

>>Luciana Ciocci: Good afternoon and thank you for joining us for the DOE Request for Information Listening Session on the Hydroelectric Incentive programs under EPA—the EAct 2005 sections 243 and 247. I'm Luciana Ciocci, stakeholder engagement lead for the Hydroelectric Incentive Program, and will be facilitating today's session.

We have Maria Robinson, director of the Grid Deployment Office, joining us this afternoon for opening remarks. Tim Welch, program manager for the Hydro Incentives Program, will provide an overview of the two programs and the request for information. We will proceed with your feedback and next steps and closing remarks.

Maria, thank you for joining us today. I'll now pass the stage over to you for opening remarks.

>>Maria Robinson: Thank you so much, Luciana. And welcome, everyone. Thank you so much for having me today. This is my first time speaking in front of many of you as the director of the newly formed Grid Deployment Office, better known colloquially as the GDO. And we're really excited to be the new home of the Hydro—Hydroelectric Incentives Program. Sorry. I come out of many years of working in the clean energy industry—most recently, I was an elected official in Massachusetts—and looking to engage with all of you as we continue to meet President Biden's goals for both 2030 and 2050.

One of the things that we're really excited about here of course is the Bipartisan Infrastructure Investment Law. And over the next five years, the Bipartisan Infrastructure Law is going to stand up over 60 new programs across the Department of Energy, which includes 16 demonstration programs and 32 deployment programs. And it's expanding funding for about 12 existing RD&D programs, so it's a really exciting time to be here at the department.

As you all know—this is not anything new, but—hydropower facilities currently supply about 6% of all electricity in the United States and account for just under a third of all renewable electricity generation in the country. And most importantly, I'd say, hydroelectric power accounts for about 93% of all current utility-scale energy storage, making sure that power is there when customers need it. And hydropower has been providing renewable energy for well over 100 years.

Of course, again, because our fleet is aging many existing plants require significant upgrades, either to become more efficient or to become better integrated with new and existing renewable energy sources. The Grid Deployment Office here is going to oversee the investment of more than \$750 million in existing hydropower facilities to improve efficiency, maintain dam safety, reduce environmental impacts, and ensure generators continue to provide emission-free electricity. And in order to do this, we had to reorganize our workforce slightly, so you may see that these programs are moving throughout the department a little bit.

DOE has gone through a large-scale realignment in order to emphasize the fact that the Bipartisan Infrastructure Law and hopefully the Inflation Reduction Act will have long-lasting impacts, truly a transformational investment in clean energy. And it's going to propel the entire innovation and commercialization life cycle, from the discovery science that happens at—that underpins all of our work up through market proliferation of clean energy solutions.

So, on the next slide that we show here, it's a new organizational chart that we've got here. And back in February, you might have heard that the department as a whole announced a new undersecretary for infrastructure, which is focusing on all sorts of clean energy infrastructure, whether it's large deployments or demonstration projects. And we, the GDO, are located here in the department in that nice little red circle there. Separately, the undersecretary for science and innovation is focusing on fundamental sciences, clean energy innovation, and the department's core R&D missions across a ton of existing programs and the 17 national labs. The Office of Energy Efficiency and Renewable Energy, EERE, includes the Water Power Technologies Office with much of DOE's hydropower work. So, there are strategic efforts that are happening here to work to seamlessly align the department's work across offices to really accelerate commercialization of key clean energy technologies, including hydropower, from early-stage research to market liftoff.

So, we here at the Grid Deployment Office are investing more than \$17 billion across all of our programs to ensure resilience of critical power generation facilities, to improve and expand high-capacity electric transmission lines and distribution systems nationwide, and to improve all grid resilience work that is happening across the country. So, the main tenets of our office include enhanced transmission planning. Of course, a successful transmission network requires deliberate planning, a new and innovative approach to supporting our changing energy mix and our increasing electrification needs. We have a number of federal financing tools that provide additional options for financing investment, both loans and grants, in clean power generation, grid resilience, grid modernization, and transmission deployments—more funding than ever before—and a significant amount of federal collaboration where we're developing a modern electric grid capable of meeting all of our electrification needs. And that's going to be a large-scale holistic effort. And of course, importantly for today's webinar and in conversation, the Power Generation Assistance Project, which is going to leverage federal funding to maintain both hydropower and nuclear facilities.

So, this Hydroelectric Incentives Program that's going to oversee the \$750 million for existing hydropower facilities I mentioned earlier is going to live under this Grid Deployment Office. And we're so fortunate to have incredible leadership amongst our team here. Many of you know and love Tim Welch, who is here today to review two of our GDO's main funding provisions. Provision 40332, which is the Hydroelectric Efficiency Improvement Incentive—what we would call Section 243 from EPA Act 2005, which is a total of \$75 million in incentive payments to owners or operators of existing hydroelectric facilities who may apply for funding in order to make capital improvements—and we'll talk about what capital improvements means—that can

increase efficiency by at least 3%. The second provision of course is 40333, which is maintaining and enhancing hydroelectricity incentives, the 247 provisions out of EAct 2005, which is going to provide a whopping \$553.6 million in incentive payments to enhance our existing hydropower facilities through capital improvements directly related to three main areas: grid resiliency, which is a major aspect, especially here now that this program is living under the Grid Deployment Office; dam safety, of course; and environmental improvements.

So, the bottom line is we're here today to help fund these capital improvement project that will make hydropower facilities more energy-efficient and resilient and such an important part of our grid infrastructure. So, I want to thank all of you for being here today and taking time out of your lives to take part in this really important session. Your expertise, your participation are truly critical to the success of these programs. We look forward to hearing your feedback. We really appreciate all of your candid thoughts here today. And I just want to thank you so much for being here.

Now, I believe we'll turn it back over to Tim.

>>Tim Welch: Well, thank you, Maria. And a warm welcome to the Department of Energy and also to the hydropower community.

So, I'm going to briefly go through and give you a high-level overview of the two provisions in the EAct 2005 hydro incentive provisions that is the subject of not only our RFI but on our listening session today. And so, here's the broad overview, and the first one, which is not a subject of our listening session today is most—many of you know is the Section 242 program, which is adding power to nonpowered dams and generation to existing facilities. That program has been in existence since 2014 and—but it was funded to the tune of \$125 million by the infrastructure bill. So, because we already have the guidance for the 242 hydropower production incentives, it's not a subject of this webinar nor of the RFI.

The other—so, the two sections that we are going to be talking about today, as Maria mentioned earlier, section 243, improving existing hydropower facility efficiency, which was funded by the infrastructure bill to the tune of \$75 million, and a brand-new section, section 247, maintaining and enhancing existing hydropower through grid resiliency, dam safety, and environmental improvements, which was funded by the infrastructure bill with approximately \$554 million. Again, 242 and 243 are extensions of programs that were previously authorized in the original EAct 2005, and 247 is a brand-new program.

Okay. Let's get into some of the details. So, section 243, the Hydroelectric Efficiency Improvement Incentive Program, is improving generation efficiency by at least three%. It was enacted in the original EAct 2005, as I mentioned, but unfunded until now. The maximum%age of federal funds to the capital improvement was raised by the infrastructure bill from 10 to 30%, and the total cap was raised from \$750,000.00 to a total cap of \$5 million per project. And this was funded for \$75 million starting here in fiscal year 2022 to remain available until expended.

So, here's the brand-new program: 247, maintaining and enhancing hydroelectricity incentives. Now, a—what are the qualifying facilities? Now, the qualifying facilities here are those nonfederal facilities that have a Federal Energy Regulatory Commission license and placed in service before the enhancement of this section, or there's a grandfather clause pursuant to a permit or valid existing right-of-way granted prior to June 10, 1920, which predates the Federal Power Act.

Now, this funding will not—should not exceed 30% of the costs of the applicable capital improvement and not more than \$5 million to any facility in any fiscal year. The total here is \$553,6000,000.00, to remain available until expended.

So, as Maria mentioned, section 247, the projects that we will be seeking will fall under three broad categories: improving grid resiliency, improving dam safety, and environmental improvements.

So, let's get into each one of them in a little bit more detail. Now, here are the subtopics under each of those main topics. For improving grid resiliency, we'll be looking for applications that allow projects to adapt more quickly to changing grid conditions, provide ancillary services, integrate other variable sources of electricity generation, such as wind and solar, and can manage accumulated reservoir sediments, which really goes to increased storage in reservoirs.

Dam safety. Dam safety includes maintenance and upgrade of spillways, dam stability improvements, including erosion repair and enhanced seepage controls, and upgrades or replacements of floodgates or natural infrastructure restoration. Next. There you go. Brian? OK. Okay, here we go.

So, finally, environmental improvements. First one is adding or improving fish passage. Improving water quality. Promoting downstream sediment transport processes and habitat maintenance. And finally, improving recreational access, particularly to reservoirs. These are—here are the four categories, subcategories on environmental improvements.

Okay. So, let's get to the subject of today's webinar. So, the—on June 30th we released the request for information seeking help in establishing guidance for implementing the two programs that I just previously mentioned, sections 243 and 247, that were funded by the Bipartisan Infrastructure Bill. So, this guidance, what we'll do—so, it will help us interpret the statutory provisions, first of all, and set forth requirements for future incentive payments. How will we evaluate the applications that we receive? And so, again, the responses will assist us in establish draft guidance for these two provisions, but we will release the draft guidance for public comment prior to finalizing it for the first solicitation. So, this webinar will not be the last time you hear from us on this thing.

So, what does the RFI look like? So, it includes a total of 38 questions under these general categories. First of all, a general area of questions, particularly regarding what is the definition of "capital improvement" in the RFI we put forth, a definition that we put

together based on various sources? And we're looking for your comments on that particular definition.

Now, under 243, we're looking—we're asking questions about the program design. What are eligible efficiency improvements, because there could be more than just working with the powertrain, and how do we validate those efficiency improvements?

Section 247: again, program design. A real important area: prioritization and distribution of funds, especially among the general—the three categories that I mentioned.

We also include questions under these last two areas about equity, environmental, and energy justice and labor priorities. And finally, we ask some questions about: how does this provision help expand union jobs and ensure an effective workforce development? OK?

So, how do you respond to the RFI? Well, we've really come up with three different ways. Overall, we have a 60-day comment period that will end September 6, 2022. And the first way is to—written and oral responses are being accepted. So, the first way is to sort of do it the general way, which is writing your response. The second way is an oral response, in a couple of different ways.

First of all, today—or, today's listening session, which provides you an opportunity to provide responses in a group setting and hear feedback from other members of the community. But we're also providing an opportunity to speak directly to our staff here at the DOE. And we're asking for requests for a 30-minute verbal response to a DOE staff member, but we must receive that request by 5 p.m. of Friday, August 19, 2022. And this gives you an email address where you can submit your request for your 30-minute session with DOE staff. And finally, again, written responses to the RFI must be submitted electronically to this particular address, WPTORFI@ee.doe.gov, by no later than 11:59 p.m. Eastern Time on Tuesday, September the 6th.

OK. So, at this point I'm going to turn things back over to Luciana Ciocci, and we will then begin our public input.

>>Luciana Ciocci: OK. Thank you. We'd like to cover a couple of logistical items for today's feedback session. So, the purpose of today's meeting is to ask for your input regarding the DOE request for information on the Hydroelectric Incentive programs under section—under EPA Act 2005 sections 243 and 247. To that end, it would be most helpful to use that you provide us, based on your personal experience, your individual advice, information, or facts regarding this topic. It is not the objective of this session to obtain any group position or consensus. Rather, the Department of Energy is seeking as many recommendations as possible from all individuals at this meeting. To most effectively use our limited time, please refrain from passing judgment on other participants' recommendations or advice, and instead concentrate on your individual experiences.

Next slide, please.

So, this webinar will be recorded and made available to registrants after. If you have technical issues, try calling into the webinar via phone. Attendees that preregistered to make two-minute general statements will speak first within each topic. Public comments will then be taken in order of raised hands. If you'd like to provide feedback, please raise your hand using the Zoom function. DOE will review and consider all responses in its formulation of program strategies for the identified materials of interest that all right the subject of this request.

And now, we will move on to category one within the RFI. So, at this point, the chat box is open. We welcome comments in the chat. They will be aggregated at the conclusion of the listening session. However, we will not be responding to questions in the chat during the listening session. And also, please remember to mute your microphone.

OK. Thanks. So, for category one, we will be moving directly within the public feedback period. Category one focuses on defining "capital improvements," timing of funds, as well as collaboration with FERC. So, at this time, we will open it up to public feedback. Please raise your hand, again, to provide feedback. And a link to the RFI has been included within the chat.

So, can we have the next slide, please?

OK.

Is there an individual [*inaudible*] category one? Please remember to mute your mic if you're not speaking. Shannon Ames?

>>Shannon Ames: Hi. I also signed up [*mic feedback*]. Sorry. OK. I also signed up for two minutes. Does this count against that or can I do this in addition?

>>Luciana Ciocci: You can do this in addition.

>>Shannon Ames: OK. Great. My only point on this one is that—so, I'm Shannon Ames. I'm from the Low Impact Hydropower Institute and I am a member of a coalition that put together the Twenty-First Century Dams Act. And the creation of Section 247, as well as the additional funding in 242 and 243, came directly out of that effort. So, I want to underscore that the intent of this statute should be considered when implementing the program. And in regard to the definition of "capital improvement," it just really needs to make sure that it is inclusive and not—it doesn't seek to limit. And a specific example to that is if a project at an existing FERC project—FERC projects often have multiple dams. And in that case, if it is in the best interest of the project to apply for these funds to increase fish passage, which would be in the environmental section, that dam removal is a qualified activity under that. And it should be if you're building a fish passage, for example. Removing a dam is part of that process. So, I just flag that as an example in

making sure that these definitions are as inclusive as possible and don't seek to limit the activities. Thanks.

>>Luciana Ciocci: [*Inaudible*]. Would any other attendee like to provide feedback on category one? Josh Petersen.

>>Josh Petersen: Yeah, I'm going to actually write a letter as well for this. My name is Josh Petersen with Dakota County Minnesota [*inaudible*] Hydro Facility. I would just make a comment that we should not be—or, I guess, we should be able to get timing on projects. I know a lot of people have projects that are in the works. And I think this qualifies for both 243 and 247, but really, there are probably a lot of owners out there that actually have projects either in preliminary design stages or projects that maybe are in full design stages. Maybe some of them are in the middle of construction right now. I would offer that we do not preclude projects that are in midphases to request funds through these programs for those projects. It may even be retroactive for those funds as well towards past activities done during those projects.

Obviously, there has to be a delineation point for past projects and past work that we did. But I think you have a lot of owners here that if you require this to be—it has to be a brand-new project or it has to be at some certain phase of the project, you might preclude a lot of owners here that are already well through the planning process. So...

>>Luciana Ciocci: OK. Do we have any other—and thank you for your input, Josh. Do we have any other comments or questions regarding Shannon's comment or Josh's comment?

Dustin Highers? Dustin, go ahead. There you go.

>>Dustin Highers: Hi, can you hear me?

>>Luciana Ciocci: Yes.

>>Dustin Highers: Oh, good. Well, I'm curious about the restriction to only FERC-regulated dams. Could that be extended to the state-regulated dams as well?

>>Luciana Ciocci: OK. We won't be able to comment on that at this time but we will take your input down for consideration.

>>Dustin Highers: All right. Thank you.

>>Luciana Ciocci: Are there any questions regarding or comments regarding Dustin's feedback?

Robert Lightfoot?

>>Robert Lightfoot: Yes. Robert Lightfoot. I've been Chief Controls Engineer for a hydro facility here in Dalton, Mass., for the last 18 months, just getting my feet wet in hydropower. But when I saw that capital improvement was limited to the FERC boundary the first thought that entered my head was would that exclude the data center and/or some of the monitoring and command and control facilities that are in some cases—in our case several miles removed from the dam project itself from being considered as capital improvements, especially since we're considering some cybersecurity improvements that would affect our command and control of the hydro facility?

>>Luciana Ciocci: Thank you, Robert. I think we have feedback from Clark Bishop.

>>Clark Bishop: Hey, good afternoon. Can you hear me all right?

>>Luciana Ciocci: Yes.

>>Clark Bishop: OK, great. Yeah, I wanted to maybe piggyback on Dustin's comment, just maybe a question. I mean, so are all nonfederal facilities that have been authorized outside the FERC licensing process—and I realize there was some additional language around those permits that were issued prior to June 10, 1920—but for those projects that have been authorized outside the FERC licensing process since 1920, I mean, are they simply out of luck here or just completely ineligible for funding through these programs? I mean, I'm thinking specifically—I mean, I'm biased here. I work with reclamation. But we have our own lease of power privilege process and nonfederal permitting process for hydro facilities centered on reclamation projects. And yeah, I'm just curious to know if those—if these power privilege facilities specifically would be ineligible for funding through these programs. And if not, I mean, I would certainly advocate that they be eligible if there's that opportunity there. Thank you.

>>Tim Welsh: OK. Clark, back to your question. All I can say is the statute's pretty clear that you have to have a FERC license or be grandfathered for 247. The statute is silent with respect to 243. That's all I can say.

>>Clark Bishop: Great. Thanks, Tim. I appreciate that.

>>Luciana Ciocci: OK. Do we have any other feedback? Again, we're not taking questions within the chat. However, we will consider them.

>>Joel Herm: Hi, this is Joel Herm from Current Hydro. Is there a minimum dollar amount that would be considered a capital improvement?

>>Luciana Ciocci: No.

>>Joel Herm: Thanks.

>>Luciana Ciocci: Cheryl?

>>Cheryl Laatsch: Hi, this is Cheryl Laatsch with the Wisconsin Department of Natural Resources. Many grants across the nation are only applicable when the applicant is in good standing. I'm wondering if any of these requirements would require good standing provisions as opposed to trying to address violations or other types of compliance issues.

>>Tim Welsh: Cheryl, I believe the statute does talk a little about—particularly the dam safety provisions—that some of the things that we get will probably be in response to compliance issues with respect to dam safety. So, right now we haven't put anything in the guidance about your standing with FERC or your FERC license. So, anyway, I appreciate your comment there.

>>Luciana Ciocci: Do we have any other feedback specific to category one and the definition?

OK. Can we go to the next slide, please?

OK. We have already received a few comments on timing of funds. Do we have any other input on timing of funds or collaboration with FERC?

Robert, I see that you have your hand up. Is your hand raised from earlier, your earlier comment?

Daniel Parker?

>>Daniel Parker: Hi, yes. Daniel Parker. Alden Research Lab in Alden, Massachusetts. Related to the timing of funds, will there be a deadline for expenditures of the funds after award?

>>Luciana Ciocci: Sorry, Daniel, I'm having a difficult time hearing you.

>>Daniel Parker: Is this any better? Hello?

>>Luciana Ciocci: OK. That's better.

>>Daniel Parker: Hello. Can you hear me now?

>>Luciana Ciocci: Yes. It's very low, but I can hear you.

>>Daniel Parker: OK. Would there be a deadline by which funds have to be expended after award? I'll put it in the chat.

>>Luciana Ciocci: The question was will there be a deadline...?

>>Daniel Parker: Yes, by which the funds have to be spent.

>>Luciana Ciocci: By which the funding has—it's funded until expended.

>>Daniel Parker: No, no—

>>Luciana Ciocci: The—

>>Daniel Parker: Once you make an award, will there be a time limit by which the funds have to be spent?

>>Luciana Ciocci: Oh, once awarded? So, that will be determined in creating the guidance. So...

>>Daniel Parker: Thank you.

>>Luciana Ciocci: And again, we're not taking questions specifically. Thank you.

Carl Atkinson?

>>Carl Atkinson: Hi, Tim and Luci. This is Carl Atkinson of Voith Hydro. Just on the timing of funds, certainly you've identified the preliminary engineering, detailed engineering, procurement, et cetera. Just from a timing standpoint on utility-level projects in that kind of category, I would say you're looking at—from more or less an award to commissioning, you could be looking at up—OK—you could be looking at two to three years depending on the type of technologies involved. Once you get into some of these more environmental topics with the types of runners and different construction, you could be—certainly be looking at—at least three years on procurement or commissioning for those kinds of projects involving the power units themselves. This is not referring to the civil projects that might involve other forms of fish passage. But certainly, there is an extended lead time associated with large capital projects on the power generating equipment for these hydro stations. So, do please take that into account as you go through your rulemaking and evaluation.

>>Luciana Ciocci: OK. Thank you, Carl. Are there any other questions on category one, general? Or, I'm sorry, any other feedback?

Okay. Next slide, please.

At this time, we will take a quick break. We will be returning at 2:13, and we will see you in a few moments.

[Break from 0:38:03 to 0:38:18]

May I have the next slide, please?

This next portion of the listening session will focus on Section 243, the Hydroelectric Efficiency Improvement Incentives Program. This program focuses on hydropower

facilities' efficiency by at least 3%. And this category within the RFI focuses on program design, eligible efficiency improvements, and validation of efficiency improvements.

Can we have the next slide, please?

So, this first portion of the feedback section for 243 will have the preregistered individuals provide their two-minute statements, and then we will move on to the general public feedback. So, the first person that we have on our list is Kim Ledke.

Do we have Kim? Kim Ledke.

OK. Ann Sibley? Do we have Ann Sibley?

OK. Peter Auila?

OK. Let's move forward with Randi Iverson. I believe Randi is here. Randi Iverson?

>>Randi Iverson: Yes, I'm here.

>>Luciana Ciocci: OK.

>>Randi Iverson: Yes, I just had a question, and that was: Do any of these policies apply to private individuals who are running their own hydroelectric system?

>>Luciana Ciocci: Specific to 247, I would say most likely not.

>>Tim Welsh: Well, 247, you have to have a license from FERC. Section 243, which is our subject now, it is silent about that.

>>Randi Iverson: Silent about what?

>>Tim Welsh: About whether or not you need a license from FERC.

>>Randi Iverson: Oh. OK. Thank you.

>>Tim Welsh: Mm hmm.

>>Luciana Ciocci: OK. Next, we have Muhammed Saleh.

>>Muhammed Saleh: Hello?

>>Luciana Ciocci: Muhammed.

>>Muhammed Saleh: Hello?

>>Luciana Ciocci: Hello.

>>Tim Welsh: Go ahead.

>>Muhammed Saleh: How are you? I'm Muhammed Saleh from Egypt.

>>Luciana Ciocci: I'm sorry.

>>Muhammed Saleh: I am Muhammed Saleh from Egypt.

>>Luciana Ciocci: OK.

>>Muhammed Saleh: Yes. Yes. I can start now. You hear me well?

>>Luciana Ciocci: Yep. Go ahead.

>>Muhammed Saleh: I think, in my opinion, the development of that leads to the production of hydropower anywhere, it will be the first historical development in the hydropower field, as that would change the nature of human activities on the Earth. In our company, in 2009, we have paid all attention to the nature of water potential energy, potential energy, not the kinetic energy, which is equivalent to the enormous sun energy, which is [inaudible] the surface of the oceans. Such a huge energy source, the potential energy of water, of natural water, humans cannot so far naturally totally utilize it.

And by the end of 2016, as the company—our company has researched—the development team—the standalone hydropower plants, enabling us to fully utilize the natural water potential energy and convert it into an unlimited mode of power anywhere. This mode of power can be generated anywhere worldwide, no matter what the weather and terrain. It's a point of operational improvements for existing plants, hydroelectric plants, is eligible for blend optimization according to parameters of water intake, like quantity of water and speed of water.

If DOE considers innovative standalone hydropower plants as a mechanical and technological improvement for overall facility efficiency, it will give the opportunity to [inaudible] the desired water quantity and speed 400% performance, hydropower plants, which may power—with any power capacity. Such a process will exclude the natural places, so preventing environmental impact of traditional plants, that besides them, failures and accidents that may affect the related areas located downstream of the dam. In this situation, DOE has a justified opportunity to limit eligibility for incentive payments to only efficiency improvements that include specific project components, like turbines and generators inside the hydroelectric typically associated with the electricity generation.

Also, DOE will allow the availability of upgrading plants to have variable or adjusted speed drive also altered as the ability of this—of those units to meet different kinds of demands.

>>Luciana Ciocci: OK. Thank you. Muhammed—

>>Muhammed Saleh: I would like to say, I would like to speak on its values and its principles and what it offers to serve humanity and—

>>Luciana Ciocci: Thank you.

>>Tim Welsh: Thank you, Mr. Saleh.

>>Luciana Ciocci: We'll need to—

>>Tim Welsh: I'm sorry, your two minutes is up. But thank you.

>>Muhammed Saleh: OK. OK. I put these statements in a file, PDF file in our—in my account. And I sent it for you now.

>>Tim Welsh: Thank you.

>>Muhammed Saleh: Thank you. Thank you. A lot of thanks.

>>Tim Welsh: Thank you.

>>Luciana Ciocci: Next, we have, as part of the preregistered, prepared general statements, Sam Payne. Sam?

I believe that Sam is here today. Do we have Sam Payne?

>>Sam Payne: Yeah. Hello?

>>Luciana Ciocci: Hello.

>>Tim Welsh: There you go.

>>Sam Payne: OK. Good. Hi, I work in southern New Hampshire in hydropower. We have fairly small sites, around 900 kilowatts, slightly larger. And I just wanted to state our support for both of these programs. They really, really help when we're starting up. In particular, we tend to buy sites that have not run in a long time and fix them up. Two specific comments for 243 is in terms of validating efficiency. In one case, five years ago we bought a site that hadn't run in six years and it had never run particularly well because it had inherent problems. We since ironed them out. So, we show a great deal of improvement in generation, but whoever was validating it would need to spend—I don't know how the validation is going to work because there wasn't a consistent, good energy production data available to begin with because the site had never properly run. So, we would be—with that particular site, we would be interested in knowing how we would come at it. We could extrapolate numbers but there aren't good numbers there.

And then, the second comment I had was—oh, if the DOE should limit eligibility to only certain efficiency improvements. And we would hope you would keep it as broad as possible because, after all, water is flowing through a fairly complicated system, and something like replacing rusted metal racks, steel racks with stainless racks with a different profile or a slightly different rack with—can make a huge efficiency improvement. So, I know that that was listed as—that's part of the intake. But anyway, we would hope that that would stay as open as possible. And again, this is a great help, in particular to small projects where we have the same amount of infrastructure—well, the same amount of equipment as required to generate power as a large project, although obviously the scale is completely different. But we tend to be just a few people trying to make it work, so this kind of thing is great.

>>Luciana Ciocci: All right. Thank you.

>>Tim Welsh: Thanks, Sam. Thank you.

>>Luciana Ciocci: OK. Next slide, please.

OK. So, we are entering the public feedback period. Please limit your feedback to two minutes. Next slide.

Oh, sorry. There we go. OK. And we will take the first hand raised, which is Daniel Kennedy.

>>Daniel Kennedy: Ah, yes. Thank you. Can you hear me?

>>Tim Welsh: Yes.

>>Luciana Ciocci: Yes.

>>Daniel Kennedy: All right. Thank you. Yes. I—just quickly reiterating what Sam said, these are great programs, and they're desperately needed for small projects, opportunities to improve efficiency. We—I consult with Earth By Design. We operate in Canal, in FERC. We operate with conduit exemption with their license and their Q apps. One of the things I noticed on the 243, specifically, was that it is limited to a 30% payment on the capital improvement. Questions that I think will come up and will be vital to potentially everyone—so, hopefully, I'm verbalizing this well for the group—is: Are these going to be payments that in traditionally DOE style come after the fact and it's out of pocket first? We need to be able to plan accordingly.

I'm not sure—I think 30% is a good number depending on the type of capital improvement. If I'm replacing a [inaudible] conduit, that might be greeting me—that incentive might be far more costly than, say, “I'm coming in, and I'm replacing controllers,” or, “I'm replacing runners in the turbine.” It could be substantially, differently more impactful to certain types of improvements versus other improvements.

So, just my summary of that is potentially revisiting the 30% as it pertains to which type of capital improvement and/or the addition of other grants that could complement and assist in those capital improvements. And thank you. That was it.

>>Luciana Ciocci: Thanks.

>>Tim Welsh: Thank you, Daniel. All I would say is 30% is in the statute as a maximum.

>>Daniel Kennedy: Thank you.

>>Luciana Ciocci: Thank you. Next, we have Randi.

>>Randi Iverson: Yes. I had a question about hydro energy through ocean tides. I live in Alaska; we have tides of over 23 feet vertical change. That's a huge amount of energy. And are any parts of these—this Energy Policy Act going to deal with that type of hydroelectric energy?

>>Tim Welsh: Well, all the statute says for Section 247 is you must have a license with FERC. However, for 243 the statute is silent.

>>Randi Iverson: So, there's no mention of—I mean, of ocean tidal energy?

>>Tim Welsh: There is no mention of those specific words, no.

>>Randi Iverson: OK. Thank you.

>>Luciana Ciocci: Sam, did you still have a comment that you wanted to make as part of the general feedback?

OK. Let's move on to Brian.

>>Brian Hickey: Sure. Thank you. Can you hear me?

>>Tim Welsh: Yes.

>>Brian Hickey: Yeah. So, my name is Brian Hickey, and I'm with the Bradley Lake Project, which is located on Kachemak bay in south central Alaska. And just as a little bit of background, it's one of the—it's a 123-MVA, dual-unit hydroelectric project with a FERC license, and it operates on the Railbelt grid, which is a small, isolated interconnection that spans about 700 miles from Homer Electric—from Homer, Alaska to Delta Junction in the interior. One of the challenges that we have with the Bradley Project is project-owned transmission that limits the ability to move energy from the project into the grid. And so, I think from our perspective it would be helpful if the energy efficiency as well as the 247 section on grid resiliency allowed for project-owned transmission improvements that increase either the capacity or energy deliverability of a project.

And further, on a second note, perhaps not excluding diversions which—for example, in this region, the three hydroelectric projects that we have, two of which are FERC-licensed, have—are lake and penstock hydro, and they operate at between 40 and 50% capacity factor. So, diversions that could move more water into the reservoir and increase the actual capacity factor of the project hopefully could be considered as energy improvement or as energy efficiency improvement for the project in that you're more efficiently using the invested capital that you have in the existing plant. Thank you.

>>Tim Welsh: Thank you.

>>Luciana Ciocci: Thank you. Carl?

>>Carl Atkinson: Sorry about that. So, again, Carl Atkinson with Voith Hydro. Under 243, the key criteria appears to be the increase of efficiency, operational efficiency, and I simply wanted to encourage the rule makers here to utilize as broadly as possible the published test codes but not simply the ones that are used here in the U.S. because there's some crossover and sort of crossutilization. So, I'd strongly recommend the ASME, the IEC, and the IEEE test codes be utilized for those efficiency measurements and that you strongly consider relative efficiency improvement measurements as opposed to simply absolute measurements. The relative efficiency is actually what you're trying to determine in a comparison of existing units to updated or upgraded units, and those tests tend to be far more streamlined and far more reliable because you're doing the same thing on the original as you are on the updated unit in order to gain that efficiency delta across the improvements that you've made or capital improvements that you've made. So, I strongly recommend that relative approach as well. But they're all defined in those test codes from ASME, IEEE, and IEC. Thank you.

>>Luciana Ciocci: Thanks, Carl.

>>Tim Welsh: Thanks, Carl.

>>Luciana Ciocci: Brandon Krause?

>>Brandon Krause: Thank you. Can you hear me?

>>Tim Welsh: Barely.

>>Brandon Krause: I'm Brandon Krause from Oglethorpe Powe Corporation. For units that have previously been upgraded that may have already fairly high efficiency levels, would the DOE consider capacity increases as part of this section? For instance, shifting the performance curve of your unit so that you would maintain the high efficiencies that you already have but be able to output higher megawatts? So, for instance, going from maybe 345 megawatts to 365 megawatts or something of that sort? Thank you.

>>Tim Welsh: That's an interesting perspective. Thanks.

>>Luciana Ciocci: Next, we have Robert Lightfoot.

>>Robert Lightfoot: Yes. I just have to say, when I saw 243, I wished I had held off on some of the improvements I've made in the last 18 months, to start with. But I'd also say that line item one there, considering things such as automated raking processes for intake rakes and automatic—and remote monitoring and restart, we had quite a bit—quite a few gains at our site when we put in cameras and remote restarts rather than requiring operators to walk to the turbine to initiate a restart. And we gained quite a bit there. And also, it's not just 3% more kilowatts but 3% more kilowatt-hours would be my take on what does an increase in efficiency mean? We want more power out. And in the best worlds we have SCADA data to prove that 3%. I know for my particular application we've got production data going back nine years, so we know if we make an increase or not.

>>Tim Welsh: Thank you.

>>Luciana Ciocci: Thank you. Suzanne Grassell?

>>Suzanne Grassell: Hi. I apologize in advance if I start coughing. I'm at the tail end of something here. But I've got several comments related to 243, and I hope I'm making them in the right spot. One of them I probably should have mentioned earlier when we were talking about the definition of "capital investment." I think most IRS definitions of capital investment assume the cost of labor and installation of a capital property, but I'll just toss that out there as something to make sure is included.

And then, I don't know if you've got a separate time you want to talk about the definition of "facility," but I think that might be an important thing to consider. There's a couple of different ways to look at it. I think when you've got an individual unit where you're doing an efficiency gain, a 3% efficiency gain or greater could definitely be struck by that unit individually, but then when you would look at it as part of a, say, very large hydro project, that wouldn't necessarily create an efficiency gain for the full project. So, I think in order to be as inclusive as possible, you would want to think about defining that facility around individual units. On the other hand, I'm also a board member of NHA; I've heard folks talk about how they may want to combine a variety of efficiency gain projects to meet that 3% efficiency gain. So, I think kind of being as flexible and broadminded as possible in the definition of "facility" would be helpful.

Another thing just to think about is, especially with all these supply chain issues, I think one thing—we do have some material on site already, for example, and others may as well. I don't know if that's going to exclude us from participating. If we have material onsite that might not meet all domestic contract requirements, but we have a lot of rehabilitation or something to do—and labor to do that would meet those requirements, I don't know how DOE is going to kind of potentially be able to sift through that, because I don't think you would want to exclude all projects that may have just planned ahead in procurement but then still have a lot of work to do. So, those are—that's my input for that program if it's helpful.

>>Luciana Ciocci: Thank you.

>>Tim Welsh: Thanks, Suzanne.

>>Luciana Ciocci: Next, we have Daniel Kennedy.

>>Daniel Kennedy: Yes. Thank you. I'm sorry, I just wanted to jump on one more time and be very brief with it in regards to the numbered of items on here. Number one is the question of how, what type of capital improvements are needed. Again, I think that comes to everybody's question, is we need to define what 3% operational improvements are going to be, how they're going to be measured. As previously mentioned, SCADA. We also have options of engineers who could come in and just certain qualify—or quantify a number who are qualified to do the work.

To what—how might the DOE validate these improvements, that number three, the question—or one of the big comments I have here is about limiting eligibility for incentive to certain project components. We have turbines. We have turbine generators. We have generators. We have hydraulic power units. We have braking units. We have controller arms. We have equipment on every side of the project within the FERC boundary, within the powerhouse, within the operations. We have a pipeline. We have intake gates and, as was previously mentioned, automatic or gate—sorry, trash rack systems. The point being that where we—if the DOE's goal is to increase this efficiency and improve this hydropower across the spectrum, the goal that we want to accomplish is giving everybody an opportunity to find a way to increase and improve that efficiency.

So, being open to the idea of it is a capital improvement, it has to be on an existing capital infrastructure, but increasing the size of your walls or reinforcing walls in a powerhouse is not an improvement. But we do want to make sure that we leave that door wide open with a broad brush.

Number four, should the DOE consider other capital improvements? I don't know, but I think that's where that broad approach would come in and be more applicable to this. And then, number five, you asked about what approaches to come in and invest. Very briefly on the Section 242, they work very hard. They don't have a set formula of forms that you would fill out but they review every project. I know they're overwhelmed right now, and I know they're just working super-duper hard. But more than writing this as a grant—and I have a lot of grants—it would be nice if we had more of a standardized "What is your efficiency now? What is the proof of that efficiency? What is your proposal? What is the proof of that proposal's outcome?" And if it is just very black and white, it makes it easier from everybody from large-scale hydro to small hydro to individuals to be able to say, "Look, I have a set kind of format." And I know that might be a lot of work on the DOE's part, but just something to consider. And those would be my comments. Thank you.

>>Luciana Ciocci: Thank you.

>>Tim Welsh: Thanks, Daniel.

>>Luciana Ciocci: Jeff Leahey?

>>Jeff Leahey: Hey, Tim. Hey, Luci. Just wanted to say and point you to the FERC—on the validation question—point you to the FERC guidance document for taking—for certifying projects for efficiency improvements and capacity additions under the tax credits—under the current tax credits. I don't necessarily think that that should be the only way that perhaps a validation scenario is developed by the office, by the department, but it might be one of several different options that you could look at in terms of gaining some insights as to how past agencies have tried to validate efficiency improvements in the hydropower space. There are obviously going to be some differences because there are some different requirements under the tax code that—under this program, but I think it is an example to look to.

>>Tim Welsh: Thanks, Jeff.

>>Luciana Ciocci: Any other individuals that would like to provide feedback on 243? Ryan Grondin?

>>Ryan Grondin: Hi, Luci. Feedback that I would give is if the DOE can consider when they issue the guidance for this is how it would be applied when an investor-owned utility seeks a public service commission approval for a capital investment and if that grant would offset that, or kind of how that would work.

>>Luciana Ciocci: Thank you. Is there another individual that would like to provide feedback?

Okay. We will take a short break then. Thank you.

[Break from 1:07:10 to 1:13:06]

>>Luciana Ciocci: OK. We will now move forward with the listening session. This next portion of the session will focus on 247, the Maintaining and Enhancing Hydroelectricity Incentives Program. Again, this program focuses on improving grant resiliency, improving dam safety, as well as environmental improvements.

Next slide, please.

So, we will start out again with registered prepared general statements and then move on to the public general statements.

So, first we have Shannon Ames. Shannon?

>>Shannon Ames: Thank you for the opportunity. Again, Shannon Ames, Low Impact Hydropower Institute and a member of the coalition that basically got this statute written

and put into the bill. So, I think intentions are important and that's what I'm trying to share today. And Section 247 was created to ensure that important projects that address dam safety, add to grid resiliency, and enhance environmental protection but don't result in generational increases, which is what makes it different from 243 and 242, making sure that these projects receive incentives so the projects have the ability to come to fruition, thereby making hydropower operations and river protections enhanced.

The statute was intended to fund all qualifying projects and we'll provide some details on how we think best to ensure that a project qualifies but want to strongly suggest that the department not attempt to make this program into a competitive grant program, which was not the intention of the statute. Understand the potential limitations of the amount of money available—and we will address that in written comments. But again, just want to underscore, especially given that Director Robinson, in her introduction, did put an emphasis on the grid resiliency section and the fact that this 247 will be administered under the Grid Deployment Office, we just want to make sure that you're very careful not to put your thumb on one of—any of the categories. They were meant to be equal and we hope that that comes through.

Finally, the statute in each of the categories says, "including," which meant that those listed activities were examples. So, please make sure that those examples don't become the limitation and the only things that are eligible, but they are examples of what could be included. So, just make sure to be as inclusive as possible. Thank you.

>>Luciana Ciocci: Thank you. We have Randi Iverson. I think I see...

>>Randi Iverson: Hi. I think I'm out of comments. The only thing that I would like to have included in these policy acts would be, again, power from ocean tides—T-I-D-E-S. There's a tremendous amount of energy that can be gained from the ocean moving back and forth. And so, I think that should be included in the Energy Policy Act of 2005. Thank you.

>>Luciana Ciocci: OK. Thank you. Carl Atkinson.

>>Carl Atkinson: Hi, Luci, Tim. Thank you again. From a statement standpoint of 247, I definitely want to say that I believe this is a huge area, particularly in the U.S., for rehabilitation of the existing fleet. There are a great number of technologies available to help support both the grid resiliency and the environmental performance improvements surrounding lots of different aspects, both from the runner standpoint, the governor, and the various oil inventories around the facilities, fish passage, both upstream and downstream, although mostly downstream with the power unit equipment. And then, certainly on grid resilience the performance characteristics of both the runner, the generator, and even potentially some of the balance-of-plant equipment in exciters, governors, switch yards, transformers, et cetera. All of those are certainly areas where a project work could be brought to bear to improve both grid resiliency and capability of those facilities in a more flexible way to support the grid, as well as to support environmental areas.

One area that might be a little bit vague maybe around just operations of certain plants where there are riparian impacts to the downstream waters and river banks and so forth, some units can be replaced in such a way as to improve the ability of those units to not create those high fluctuations in river levels or water levels and to improve those environmental conditions downstream. That may be an area that's a little bit obscure but maybe worth considering as well in this evaluation.

So, I definitely look forward to submitting written comments on some of the other technologies. And thank you for the time to speak.

>>Luciana Ciocci: Thank you.

>>Tim Welsh: Thank you, Carl.

>>Luciana Ciocci: And we have Sam Payne next.

>>Sam Payne: Hello?

>>Tim Welsh: There you are.

>>Luciana Ciocci: Yep.

>>Sam Payne: OK. OK. Yep. Again, as somebody who is part owner/operator in multiple plants in southern—small plants in southern New Hampshire, we are mostly rehabilitating and getting old milldams back online. And we run into primarily rotting steel and rotting concrete when it comes to the structure, which has some effect on the efficiency on the site, but primarily it doesn't. And this would do a whole lot to help get through the amount of money you have to put up front to get things back online again. And it's quite exciting.

Included in this, though, I would encourage you to include—somehow limit repairs also to powerhouses, roofs, the covering for all of the switch gear and turbines and—I mean, not turbines, but turbines in some cases and generators because that's often severely degraded here in the Northeast. Most of our sites are a hundred years old, maximum; 30 is the youngest that we have. So, we're constantly running into structural repairs that don't have efficiency—direct efficiency impacts.

I know, it says, "maintenance of upgrade of spillways or other pertinent structures." Perhaps a better definition of "pertinent structures" would help to deliberately include penstocks, for example, because later on waste gates—floodgates, waste gates are included, which is very nice.

And then, when it comes to resiliency, we typically automate the sites, and they're typically unautomated, which has both an efficiency impact and a resiliency impact, because it allows us to react a whole lot easier than a local operator coming in and

increasing output once a day, where we have a computer sitting there measuring the pond level and increasing output as soon as it changes—or decreasing. So, yeah, those are my thoughts. And once again, thanks. It's very exciting.

>>Tim Welsh: Thanks, Sam.

>>Luciana Ciocci: Thank you. That concludes the registered prepared general statements.

Next slide, please.

Now, we are moving on to the public feedback portion of the 247 topic.

Next slide, please.

So, this covers specifically category—well, (A) prioritization and distribution of funds within 247. So, we will start to take comments. Again, please limit your comments to two minutes. We will take—we will hear from Brian Hickey first.

>>Brian Hickey: Good afternoon—here in Alaska anyway. Almost afternoon. Thanks again for the opportunity to comment here. And I just wanted to reemphasize sort of the unique nature of the Bradley Project and its integration into the Railbelt grid, which is a very loose interconnection that's transient-stability-limited. The project itself is actually a 123-MVA project but it's limited to operation at 90 megawatts primarily due to losses, which I talked about in 243, and the stability limit of the project transmission lines that move the project's energy off the Kenai Peninsula north to the participants beyond those down on the Kenia.

So, I think that if there could be an inclusion in the grid resiliency aspect of this to improvements in stability margin, I think that would be a worthwhile—transmission improvements that lead to an improvement in stability margin, that would be very helpful for us. The project itself has been plagued with both small signal instability problems as well as transient stability problems since its commissioning in 1992. So, anything that we can do to move the transmission side of this, as long as they're project-owned assets, under the grid resiliency aspects of 247, it would be helpful to us and our sort of unique circumstances here in Railbelt. And thank you again for the opportunity to comment.

>>Luciana Ciocci: Thank you. Next, we have Daniel Kennedy.

>>Daniel Kennedy: Yeah, thank you. Just going through the line items, "What are some of the ways to prioritize the funding?" In these three different terms, honestly, that's a complex question because I think all three of these sections have equal weighted value depending on their impacts. There's things that we can do to our transmissions—or, sorry, to our switch yard point of interconnection and to our very cable that could massively provide more stability to the grid in the areas where we're located. At the same time, like for environmental impacts, there are definitely things that we can do for water control and quality. There are things that we can do to help reduce—like, for instance, in the

Pacific Northwest, where we suffer right now some water loss and some water issues, there are things that we can do with the additional help and support, and we can work with irrigation districts, water districts, and things like that for a joint project that would actually increase—stabilize the water, stabilize the impact on the [inaudible].

So, just once again painting with a broad brush these possibilities, and that one being a much more wide-open category on what is the impact that we're searching for and a definition of what kind of impacts you want to see, more than just a question of what will you do? What will the impact be?

As far as the type of payments... I think it is fair to say that, everybody who is trying to do capital improvements or any sort of improvement, it's always about money up front. It's always about scheduling contractors. It's always about having the funds available. One of the great programs the DOE had, which I really appreciated, was the Advanced Hydro Development Grant. It was amazingly well run and it offered an opportunity to do—on a long-term, something that would last three to four years to get completed, to do—to submit invoices, receive payments, receive funding as we went along the project based on a finite amount, specific goals that have to be met, and qualifications of those goals in advance.

That's it. That's what I have. Thank you.

>>Luciana Ciocci: Thank you.

>>Tim Welsh: Thank you, Daniel.

>>Luciana Ciocci: Jeff?

>>Jeff Leahey: Yeah, thank you. I just wanted to sort of reiterate some of the comments that we heard from Daniel and earlier from Shannon with regards to prioritization. The—as I think was mentioned, all of these categories are very important and, I think, equally important, and important to different asset owners for different reasons. And the statute didn't provide any sort of direction with regards to the need for DOE to be prioritizing and sort of making value judgments across categories or within categories, types of activities within categories. So, I think we would encourage, or at least I would encourage the DOE to consider whether or not "prioritization" is needed, and this is more of a program that supports all eligible activities that come in and that apply.

I also think that that potentially creates doing some sort of crosscomparison between categories of projects or within categories of projects. It's going to create a tremendous amount of additional work for the review process by the department and potentially could slow down significantly the process and therefore the payments. Thank you.

>>Luciana Ciocci: Thank you. Daniel?

>>Daniel Kenney: Yeah, sorry, I had one more. And thank you for the follow-up there. It's—and I know it's been asked in the comments, but the big question being—there are two sections here: 247 and 243—will both—the question on everybody's mind is going to be "Can I apply or qualify for both? What parts of my project could apply for both? Or not?" And a clarification to that, because one of the things that I mentioned earlier, like grid resilience, OK, I can come in and I can actually do a tremendous amount of work on transmission lines and switch yards, and it would really stabilize our power with the local grid and utility. I can have engineers certify and approve it. But at the same time, it also becomes—whether I want it to or not, it increases the project's efficiency power output in that kind of regard.

So, some of these things are going to cross over, so I think just from my perspective when I'm going to—when I look at this, I'm going to have these million questions: What crosses over? What doesn't? How do I separate out, yes, if it would be applicable to upgrade the runners in my turbine for improvement efficiency, could it also be applicable to then say, "Look, I need to put in X equipment that's going to improve the quality of the water and the quality of the aquatic life that are affected by it"? So, just those two things that mesh. I'm sorry, just that one last comment. Thank you.

>>Luciana Ciocci: Thank you. Any other comments specific to prioritization and distribution of funds?

OK. Next slide, please.

OK. So, now we have moved over to the grid resiliency improvements. Do we have any feedback on section B within section 247, that category?

Daniel?

>>Daniel Kennedy: We all know when it comes to the grid resiliency improvements that this is going to involve the power utilities. And it's going to involve a lot of going back and forth with their engineers to just be clear that whatever we're doing, whether it's at our switch yard, our switch gear, whether it's in our transmission lines, our point of interconnection, everything we're going to do is going to have to coordinate with these guys. And I think that they're going to want to have input. They're going to want to be very, very "What are we doing? Why are we doing this? How is this helping us?" And we need to know whose definition the DOE wants. Just my thoughts. Thank you.

>>Luciana Ciocci: Thank you. Any other thoughts on grid resiliency improvements? Other feedback?

Anyone that would—who used the chat previous and would like to speak at this moment?

OK. Next slide, please.

So, we are now looking for feedback on dam safety improvements.

Jeff?

>>Jeff Leahey: Just to say that, as we talked about in the 243 program with regards to the FERC DHAC Office, having a system for looking at certification of efficiency improvements, obviously their coordination or some consultation or coordination with FERC D2SI would potentially make sense here. I think that there are other organizations that potentially could be considered, whether they be state dam safety organizations or others. So, not to say that FERC is the only one, but obviously there is some coordination that could happen amongst that group and potentially others.

>>Tim Welsh: Thanks, Jeff.

>>Luciana Ciocci: Any other feedback pertaining to dam safety improvements under section 247?

Daniel?

>>Daniel Kennedy: Hi, just following up from what Carl had said earlier, and I think someone else mentioned it. Because of supply chain issues, because we are having some economic issues, I think whatever—and I know this doesn't start coming through 2023, depending on what we have once we get through the election, just a consideration for any of these projects that might be longer-term that might be facing more delays than what other projects would. Thank you.

>>Luciana Ciocci: Thank you. Jeremy?

>>Jeremy Somogye: Yes, thank you. Jeremy Smogye with Eugene Water Electric Board Public Utility. I was just going to have a comment to number three on this slide and just make a recommendation that some prioritization be allocated towards FERC projects where FERC has remanded the project to go on hold over dam safety issues. That might be a good prioritization avenue for those who are on holding pattern for generating. That's all I have. Thank you.

>>Tim Welsh: Thank you.

>>Luciana Ciocci: Carl?

>>Carl Atkinson: Yeah, Tim and Luci, again, on section three as well. I guess I'd be remiss if I didn't suggest that projects that contribute specifically to improving public safety around existing dams, whether there are hazardous conditions or simply improving safety for recreators, and so on, I would think those maybe should have some priority in that discussion if there is a prioritization to be done. But public safety is what I would suggest.

>>Luciana Ciocci: Thank you. Any other feedback regarding dam safety improvements under 247?

OK. Next slide, please.

We're now looking at environmental improvements under section 247. You can go ahead and comment.

Muhammed?

Looks like there might be a technical issue. Daniel Kennedy?

>>Daniel Kennedy: Thank you. Speaking for hydro projects that are in run-of-river, run-of-canal, one of the things that I would like to see, and I do not see it very often, is some sort of support for things like canal lining. I know that can be an expensive request, but if we were working with irrigation districts, water districts for our specific hydropower, because it proves our project—I could—right now, I know one of the projects I have in Oregon, I could literally run just a simple five miles of lining upstream and not only would I save—I could literally be stopping the loss of millions of gallons of water. I'm improving my downstream output. I'm improving the downstream effects. And I'm improving the quality project of the hydropower itself because of the way we can better capture water. [Coughs] Sorry. A little bit of coping. I know that's an extreme example, and I don't mean to just throw out an extreme example, but it talks about things, about how we improve capital projects in here, and I'm going, "I'm not sure everything for—when we're talking about environmental impact is going to be limited to—should it be limited to my intake? Should it be limited to my powerhouse? Should it be limited to my tearaways? Is there things I can do working with the canals, working with the conduit to improve it overall?" Maybe these are outside of the spectrum of what was intended in this legislature, but the whole idea, again, was—the big concern of the Pacific Northwest is water quality, protecting the aquatic habitats, aquatic species. So, just something I would love to see considered in this project. Thank you.

>>Luciana Ciocci: Thank you. Cheryl?

>>Cheryl Laatsch: Hi, Cheryl Laatsch from Wisconsin DNR again. I think the items outlined as far as water quality improvements, fish pathogens, and such are very common. I'm hoping that kind of building off some of the stuff that Shannon had mentioned earlier where utilities or hydroelectric operators and owners can collaboratively come together to look at basin planning for drought and climate resiliency or flood resiliency through different types of assessments. Basinwide planning, and hydrologic assessments could be something that could be considered or fit into some of these different boxes or categories, as they are not a strict water quality, they are not a strict single species. They are more of a holistic approach to better management of a resource system.

>>Tim Welsh: Thanks, Cheryl.

>>Luciana Ciocci: Let's see. Muhammed, are you still having technical issues?

>>Muhammed Saleh: Are you hearing me now? Hello? Hello?

>>Tim Welsh: Go ahead. Go ahead, Muhammed.

>>Muhammed Saleh: Yes. As a goal, in my opinion, in this [inaudible] is a new ultimate [inaudible] for the problems of traditional hydroelectric power stations, which are many in deterioration in the infrastructure and the environmental effects of traditional hydroelectric power stations. As a company achievement, it's an innovation of a new method to use the world's water potential energy to generate electric power or practically ultimate mode of power. In my opinion, DOE should divert the incentives program towards installation of the new—or, the lowest cost potential hydroelectric stations [inaudible] at the final [inaudible] of distribution [inaudible] of hydroelectric station based on dams to compensate the degrees of power reduced by such dams. The application of DOE to install as the potential hydroelectric stations as a new power—hydropower flexibly technology to provide 100% flexibility for traditional hydroelectric power plants and neglected environmental constraints, as the constraint which is costly and hard to be [inaudible]. And to focus on the rate of the operational constraints and improve the grid resiliency, which can [inaudible], like turbine and generator efficiency enhancement.

And I would like to say [inaudible]. It's [inaudible] too for a national company mentioned by DOE to work with this or a new national-funded company by DOE to implement these contributions. And—

>>Luciana Ciocci: Thank you. Jim Howe.

>>Jim Howe: Yes, hi, everyone. Thanks to all of you at DOE for hosting today. I'm Jim Howe with the Nature Conservancy. We just wanted to weigh in on question number one here. If you do get a proposal that looks like it's benefiting one species over another, I'd really encourage you to think about consulting with partners, state agencies in particular, state environmental or fish and wildlife agencies to help you weigh the merits of that proposal. And I would definitely associate myself with the previous comment about looking for environmental improvements that benefit the whole system rather than an individual species. Thanks for the opportunity to comment.

>>Tim Welsh: Thanks, Jim. Thank you.

>>Luciana Ciocci: Daniel?

>>Daniel Kennedy: Thank you. I appreciated Cheryl's comment, and I just wanted to follow up. What that kind of got me thinking about, though, is what happens in this particular 247 if one hydro facility says, "Look, I can upgrade grid resilience, and it's a substantial improvement. I can upgrade dam safety; it's a substantial improvement. I can

make an environmental improvement, just like was mentioned previously, that will benefit multiple species, and it's an overall system improvement." Something to think about is how many people are going to then say, "Can I only apply once or can I apply to the separate individual components of this if each one of them can qualify separately? And then, how does that affect the application process?" So, just that thought.

>>Tim Welsh: Thank you, Daniel.

>>Luciana Ciocci: Thank you. Nathan?

>>Nathan Rangel: Yes, hi there. I'm with California Outdoors. We're members of the Hydro Reform Coalition. I just wanted to simply say I wanted to second everything that Jim Howe just mentioned in—as regards to this issue. So, that was it. I just wanted to let you know that we certainly support those types of—all those types of criteria in terms of how to deal with all of this. Thank you very much.

>>Tim Welsh: Thanks, Nathan.

>>Luciana Ciocci: Thank you. Any other feedback on environmental improvements within 247?

Next slide, please.

This provides an opportunity to give us general feedback. So, it doesn't necessarily need to be on a specific topic within 247.

Jeff?

>>Jeff Healey: Thank you. I think one of the things that I hear that industry members are seeking more clarity on is going to be things like DEI, the process for divested content and the waiver process for that. These—242 and 243 were existing programs, as Tim noted, and never had—and were funded through annual appropriations or were hopefully going to be funded through annual appropriations in the case of 243, and so there weren't those additional criteria that were included as part of the infrastructure law. So, understanding better how they're going to be applied in this context, I think, is something that I have heard again and have also heard that people are also wondering how those requirements, which are substantive, and how compliance requirements in terms of receiving federal money through this program, what those will look like and what they may have to do internally in their processes in order to make sure that they're in compliance, if there are such things that are needed, which there may not be.

>>Luciana Ciocci: Thank you. Daniel?

>>Daniel Kennedy: Yeah, thank you. And I know Mr. Welch clarified this in the 243, but there is a 30% cap and it's already written into the legislature. There just might be—again, it's very difficult for a lot of people right now and we want to see these projects be

successful. Whether or not it's working with some of the folks in the environmental group if it's an environmental improvement, that we can piggyback and support one another in that kind of a possibility, or if it's just for hydropower and in some areas where the avoided cost rates have been dramatically reduced and it's not—and you see things like droughts causing, really, financial harm, the performance increase and the opportunity for a capital cost improvement could keep some projects alive. We're already seeing the—and I don't know if it's going to happen or if it's already just set in stone—we're already seeing the [inaudible] thing going—we're seeing hydropower just being thrown away. And it would just be nice to see, okay, some of these projects, maybe there's something we can do to help balance for some of these folks.

And that's just a thought. I don't know how you would approach that or begin to approach it, but that would be my concern for some of these projects, to say, "I could finally stay alive, I can keep hydropower going, and I can improve my efficiency, but I don't have a million dollars out of pocket just to lay down at the moment." So, those are just something to consider and I don't know how you would approach it. Thank you.

>>Tim Welsh: Thanks, Daniel.

>>Luciana Ciocci: Suzanne?

>>Suzanne Grassell: [Inaudible]

>>Luciana Ciocci: Suzanne, I'm sorry—apologies here—

>>Tim Welsh: You're breaking up, Suzanne.

>>Suzanne Grassell: [Inaudible]

>>Tim Welsh: Still breaking up.

>>Suzanne Grassell: [Distorted] Can you hear me better now?

>>Luciana Ciocci: No.

>>Tim Welsh: Not really.

>>Luciana Ciocci: Only slightly

>>Suzanne Grassell: OK.

>>Luciana Ciocci: We'll call Branden now, and we'll go back to Suzanne. Brendan?

>>Brendan Krause: Yes, thank you. I just wanted to make two points. DOE might want to consider how a phased application process would work in which a very simple or reduced phase, first phase of the application might enable applicants to get a quick read

on qualification, however you choose to tier that. The second point would be that DOE may want to consider having a first half of the funding in an initial tranche or process here, evaluate what worked and didn't work, and then do a second half in the—for the remaining funds that are available so that you could perhaps tend a program in the second half. Thank you.

>>Tim Welsh: Thanks, Brenden.

>>Luciana Ciocci: Suzanne? Let's see if we can hear you.

>>Suzanne Grassell: Can you hear me better now?

>>Tim Welsh: Yep.

>>Luciana Ciocci: Yes.

>>Tim Welsh: Don't move.

>>Suzanne Grassell: OK. Well, we'll try this. OK. Hopefully, you won't get too much background noise. But I just wanted to second what Jeff said from the compliance perspective. We're in the power public community; we're very compliance-oriented, and we don't have a lot of experience taking on a lot of different federal funds. And I think one of the things we're really looking at is just some direction on maybe where to go. I think some agencies have standard legal contracts, for example, on the back end. Once you're actually selected for an award, then there's this whole process on the contract side. And I think that would be really helpful. I don't know if DOE has something like that already or if you think you're going to, to just even know that in advance, what that contract might look like, what things we just might want to expect to see so that we can get prepared and just have a better sense of who to go to with questions on the compliance side of things.

>>Tim Welsh: Sure.

>>Luciana Ciocci: Carl?

>>Carl Atkinson: Hi, Tim and Luci. I don't know if there is precedence for this, but given the complexities of 247 in particular, it may be worth considering one or more advisory panels for the review of the various applications and some of the technical aspects of those. I don't know how DOE is exactly positioned to do those kinds of evaluations simply to determine what is the applicability of each application to the specific provisions. But at the end of the day, there may be some value in having an advisory panel involved in that in some way. And I'm certain that the industry—Tim, you know certainly that there's a lot of expertise not only around the industry but certainly with the NGOs and the environmental community as well that could participate in something like that.

>>Luciana Ciocci: Thank you. Any other general feedback on 247?

OK. Next slide, please.

Category four: equity, environmental, and energy justice and labor priorities. Are there any general comments on this category?

Daniel?

>>Daniel Kennedy: Yes. I'm sorry, just a second. I apologize. This oxygen...

Anyway, the question I have is it would be really nice to see a flat-out—an example. It just really would as an applicant. I've come across equity, environmental, and justice before, and I read it one way; some of the coalitions I've been in, each individual member read it a different way. So, something that is more well-defined for us on this end. When we're were talking about equity, environmental, and energy justice, are we—is this labor, is this people, is this culture, is this community, is this energy? Is this a project? Just something that defines it better for us would be one of the things that I think would help in the process. Thank you.

>>Tim Welsh: Thanks, Daniel.

>>Luciana Ciocci: Thank you. Any other feedback?

Okay. Next slide, please.

Category five: expanding union jobs and effective workforce development. Do we have any feedback here?

Jeff?

>>Jeff Healey: I would just say to you guys that I think you could expect feedback. I think people are probably still working, particularly on these last two categories, aren't as necessarily plugged in as we are to some of the more technical categories, but can expect that you'll get some feedback.

>>Luciana Ciocci: Thank you. Linda?

>>Linda Ciocci: Thank you. On behalf of the Hydropower Foundation, I think what you've proposed here, I think, is extremely important with regard to recognizing the importance of workforce and workforce development issues. One of the greatest issues, however, is creating an industry that is strong, and so these incentive programs, I think, are critical toward that end because you're not going to be able to attract a new workforce to the industry unless they sense there is real opportunity. So, I applaud the creation of these programs. I think they're going to be critically important. Obviously, continuing these types of incentive programs are extremely important for the industry.

But one of the things I do want to point out, and I think it's incredibly important, is that the department recognizes the critical need for funding of these types of workforce programs. There is not a lot of money out there that supports the types of training necessary for the hydropower industry that supports community-based organizations or organizations like the foundation. So, as you really look at how you're going to implement and promote workforce development within the hydropower industry, you're going to need to look at the types of training programs that have made a difference before—and there are programs out there, and we'll be filing a response to this with regard to what they are—but you also need to understand the need for creating new programs, like hydro veterans programs and things of that nature. And we'll be filing some recommendations with regard to that as well.

So, I just wanted to point out the need for the creation of these programs in order for and really to bring in the type of workforce that's necessary. It's going to be a huge, huge opportunity within the hydropower industry because of the number of retirements and people that—there will be a significant amount of openings, tremendous variety of the types of jobs that will be created as a result of these programs and the new infusion within the hydropower industry. And getting that word out and working to ensure that the types of programs are available to train and prepare these students and working with the universities is going to be important.

That's all I have to say. But watch for our comments when we file them. Thank you.

>>Tim Welsh: Thanks, Linda.

>>Luciana Ciocci: Thank you. Any other comments? Feedback?

Okay. Next slide, please.

>>Tim Welsh: All right. So, just to reiterate something I said earlier, just to leave you with the—sort of the next steps here, with regards to mechanisms to respond to the RFI. A 60-day comment period. We're about halfway right now and it ends on September 6, 2022. Written and—both written and oral responses are being accepted. With respect to oral responses, in addition to the ones that you heard today you can make an appointment for a 30-minute verbal response with a DOE staff member, but that request must be received no later than 5 Eastern Time on Friday, August 19th. And you see the Web—or, the e-mail address that—where you send your request. Now, written responses, the traditional method, must be submitted electronically to the WPTTRFI@ee.doe.gov no later than 11:59 Eastern on Tuesday, September 6th.

Next slide.

So, here's our tentative schedule. So, our tentative schedule, we are now in sort of the second phase there for both 243 and 247. The July through September area, we were holding our public workshop today on August 9th, so next we move into the third

column, the final column for FY22, and that's preparing the guidance. So, once we receive the feedback from the RFI we'll begin to put together the draft guidance.

Now, here's where we depart a little bit with both things running perfectly in sync together. We will give some priority to our 247 guidance so that we can get that out for public comment. We will continue to work on the 243 guidance, however, and we will be requesting comment in January/March 2023. So, we're hoping with 247, by giving it some priority we'll be able to issue our final guidance and open our solicitation in the spring, then begin reviewing applications in the spring, and then in early summer issuing payments. And so, again, 243, a little bit more behind but we will give both 243 and 247 our utmost attention. But we really wanted to get the 247 guidance out as soon as we possibly can.

Any questions there on our schedule?

OK. So, just the process for applying for the incentives. Hopefully we'll have the guidance. It's very clear to everyone. So, I would encourage everyone to read the published guidance thoroughly in its entirety. Incentives are for qualified eligible hydroelectric facilities as defined in the guidance, which would be based on the statute. You need to submit an application addressing all the requirements and the guidance and provide supporting documentation. And of course, you must submit before the application deadline.

So, I wanted to say a little bit here about our payment steps. I know there's a lot of questions about the accounting principles the DOE is using. We're in the process of consulting with our general counsel about those principles with respect to really what are these incentives and how does DOE handle these incentives? Do they handle them a little bit differently as they might handle financial assistance? So—but one thing we do know is this is sort of the mechanics for how you would get your award. This will probably be in the guidance anyway. This is sort of based on our section 242, which we've been running since 2014.

So, just to go through this relatively quickly, I'll turn it over to Corey Vezina.

>>Corey Vezina: Thanks, Tim. As Tim was saying, we're basing off the qualification processes and the financial compliance requirements of—similar to 242. These incentives are a unique funding mechanism for DOE, so they fit into their own niche. But basically, the steps that we do know are likely going to qualify would first you need to obtain your tax ID number—this is something that all federal recipients would need to do—as well as registering your entity into the SAM account system, the System for Award Management. Lastly, if you actually want to receive your payment, you need to register with the VIPER System, the Vendor Inquiry Payment Electronic Reporting System. These are all our basic steps just to go through to receive those federal funds and those federal dollars. Once again, this is based off of our 242 process that we had put in place. If there are more financial procedures or processes that will be required, as Tim said, we'll be updating those details in the guidance and list those there once it's released.

Tim?

>>Tim Welsh: OK. Are there any final questions before we go? OK. Oh, one more. Nathan.

>>Nathan Rangel: Yeah, sorry. Quick question. We're requesting a 30-minute verbal opportunity to meet with your staff. I'm assuming that we can do that and then also after that, as long as it's in time, submit written comments. Is that the case?

>>Tim Welsh: Of course. Yep. You can use all three methods.

>>Nathan Rangel: And thanks for everything, all the way. I appreciate all this.

>>Tim Welsh: You're welcome. And thank all of you for joining us today. And again, we'll leave this slide up for a few minutes here. And these are the important deadlines that are coming up. So, again, thank you. We will be putting out the guidance for both 243 and 247 out for public comment. And so, this won't be the last you'll hear of us. So, anyway, once again, thank you very much.

>>Luciana Ciocci: Thank you.

>>Daniel Kennedy: Thank you.

[End of audio]