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COMMISSIONER PLENARY: KRISTINE SVINICKI

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Public Meeting

APPEARANCES

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P R O C E E D I N G S

ERIC LEEDS: All right. Welcome back. If I can get you all to start taking your seats -- thank you. All right. At this time, I'd like to introduce Commissioner Kristine Svinicki. Commissioner Svinicki was sworn in for a second term as a commissioner at the U.S. Nuclear Regulatory Commission this past June 2012. Her first term began in March of 2008. She came to the Commission from a position on the staff of the Senate Armed Services Committee where she worked on issues such as nuclear defense programs, nuclear security, and environmental management. Prior to her work in the Senate, Commissioner Svinicki worked as a nuclear engineer in various positions with the U.S. Department of Energy, both in Washington D.C. and in Idaho. Before that, she was an energy engineer for the Wisconsin Public Service Commission. Please join me in giving a warm welcome to Commissioner Svinicki.

[applause]

COMMISSIONER SVINICKI: I brought this water over here. I was watching people do that earlier. And I thought -- I actually tend to have water available, but I don't use it throughout the course of my speech. But I thought I could have my Marco Rubio moment.

[laughter]

Anyway, Eric could actually -- he could have some fun with us; he could move it way over there so I wouldn’t have to do it.

[laughter]

Thank you, Eric, for that introduction, and good morning to everyone. I'm pleased to take part in this year's Regulatory Information Conference. Thank you to each of you who is attending this session and to those who are tuning in to our webcast. I also want to add my thanks to those of everyone who's spoken before me, to the NRC employees who make this conference possible. I tend to note every year that this very impressive event is fueled by the hard work of the staff that are responsible for the RIC, also the many NRC staff who volunteer just to facilitate and make sure that things go smoothly. And as soon as this conference ends, they will begin their hard work in planning for the following year. But it is their hard work and commitment to this conference that make it such a success.

I will also acknowledge our many colleagues in attendance. They're joining us from across the country and really around the world. Thank you for traveling, in some cases very great distances, to be here. I also acknowledge the presence of important partners from federal and state agencies. The NRC has many relationships with other agencies that are so essential and vital to the successful accomplishment of our mission. I want to thank you for being here but also for many of you agreeing to participate and be part presenter and participating in some of our technical sessions. That really adds to the quality of our program.

I'd also like to acknowledge the presence of a number of the current members of the Advisory Committee on Reactor Safeguards as well as any members of the Advisory Committee on the Medical Uses of Isotopes. I want to thank them for their technical contribution to the Commission's deliberations on many complex matters over the course of the years. For any of you who aren't

aware, the Advisory Committee on Reactor Safeguards was established under its current name by the Atomic Energy Commission in 1953. And it was made a statutory body by Congress in 1957, with the purpose of providing an independent review of the safety aspects of nuclear reactors. But the Committee really began performing that same function under the name of the Reactor Safeguards Committee as far back as 1947. And I'm personally and professionally very grateful for the work of the ACRS, which has a history, as I've just noted, stretching back further than the Nuclear Regulatory Commission itself, and which continues to this day in the form of substantial contributions to the advancement of nuclear safety in the United States. So I extend my thanks to each of the gentlemen and one woman who now comprise the current ACRS.

I'd also like to acknowledge -- many of you attend the RIC every year. The security personnel that you see here actually have come over from our building complex to provide -- make certain that things go smoothly here at the RIC. And these are the same men and women that, when you work in the complex across the street -- as the chairman mentioned, we encounter these individuals every day as we go about our business at NRC. And they've made a commitment to making sure that our operations in that federal complex are going to be secure day in and day out. And they're the kind of people that you see when you come in early, or you leave late at night, or maybe they're -- you know, they're on their way to their security post. And I really have not -- I've been intending to, but I've not extended my appreciation to them for the work they do. But they also, some of them, come over here and provide a secure environment for this RIC, where we have the gathering of all these people. So I want to thank each of them for that.

I also want to acknowledge the members of my own staff who are here. And I want to thank them for their contributions to the work that I try to do each and every day. So I really appreciate their efforts in support of that.

It's interesting now to me, you know, having another woman on the Commission affects your life in ways big and small. I was trying to make a quick pit stop, since I knew I was going to be speaking next. And I noticed that there were all these men gathered outside the ladies room. And so I thought to myself, "Oh, that's a little bit odd." But I got in there, and of course Chairman Macfarlane was making a quick stop on her way somewhere else. So it's -- we got to exchange a little thumbs up and, "Good job," and pep talk with each other. So that was -- I really appreciate that. But it is -- I was also reminded yesterday, and here I've fallen into it again just by falling this story, but Jeff Sharkey, who's my chief of staff, I told him that I was challenged this year. And I wanted to prepare these remarks and have something that would really add to the conference. And I said, you know, "I'm just not sure that I have very many creative thoughts about what to do." And he said to me, "Well, maybe something interesting will happen to you in the ladies room. And I have to --

[laughter]

-- explain to you why he said that. So then he said to me, "Wasn't it in San Francisco where you told a story about what happened in the ladies room right before you talked?" And I said, "No, no. It was Bay City, Texas." And then we realized it was both places. So --

[laughter]

I have this -- well, I mean -- but it's logical, right, because you're going to make a stop if you're going to be speaking. So something tends to

happen to you. One time I was, I think, in San Francisco, a woman got locked in her stall. It was a very dramatic thing --

[laughter]

-- to have happen, because she was calling out to me for assistance. And --

[laughter]

And I needed to get into the session. But anyways, I did -- I had someone else dispatched. I said, "There's a woman in the bathroom. Somebody needs to go let her out." So --

[laughter]

But that wasn't today. That was in San Francisco last year. So that didn't happen here. Let's see here. [laughs] I just touched my hair. I'll say this other thing, is having -- so welcome to have another woman to have on the Commission, is that the first year I spoke at the RIC -- you can tell I don't have a lot of content for this speech, right? So I'm telling all these stories.

[laughter]

The first year I spoke at the RIC -- it's kind of -- you're in a new role. And you're on the Commission and you want to do well. And you find out that people can be so critical. Someone came up to a member of my staff. And if you're -- if this is someone who was here, and she'll recognize that she was the person who did this -- I honestly don't know who it was. And I'm sure you were well motivated. But you came up to a member of my staff and you said, "Well, she did all right. Commissioner Svinicki did all right. But, you know, she has this tendency to touch her hair. And these things need to be corrected." And they had a long list of things. And I'll -- I just will explain. What happened there is that

when we spoke -- although maybe the podium was a little off center or something now. But -- and I was the most junior member on the Commission, so I went last. And -- but when I got up there, a blower had, like, a draft coming. It went right on the top of your head. And so I had this chunk of hair that kept coming and interfering with my view. And I didn't have product in, which I don't, today. So --

[laughter]

I -- but, you know, then I realized -- I thought, "Why was that not discovered before I went up there?" And I thought, "You know what? While I have, you know, fondness for all my male colleagues, but they didn't have the same problem as me."

[laughter]

So that's why. Some of them perhaps would have appreciated having that kind of problem, but they didn't have that kind of problem.

[laughter]

So I [laughs] felt that, you know, aside from that person getting all "judgy" on me about it, you know, I'd -- I'm like, "Well, there wasn't reason for it, but I will try not to touch my hair."

[laughter]

And I'm going to try to stand up straight. [laughs] So with all of that as a preamble, some of you have suggested that you expect me to tell a joke. Frankly, under the heading of “things you will wish at some point you never did,” I told a joke my first or second year here. And then the next year, people said, "You should tell another joke." So then I found that there weren't that many jokes, because I wanted them to be atomic jokes. So I have these cringe-worthy atomic jokes that -- I had gone through, frankly, all of them. And, you know, I

guess I'm cursed that I got a second term, because I'm going to have to keep dealing with this. But --

[laughter]

So people said, "You have to have a joke." And people keep telling me that. So -- and if you didn't want this, someone to the right or the left of you is to blame for this. But by popular demand, these were the two prior jokes. And people did demand this, trust me. I didn't -- I'm not just saying that. So two atoms are walking down the street and one says to the other, "Hold up for a second. I lost an electron." And the other one says, "Are you sure?" And the first one says, "I'm positive."

[laughter]

The second joke, you know, that I found for the next year is: A neutron walks into a bar, and the bartender says, "What'll you have?" And the neutron says, "I think I'll have a beer. But how much is it?" And the bartender says, "For you, no charge."

[laughter]

So when you go out and you search the Internet, which has everything, you will find that there isn't, like, a joke about a proton or something. If you all know it, you know, good on ya. But it is the 21st [sic] anniversary, and we know that because we have a 25 doing a chin-up off of the acronym up there. And the anniversary of the -- [laughs] this 25th anniversary, I really dug deep. So prepare yourself. It's not -- I don't like it as well, but we'll go with it. So Heisenberg is pulled over for speeding. And the police officer asks, "Do you know how fast you were going?" And Heisenberg says, "No. But I know exactly where I am."

[laughter]

Okay. So I hope I scratched that itch. And I don't now --

[laughter]

Perhaps at the 30th anniversary, although I don't think I'll be here then -- at the 30th anniversary, maybe I'll find another one. So in addition to my capability of telling these really bad jokes, I've also shared with a number of you, and at prior RICs, that I have a strong interest in film and literature. A book that I enjoyed recently was "The End of Your Life Book Club," by Will Schwalbe. It has, well, a very serious theme. It's principally the narrative of a relationship between a son and his mother, who's dying of cancer. But I look at it, I think, in a more -- brighter context. It's a book about books. And it's about people who love books and the books themselves. And Will Schwalbe uses a term of saying that literature really enriches our lives. And it facilitates our ability to share and understand each other's experiences in what he calls, "the human conversation," which I think is a great term. But when I was done with reading the book, because there's so much discussion of other books, I ended up with a very long list of books that I want to read, which isn't strange in and of itself. But on that list are many books that I have been intending to read for a long time.

And I'm sure that that happens to a lot of us. We keep some notion in our minds; we keep hearing positive things about a book, and we say, "I want to read that book someday." And one of the books for me that was mentioned in "The End of Your Life Book Club" that falls into that category is the "Appointment in Samarra." It's by the author John O'Hara. I'll reveal something about how superficial my understanding of the book was, is -- based on the title, I assumed that it was about, you know, the Middle East and Middle Eastern history, which is

an area not familiar to me. And so I knew that when you're reading about something that isn't an area you're familiar with, you really have to concentrate more. It's a little bit more of an effort. And so I kept putting that book into the category of, you know, "I really need to get around to reading that book." But I think it's going to be a kind of a hard slog. [laughs] I was listening to the comedian Jim Gaffigan, who's a favorite of mine, once, and he said, "You know how you had a book on your shelf, and a friend will come over and go, 'Oh, you know, that's a great book, there. Have you read it?' And you'll be like, 'No.' And they'll go, 'Can I borrow it?' And you go, 'No.' And then it'll be like, 'Well, when did you get it?' And you're like, '15 years ago.'"

[laughter]

Then that's -- you know, I'm sure I have any number of books stacked up like that. But the interesting thing that I learned, though, is that "Appointment in Samarra" is about a family in the United States. And it's set in the 1930s. So -- but the more interesting thing is how it gets -- where it takes its title from. And it takes its title from what is -- I hadn't known this at the time -- but Middle Eastern folklore or fable that's very famous. And it's been told and retold over the centuries in various literary contexts. But the heart of the fable is the following story.

There was a merchant in Baghdad who sent his servant to the market to buy provisions. After a short while, the servant came back, pale faced and trembling, and said, "Master, just now when I was in the marketplace, I was jostled by a woman in the crowd. And when I turned, I saw it was Death that jostled me. She looked at me and made a threatening gesture. Lend me your horse, and I will ride away from this city and avoid my fate. I will go to Samarra,

and there death will not find me." So the merchant lent the servant his horse. And the servant mounted it, and he dug his spurs into the horse, and he galloped away as fast as he could go. Shortly thereafter, the merchant went down the marketplace and he saw Death standing in the crowd. And he came to Death and he said, “Why did you make a threatening gesture to my servant when you saw him this morning?" "That was not a threatening gesture," Death said. "It was only a startle of surprise. I was astonished to see him in Baghdad, for I had an appointment with him tonight in Samarra."

[laughter]

So again, this fable is old and well known, even though I hadn't been familiar with it. But it's a variation on a very classic narrative. In seeking to avoid his fate, the servant has of course raced towards it or, as another saying puts it, "A person often meets his destiny on the road he took to avoid it." So the fundamental question is this: As we seek to avoid one consequence, do we understand fully what we may create in the process? In the nuclear context, it is essential to be thoughtful, to be disciplined in approaching this question, because the wisdom of the ages teaches us that a person can meet his destiny on the road he took to avoid it." Two years on from the sad events of March 11th, 2011, our knowledge and understanding of the Fukushima event continue to grow as time progresses. The NRC has continued to engage with plant operators through organizations such as the Institute for Nuclear Power Operations, and WANO, its global counterpart, and with the international community as reviews and investigations of the accident sequence, operator actions, and command and control responses continue to come into greater focus.

To sharpen the focus on the various responses of regulators around

the world, last year the 75 nations which are parties to the Convention on Nuclear Safety convened the treaty's second extraordinary meeting to analyze the Fukushima accident. The extraordinary meeting had two fundamental purposes: first, to converge on the most important technical areas on which national regulators should place their focus following Fukushima; and second, to discuss measures for improving the effectiveness of the convention through either amending the convention itself or its guidance documents. Although the final outcomes of the extraordinary meeting are documented more formally, I will characterize and paraphrase the following points as being among key themes that emerged. First, a tenet of a sustainable, safe, and secure national nuclear program is the establishment of a robust, effective, and independent regulator which operates in an open and transparent manner. Countries are encouraged to review their regulatory programs to implement the lessons learned after Fukushima, and to develop regulations and other mechanisms to anticipate, prevent, mitigate, and effectively respond to events in the future.

Second, since the events of March 2011, countries have reviewed and enhanced, where appropriate, technical aspects of their regulatory programs. And governments are committed to continuous safety improvement. Third, the Fukushima accident has engendered the need for enhanced and expanded attention to cleanup and decommissioning. Governments are committed both to assisting and learning from Japan in this area. As the international community continues to cooperate on these topics, three additional outcomes merit consideration. First, now and moving forward there is a need to normalize lessons-learned activities at the national, bilateral, and multinational levels into existing regulatory frameworks and practices, to better utilize

resources and ensure that new insights are sustainable. Second, it is time to formally recognize that the event has passed the phase of immediate crisis, and lessons-learned responses now need to be prioritized with other ongoing matters, no less important to safety and in some cases more so. And third, strong self-assessments need to be consistently encouraged. And frank and open discussion about issues, including following up on recommendations to address identified weaknesses in response to the accident specific to Japan, needs to occur.

The Japanese journalist, Yoichi Funabashi has spent the last two years recording the firsthand accounts of those involved in responding to the Fukushima accident, in attempting to document the full story behind his event. He has published a two-volume work entitled, "Countdown to Meltdown." Concurrent with the release of this published work, he has given a number of media interviews which reveal the unprecedented access he appears to have had to people at all levels of government and industry who were involved in these events. In an interview published last week, he was asked what lessons could be learned from the failure to conduct sophisticated training exercises in Japan, or to have better models for the prediction of accident consequences. His reply was as follows. "A true system to deal with crises has not yet been established. For example, a major change might be possible if, in deciding to resume operations at nuclear plants, the decision was made to permanently base inspectors from the newly established nuclear regulation authority at the plants and have them work together with officials of the plant operator when a crisis arose."

"Another possibility would be to have those who would be actually

manning the control rooms at the plants to inspect the new operation room and ask them if they would be satisfied that the changes incorporated would be sufficient, even if earthquakes and tsunami led to a failure of the cooling system. In the end, people will have to screen the changes proposed. Regardless of how skillfully the procedure, system, and organization are put together, in the end it is people who determine if those factors actually work. Those people who would handle operations at the control room should be asked if they feel satisfied that the changes will protect their safety and keep the plant under control. That sort of thinking, of asking people who will actually use the procedures and systems to screen the changes, is not currently found," he said. "Everything is about laws and systems. But in the end, it is about people and leadership." His statement is a powerful one and something to reflect on. While it is true that our confidence in operators must be strong, we must complement this by continuing to add to our fundamental knowledge of severe accident phenomenon.

A significant effort in this regard has been NRC's State-of-the-Art Reactor Consequence Analyses, or SOARCA. NRC began this work to refine our estimates of the potential health effects from severe accidents. SOARCA's results are so central to our nuclear safety mission that the Commission itself directed the NRC staff to develop what we labeled, "A brochure which would provide a plain-language summary of SOARCA's methods, results, and conclusions." This document is available of the NRC's website. In brief, SOARCA's conclusions include the following. When nuclear power plant operators are successful in using available onsite equipment during the accidents analyzed in SOARCA, they can prevent the reactor from melting, or delay or reduce releases of radioactive material to the environment. SOARCA analyses

indicate that all modeled accident scenarios, even if operators are unsuccessful in stopping the accident, progress more slowly and release smaller amounts of radioactive material than calculated in earlier studies.

As a result, public health consequences from severe nuclear power plant accidents modeled in SOARCA are smaller than previously calculated. The delayed releases calculated provide more time for emergency response actions, such as evacuating or sheltering in place, for affected populations. For the scenarios analyzed, SOARCA shows that emergency response programs, if implemented as planned and practiced, further reduce the risk of public health consequences. Both mitigated cases, where operator actions are successful, and unmitigated cases, where operator actions are unsuccessful, of all modeled severe accident scenarios in SOARCA cause essentially no risk of death during or shortly after the accident. And finally, SOARCA's calculated longer-term cancer fatality risk for the accident scenarios analyzed are millions of times lower than the general U.S. cancer fatality risk. When these SOARCA results are laid alongside the NRC staff's prioritization of post-Fukushima lessons learned, it is clear to see how the NRC has prioritized its regulatory response to lessons learned, to reflect these key SOARCA outcomes.

Back in 1953, U.S. Navy Admiral Hyman Rickover issued a statement which many people now refer to in a shorthand way as a comparison of paper reactors and real reactors. He wrote the following. "I believe that confusion stems from a failure to distinguish between the academic and the practical. These apparent conflicts can usually be explained only when the various aspects of the issue are resolved into their academic and practical components. To aid in this resolution, it is possible to define in a general way

those characteristics which distinguish the one from the other. An academic reactor or reactor plant almost always has the following basic characteristics: it is simple, it is small, it is cheap, it is light, it can be built very quickly, it is very flexible in purpose, very little development is required, it will use mostly "off-the-shelf" components," and, "the reactor is in the study phase. It is not now being built."

"On the other hand," he wrote, "a practical reactor can be distinguished by the following characteristics: it is being built now; it is behind schedule; it is requiring an immense amount of development on apparently trivial items, it is expensive; it takes a long time to build because of engineering development, it is large; it is heavy," and, "it is complicated." It's interesting to think that Admiral Rickover wrote those words 60 years ago. Some of these issues have, of course, been worked on in the six decades. But at bottom I think the fundamental friction he describes between the academic and the practical underlies yet today the modern challenges for those hoping to revive and sustain a nuclear renaissance, and those who must regulate it. J.K. Rowling of Harry Potter fame said, "It's impossible to live without failing at something, unless you live so cautiously that you might as well not have lived at all, in which case you fail by default."

Since I began with some thoughts on fate and destiny, I wanted to close with words that I think come the closest to aligning with my own view on the subject matter. However, as articulated by William Jennings Bryan, he said, "Destiny is not a matter of chance but a matter of choice. It is not a thing to be waited for. It is a thing to be achieved."

I appreciate your kind attention and I value the time that we will

spend together over the course of this week. And wherever it may be that our paths will next cross, may it not be on the road to Samarra.

[laughter]

Thank you.

[applause]

ERIC LEEDS: Thank you, commissioner. We have time for just a couple questions, if you will. Thank you. As the longest tenured commissioner, you've seen the industry cycle from the nuclear renaissance to being impacted by cheap natural gas from fracking. How has this evolution affected the NRC staff workload and its focus?

COMMISSIONER SVINICKI: You would think that -- and I agree that I have witnessed that. And it has been quite a change in five years' time. You would think that that would have a very strong correlation with the staff's workload. But when you think about things like the new reactor COL applications, most of those are still pending. The reviews are ongoing. And it may be that the decisions most impacted would be when or if there would be a decision to build, if those licenses are granted. Of course, we have the workload of the post-Fukushima regulatory response. And on the material side, it's been a fairly consistent kind of a workload for the other uses of nuclear material. So of course, as it does for the industry and other organizations, these kinds of changes make it very difficult to plan. But as a federal agency, we're looking always two years out in terms of budgeting and resourcing. And I think that it doesn't have as much of a whipsawing effect as you might think.

ERIC LEEDS: Okay, all right. Okay, the next question: We're two years into the Fukushima lessons learned. What do you think of the staff and

industry's efforts to date?

COMMISSIONER SVINICKI: I think it's been an impressive effort on the part of both. Again, this was an activity that people did not foresee. And no one had planned for it. And I think it speaks to the quality of the staff of the NRC and just the quality of the professionalism of people throughout the nuclear industry, that everyone has stepped up to address the issues that arise out of Fukushima. And so I -- you know, I put the efforts of those in the nuclear professions up against any other industry. I think we have a lot of very impressive people in this business.

ERIC LEEDS: Thank you, thank you. All right, the next question: The U.S. benefits from a good working relationship between the Nuclear Regulatory Commission, the Nuclear Energy Institute, and the Institute for Nuclear Power Operations. How can regulators in other countries leverage industry expertise while preserving their important role as independent, objective custodians of safe nuclear power?

COMMISSIONER SVINICKI: I think a simple answer, what comes to mind for me, is to be part of the dialogue. I didn't continue with the piece that Admiral Rickover wrote. I talked about the paper reactors versus the reactors being built in the real world. He -- Admiral Rickover actually goes on to emphasize in the latter parts of that written statement that the most important thing is those with knowledge come forward and be a part of the dialogue. And in interesting parallels between 60 years ago and today, he talks about the fact that there need to be technically-informed decisions, and that those who have knowledge need to come forth and not let those who just feel the most strongly dominate that dialogue.

ERIC LEEDS: Okay. One more question. I've got a number of questions here that all relate back to the same root, involving cumulative effects of regulation, all the activities that are going on, from NFPA 805, to GSI-191, to the Fukushima action items. And just to open it up to however -- wherever you want to take it, commissioner, if you could speak to the cumulative effects of regulation and your thoughts on that, please.

COMMISSIONER SVINICKI: Okay, I -- and I did notice that this was touched upon by Chairman Macfarlane also by Mr. Borchardt. Here's -- sounds like Forrest Gump. "Here's what I have to say about that."

[laughter]

It won't be all I have to say about it, but I'll try to be concise. He says, "That's all I got to say about that." I actually had a whole Forrest Gump piece in here that I dropped. Anyway.

[laughter]

That's a teaser for next year.

[laughter]

On cumulative effects, I guess I have not met anyone who does not think that there are cumulative effects. On the one hand, I guess just because that's a very logical statement, because when you have one thing on top of another thing you have a cumulative effect. So I guess in that sense it's not very interesting that no one contests that point. But I think it's deeper than that. What I hear from the leadership team at NRC, members of the Commission, is an acknowledgment that there is a cumulative effect of regulation. And certainly the Commission, when we testify before Congress -- I know that elected officials are thinking a lot about cumulative effect of regulation. So I don't have anyone who

comes and argues that there isn't an effect. I think it is as -- I remember crisply, Bill Borchardt up here, just moments ago, saying that we -- there won't be any change in the standards of needing things to be safe. And I don't think that cumulative effects are about any kind of compromise or relaxation on safety. What I think cumulative effects of regulation is about is let's be smart about the, you know -- have some kind of safety-informed, risk-informed approach to changes that are necessary. And I think it's not about any kind of a lowering of standards. I think it has to do with looking at things all of a piece and saying, "Are there ways that we can be smart about this and inform it properly?"

And I will say that because it gets to that question, and it's not just about, you know, the -- whether it's a fact positive and it exists. It's a lot harder when you get into that other space of saying, "Oh, it's about being smart about things." I mean, that's a very easy thing to say. But then the tool sand the way to really inform -- and what kind of metrics are you looking at? Some of my colleagues feel that it is a very site-specific kind of a question. And there certainly is a component of that. But, you know, I guess on cumulative effects, if I haven't said it to folks this bluntly, I'll say it now: If you have good ideas on how we can instill that kind of informing for cumulative effects, you know, my door is open because I really think that if you have smart ideas -- NRC staff solicits for statements of cumulative effects in our rulemaking process. That's a good first step. I mean, it's modest. But it's at least something that we can do. I know that if you feel burdened by cumulative effects you'll probably say it's not terribly sophisticated, because all we're doing is saying, "Hey, if you have cumulative effects, come tell us about them."

But as a regulator, that's, you know, part of what we can do, is say,

"I'm open to hearing what your impact statements are." But if there is some more sophisticated way to approach it, I think, you know, I'm certainly ready to hear it. And I think we need to keep chipping away at this problem. I think some of the frustration that I've heard from Congress and others is that they feel that maybe we know the answer, but we're just not bringing it forward. And I don't think that that's true at all. I think that, again, to a person, every manager at NRC where this has come up and we've talked about it, you know, they acknowledge that there is an impact. But I think we have a shared burden to come together and figure out, "What are those tools for trying to better inform this process?"

ERIC LEEDS: Thank you very much, commissioner.

COMMISSIONER SVINICKI: Okay, thank you.

ERIC LEEDS: Thank you.

[applause]

[Whereupon, the proceedings were concluded]