortgage, with a down payment; savings accumulate over the years, and ultimately the savings exceed all the costs invested for the energy assistance measures. The most challenging model is a small electric-heated house as the savings are not as great. With a midsize gas heated home the savings are realized much sooner, even within the first year. There is about a \$2K investment, but over the life of the mortgage, the savings are four times greater. Baylon's analysis did not utilize the 'fuel escalation rate,' so the data should take that into consideration. The next analysis will be an improvement.

Dale Wentworth asked about the table and the electrical options. Jon Napier noted a review of table two would provide the details. Murray added that a much more detailed analysis will be completed for the Council. Tim Nogler noted there will be additional revised reports from others like Paul Burckhard. Eric Lohnes noted the building community is putting together cost numbers; those will be forthcoming and he expects there will be disagreements and disparity between the various estimates. He indicated that if there is too large a burden on the front end, i.e., increased cost for energy efficiency measures, it will be impossible to recover these costs. The margin is very tight for builders; he believes data will be available within the next couple of weeks.

The minutes were approved.

SMALL BUSINESS IMPACT

Nogler noted staff will be filing the proposed rules to the Office of the Code Reviser by the August 5, 2009 deadline to ensure these are available for the public hearings. He added that several issues with potential impact have been identified. The measures are listed and summarized; the definition of small business is defined as 50 or fewer employees. When proposals are initially submitted some analysis is provided by the proponent, so that is one factor considered. As the proposals are modified through the TAG process, additional information and analysis is provided and estimates are modified. Small business impacts such as the cost of training and potential lost sales or revenue are incorporated. Small business is provided an opportunity to participate in the process, so this must be included in the final analysis. The balance of small to large business involved in the process was considered. They can identify important factors such as the potential gain or loss of jobs resulting from the proposed change.

Nogler stated that staff has the data needed to look at the Energy, Residential, Building and Mechanical codes. Tom Kinsman asked about the implications of the report deadline and whether the (ERAC) committee will have an opportunity for additional input. Napier asked when the committee will have an opportunity to review the information collected. Nogler indicated another meeting may be needed in late July. Since the information is still in draft form the group agreed to meet again. This will be a conference call on July 29 at 10 a.m.; it will be at a monitored site in Olympia, likely at the CTED offices of the SBCC. Details will be sent to the committee and the list of interested parties for the various TAGs.

Napier asked about the mass wall under ASHRAE, i.e., the Young proposal; it went back to TAG. Nogler noted it is a national standard, it is standard practice according to the Energy Code TAG. John Hogan noted there is an assumption that Washington is way ahead of the national level for energy efficiency, but it is not so. He added that the 2006 Washington State Energy Code is not ahead of any national standard for walls; in fact it is less stringent than the national standard. He had submitted a proposal that was turned back by the TAG; the proposed insulation requirements went down. They have tried to accommodate Young's issues. Heat loss is still higher for mass buildings, and they are allowed a lot of credit. Kinsman asked if there was any justification for Young's concerns; he added that the national standards were upped for a segment of the industry. Hogan questioned whether these allowances may ultimately skew the market.

Hogan noted there has been no change for residential. Seattle has had more stringent requirements all along. Nogler clarified that for residential other than IRC, the U-value remains the same .057, it has not changed. Hogan noted the change has occurred in non-residential. Some cost information was

provided by Young at the last meeting; CM will prepare a response, as noted earlier, he has only draft information to share at this time. Some modeling was done by Kennedy, and then Murray did some cost analysis. With the change to R-10 continuous, the wall still is not as energy efficient as other applications in the code. Some savings occur over the base case year; the cost is \$2.65/sq. ft.; the payback cycle is around 15 years, without considering fuel escalation rates over time. This is for block wall facing on both sides. Hogan noted the only place this changes the code is Climate Zone 1.

Garrett Huffman, Master Builders, presented a power point report from the Association: Economic and Residential Real Estate Outlook (attached). He had an opportunity to go over the analysis with the economist who wrote it, however he acknowledged that his own expertise lies elsewhere, not in the economic analysis field. According to the report, the growth rate trended downward from Q3 08 to Q2 09, at a rate of minus 6%. The report included job gain/loss information from Washington Employment Security Department. Huffman noted that compared to Detroit, Seattle is doing much better. Consumer confidence is lower than it has been in the entire decade. US debt is up, having peaked in 2008 and is going down according to the Federal Reserve. Personal savings rates, also known as deleveraging, are trending upward. This economist takes the view that the economy will begin to recover at the end of 2009. Huffman noted that national banks currently will not lend money, however some local banks are willing. Concerns about an economic 'depression' like that of the 1930s are unfounded; there are many safeguards in place that did not exist at that time. Even compared to the 80s, things are not as bad. Home sales peaked in 2005, then dipped. Currently, with the federal tax credit of \$8,000 for first time homebuyers, sales are going up in some markets. Despite this hopeful note, generally home sales are down significantly since 2007. Home values and sale prices raised dramatically in the Seattle market throughout the decade, but have declined sharply since 2008. Some increases are being experienced currently; this is in keeping with the typical pattern of home sales during the summer months.

Napier asked about the escalated cost of housing over several years, i.e., the market increases. He noted if it is positive for builders to experience increases in value, it stands to reason that equivalent savings in energy would also be positive. He wondered if it a market driven issue, or whether builders believe there a 'good time' to have upfront costs. Huffman replied that right now more people are qualified, if you additional costs to install energy savings measures is incorporated now, many likely would not be able to qualify for the home mortgage loans. Napier noted it is the market price increases that would drive folks out of the market, it is much harder to qualify if the housing price is escalating; he added that the impact of the energy efficiency measures results in relatively low price increases overall. These increases are made up with the fluctuations of the market, and it seems like what is being said is that there is not any good time to incorporate these measures. Huffman repeated that it comes down to more people being unable to get into housing; it is preferable to do nothing at all if it would result in increased upfront costs. Napier asserted this is not so simple as it is being made to sound, it is very complicated. Huffman responded that there is no right answer, and although it is a tough time to make

comparisons, market fluctuations are a given. He asserted that fewer people are able to qualify to buy new homes when the additional costs are incurred. Napier noted there is affordable housing available in the existing housing stock, many people qualify for that housing and may be unable to get a new home, but would still be able to find affordable housing.

Huffman asserted the data shows new housing starts have gone down dramatically, 37 percent over last year according to the US Census Bureau. According to the National Realtors' Association, locally, relative home sales declines are much lower compared to other areas; we did not have as large an inventory as some areas, others are much worse off. He added there has been a large decline in 30-year fixed rate mortgages. Napier pointed out that interest rates impact buyers, Murray notes the down payment amounts may increase. Napier added that many complex factors go into this calculation, it is not just one thing that affects the rate of homeownership; that rate has been declining since 2004, before the current economic decline. Currently, banks are actually offering lower interest rates, so while the number of applications is increasing dramatically, the supply of homes is down.

In terms of Puget Sound specifically, Huffman noted that local employment is relatively good compared to other places; public sector is still positive. However, negative employment rates will continue, there needs to be economic growth prior to job growth, certain ongoing capital projects being completed with federal stimulus dollars may help to stimulate the economy. Real estate: listings are down; average prices are not down enough yet. New construction has dropped dramatically. Prices are down to an average of just over \$500 K in King Co. Permits for new building are down, in some cases administrative extensions are being allowed at the local level. Lot prices have declined dramatically, but sales are slow regardless. Forecast: There continues to be lot of market inventory in condos, some will be converted to apartments/rentals; there is more interest in lowering prices and giving buyers other amenities, e.g., parking.

Kinsman noted that the local economic outlook is fairly positive, even if it doesn't hit until next year. It seemed evident that the purpose of the presentation was to make the case that there is no good time to add the proposed energy efficiency measures. Lohnes stated that the economist who wrote the analysis presented by Huffman currently projects that large numbers of single family homeowners will be losing their jobs; at the same time, building permit applications will continue to decline. He noted that when residential construction jobs are created, there is multiplier effect and an additional job is created within the community; this ultimately provides more revenue for local governments. However, when costs go up houses don't get built, and the supply of housing is reduced. Huffman added an example related to the tax credit for windows; if there is demand, manufacturers will try to produce those windows so that the product is available, then they are not likely to layoff their employees.

Huffman asked about the public hearing process and the cost analysis being prepared. He asked whether staff would provide models of the costs that the 'average Joe' will be able to look at and understand how much impact these changes would have. TN noted that these estimates are usually done by producing a formula that results in a price per sq. ft. estimate, and tables are produced. Huffman added there are other costs and/or savings that might be missed or not understood. Murray stated it is really about cost of ownership, and since costs will continue to rise, logically it is better to make the changes while costs are lower. JN noted that there are many factors involved in setting costs, and for some folks who do have jobs this is a good time to buy, and with the lower interest rates they can get a mortgage. He added that energy efficiencies should be built in while the interest is low enough to afford to buy. There are many people in the market who are not concerned about whether or not new housing is built, it may not be realistic to think that more new housing is desired by the public right now. The question that they need to answer is whether to upgrade the energy efficiency measures while the costs are low, or wait until costs are higher again.

Huffman asked if there is 'agreement around the numbers.' Murray answered 'no,' but his low estimate is around \$1 a sq. ft. Huffman again asked if the 'average Joe' will be able to understand what is involved so they can testify on what they think. Napier replied that the work of the SBCC has very little impact overall on the cost of housing; it is minor compared to other factors that impact housing prices; we don't have much control over this. Huffman was adamant that the SBCC has control of what they do and do not require, therefore they do have some control. Napier noted many other building materials and standards have a much greater impact on the price of a home or a lot; nothing the Council does has any impact on the price of a lot.

Dale Wentworth suggested that it would be positive for builders to take this on as a benefit to homeowners; it should make new homes more desirable and bring more people into the market. Lohnes asserted the question is really at what rate we need to change, when it will be done; it is not a question of whether we need to change, we need to do so. However, he also pointed out that at the same time homeowners are going to be experiencing other new costs, e.g., fire sprinklers. Huffman repeated that he wants the staff to offer an analysis of the costs/numbers that would provide the public with the information they need to participate in the process. Kinsman suggested that the builders should look at the numbers provided by Murray and use those to explain their own concerns and identify talking points. Napier concluded that would become a philosophical discussion; the committee needs to provide information for those who are making the policy decisions, not engaging in endless discussions around whose numbers are more accurate. Builders can build better homes that look to the future; it's a good message to everyone. Huffman would prefer to see agreement around the numbers, to get to the point where the question can be asked if this is the right time to take on these changes or not; he is fearful they will not be able to get to an agreement. Nogler pointed out that estimates have been provided around the percent of construction costs. Some of those indicated the total was around one percent; in the analysis for the proposals a significant increase is considered to be more than one

percent. Paul Burckhard's estimates were over two percent for the initial cost; this raised questions; only actual construction costs should be included, not the cost of the lot or other factors.

Wentworth asked about the best way to decipher initial costs. Nogler replied that the estimated small business costs will be considered along with additional figures determined through the public hearing process. Murray added they estimate the energy savings cost first; they begin with an energy model to establish the expected savings in the two climate zones. They incorporate a fuel escalation rate; however, at this time the cost of fuel is estimated to be going down, so this is also going to be considered. If the impact on homebuyers takes a long time to realize savings, it is not a measure that they would promote; relatively quick cost savings are desired. Applying logic, he pointed out that large houses cost more to build and heat because they are larger; smaller houses use less energy. He concluded that at some point they could even increase the cost for efficiencies threefold, and still see savings relatively soon. A year by year forecast is prepared to show the cumulative position of the homeowner over time.

Nogler noted no other reports are available to review at this time. He reminded the group that the next meeting will gather up all the information needed prior to the August 5 filing deadline; it will be a conference call with a monitoring site in Olympia on July 29, at 10 a.m. Details will be provided by mail.

The meeting was adjourned at 12:10 p.m.