MARTY ROSENBERG December 10, 2024 GridTalk #427

DAN REICHER INTERVIEW

Hi, and welcome to Grid Talk. Today we have with us, Dan Reicher, who was Assistant Secretary of Energy back in the Clinton Administration, and has been among other things, active at Google where for four years where he headed up their Climate Change and Energy Initiatives and he's attached to the Stanford Doerr School of Sustainabilty, as well as Dartmouth's Irving Institute for Energy and Society, where he's doing a lot of interesting projects.

- Q: Hi, Dan. How are you?
- A: Good to be here, Marty.
- Q: Well, you're a very timely person. I want to talk to you about an effort you're very intimately involved with at Stanford called Uncommon Dialogues. And welcome back to GridTalk. It's kind of like Saturday Night Live where there's one or two or three people who I've invited back over the four years; you're one of them so we should give you a robe to wear, a GridTalk robe as you MC this conversation.

A: Hopefully, it's more than my humor that brings me back but anyway, let's keep going.

Q: Well, because last time we talked it was three years ago. Congress had just passed the Bipartisan Infrastructure Law and at that time you and I were discussing what a \$60 billion dollar infusion into the Department of Energy might do for energy in this country, and we talked about how it was going to be spent on the short-term and the long-term and the importance of early work that needed to be done to stage that expenditure so that it would last a decade. But here we are once again with a shift, a dramatic shift at the top of our government in energy policy. You were a key player during the Hazel O'Leary secretary shift at the Department of Energy when Clinton came into office. You were DOE's chief of staff, which, as I've learned, is an important job managing the Secretary's office. Then you became Assistant Secretary for Energy Efficiency and Renewable Energy You've gone from Clinton initiatives to George Bush initiatives, to Obama initiatives, to Trump initiatives, to Biden initiatives, back to Trump initiatives and frankly for the industry, it's been a dizzying ride. And now, it's not inconsequential when tens of billions of dollars are being spent on infrastructure with each swing of the pendulum or a retrenchment. There's got to be a better way, and I immediately thought of you as I heard about Uncommon Dialogues at Stanford. Take a minute and talk about these broad sweeps of the pendulum

nationally and then tell us how Uncommon Dialogues have surfaced at Stanford and what the policy and the goal is before we dive into the specific examples.

A: Well, there are big swings and obviously as you said, we're seeing another very big one as we move from Biden to Trump -- or back to Trump I guess I should say. But meanwhile, and this is I think somewhat of the encouraging part, the clean energy world marches on. The technologies advance, the investor interest moves along very substantially. We have not just the \$60 billion from the Bipartisan Infrastructure Law but hundreds of billions which followed it in the Inflation Reduction Act. And this has gone from a modest business opportunity to a very, very large one. Meanwhile, the climate imperative grows by the year so we have a real strong intersection there. But having said all that, we do have these swings of the pendulum as far as administrations go and with Donald Trump coming into office there are concerns about whether some of this might get set back.

Meanwhile, this takes me to the Uncommon Dialogues which are a longstanding program at Stanford which brings adverse parties together on tough sustainability issues. One of the most successful earlier ones involved the allocation of western

water. When I moved over from the Stanford Law and Business Schools to the new Doerr School of Sustainability, I took a look at these Uncommon Dialogues and I was impressed with what we might do with them, particularly in the face of this pendulum that we see swinging back and forth. And so that's what I'm here to talk about today. Happy to dig into why we're pursuing the dialogues and then talk about some examples.

Well, you mentioned the Doerr School. Just for folks that 0: are listening and might not have heard of it, John Doerr is a wealthy venture capital investor . He's given one billion dollars to set up a School of Sustainability at Stanford. That in itself is on the order of lots that has come down the pike during the Biden Administration; it's a lot of money. Tell us about that Doerr School of Sustainability and what's it's about. Well, John Doerr did write a check for a billion dollars A: and another several hundred million came in as well from other big donors and what we've got is a very powerful school that's both training the next generation of folks working on sustainability and getting out there into the real world and really trying to have some impact today. Within that school are two institutes. One is the Woods Institute which is actually the home of the Uncommon Dialogues and there's also the Precourt Institute which is more focused on technology in the energy area. So it's a big, powerful school and I'm excited to be there.

Q: So, the heart of our dialogue really is to jump into what your dialogues are tackling. There are several areas that you and I discussed that I think our listeners will find fascinating as we explore the concept of camps that seem irreconcilable but might find a way a way to reconcile. That's certainly is going to be resonating with where we are nationally, where a lot of people in the utility sector are wondering: do they hit the brakes or are there a lot of the changes that have come along inexorably and they'll continue? Let's look specifically first at hydropower and set out for me the two sides on hydropower that seem irreconcilable and let's talk about how the Uncommon Dialogue worked with them.

A: So, when I moved over from the Stanford Law and Business School to this new Doerr School of Sustainability, I started to look into this Uncommon Dialogue program and I was really quite intrigued given the difficulties we have in resolving some of today's big energy, climate and environmental issues. I thought to myself what's the oldest and one of the toughest of all of these environmental battles and it clearly came to me: it's the battle between the dam builders and the river conservation community literally going back to John Muir and the damming of

the Hetch Hetchy Valley in California, more than 100 years ago. There's been this real tension and it's broken out into battles, and indeed wars, over the decades. This is something that I'm very interested in given the energy connections, given the environmental challenges that come with the big dams in the United States, and given there are over 100,000 U.S. dams.

Q: So, on one side are those that want to maximize power production from these hydro facilities. On the other are environmentalists that want to take them down and let fish run wild.

A: Yes, and it gets more complicated than that. One of the things that I discovered is that only about 2,500 of those 100,000 or so U.S. dams actually make electricity. These 100,000+ dams do lots of other things: water supply, irrigation, flood control, navigation, you know a whole set of things. So the parties at the table are even more complex than just the two you mentioned but I thought to myself, there is a decent share of U.S. electricity coming from hydroelectricity. There's also a big share of U.S. electricity storage in the form of what's called pump storage. But these 100,000+ dams are also very much a focus of the environmental community, seeking the return of fish and the return of native habitats. The tribes also have a great interest in this so it's a tough issue and it really

hadn't been resolved to any great extent, but it really needed to be.

Q: So, to cut to the chase, what did you convene in terms of a dialogue and what was the positive outcome?

A: So, first I got some really smart Stanford graduate students to dig into some of the aspects of all these sides of dams and rivers in the United States and they came back with a lot of interesting information; that was I think in 2017 so in 2018, I got in touch with folks that I know around this whole community. I have significant connections, in fact, sat on the board of American Rivers, one of the big river conservation groups. Plus, I have lots of connections to the hydropower industry through my work on renewables over the decades.

Q: Okay.

A: As I said, let's see if we can get all of these parties -represented by pretty senior folks -- together at least once and
see whether there's any interest in really trying to resolve
some of their big differences.

Q: And did you have one mega conference? Tell us what happened.

A: We had many meetings and at the end of each of these meetings where we were trying to find common ground - or as I like to joke, calm water -- I would say, do we want to

continue? Are we really making progress? And if folks raised their hands, we'd go on. If they said no, I had plenty of other things They raised their hands, so we kept going. It took us 2½ years but in October of 2020, we reached a major agreement about how to go forward on what we call the three R's of U.S. dams and river conservation. The first "R" is rehabilitate some of those 100,0000 dams for safety because safety is most important and these dams are typically many decades old. The second "R" is retrofit; retrofit existing dams that have power by putting in new turbines, and also actually power some existing dams for the first time that don't have turbines. And the third "R" is removal; remove some of those 100,000+ dams for both safety and conservation. So the 3Rs really brought most of the interested parties to an agreement and that agreement set out a number of working groups that would take up the charge based on this overarching agreement.

- Q: And did that lead to congressional action?
- A: It did in a very substantial way. In November 2020, the month after we reached this agreement, President Biden was elected and as I like to joke, the third word out of his mouth was "infrastructure," and we had a working group that was looking into dam infrastructure in the U.S., and what needed to be done, and so...

Q: Dam being a noun and not an adjective?

Well, it gets worse than that because sometimes, while my name A: is Dan I find myself writing "Dam" and sometimes I put the "N" in Dan after the "M" in Dam and get "Damn." So I get really confused. Anyway, in November 2020, Biden started talking infrastructure and fortunately what was moving forward was the Bipartisan Infrastructure Law. So in the nick of time, we got information we had put together into that process and lo and behold, in 2021, we got 2.3 Billion dollars for the three R's of Uncommon Dialogue. Our working groups have been coordinating ever since with federal agencies to spend that substantial funding in smart ways.

Q: We could spend multiple podcasts on this work, the recommendations, the outcomes of that dialogue, but I want to move along to other areas. Large-scale solar and those that want to conserve land and don't want to see acres of solar developed, how do you address that and what's been the outcome?

A: So, interestingly we got a lot of attention from this hydropower agreement: a big New York Times story and lots of other press.

Abby Ross Hopper, the head of the Solar Energy Industries Association, who I know from a board at Dartmouth College, said, "We're interested in what you did. We have a big challenge ourselves which is siting large-scale solar projects

-- utility-scale solar -- and do you think there might be a way we could do something similar?" And I said, "Well, it's worth a try." So long story short, we got some of the biggest solar developers in the United States to sit down with some of the big environmental groups including The Nature Conservancy, the largest conservation group, and with tribal representatives and a whole host of others. It took us 20 months but in October 2023 we reached a second agreement, built around what we call the "3C's": climate, conservation, and community. If you're really going to make progress -- siting big solar and doing it in a way that's going to be accepted in local communities and that is going to be viewed as equitable in terms of the results and the benefits -- then build it around the 3C's. We reached that agreement, and launched associated working groups and we've been moving forward ever since to really try to improve the way we site, operate and transmit the power from these big solar projects, often measured in the hundreds and hundreds of megawatts and some of them approaching 1,000 megawatts.

- Q: The third Uncommon Dialogue area is transmission siting and cost allocation.
- A: Here's what happened in that. One of the areas we did not reach agreement on in the solar Uncommon Dialogue -- which may in fact be the biggest challenge for big solar projects -- is

having adequate transmission capacity. Rather than try to reach agreement on that and put it in that second dialogue, we said, "Well, let's hold that off for a third dialogue," so last year we convened a third Uncommon Dialogue on transmission siting and cost allocation and this covers for example, how do you build a 700-mile transmission line that crosses three states and hundreds of communities where often the real beneficiaries are the folks at the front end of that and the back end of that but nobody in between. So that has been moving along. We've had some informal help from former Energy Secretary Moniz, former FERC Chair Glick. We're still very much in the middle of that and actually have been engaged with the pending bipartisan permitting bill that's moving its way right now through the lame duck session of Congress. We'll see where that comes out in the next few weeks. That will give us direction in terms of where we go with this Uncommon Dialogue.

Q: Are there other areas? Do you have a wish list of topics and controversies that you think could be addressed in the energy sector?

A: We are regularly approached by folks who have other challenges. We've heard from folks siting big wind projects which are getting more difficult in certain parts of the country to build. One of the things we were approached about -- and we

have just dug into -- is a regional Uncommon Dialogue on the 21,000+ dams in the Northeast: 7,000 in New York, and 14,000 in New England. We're beginning to move that one along. It's the oldest complement of dams in the U.S. There's a lot of controversy around them and we think we can bring a more specific outcome than the national dialogue if we dig down one layer into regional needs and opportunities.

Q: Do you see that pattern evolving with other complex topics that you address on a national level and then on a regional level?

A: I do. Some of them may lend themselves to that but I definitely see as we move into the Trump Administration, there's going to be more and more need for what amounts to an external approach, not driven by government but involving government to help solve some of these big energy, environmental, and climate controversies. I have to say the Department of Energy has been extremely helpful in both the hydropower and solar dialogues, so federal involvement is important. But we think that having this process move forward connected to, but not dependent on, the federal government will be a useful place to be.

Q: So, it's funny that you say that because that really also is at the heart of why I wanted you to be on the podcast. Over the summer, we had Amanda Peterson Corio on the podcast. She is

Google's Global Head of Data Center Energy and given your former role at Google, I don't know if you know her but I'm sure you know where Google's coming from on energy. They went into Nevada and they -- I don't know if you're familiar with this -- came up with a Clean Transition Tariff and they worked with NV Energy to get private sector funding for specific projects. In this case it was geothermal that Google wanted to have access to this tariff and this enables Google to help fund it and make it possible so its impact on other ratepayers will be minimal. I point to this as an example of what you just said which is: is there a way to achieve change without federal involvement at the top steering it, as we've had over the past four years? Corio said to me that Google's assessment is \$2.5 trillion dollars needs to be invested in energy over the next six years globally. Clearly, it's going to take ... and we see what's happening with COP; they take five steps forward and nine steps back. Do you think there's change bubbling up here from the bottom and might now be the timely transition with the change of philosophy in Washington to really focus on that and nurture that and help that along through efforts like the Uncommon Dialogues? Talk a little bit about the big picture. Regarding the big picture, when I got started in this whole A: area back in the Clinton Administration, the world of clean

energy projects was still pretty immature. A lot of good R&D work was going on. Some of these technologies like hydropower were already there in substantial form but much of the rest of clean energy and the response to climate was, as I said, at a pretty immature state. We've come such a distance since then and we have big mainstream clean energy industry facing massive new demands. When I was at Google, we were not thinking in terms of this gargantuan demand that's coming from data centers and AI, and potentially from plug-in vehicles as well. Now we face trillions of dollars of new facilities that have to be built. So I think if we're going to make progress on those sorts of facilities and if we have an administration that may not see eye-to-eye on all things related to clean energy, I think initiatives like the Uncommon Dialogue are going to be doubly important. If we can reach these agreements; if we can agree on how to site big facilities; if we can agree on how to address safety questions; if we can agree on how to go into communities successfully and openly and really distribute the benefits of these kinds of projects equitably; then I think we're going to make a lot more progress and do it without having to have government in the lead in all circumstances. So I think this approach really does lend itself in a very nice way to the

situation we find ourselves in with a new administration and a new Congress.

Q:So, all these things we're talking about with the transmission siting or large-scale solar or repurposing dams that have been around for decades if not longer, is very complicated. What's the challenge of keeping the public informed on this?

A: I think that our working groups in the various

Uncommon Dialogues are a smart approach where we: identify the top issues and the top opportunities; get a group of people in each working group to take those on; have a well-organized effort that at the right moment, puts out the information that we've learned; and proposes the resolutions that we've come to. I think a way to do it in an organized fashion that keeps the public informed but also gives folks the ability to talk quietly -- often parties that are adverse to each other -- and try to work out agreements and then, put them out publicly. I think we've got a good process and we've tested it now in both hydropower and big solar and I think it could work well on a lot of other issues. Q:So, Dan, really to capture this and to sum up, let me ask you, in the work you've done on these various Uncommon Dialogues, can you think of an instance where two people who might have been at each other's throats, just ready to slug each other out in the

past, went off and had a beer, became friends, and started working together on a project?

A:Well, I heard about one example fairly recently. I can't say I was part of it but apparently one of the toughest lawyers in the movement to take dams down and one of the toughest lawyers from the hydropower industry, got to be friends as a result of our Uncommon Dialogue and apparently went on a canoe trip together. It doesn't get much more positive than that. That is, staunch opponents who basically start to talk to each other and see that their differences are not really as big as they thought and that finding common ground can really advance both sides. I think that's what we're finding now and I'm excited to keep this going.

Q:Well, Dan, as you continue this work may it continue to identify rivers that have become free and running again and get more of those canoe trips going down the river of former enemies on a boat together navigating interesting waters.

A:Well-put, Marty. And yes, I'm excited to keep going at it and it definitely gets me out of bed every morning. And if it can also get me on rivers, all the better, because that's where I love to be.

Q:Okay. Thank you, Dan.

A: Thank you, Marty.

We've been talking to Dan Reicher, former Assistant Secretary of Energy, currently associated with the Doerr School of Sustainability and involved in multiple other projects and endeavors.

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