MARTY ROSENBERG
April 15, 2022
Grid Talk #306

CHRISTINE HARADA INTERVIEW

Hi, we want to welcome you to Grid Talk. Today we're very pleased to have with us Christine Harada, who is the Executive Director of an agency that you should know about, called the Federal Permitting Improvement Steering Council and was created back in 2015 to help facilitate government approvals of major projects, and we're particularly interested in talking to Christine today because of the massive infrastructure spend that's coming down the pike now that Congress has approved the Bipartisan Infrastructure Act.

Q: Hi, Christine and thank you for joining Grid Talk.

A: Thank you so much for having me.

Q: So, in your byline I neglected to say that you were also the White House Chief Sustainability Officer in 2016 and you have an interesting background. You have a BA and a MA from MIT and Stanford respectively in aeronautics and astronautics. How has that prepared you for the job that you now hold?

A: Yes, so I would like to argue that that is exactly where I cut my teeth with the respect to managing large, complicated projects. Of course, building out satellites and airplanes has

millions of parts, super high risk, zero tolerance for failure type of environments and so thinking through all of the various systems and how they're all integrated together, how they're all sequenced, how do you manage the supply chain, how do you manage suppliers in the integration and test of all of that is exactly how cannily I think of doing large-scale, program management.

Q: So, we're…let's focus a minute on an area of your work and that's with energy infrastructure, clean energy infrastructure, renewables and transmission lines. In particular, transmission lines are notorious for getting bogged down in red tape. How do you assess that problem and how are you addressing that problem?

A: Yes, so transmission lines of course, to your point, can and do take many, many years for planning and construction well before it can even be charged. A lot of the elements that can tie into or can certainly contribute to a number of those delays can include the environmental reviews and the permitting and authorizations that are required both at the Federal level as well as at the state levels as well. Just the fact that the project developer has to coordinate with so many different entities with frequently different priorities across different administrations just given the timeframe that it takes to go and develop these kinds of lines and projects which I think certainly sum up the major contributors to a lot of the time associated with that.

Q: So, let's talk about a major transmission lines and I went on your FPISC website and you have quite a number of project listed in worksheet fashion there. What's the purpose of that listing and what is that that enabling the industry to achieve?

A: Absolutely so our website—what you're looking at there is the Federal permitting dashboard which publicly tracks the status of project reviews and authorizations and provides that transparency and accountability for their progress. And the process includes all the environmental reviews and authorizations so it's not just me but so it's things like transmission lines, that includes rights-of-way, Historical Preservation Act Section 106, Endangered Species Act, consultations, Clean Water Act, coordinating with the Department of Defense, permitting Clearing House depending on the location, obstruction, lighting, marketing, etc., and we fundamentally provide transparency and accountability, and predictability for not just the project sponsors but also for Federal and state agencies as well with respect to the progress of the project.

Q: Who approaches you with the project? Do all Federally-funded projects get funneled to you or how does it actually work?

A: Yeah, that's a great question. So, we are a voluntary process which means that transmission developers and other project developers are the ones who have to apply to work with

the Permitting Council. It's not that complicated; we're very happy to consult with your audience on how they can benefit from the process of rule and we'd very much love to encourage the listeners to reach out to us. Our website as you mentioned is FPISC.gov or Permits.Performs.gov and our contact information is listed there.

Q: So, how many projects would you say that you're tracking by now particularly in the energy sector? Do you have a data on that?

A: Yes, we're tracking 28 projects in total over half of which is offshore wind. We have 12 projects that are currently on the dashboard within our portfolio. We also have two transmission lines, SunZia and Ten West Link, that we are currently tracking and actively working on.

Q: How well known do you think you're known to the utility industry, energy companies, transmission developers, renewable project developers? Are you all known and how are you addressing that?

A: I would say that we are relatively lesser-known and that is for a couple of reasons. Number One: We were only recently stood-up as a Federal agency in 2015 when Congress passed a law called FAST-41 to establish the Permitting Council and bring together those agencies to help coordinate the environmental reviews and

permitting activities. Belatedly, when the law was initially passed, there was a sunset on our organization and we were originally slated to go away in December of 2022. Thanks to the Bipartisan Infrastructure Law, we were now just made permanent, so as of November 15, 2021, we are the newest member of the start-off family, permanent Federal family and that is why I'm currently on a mission if you will to make sure that developers and utilities, RTOs, etc., are familiar with our organizations so that we can actually deliver on the president's Infrastructure Agenda.

Q: To encourage them, do you have any data on how a typical 30-mile or 50-mile transmission line getting approvals has taken on a task on and where you'd like to see it go? How much time could be saved?

A: Absolutely. I would say, maybe not specifically or those types of projects in general across many of the other renewable energy projects like solar. For example, we have found that we were able to decrease the overall timeframe by upwards of 2-2½ years just simply because of the transparency provided by the dashboard and by the activities that this Council takes on to be able to help negotiate and review and resolve challenges.

Q: How about transmission; any idea of what…even if you don't have hard data, what's your hope? Would you like to trim 10% or 25% of the time? What's achievable?

A: I could certainly at least 10%. I am an overachiever so I would love to achieve something like 25%. I think that's certainly just within the Federal agencies realm of control, 10% is a great target. Working with state and local entities, I think that's something like a 25% reduction would be a great stretch target. On state agencies, state governments, we have the authority to work closely with state governments and they too can opt into the process itself and so that's something I'm actively looking to help coordinate with other states.

Q: During the Obama Administration after the last major recession, there was Federal stimulus spending allocated. A lot of it went into Smart Grid-funded projects but we find that a significant share of those dollars never got spent. Is it your hope that that does not happen with this $80 billion dollars that's been allocated?

A: Absolutely. Time is the enemy, right, and it's the same thing whether it be the project's sponsor is a state entity and you need a spend with the government funding or whether it be some an America rescue plan funds that we're also starting to see in other sectors like broadband and/or for private sector project sponsors to simply because you need to go out and get the project finance for your particular project. Time is the ultimate killer

for a lot of these projects and so that is very much the goal and variable that we're trying to optimize for.

Q: Now, you're alluding to the fact that you're on a mission to get your Council better know. Are you going to work with any Federal agencies like DOE to try to get projects launched and maybe more proactively engaged in projects in their early stages, before people find you, get engaged with those efforts?

A: Absolutely whether it be working with the departments themselves or the Department of Energy. Actually, Secretary Granholm and I just spoke this morning about permitting and how we might be able to work more closely together on one of projects that they're launching but similarly, working with many other agencies whether it be on the Department of Interior and the Bureau of Ocean Energy Management with offshore wind, or with the Department of Agriculture in forest service lands when they can usually go take the lead in conducting s for other renewable energy projects like solar fields, etc., so, absolutely.

Q: So, let me take you to one topic. It's an area that's on your website as bulleted area of interest for you and that's carbon capture projects. Can you think of any that you'd like to see work with DOE and inspiring?

A: So, we're currently very much in active discussion with the Department of Energy on carbon capture and utilizations and se-

questration projects. I also know that there are also a number of states that have voiced an interest in not just carbon capture but establishing hydrogen hubs. This is just an example of another area that we're looking to partner with both the Department of Energy and states.

Q: What about conventional energy? That's an area that also is in your purview. There's a new generation of small modular nuclear reactors. Are you going to work with that?

A: Absolutely. The NRC, the Nuclear Regulatory Commission is also a member of the Permitting Council and we are…we have not had nearly as many active conversations with the NRC with respect to small modular nuclear reactors. We've been a lot more focused on renewables and transmission.

Q: You are, in the renewables arena, you mentioned of offshore winds. What are some of the permitting obstacles there and it seems like you're getting—forgive the pun, seems like you're "getting your feet wet" in not getting those ratified. What kinds of issues does a major offshore wind project face because frankly, if you've been through it, there are many, many more offshore wind developments that have taken place here in North America. Talk about offshore wind and what work you're doing there.

A: You know, all of the ongoing offshore wind efforts are in our portfolio and we are working very closely with not just all the Federal agencies but with the project sponsors as well. In that, this industry's…it's absolutely novel and it's new for this nation. Period. End of story and so, with that, we are all learning together about with project sponsors. How do we think about doing permitting for eight fundamentally different kind of structure within the ocean. It is very different from oil and gas platforms where it's just eight plus one or two; you can count on them and they're in the dozens. With offshore wind we're talking about thousands of turbines in the ocean and so what they're for is the overall problematic and achievable impact on the ocean floor or the endangered species like the other marine mammals such as the right whale off the Atlantic Coast of the United States. So, educating also the Feds on what kinds of alternatives are actually technically feasible. Right now, given the fact that we don't have much of a supply chain here in the United States; what's the lead time for ordering turbines? and so, therefore, why can an agency therefore not pose alternatives like, "Can't you just put-up fewer turbines and just use bare ones?" Well, it's because A, it's not technologically available right now and/or B, the lead time is that we've already placed the order for those turbines two years ago and so those are the turbines that

we have to use. We're also starting to learn about the cable lane, too, like all of the substations that have to be built offshore, what might that look like both from a construction, operations and maintenance type of perspective so, therefore, what are the permits that required for that and in thinking all of that stuff through.

Q: So, when industry folks think of Federal permitting, it's more of a rearview look of what exists out there now and what kind of hurdles can the Federal government throw in our way and how do we clear them. But we're talking just most recently about two new technologies——modular nuclear reactors and offshore wind. Will government regulation and state regulations may not quite have evolved to where it needs to be so are you, in that instance, helping to form and draft new regulation that make sure these investments take place in a safe, affordable and realistic way?

A: I would say that we call the question with the Federal agencies that are responsible for developing the regulations and the policies. So, for example, as we think through for what the permitting process would look like for carbon-capture, we are convening the Department of the Interior, Energy, EPA, DOD, USDA to think through precisely like how, if the project is on this type of land, who would be the lead agency for that? What would be all

the permits and reviews that are required for that? And again, in just in helping to be able convene, those folks help to push those types of activities forward. We have the good fortune on the Permitting Council—so the Permitting Council so just take a quick step back and describe it better for your audience, we are indeed a unique Federal agency that's comprised of the 13 Federal agencies that are involved in the overall permitting processes so agencies like Interior, Energy, EPA, etc., as well as the chair of the Council on Environmental Quality and the director of OMB. And so, for the Permitting Council members, the membership itself is comprised itself of deputy secretaries or the equivalent at all of these agencies, and so, I have privilege to be able to work with the senior most leadership at these agencies to precisely think through these types of issues to help address and forecast like what kinds of regulatory issues are we going to end up running into that might impact your particular war-making agenda, etc. And also, just on an operational front, helping with resolving a number of permitting timetable challenges as the case may be.

Q: So, in a case of the NRC about a decade ago, they went through some internal revisions of their procedures to try to streamline and make more affordable, projects that were off the charts in terms of expense. Does your Council have any function

in doing review of existing regulations to see if they can be pared back or changed in a way that's more realistic given today's technology and business climate?

A: Well, not so much from actually having a hand in the regulations if you will but again, definitely with respect to calling the question, so in the case of the NRC with the NEMA; I forget exactly what the acronym stands for and I do apologize for that, but there are certainly a number of process improvements that were required of the NRC in thinking through what the overall permitting process looks like and how they want to think about streamlining it, etc., and so, that is very much part and parcel to kind of what we're doing along side the NRC and so, as we engage in those kinds of new, newer nuclear reactor-type of projects, that's something that we'd be working very closely with them on.

Q: So, you mentioned the constituents of the Council. These are heavy hitters in governments. How often do you convene as a Council in person or virtually? Tell us what the agenda looks like.

A: Sure, so we convene on at least quarterly basis and thus far, it's been done virtually largely because of the pandemic and generally, it's one of the benefits of being able to do this type of work in this kind of technology environment if you will. The agenda to date largely has been around thinking through what are

the actions that we need to take to collectively to ensure that we're actually delivering on the president's Infrastructure Agenda so, that can include both from a procedural element: what are the things that we as a Permitting Council want to do just to keep in mind that we were newly-reconstituted in September of 2021, and so since then, we've met three or four times. And so, there's a little bit of regulatory cleanup on our end of making sure that we're all completely aligned with what respect to the various sectors to what we want to be working on. What are the overall regulations that various agencies are taking part in. Also reviewing the status of projects; what are we things that we're doing with respect to ensuring that we're all able to meet the various permitting timetables that we've set, that we have established. Also, ensuring that we're all executing on the administration's priorities with respect to environmental justice and better engagement with the tribal nations and the government consultations, so a lot of things of that nature.

Q: How closely is the White House watching what you're doing and who is your main point of contact at the White House to discuss these issues?

A: Yeah, we are very fortunately to be working super closely with the White House. We work on a near-daily at least weekly basis with the Council on Environmental Quality and the Office of

Management and Budget. I also work very closely with the Climate Policy office as well and so the good news with administration, we all are very lockstep with, both in terms of core value as well as the agenda and implementing all of the infrastructure projects that we'd like to see here.

Q: And the public is aware of this and if I assume you're going to say, no, what three or four things should they know about all this coordination that's taking place?

A: So, a couple of things that I think would be really key for your audience to know on that front: Number One: this is not just about making fancy announcements or whatever the case might be. We are very actively working on these projects and ensuring that we are delivering. Anticipate that your audience has likely seen a number of announcements over the last couple of months especially with respect with the funding opportunities that are available courtesy of the Bipartisan Infrastructure Law. I think we've released upwards of $100 billion dollars of funding already to date and so, that takes a lot of very active management and coordination across all of the departments and agencies that are involved with them. We're also working very closely and monitoring very closely the advancement of a lot of the projects that you see on our websites so certainly from the FAST-41 perspective, the 28 large infrastructure projects that are there. Relat-

edly we also share the website with the Department of Transportation so a number of things that we're pushing forward with respect to EV charging infrastructure, etc., those things are also being very closely tracked and managed through as well.

Q: How many people work on your staff?

A: On my staff, we are now at 21 Feds and a number…the staff thing is largely split up in two big areas if you will, so one's are active project management so we work very closely with an infrastructure portfolio management team that works very closely with the agencies to identify what are the issues. We work closely with the project sponsors to identify any trends or challenges that are coming up by Federal agencies. We review those with our Federal agency sisters, as well at the Permitting Council level as well. And of course, on the technology front, a lot of this data requires a good amount of management and maintenance and so we are currently in the process of making some upgrades to the dashboard that will be coming out shortly, but also, we are authorized with the Bipartisan Infrastructure Law to standup ourselves to for permitting excellence and so enhancing both the data collection and analytics capability about permitting across the Federal agencies is something that we're very much focused on.

Q: So, just backtracking a second; you say you put at least $100 billion dollars to date. What is to date mean? What's the timeframe and was that hundred billion in all kinds of infrastructure?

A: Yes, so the hundred billion dollars is from the Bipartisan Instructure Law and that is, I believe within the initial six months if I'm not mistaken since the passage of the Bipartisan Instructure Law and that includes all sorts of notifications of funding opportunities, renewables from Department of Transportation, Department of Energy, Department of Interior, the abandoned wells, type of funding…

Q: So, the whole pie is in excess of a trillion dollars is it not? So, it seems like you're just barely getting started, so assure us how you're going to ramp up on this.

A: So, $1.2 trillion dollars if I'm not mistaken over at least five-year period and so, if you divide that by five, that's still roughly called $200 billion dollars a year. Within the first year, we've already…we've actually already deployed half the funding thus far and so we're very much on track with doing that. I work very closely with Mitch Landrieu's team. Of course, he's the implementation team coordinator at the White House and we meet with them very actively on a weekly basis…twice weekly basis to think through and coordinate all the action on that.

Q: Okay. I'd like to give you an opportunity in closing to say what this work means to you and the significance of what you're doing to the country?

A: So, I am…I consider myself extraordinarily privileged and fortunate to be able to support the president's Infrastructure Agenda. I don't take it lightly at all. I grew up in an environment where both my parents were in Japan during World War II and I've seen what war can and does do to families on an individual level and is with that lens that I view our climate change crisis. That if we don't make this transition now, I don't want my children and my grandchildren to have those kinds of negative experiences, so it is absolutely imperative that we help every which way possible to make sure that infrastructure and the transition to a clean energy economy actually happens. I want to make sure that we're putting boots on the ground—that we have the construction workers who are there and actually making the infrastructure happen. And there's so much opportunity out there, whether it be with shipyard and facilities to build out the offshore winds, supply chains, to change out the blades and build out the turbines, then the cells or develop with actually manufacturing the cables, trouble with offshore wind transmissions lines with steel, to make sure that we're actually implementing the steel in the ground for our aging transmission towers, etc.,

and so, I very much view my job as contributing to the next generation of the United States. Again, the Bipartisan Infrastructure Law is a massive investment. It is definitely, once in a lifetime, once in a generation investment in our nation's infrastructure. It is so much more important now that ever to have a coordinating body like ours, tasked to ensure that the collaboration and accountability and transparency of delivering on that actually happens.

Q: Thank you, Christine. We've talking with Christine Harada, who is the Executive Director of the Federal Permitting Improvement Steering Council. The acronym is FPISC and if you add .gov, you'll get to their website. Please give a rating of this podcast on your favorite platform and for more information or to subscribe, please go to SmartGrid.gov/GridTalk.

END OF TAPE