U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

Building Energy Codes Program

Building Energy Codes Program Overview
Jean Boulin – U.S. Department of Energy (DOE)
Energy Codes 2009
July 27, 2009
Presentation Video Transcript

SCOTT: So, good afternoon again, Scott Hine if you forgot my name. I would like to, as we are pulling up Jean's briefing, Jean Boulin is the next speaker. Jean has been heading the building codes program within EE, within the department for the past 25 years. He has a Master's degree in architecture from the State University of New York at Buffalo, but more than that, the one thing that I would like to say is Jean is a legend within the building codes initiative program overview in terms of what legacy knowledge, what corporate information he brings to the table. Jean sits about, I do not know, 50-75 feet away from my office. He and I speak often. We run, Jean and I have meetings, probably not enough. My schedule gets pretty full, but clearly it is indicative of the fact that from my point of view, building codes clearly are a direction that we need to go. We need to do some education awareness and outreach and Jean has been a great asset. I truly appreciate Jean's knowledge and background in this area. So, it is my pleasure to introduce Jean Boulin.

JEAN: Okay. Thank you very much. Thank you Charlie. That was very informative. Very good question that we had here, particularly on that coordinating that question on codes and how we are going to handle that and we will have to pay a good deal of attention to that. Wow! You know, we are living in exciting times here. I remember last year I stood up in front of you and we were talking about some pretty serious stuff. Global warming and all of a sudden we turned around and we find that there is an awful a lot of money here to allow us to be able to do some things that we were saying, hey, we have got problems and we in an area here that could really make a difference. Not only in this country, but in the world. Wow! We are living in exciting times. What a great opportunity to shine? Less energy. Less costs. Less carbon.

What I would like to do for a few minutes, the remainder of this session here is to take and look at what the building energy code program is influenced by. That global climate change thing, the national and international economic conditions, which are behind a lot of this stimulus that we are talking about. What we still have and have had for a few years now is the very strong legislative requirement in some existing, some new requirements that are floating around in legislation in our federal government, in congress, some significant progress in goals that we have set a couple of years ago in our code cycles and where we are in that progress and some things that we perceive and we hope we are right in some of your leads relative to these events here. What I would like to do is take those legislative requirements, I have repeated them several times up here in prior years. We are required to split the upgrading of these model codes, key

model codes. We are seeing that in the legislation, legislative requirements that are linked to these financial incentives now that are being put out. So, we are getting this from congress twice around. Determinations about whether these model codes will improve energy efficiency. We really had not done a very good job on that. We published something out here and we will talk a little bit about that and there are some sessions later on that we are going to be talking a good deal more about these things. We are required to provide financial and technical assistance to the states to upgrade, implement and enforce the energy code. That is still around and I would like to talk to you a little bit about how we are planning to juggle some of this stuff with these big numbers that have come around and then, we are required, in our group, to establish standards for energy efficiency and manufactured housing.

Those of you who went on the tour with us today saw how these units are put together in very creative ways. We are now required to work with HUD and get new standards updated for manufacturing houses. So, in the sport of upgrading model codes, I think we are going to hear a little bit more about our standard 90.1 2001 goals, take a look at those programs. They are going to tell you where we are. Why is that important to you now? 2010? When we have this requirement to, commitment from some of our governors to update to 2007, well, it gives you a perspective of where we are going and why it is quite viable to update to 2007 code. Joint effort with ASHRAE. We are going to be talking and getting some input from the ASHRAE people on this. Residential low rise model codes, 2010 IECC. Here, we had a situation you remember last year we talked and many of you were quite familiar and actively involved in the group of advocates that have put together their own goals, 30 percent goal. The department has latched onto that. The community itself to make that a reality and is very strongly working in that area.

We plan to give you some background, so you know what is coming down the road. Multistate coding effort. Manufactured housing codes. We are required to propagate this as a federal code. Some of you who work in the codes area explicitly know about the HUD code. Congress made the decision a couple years ago that HUD had not put these things out and updated them sufficiently and gave us the responsibility. I am really proud to say that we have a very good relationship with HUD. We have been having meetings with HUD on a regular basis and we are going to be working very cooperatively with them to not only put out this energy portion of the code, but to make sure that it coordinates with their other safety features in the code that HUD will continue to publish. Determinations. Well, I have wrong numbers on this thing and I cannot change it. That 2007 really out to be 2004. I made the change and could not save it on my thumb drive when we copied things here, but at 2004, standard was published, determination was published in the federal register in January. That means that under the current legislation, certifications are due to DOE in January 2011.

Lets take a step back here. If congress has gone off and said, we would like the state's governors to certify that they are going to update their code to standard 90.1, 2007, I think our focus really ought to be on the 2007 goal, no matter what the determination that they published in January said. That was before the things began to roll in congress. So, we will work with you to help you not have to duplicate things and we will be getting out a new determination to the 2007 code in January, coming up. Residential codes. We still have some problems there. Our basic problem is all of the technical work is done and straight forward, the technical things a relative to

the IECC 2006 are really a mixed bag. If you live in one part of the country, it really makes eminent sense to update your code to the 2006, but you may remember, cause when we tried to update our code, originally in the 2004 time frame, most of what we were trying to do was to make a much more complex code relatively simple to use, to understand and enforce and in doing so, we said, we are not going to be struggling to make this terribly more efficient.

We are not going to fight those battles. We need to get this thing cleaned up and straightened away and that is what we did and so, there was the basic commitment back at that point in time not to fight a lot of wars about how stringent this or that should be, lets make the thing much more usable as... for interim and then the 2006 standard, so that we really have a mixed bag and in some parts of the country, actions were taken which saved energy and in some parts of the county, in states that had updated their code already, to go to 2006 should be rolling things back and so, there is some good and bad. It has been very difficult to come to a coherent decision on this and make a formal determination. We are going to make a determination relative to the IECC 2009. We have done estimates, broad estimates on that and our criteria for making the termination is to save energy in residential buildings. This definitely will. We are talking about the across the country, on average, 15 percent savings. So, there is going to be a positive determination relative to this code and we would recommend to begin focusing in that area. Financial and technical assistance. Wow! We could talk about numbers that I cannot comprehend. You know, magnitudes that are off my charts.

Recovery Act funding in 2009, 2010, anything we might have had in the program funding for these years, so pales that we are not going to be coming out with any special project funding for this year and I would anticipate, or for next year. So, with this recovery funding, that is going to be funding that we are hoping that will help reinforce and provide the financial assistance to states. Three point one billion dollars that we have been talking about, just a fraction of that does not make any sense to put on there. We do have some money over and above what Charlie has been talking about in the block grants and a small piece of what Scott was talking about here that is going to be used in the area of building energy codes and that is about 13 million dollars. I will talk about that in a minute. Technical assistance. The base program is going to continue in focus on the challenges you have ahead of you. A lot of your governors have certified to the secretary that they are going to take action on codes and we have been talking about that publicly and those actions include, actually, 90 percent compliance coming down the road. So, we are going to help reinforce that.

Our codes program in the base, you will find, as far as technical assistance goes, on our energy codes .gov site, a lot of code proposals that are going into the IECC. You will get some updates on what is happening in ASHRAE. We will be publishing, regularly, information on manufactured housing code. There is a particular link, although it is not in our activities, it is within the federal energy management program to the federal building energy codes, which are also based on any IECC and ASHRAE. We will be coordinating with those people. So, if you have federal agencies that are asking questions about codes, because they are required by the federal government for the federal buildings that happen to be in your states, there is a good deal of coordination. You will continue to find our tools and we are continually in the process of updating those. There is some information out on setting the standards of when that kind of

thing is coming forth and you will find information, training, whatever we have done that can be released, it is going to be on the website. And we will try to put those links into the larger Recovery Act and the grants that may particularly affect codes on those. It will probably send you to the correct sites as to where they are. We are going to beef up our webcasts and training and focus on these codes that your governors have assured we are going to, that they are going to adopt and what have you. We figure why not put that out on a national basis. It is basically the same information. If we can reinforce that and get that to you in programs, we will do so.

We are continuing with setting the standards. We got one the other day. It brought some new information. We hope today, or tomorrow, and the following day, that we will be able to bring this information to you in some detail. Advocacy assistance. ...Stand up over there please. Come on. We have the VCAP people here. Where is... big bearded fellow. There he is! Around. They continue to be a resource to you in the states. Go out and help you sell the game, to tell the story, to provide advocacy to help you build the grass roots to get your things done in place. I know you will all find them valuable and their energy code site is extremely valuable and I found, particularly in the last several months, all of these new alerts and what is happening in the states. Sometimes, it is very useful to understand what is happening in the state next door to you and sometimes, you are not always aware of that, that the other states are doing certain things and that is extremely valuable information.

Okay. Let me come back to the codes Recovery Act at 13 million dollars. We are planning to put some money into upgrading the 2009 IECC. That effort to move that to that 30 percent and beyond. We plan to put some effort, some additional funding into our manufacturing of housing code that we will be working on. The bulk of the money will be, indeed, in technical assistance to you. We figure that you have a great deal of money out that of your own, so it is our intention to focus our efforts on tools, materials, training. Now, we are going to focus on those in several ways and we are going to need some of your selected assistance in this area and some of your assistance on both of the parts of states and stakeholders to help us to develop and pilot test some of these things. Let me give you the best example. We have a straw man out there on this 90 percent. A number of you are involved in that straw man. How to get this 90 percent compliance. We have been doing that on the base program nickel. We are going to take that and turn that into a pilot program where we have, we know, out there, a number of you with range from just the very small states to the very large states, from states with no very much resource, to states that are well endowed with both knowledge and information and the capability to do a great deal on your own and sometimes, more than we can do in the federal government. We will need tools that can span those kinds of capabilities, that you can all use in a variety of ways.

This 90 percent compliance is a prime example. We will do a full blown, absolute analysis on this 90 percent or if you are state that just does not have those resources, what do you have to give you some confidence that they, Charlie and the people back there, that indeed, you are making this 90 percent compliance? So, we are going to test these kinds of things and we are going to need some people to help us out there. In addition to that, we are going to need a lot of training. If we are going to jump 30 percent, initially, maybe 15 percent. Fifteen percent is almost as much as we have jumped since way early in the program. We are going to need some help in getting people trained. We are going to have to get code officials... about these things

that are being done in the IECC, and are actually stated in 90.1. We always know that we do not always have the forces on the ground and the capability that will keep the change. So, we are going to have to be working with states and the code, model code organizations, organizations of code officials, the design communities to train their designers. You know, hey, the code official there, the checks that off. If he has to spend all of his time redlining and does not have trained design community who come up with complete plans, we have got a problem. We all know that. We have got to get those people changed. So, we are going to be working a lot of these kinds of tools, materials, information, different types of information and we are going to be asking you to come help us test and work with these kinds of things.

So, we are going to use our funding to do that. At this point in time, it has only been a few weeks since we have known that that funding has finally been released and we have approval there. We are in the process of getting these transferred. Information about this will be announced on our website. We will keep you up to date where we are on this and we will be announcing this, as well, through the DOE website that will be tracking the progress of all of these Recovery Act funding. So, this is what is coming down the road. Our big problem on this is that all of these grants, all of this money is going to be very carefully tracked and that has been one of our problems. We are going to have to make sure that we use our money wisely. It is my tax money. I feel that way and I am darn sure that you feel that way too. If we are going to put this much money out there, we want it to have the effect it is intended to have and to be able to do that. So, I think we have some exciting things coming up. We have a terribly exciting time. I think we have a good program and we really need you all to take back from this the knowledge and the enthusiasm. We already know you have the ability to help us get this thing done and working on the ground and operational codes in place and enforced. Thank you.

QUESTION: (Unheard) That is encouraging to hear on the 2009 IECC determination. I am working if there is a time line for publication, even in the form of a sentence that says, DOE believes the 2009 IECC is more efficient. That is kind of question one.

JEAN: Our problem on that is, I do not have a real answer. I tried to get one before I came because I knew someone would ask that. I am surprised that I do not have five other people asking that as well. We are going to diligently get that out. It is very important for all of us to get that determination out and that should not be a problem from any kind of technical point of view. We know we have made the progress.

QUESTION: Okay. The second question also related to state advocacy, and these determinations, by the way, are very useful when we go into the states and say, not only is stimulus money attached to this, but also, your own department of energy has determined this is good for your state. A second part of that question is...

JEAN: Well, it is more than determined that it is good. The legislature says the DOE is to publish in the federal register a determination as to whether that will save energy over the previous edition. There is then a clock that begins to tick and on the residential side, states should give them two years to determine whether it is appropriate to update their codes to that monocode and on the commercial side, they are required to certify directly to the department that

they have done so. Now, you and I know that codes are really a state and local prerogative, but that is a very forceful situation.

QUESTION: Okay, the second question, which kind of relates, as we know, the IRC and the IECC have diverged in a pretty significant way in the 2009 version and some states are going in the direction of the IRC and some states are going in the direction of the IECC and I am wondering if there will be an official determination specifically on the difference between those two codes or whether one or the other is acceptable for stimulus funding.

JEAN: Yes. We have a technical paper on that. There will probably not be a formal announcement on that, but the technical analysis will be available.

SCOTT: Jean, we have a scheduled break at that time. There probably are more questions for you.

JEAN: I will be around.

SCOTT: Alright. Thank you very much folks. A round of applause for Jean.

JEAN: Thank you!