

NYSERDA'S 264th BOARD MEETING

November 29, 2023

Clean Copy of Transcript

Chair Kauffman:

I call this special meeting to order. This is the 264th meeting of the New York State Energy Department. Notice of the meeting was provided to the Members and to the press November 22, 2023, a revised agenda was posted today, I directed a copy of the notice and agenda and the revised agenda to be annexed to the minutes of this meeting. Welcome to the meeting. This meeting is being conducted by video conference from locations in New York City, Albany, and White Plains. The Authority will post a video and a transcript of this meeting on the web. To confirm that we have a quorum, I'd like each of the Members to introduce themselves. I'm, Richard Kauffman, Chair of the Authority.

Vice Chair Bell:

Chuck Bell, Member of the Board.

Sherburne Abbott:

Shere Abbott, Member of the Board.

Arturo Garcia-Costas:

Arturo Garcia-Costas, Member of the Board.

Rory Christian:

Rory Christian, Member of the Board.

Justin Driscoll:

Justin Driscoll, Member of the Board.

Jay Koh:

Jay Koh, Member of the Board.

Chair Kauffman:

And.

Commissioner Dominguez:

Marie Therese Dominguez, Member of the Board.

Chair Kauffman:

Okay, thank you. That confirms we have a quorum. Yes. Very good. Thank you all. There was one item on the agenda today. Consideration of the Authority's proposed rulemaking establishing a cost-effective methodology for use by the Code Counsel in updating the New York Energy Code in accordance with Regulatory Authority and directions set forth in the Codes and Standards Act passed in 2022. Chief Program Officer Anthony Fiore and Chris Corcoran, who is Code's Products and Standards Program Manager will present this item. Anthony,

Anothony J. Fiore:

Thank you, Chair Kauffman. Good morning. Members of the Board, as you mentioned, Advanced Building Codes Appliance and Equipment Efficiency Standards Act of 2022 changed the approach to calculating the cost effectiveness standard for determining updates the State Energy Consideration Construction Code and directed NYSERDA to develop and implement rules for the State fire prevention and Building Code Council to consider in its cost effectiveness determinations. The changes to the cost effectiveness methodology were enacted in part to integrate longer term environmental effects of code updates in consideration that buildings are a long-lived asset and currently account for more than 30% of the greenhouse gas emissions in New York. Next slide please.

So today's Special Board meeting is intended to do two things. First is to authorize an assert to develop and issue, a proposed Notice of Rulemaking and secondly, to approve the issuance of a Negative Declaration under the State Environmental Quality Review Act. The Notice of Proposed Rulemaking is the first step in establishing a new NYSERDA rule for determining Energy Code cost effectiveness and marks the beginning of the public notice comment period under the State Administrative Procedures Act. A Negative Declaration will fulfill NYSERDA's environmental review obligations for rule for the rulemaking action. Next slide please. So today Chris is going to one, provide additional background and context. He'll walk us through the methodology and proposed rule for funding Energy Code cost effectiveness. He'll review the public meetings and comments received to date, briefly describe the secret process and how we arrived at a Negative Declaration after which present the resolution for consideration and wrap up with next steps. I urge you to ask questions along the way and with that I'll turn it over to Chris.

Chris Corcoran:

Thank you, Anthony. Good morning. My name's Chris Corcoran. I lead the Codes Product and Standards team as part of the Clean and Resilient Buildings Business unit. Go to the next slide.

Before we get into the details, we want to set the foundation for the actions that we're proposing. First, it's important to remember that the Energy Code primarily applies to new construction and substantial renovations of existing buildings. Those substantial renovations often entail rebuilds down to the studs which end up looking like new construction. Because of that, the rule focuses on new construction. Our team has been working closely with Department of State for more than two years now on this next Energy Code update right now, the next targeted update is set to take effect in the middle of 2025 and we'll talk a little bit more about that timeline as we progress. And then lastly, going back to the Codes and Standards Act that was previously mentioned. Similar when we came and spoke to you last year about the rules around appliance standards. NYSERDA has been directed to develop and adopt a rule that one establishes a lifecycle cost methodology for Energy Code updates and two, defines the societal effects associated with those Energy Code updates. This rule change is going to move for the better, how the Code Council will consider future code updates requiring them to take into account both elements in determining cost effectiveness. Next slide.

As we look ahead over the next couple of years, this timeline identifies the important milestones in our rulemaking process on the top half and it also shows the parallel work that Department of

State and the Code Council will undertake to update the code on the bottom half. If the Board approves today, our NOPR Notice of Proposed Rulemaking will be published in early January and that will open a 60-day window for public comments. As part of the official SAP up process. We expect to finalize the rule and come back to the Board in June of 2024 for final approval with the rule set to take effect in July of 2024. At that point, Department of State and the Code Council will start their official SAP of rulemaking process by issuing their Notice of Proposed Rulemaking in September of 2024. That rulemaking, as I mentioned, will lead into early 2025 with the adoption and the code set to take effect about three months later in May of 2025. Next slide. Now we can move into the more detailed rule itself. We can go to the next slide. We,

At its core this rule is about how to determine the cost effectiveness of a new Energy Code. As I mentioned earlier, the Code Council must consider whether an update to the Energy Code is cost effective by applying the lifecycle cost methodology in this rule and considering the secondary or societal effects. Because this rule uses net present values to consider the future values of costs and savings, an Energy Code update can be presumed to be cost effective or when the sum of lifecycle costs and the value of societal effects is greater than or equal to zero. Next slide

Going into a bit more detail now, the proposed rule has three key parts and those are identified here. First is the lifecycle cost methodology itself. That's based on the US Department of Energy methodology that is used nationally to determine the cost effectiveness of model codes. This methodology calculates cost and benefits of proposed changes to the Energy Code over a 30-year study. New York specific adjustments are made to account for New York climate zones, construction forecasts, energy prices, construction costs, and average interest rates. It also excludes property tax costs from the calculation because of the limited impact energy efficiency has on property valuations and building valuations in New York State. The second part is societal effects. So for societal effects we propose to define them as a monetized value. greenhouse gas emissions reductions resulting from changes in fuel and electricity consumption due to proposed Energy Code changes. These values are calculated using the Department of Environmental conservation establishing a value of carbon guidelines for State agencies. And lastly is the cost effectiveness presumption, as we've noted previously, and a proposed Energy Code is presumed to be cost effective if the sum of the lifecycle costs and the value of societal effects is greater than or equal to zero. Next slide.

Chair Kauffman:

Chris, can I, you said we can ask questions along the lines? Absolutely. So I've got two questions here. Yes. One is the lifecycle cost methodology. So DOE is in a sense providing a reference case and then States can adjust from that point. Have other States adjusted from this benchmark or are we unusual in doing that?

Chris Corcoran:

No, this is a model for it's set forth by DOE. It is meant to be adjusted for local application. You wouldn't want to be applying national building weights and projections to the New York State. I mean, it is really meant to be adjusted so that it can really reflect what's going to happen in New York State.

Chair Kauffman:

Okay, great. And then the second question is, so we have in VDER an environmental part of the value stack. So what's the broader environmental benefits? How different is DEC'S value of carbon from what sort uses in ITS or PSC uses in its calculations?

Chris Corcoran:

Yeah, exactly. Talk that. So yeah, so the DEC methodology is really about setting the social cost of carbon. So that's taking into account a wide range of impacts both broad health impacts as well as future changes based on the environment. It's a broad look, no, sorry, you veer in that use is going to be more of a locational based energy adjustment environment. Environmental adjustment. Yeah, exactly.

Chair Kauffman:

There is an environmental adjustment in

Chris Corcoran:

There is.

Chair Kauffman:

Yeah.

Chris Corcoran:

There is.

Anthony J. Fiore:

The DEC methodology and calculations were published after VDER was in place and DEC'S calculations mirror what EPA put in place to catch the broad societal impacts of climate change.

Chair Kauffman:

Alright, great. Thank you. Sorry Chris, go ahead.

Chris Corcoran:

Not at all. Thank you.

Jay Koh:

Can I just ask one question? Yeah. Being able to say then that this kind of two-pronged approach to the adjustment as a for development is consistent with other approaches that are recommended either by the federal government or by other States with

Chris Corcoran:

On the lifecycle cost methodology itself or on both?

Jay Koh:

Taking both of these into account as opposed to just using one or some kind of sequence?

Chris Corcoran:

Yeah, so the lifecycle cost methodology is, as I said, that's a federal model. We're unique in applying the societal effects. New York State is unique in applying the societal effects. That was an adjustment that was required by energy law. So we're really taking into account what the legislature told us to do there and then using the best practices from DEC. So both the lifecycle methodology and societal effects are relying on proven methodologies that have been peer reviewed, which is really the goal on this.

Jay Koh:

But this is innovative for New York State to become by law to combine it with a societal effects calculation.

Chris Corcoran:

Exactly, yes.

Sherburne Abbott:

Can I ask, sorry. So if the feds readjust the lifecycle assessment methodology, does that change the timeline? There's a lot of work on the embedded carbon stuff, right?

Chris Corcoran:

Absolutely. So this rule, we will be adopting the methodology as it is set now, but we'll be

Sherburne Abbott:

It doesn't reset it.

Chris Corcoran:

No. And we will have an opportunity to come back to this every three years as the code is adopted or as the code is updated. So this is not the only chance that we'll have as DOE makes adjustments as other things, other measurements or societal effects come in, we can look to add those as well. All right. Next slide please.

So as you looked at the rule itself, you can see that the lifecycle methodology and the side effects have a lot more detail in how they're applied. So we want to spend a little bit more time talking about those details for the lifecycle cost methodology. First, we're proposing to use computer simulated building models. Those models represent the projected new construction starts across New York State during the next code cycle. So for that three year code cycle period, the incremental energy savings are calculated by comparing the proposed Energy Code to the existing requirements. And incremental costs are developed using those same model comparisons for costs on things like initial construction, mortgages, maintenance and replacement. The energy savings and costs are projected over a 30-year time horizon. And the net value, the net value of calculated savings and costs are some to determine the energy savings, energy cost savings for societal effects. These are defined as the avoided greenhouse gas emissions, which are then quantified into dollars. So the emissions factors are applied to incremental energy savings to calculate the emissions impacts for proposed Energy Codes. The dollar value of avoided greenhouse gas emissions are then calculated on an annual basis for the

30 years. And that follows the DEC guidelines. And then specifically we are using a 2% discount factor as recommended by DEC for those 30 years.

Chair Kauffman:

A couple questions. The discount, you're proposing a different discount rate for a categories?

Chris Corcoran:

So for the lifecycle cost methodology and a categories, the discount rates follow more along the lines of mortgage rates. So when we're looking at those, we've taken into account the mortgage costs. We take an average look at those over a five-year period. We're not just looking at what the mortgages right now, knowing that there are spikes and valleys trying to look at that more over a longer period to get an average cost there. And then the societal effects are treated slightly differently by using that 2% discount rate. Again, that's from DC guidance. It's also the direction that the Office of management and budget has been giving recently as well.

Jay Koh:

Okay. So the obvious intellectual disconnect between those two, I suppose it's because the providence of the development of these methodologies are independent, they're,

Chris Corcoran:

We just value long term title potentially lifecycle

Jay Koh:

Because 600 basis points have increased real interest, not real interest, no interest rate basis averaged over time. I mean we'll see how it stabilizes, but you're going to end up with probably a differential with at least two to 300 basis points on current calculations.

Chris Corcoran:

Correct. And again, that's following along with what DOE has recommended on that side. And you're exactly right, I mean this is a,

Jay Koh:

I'll go over the cliff together.

Chris Corcoran:

Well it's, it's a building model valuation versus that societal effects valuation,

Anthony J. Fiore:

Which are both over very different time periods. Right. So this bio effects are over a much longer time period.

Jay Koh:

How long is that time period?

Anthony J. Fiore:

Do you remember? I don't

Chris Corcoran:

Because the first one's 30 years, but three years, 30 years, they're both for 30 years. Okay. Okay.

Chair Kauffman:

Well, so obviously the point of the Board here is not to approve the substance, right? It's to approve the process that's going to go forward. Is that correct?

Chris Corcoran:

Correct.

Chair Kauffman:

So I guess the question I would have is based upon the comments and so forth, is it possible that there may be some adjustment between this proposal proposed rule and the final rule with respect to changes in discount rates and the apparent disconnect between A and B?

Chris Corcoran:

Yes, that's a great point. This is going out to public comment and we will be looking at all and reviewing all the comments and we can make adjustments at that point.

Chair Kauffman:

Okay. So then I guess from a legal standpoint, I'd like to know from the Board's perspective, my intuition is that the Board might have some perspective on this matter of substance. When does the Board, when and how does the Board weigh in on this question? And when we approve, are we approving process or are we also approving the substance of the subsequent rule?

Tomi Vest:

Pete, are you?

Peter Costello:

The answer is both.

Chair Kauffman:

When you say that

Jay Koh:

So reason was two things, just to clarify. One is today's decision is to approve the process, the launch of the process by which this rule will be developed. Is that correct?

Peter Costello:

Yes.

Jay Koh:

Okay, great.

Peter Costello:

And certainly to the extent you have comments on the substance today, we should be taking those comments as well.

Jay Koh:

Your matters are point to curiosity perhaps. But the second point is that is it reasonable to say that the development of these methodologies which have different provenance and or combined for the first time in New York State, right? So there is no prior precedent for federal level or State level combination of these two, let's call them just for shorthand apples and oranges, then the process by which so independently there are methodologies that have been developed to create this approach, these two independent approaches in A and B. And its management's reasonable belief that independent development accords with federal practices, State practices and other practices that have been consulted.

Chris Corcoran:

Yes. Thank you.

Jay Koh:

And then it is also fair to say that though in the process that we are about to approve that comments regarding how the two different components of this will interact to be solicited and reviewed with regard to the development, the final substantive rule.

Chris Corcoran:

Correct.

Jay Koh:

Thank you.

Arturo Gracia-Costas:

So in terms of definitional issues, does that count as a process issue at this stage or is that more of a substance issue that we're going to explore during public comment period?

Chris Corcoran:

Do you have an example on definition?

Arturo Garcia-Costas:

Yes. For example, defining societal effects as simply avoided greenhouse gas emissions as opposed to the language actually says including greenhouse gas emissions, which by indication means the societal effects are broader than greenhouse, greenhouse gas emissions. So we are making a decisions here that we're narrowing it down to greenhouse gas emissions.

Chris Corcoran:

That is correct. And that is a substantive rule or piece of the definition that would be cited here. It can be adjusted, but that would have to go out to a second rulemaking if we added additional anything additional to the greenhouse gas emissions. And as we noted, the plan also is to come back in three years to look at additional societal effects potentially that could be added in

addition to that greenhouse gas emission. So this is not the only bite at the apple to address these things. There will be future as future code updates come.

Arturo Garcia-Costas:

But that issue is not methodological, it's substitute.

Chris Corcoran:

Yes.

Chair Kauffman:

So I guess what I would say is that, I'm not sure exactly the follow-up here, but I would like to hear from the team two things. The first is what is the logic of using different discount rates between A and B? And then with respect to B, why is 2% still the right number in light of recent increases in interest rate notwithstanding Chris's your point that maybe we need to normalize it 2% intuitively feels like a pretty low discount rate. And when you talk about something just in terms of the math, when you talk about something that has a 30-year asset life, there's a huge difference in terms of that value if you're using 2% discount rate versus anything that's consider higher. I don't want the answer today, but I think that's what I think that again, in terms of follow up, I think Board would like to hear your thoughts on those two questions and anybody else wants to add.

Arturo Garcia-Costas:

Yeah, and for example, EPA has a rule out right now that's acceptable public for increasing social cost of carbon from \$51 per ton to hundred 90 and they use this 2% discount rate which PC basically adopted in their guidance. But building on what Richard has just said, there's lots of analysts that say that really a lower discount rate 1.5% or where we value the future of more is going to shoot up the social cost of carbon and change the calculus dramatically or vice versa. But I just want to understand what the rationale is. I'm not completely comfortable with us, particularly with this new hybrid that we're doing here, accepting EPAs 2% without interrogation.

Rory Christian:

Just building to Richard's point, I think what would be helpful is understanding the difference between the old methodology and the new methodology in real time. Using an example project to illustrate how one the fundamental shift from the 10-year approach we currently use to 30 changes the viability of particular series of projects. I think just that as a baseline would be helpful. And then taking the current proposed methodology that's in here and looking at changes to the interest rates and other variables, how that affects that compared to the current methodology and then going a step further, understanding the potential risk associated with changes in each. Right. I mean one of the things I appreciate about the new methodology is the view of looking at the incremental costs above the code. I think that's an important shift from what we've done in the past in addition to this 30-year shift. Those two I think will open up a far greater scope of projects making them more viable than anything we've seen in the past, which is what we need. So I think in looking at the discussion here is in addition to understanding why we're picking the numbers, what's the impact of those changes? If we were to have everything at

the same discount rate, would that make a material difference in the availability of projects that could be financed through this. Then to complicate things through.

Jay Koh:

But I do want to make two additional suggestions. One, the most obvious disc, let's say lack of unity, let's say between the two approaches is the discount rate. But there are potentially other artifacts and just because they both cancel into the dollars doesn't mean the dollars methodologies were created for the same purpose. So in federal budget accounting subsequently doesn't last longer than seven to eight years. I think it's eight years max. And so the MB doesn't care about anything after eight years obviously. So they have their own approach to why they've developed a cost benefit methodology and if these two were developed independently have never been combined together, it's important not just to look at the discount rates which are obvious, but other artifacts of why and how these calculations were done to and the necessarily potentially unanticipated consequences of it.

So you could imagine if the discount rate under this methodology for building materials as a certain cost to it and the long-term effect of carbon reduction has a much lower discount rate, meaning valuing future carbon reduction at a much higher rate than you would have over investment or differential investment in carbon abatement of the building as opposed to the existence of the building, the structural existence. So you'll create different incentives through this structure potentially because methodologies were not developed as far as I understand it to be combined or the implications of combining the two on an equally weighted basis have not been fully explored. So I think it's worth at least from the point of view with this Board Member having understanding as an example, because I think it'll illustrate it if I build my roof stronger or I build more insulation on the walls of my house, the house might not exist after seven years, but the energy efficiency that the house is going to be a heck of a lot more valuable 30 years from now.

So that's point 1. So I think it's not just the interest rate piece, it's also thinking about how these two methodologies actually interact with each other generation. The second point is on the table, I would really like to know on a 30-year basis if these projections on both sides include the impact of climate change. Climate change is definitely accelerating. We have \$28 billion disasters at last count, which is a record and we're not even done with a year yet. The National Climate Assessment fifth one just came out, we're on a one and a half degree minimum baseline's probably more like 2.9 degrees right now and 30 years is a long time. And if you're discounting both of these things and both of the sets of assumptions are wrong because we have flooding or inundation events or fire events or other kinds of events, it would be silly to use both of these models without at least incorporating some assumptions about future physical conditions for mentally and otherwise.

So I would urge consideration of some approach or at least suggestion of an approach here that incorporates analysis on that big conditions in the generation especially for actually really genuine using 30 year projections for this access because the world will look very different. I think we all agree the world will look very different in 30 years

Arturo Garcia-Costas:

It's what's driving EPAs increasing. It's \$190 or \$190 per ton, but it isn't localized because basically global. I think that we should look at that assumptions within New York State our local circumstances and look at the values and look at all these calculations, all the assumptions that you just talked about, Jay, all of it need to be placed within New York State as opposed to accepting necessarily what EPA is doing on a national basis.

Jay Koh:

I think perhaps maybe you're saying in a way of we're doing localization adjustment analysis for part A and we're not for part B. That's another difference approaches the methodology. And again, I don't know the full implication for that. My point is I don't know if either of these methodologies actually incorporate any systemic way the necessary increasing impact that we're in New York State of extreme weather events at a minimum. So yes, you can discount your carbon going forward but the building doesn't exist and you have to rebuild it. There's a very different carbon budget for that and I don't know if any of the bottles currently incorporate the flood risk and storm risk and fire risk and drought risk and other risks that we absolutely now I believe all agree have will occur at some level on an accelerating basis than a minimum of one and a half degree scenario, especially with 30 year projections here and likely to be dramatically more than this.

Chair Kauffman:

So just to follow on this Jay, so this might mean thinking about the different building materials maybe that maybe imagining that fire resistant materials or next generation of windows that will need to be whatever that's not how buildings are going to be built isn't necessarily included there. You're assuming the way the buildings are built today or the way the buildings are going to be built tomorrow.

Jay Koh:

It's a little bit,

Chair Kauffman:

That's what the methodology is saying.

Jay Koh:

The methodology doesn't currently suggest that these calculations should be done under a projected set of changing environmental conditions regardless of the building. And so here in the first part of it, a traditional cost benefit analysis doesn't assumes a relatively static environment typically like your building doesn't have an increasing amount of flood risk going forward or there's no catastrophic risk that suddenly manifests sometime in the next 30 years where you completely destroy the building. There's a certain set of assumptions there and I think the challenge that I see between these two things right now is if you take just simply with the disconnect we've identified, which is a 2% rate versus let's say a 5% rate, the 5% rate speaks to the expense of the building which we discount rapidly. So the future existence of the building, we value the energy efficiency of the building.

Now both of those things, it's not clear whether the assumptions for both of those things are generated. That analysis is generated under a set of changing forward condition. So the building might have an energy efficiency that's assumed to be static, but as you increase the amount of temperature variance, the value of the energy efficiency might go up because you would reduce heating and cooling variation because you have a much more efficient building. It's not clear it could go down, it could change, but it's not the same for 30 years because we know that the world is not going to look the same for 30 years assuming in the building materials, the buildings. So this is a rulemaking in regard to general cost effectiveness, not just for buildings. We're talking about appliance I think to like should we build a giant wall around New York or not as an example and the energy efficiency of that wall now has a higher value than that building, I think that would be outside of the scope, definitely outside the

Tomi Vest:

Energy Code so it doesn't apply to other parts of the Uniform Code.

Rory Christian:

Okay. So Jay, I'm going to cut you off for a second. So I think I get where you're going with this and I understand the perspective, but I want to caution here what I'm hearing from you is the creation of a far more complex modeling than I am not entirely sure if it's justified given what we're trying to accomplish because one, we're trying to approve the methodology today, we'll get to that, but whatever the methodology we approve is ultimately going to determine today based on what we're aware of the conditions for the next 30 years, all of which you're pointing out are valid. Does it make sense to do this project? Does this project cashflow? One of the challenges with all these things is as you're pointing out, we have to predict everything for the next 30 years. That's the weather, that's economic conditions, that's energy usage change in energy usage patterns, all these things.

And also changes in pricing. That's already a complicated multi-variable process just with looking at the variables at DEC, modeling them out, we're going to adjust 'em every five or 10 years to take into the variability you're suggesting. That's a higher level of complexity that I don't necessarily know is needed. And I think we can figure out the necessity of that with what I was suggesting earlier by just understanding where are we today scenarios in our modeling based on current methodology, where would we go tomorrow with what's proposed? And then based on what's proposed tomorrow, understanding how each variable changes the outcome. I think with that analysis we can understand the risks of each of the you're concerned with more effectively without necessarily having to adjust the variables all the time.

Jay Koh:

I think I am suggesting two things. The first is I agree it's more complicated for sure, right? The current approach, unless there's no factor or no methodology or systemic structural way of incorporating any delta assumes that climate change does not happen because there's no, we're talking about 30 year projections at a 2% interest rate, which values the future at a very high rate and seems to assume the future looks exactly the same over that 30 year period because we have adjusted nothing in the math at all. Right? So you might be right that the wave form that you might adjust it with might be complicated and maybe we should take estimates of it or we should have a process by which we actually try to determine whether it's material enough to adjust these

factors. And I'd be happy to look at any of this. I simply think that most of the planet is doing the calculation where they assume the delta is zero no factor that's been put into it for the future set of physical conditions where you live under, we are the New York State Energy Research and Development Authority.

Our job is to take climate change seriously. One of our strategic pillars is to focus on resilience after a lot of table pounding on it. If anyone can come up with at least some kind of calculation that adjusts over a 30 year discount rate, a 30 year period for discounting some factor as opposed to we are going to model the world of the future, we're the energy agency of the New York State government and we are going to assume that the rate of change is zero when we all have the kind of <inaudible> for most of the strategies we're pursuing here. It assumes that we take climate change very seriously and we're seeing the physical manifestation of it right now. Now we will incorporate that into the cost benefit modeling on a, because as you destroy buildings at a higher rate or you have to build 'em out of different materials because you're going to see X posts, what happens when you don't build 'em that way?

The costs curves will change, everything else will change. So I agree with that. You will adjust, society will adjust to climate change badly or less badly. Our job is to make it less badly. And if we are actually purporting to forecast a 30 year future at a 2% discount rate for energy efficiency, first of all, I have no idea how you actually understand what those assumptions look like because if the buildings don't exist 30 years from now, and there are many examples of weed platinum rated buildings in Houston that were destroyed by Hurricane Harvey, they were extremely energy efficient and they were built on a floodplain. So you can have incredibly wonderful cost benefit analysis on B and no building on A, and that's my concern here is that somebody needs to push society to actually make some kind of attempt at a calculation to incorporate different assumptions about the future into what are purported to be 30 year calculations.

And if there's not an agency better positioned to attempt or at least to suggest that this should be a consideration in the development of these rules, I don't know which agency it should be. Now, does the EPA assume that I doubt that they do systematically. I do not know. I would like to know the answer to that from a kind of like a policy and substantive question, assumptions about deforestation reduction in protection that do not assume increased wildfire risk and the emittance of carbon from that or pestilence or drought are just simply fake and you'll destroy the credibility of the entire attempt to adjust to the climate change phenomenon. If our math suggests that we don't believe climate change is actually happening and that's what this math currently, unless there's a assumption that's baked into it or some process by which we try to assess it, even begin to assess it, I think that it just continues in the math that we actually are doing here over a 30 year period to effectively deny mathematically and from a cost perspective that climate change is actually happening. So I'll stop there. I'm sorry.

Sherburne Abbott:

So one way to do it is to look to the IPCC scenario because there's a lot of stuff that's been done in this, but the other thing is, the other piece of this that I think is equally as important is the impact of these two different frames on technology development.

Jay Koh:

Yes.

Sherburne Abbott:

And so to the extent that you could incorporate both the IPCC scenarios analysis and the impact on technology development, you get closer to where you want.

Jay Koh:

Yeah, you would create incentives because you would adopt the technologies that would change these.

Sherburne Abbott:

But they actually have looked, I mean it's not great, but it's a step in the right direction.

Chair Kauffman:

So I was just going to suggest that you can tell the Board Members have some thoughts on this, that the team reflect on what you've heard and engage with individual Board Members that are interested in pursuing this and we can figure out what's appropriate follow up for the Board. Is that seem like a reasonable way forward?

Jay Koh:

Yes.

Chair Kauffman:

Everybody okay with that minutes? Okay.

Doreen Harris:

Yeah. Also whether I think some education with respect to what is going into this model would be particularly useful. I must say. I'm curious myself. Some of this may be,

Chair Kauffman:

Did you want to say something?

Tomi Vest:

I was asking if it was okay to continue with the presentation at this juncture.

Chair Kauffman:

We're warmed up. So go ahead.

Tomi Vest:

We also just State one thing about the assumption here. We're only modeling building construction for three years. So I think that's a little bit different than the study period. So the costs are calculated out 30 years, but the actual modeling prediction of what the building construction will look like is the code effective period, which is mid-2025 to mid-2028. We're only thinking about what the buildings that are constructed that look like and then the costs are what go out 30 years.

Chris Corcoran:

Next slide. Okay. So moving on to the public meetings and the feedback next slide. As required by energy law, NYSERDA held public meetings across the State and virtually in advance of this rulemaking with the goal of discussing the proposal and getting meaningful feedback from impacted communities. So these meetings were the preliminary step in developing this rule. Overall comments expressed support for the move to this more nuanced cost-effectiveness approach over the previous 10-year simple payback analysis that was used. But it also did suggest some adjustments. So the four main themes and the comments, recommendations to increase the value of societal benefits and reduce the costs associated with lifecycle cost methodology, which we've obviously just discussed. Second to increase lifecycle costs related to electrification. Third, there was a request to provide transparency on costs, discount factors, weather models and the carbon values. And then last, there were objections around the perceived impact on existing buildings. So each of these comments were reviewed and considered and we discussed them bit more in the summary in the next couple of slides. So next slide.

Okay. For common theme one on increasing societal benefits and reducing lifecycle costs, one change was made. As we noted earlier, the property taxes were removed from the lifecycle cost. It was determined that energy efficiency investments generally do not impact property assessments and that change also aligns with the upcoming changes to the DOE methodology as they remove that from their national model. Also, while additional societal effects were requested, they were not added for this rule, obviously we'd look to consider those in future updates. We can discuss here further on that point. That was made one note here that as were looking ahead, that even with just the 30-year lifecycle class methodology along with the social costs of carbons, the societal effects, the numbers for cost effectiveness overall add up and our preliminary analysis shows that the New York can achieve its building climate goals and its needed update for the future Energy Codes with these changes.

So on the second comment around including additional lifecycle costs resulting from electrification, these costs were not included as unfortunately as we all know, extreme events can compromise any fuel, not just electricity. And so the costs with the disruption to any fuel we believe would be roughly equivalent on that front. So those additional costs were not added. And then that said though it is expected that with this cost effectiveness analysis, the rule is going to result in Energy Codes that are much more efficient, which will result in reduced energy usage overall and that energy usage is going to support and have positive impacts on LMI households who have a disproportionate amount of spending on their energy costs. Next slide.

Chair Kauffman:

I'm sorry, I don't want to

Chris Corcoran:

No.

Chair Kauffman:

So I don't know if, I mean the first bullet point under theme two, I mean the history has been that people that are on the gas system, the gas system was more resilient than the electricity system. So to say that it's just a equivalent, I don't know if that makes sense, but you're saying that if

there's an interruption in power failure, there's no difference between a building that is all electric and a building that has natural gas.

Chris Corcoran:

This is a fuel neutral model and it's really, it's just taking into account the impacts not of any individual fuel, it's looking at the costs associated with them. The request here was to add in additional costs that could be considered if a building was electrified in the downside threat on life safety.

Chair Kauffman:

Correct. Thank you.

Jay Koh:

Sorry. Would this rule be applied to whether or not we should install energy storage, electric energy storage on site in the building?

Chris Corcoran:

So that's likely to be covered under the Uniform Code, not the Energy Code. So the Energy Code, the focus of the Energy Code is really around efficiency and that's mostly around the envelope. So what we're talking about is trying to adopt an Energy Code that has an efficient envelope and efficient building systems. When we're talking about the things like energy storage and solar, those are more in the Uniform Code, the other codes, plumbing, electrical, things like that. So those would not be as part of this analysis.

Jay Koh:

So just to think about the incentives, just simply energy storage, battery storage on site in the event of increasing frequency of severe weather events, which causes 80% of power outages in North America are weather related period.

And so we are looking at an increasing frequency severity of weather impacts. We've already seen that. That's controversial. And so does this rule, you're saying this rule creates zero incentive, positive or negative from your point of view on whether or not the design of a building, a brand new building includes energy storage on site to address some of these backup power problems, right?

Chris Corcoran:

Correct. Is, I mean this is looking at the code as a whole, not any individual building. The incentive for this type of rule is to have a more efficient building. And then

Jay Koh:

How does efficiency come into play with total power interruption? I guess your power efficiency here, your power, your power assumption goes to zero because you have no access to power. So I suppose it makes sense.

Chris Corcoran:

It goes to the life safety and passive survivability. As you have a more efficient building, the temperatures stay consistent for longer. There's an opportunity to have working windows that can provide ventilation if needed. That's really the goal here in the efficiency changes. Next slide.

So on the comment around providing greater transparency on the factors in the rule itself, we've identified all of the areas where the factors differ from the DOE methodology to better align with New York State. And then we also specified around the model baseline that this is going to be using the existing Energy Code plus other legal requirements. So this takes into account that there is a requirement in place for the phase out of fossil fuel equipment and systems. That would be, that requirement is set in energy and executive law. And so that would be included in the baseline as we look ahead on comment four. Lastly, they're specifically asked to explain how this rule will be applied to existing buildings. And so as we mentioned before, Energy Code really it applies primarily to new construction and significant changes to buildings and significant retrofits. So the rule specifies that Energy Code will be considered cost effective if it is considered cost effective for new construction. Again, a major retrofit that's going down to the studs looks a lot more like new construction. It does otherwise.

Arturo Garcia-Costas:

So I think I noticed in the documents that threshold or considering a new construction system building's 50% or more of a renovation or a retrofit?

Chris Corcoran:

It depends. There's different triggers for different pieces. Some changes don't trigger, most changes don't trigger the Energy Code at all. Think about it. If you're installing a stove, there is no Energy Code impact on them when you're thinking about those existing buildings. Energy Code really doesn't affect them unless you're doing significant changes in some cases, like a 50% threshold for lighting I think is one of 'em.

Alright, so then moving on to SERQA. Next slide. The State Environmental Review Quality Act or SERQA. Next slide. So SERQA applies here because this is a rulemaking and rulemaking actions are subject to SERQA as the agency taking action. NYSERDA must follow SERQA and assess environmental impacts. NYSERDA serves as the lead agency here because we are primarily or principally responsible for taking the action and we are the only involved agency, the Code Counsel is considered an interested agency in this rulemaking, given the obvious impacts on their work. This code, this action is considered an Unlisted Action under SERQA because it is not a type I or a type II. Next slide. So as the lead agency, NYSERDA must determine the significance of this action based on the nature of the proposed action. NYSERDA has issued a Negative Declaration for this action finding that there will not be adverse environmental impact for the action and that an environmental impact Statement need not be prepared. We are asking the Board confirm this SERQA Negative Declaration today. Are there any questions on SERQA? Okay.

Chair Kauffman:

This is relative to where we are today, right?

Chris Corcoran:

Right? Correct. So it wouldn't have a negative, this rule would not have a negative impact on the environment.

Chair Kauffman:

Relative to the current rule or just an absolute standard.

Chris Corcoran:

In absence of this rule. There is no rule right now.

Peter Costello:

So to be clear though, this rule is when it's finalized is essentially guidance to the Code Council under the statute. The Code Council must consider our methodology, but it is the Code Council that will be updating the code at a future date and those code updates will undergo their own evaluation for environmental impact and they will have to make a secret determination at that time. But in terms of what we're producing from this rule is the guidance to the Code Council.

Commissioner Dominguez:

Can I just ask a quick question. Would those code updates, would those be then subject potentially to a full Environmental Impact Statement?

Chris Corcoran:

Yes.

Commissioner Dominguez:

Okay.

Chair Kauffman:

So why does the Negative Declaration have to be done at this point as opposed to when we actually see the final rule?

Commissioner Dominguez:

Correct. That was my next question. Thank you, Richard.

Chair Kauffman:

Sorry.

Peter Costello:

Tommy, do you know the answer to the question?

Tomi Vest:

In order for us to issue the No, we have to have, I do know that we have to submit the environmental review documents at the same time.

Peter Costello:

Okay, so that's a <inaudible> requirement that they be submitted.

Tomi Vest:

Right? So when we looked at the timeline, this is a sequence of events that happens with theta, puts out the cross methodology, cost effectiveness methodology, then DOS and start and work through the code update. So it's a sequential process and it has the law says that we have to do this piece of it and then DOS does the actual code update. So in order for us to actually issue this, we need to do the Negative Declaration on just the cost effectiveness methodology, not the full code update. We aren't talking about that. We're just talking about this methodology that then the Code Council will consider as part of the full code update.

Chair Kauffman:

Well I understand, I understand. I'm just talking about purely the methodology, right?

Tomi Vest:

Yep.

Chair Kauffman:

You're saying in order for us to go to the next step, even though we haven't finalized the methodology, we haven't finalized that we have to have a Negative Declaration today about SERQA. It doesn't make, I mean if that's the way it has to be legally fine, but it logically doesn't make sense.

Tomi Vest:

I think the idea kind of went into that with the Type I and Type II Actions. So this is an unlisted Action, meaning let's think about the action as a whole. The action as a whole is providing guidance to the Code Council that they will use for an Energy Code update. So just the act of providing guidance, whether we're tweaking discount rates or anything like that. It's the action which is providing guidance is that's what has the Negative Declaration.

Chair Kauffman:

Okay. So it's about the process again. So this is about process. So the SERQA thing is about the process, not the not the substance.

Chris Corcoran:

Just to be clear, would the process of providing guidance in any scenario result in a positive environmental requirement? Because we're just giving guidance, right?

Tomi Vest:

It's nonbinding, it's nonbinding guidance.

Jay Koh:

And so under all circumstances, or let's just say certainly this falls well within the reasonable range of circumstances of providing kinds of guidance, that is unlikely. Just a provision of that guidance itself does not have an adverse fact that that's what we're certifying to today or agreeing to today. Correct.

Tomi Vest:

Right. Because I think all circumstances could include any changes to the Energy Code.

Jay Koh:

This is just guidance, vision of guidance.

Tomi Vest:

This guidance, exactly.

Jay Koh:

Okay. So if we actually change the Energy Code, we would look at the substantive impact of those changes to the code simply because we're providing guidance about how they might change the Energy Code. The act of providing guidance is what we're evaluating the environmental impact of?

Tomi Vest:

So I think it's actually a little bit more nuanced than that because our guidance isn't actually suggesting changes to the code. It's saying if you're making a change, here's how you would value that in dollars.

Chair Kauffman:

Okay. That's very clear. Thank you.

Commissioner Dominguez:

Okay. I just want to make sure though, because what it says on the slide is that it's going to have a point by point analysis of required criteria. So again, is this a process issue?

Tomi Vest:

Which point are you mentioning?

Members of the Board:

Declaration.

Commissioner Dominguez:

Your slides on the Negative Declaration and the third or the fourth bullet says the reason support it gets into, it'll contain a description of the action and the reason supporting the determination and a point-by-point analysis of the required criteria.

Tomi Vest:

So that's in the actual Negative Declaration Statement, which I think was sent to the Board as part of the material.

Jay Koh:

Just to clarify, the point-by-point analysis of the criteria are the SEQRA criteria that describes That's right or not of check. That's exactly right. It's the checkbox section. But the recording

criteria in this case are not the substantive recommendations or anything like that. It has to do with its own checklist upon?

Tomi Vest:

That's right.

Jay Koh:

Okay. Which we are satisfied, which management is satisfied has been answered in the affirmative regard to being a Negative Declaration.

Peter Costello:

That's correct, Jay.

Chris Corcoran:

So next slide. Let's see, I think that actually wraps up. Do we want to switch, go to the next slide to go to next steps just before we consider the resolution or do you want to consider the resolution?

Arturo Garcia-Costas:

I did have just one other question to ask about the narrowing to societal effects to greenhouse gas emissions.

Chris Corcoran:

Yep.

Arturo Garcia-Costas:

I understand that we're going to have another bite of that apple in the future. And however, even narrowing it to greenhouse gas emissions and I understand that to be on carbon dioxide, is that what we're looking at? Carbon dioxide, CO2 equivalent?

Chris Corcoran:

Yeah, so CO2 equivalent.

Arturo Garcia-Costas:

So we're not even considering, for example, PM 2.5 or in the mix. Even though it has a very strong gas effect and it also has by lots of local impacts. I do think that we should probably begin the process of preparing for that three-year review.

Chris Corcoran:

Absolutely.

Arturo Garcia-Costas:

Based on the public comments that we've already gotten and the public comments we're surely to get when this comes out, to actually be prepared for the case of how to incorporate appropriately within the context of CLCPA and everything else, those public health impacts. So we're not caught that we are seen as actively working on this in this three year period.

Chris Corcoran:

Absolutely. Thank you.

Chair Kauffman:

Well, if the Board is a proxy for some educated Members of the public, I would want to be sure that we do everything that we possibly can to be sure that this next phase really elicits quite a lot of attention because then obviously not surprised, but the number of people actually participated in those public meetings was very, very, very limited. So I just want to be sure that we have done everything that we can do to be sure that people know about this entire process. Okay. Alright. Any other questions or comments? Alright, so we will have some kind of follow up terms. So I'd like then to have a motion for resolution number 1714 authorizing the Authority to develop an issue a Notice of Proposed Rulemaking to establish a New Part 510 of Title 21 of the Official Compilation of Codes, Rules and Regulations of the State of New York. And to approve the issuance of a Negative Declaration under the State Environmental Quality Review Act for new Part 510 of Title 21 of the Official Compilation of Codes, Rules and Regulations of the State of New York.

Rory Christian:

So moved.

Jay Joh:

Second.

Chair Kauffman:

All in favor?

Members of the Board:

Aye.

Chair Kauffman:

Any opposed? Very good. The resolution has been adopted. Thank you for more than what you expected. This is what happens. All expect copy of it, how we know it's not to deter you from meeting. So this concludes our formal agenda. Are there any other matters that to discuss? May I have a motion to adjourn the meeting?

Jay Koh:

So moved.

Arturo Garcia-Costas:

Second.

Chair Kauffman:

The meeting is adjourned, Thank you.