

NATIONAL TOWN MEETING ON DEMAND RESPONSE
Chairman Jon Wellinghoff
JULY 14, 2009

Thank you Dan, it's really a pleasure to be here. Dan has done a wonderful job with this group, growing it over the years and I would just love to come here every year and see it grow and grow and grow.

Dan knows me so well that he asked me as I came in, "So where's your PowerPoint?" I don't have a PowerPoint today. I usually do provide a PowerPoint but I thought I'd just talk about some things with you all and hopefully we can have a discussion here.

I wanted to start with sort of the challenges. We are talking about the challenges to demand response and Smart Grid and I think we have two fundamental challenges that we have to consider. The first is how to make demand response and Smart Grid relevant to consumers. I think that's a key issue because ultimately we're going to have to have consumers pay for these things. Consumers are going to be the ones that are going to foot the bills for the utilities or for third-party aggregators or others to put these devices at in-uses and to have these communications standards put in place so we can ultimately have the two-way communication between consumers' loads and the grid. So, consumers have to see the relevance; they have to see the value. We have to somehow ensure the consumers can understand the value of the systems. And secondly, and of equal importance, is we have to ensure that demand response and Smart Grid are useful to the grid. And I say useful meaning improving the efficiency of the grid. That's what this is all about. And as I see it, there are, I think, two main useful aspects to demand response and Smart Grid. One is, improving overall efficiency through better operation of the grid and lowering costs on the grid and thereby lowering costs to consumers; and as part of that, also lowering consumers' bills through their ability to control their bills. That's one aspect of it. And I think another very large aspect of it that we have to be all cognizant of and understand the potential for and that is the integration of clean, renewable, variable resources. I think demand response and Smart Grid enablement will, in essence, allow us to integrate in much larger levels of variable resources like wind and solar and do so in a reliable manner. So I think those are the two keys that we need to look at with respect to the challenges: how we can make it relevant to consumers and how we can, in essence, make it useful for us all to save money.

So, in that context, let me tell you some of the things that FERC is doing—and you've heard some of those things from some of our people, I think, yesterday. But the Commission, as you may know, is in the midst of conducting a multi-year

demand response project. The staff completed the first phase of the project last month when the Commission released the *National Assessment of Demand Response Potential*, and I believe Dean Wright presented the results of that assessment. The assessment's noteworthy because it provides, for the first time, a state-by-state analysis of demand response potential, and makes the model used to perform the analysis publicly available. So in essence, states and other entities can look at this model and say, "Well I don't necessarily agree with the Commission's assumptions, let's put in our own assumptions and see how this model can work and what our potential is in our own area to put in demand response." And I think, as such, hopefully this will be a very useful and powerful tool for all of you to be able to use. The Assessment analyzes the potential for increased demand reductions through the expansion of demand response programs under a range of scenarios. And the estimates of demand reduction under these scenarios range from 38 gigawatts today to as much as 188 gigawatts by 2019, or up to 20 percent of national peak demand under current forecasts. So this is a very powerful number. We could actually reduce our demand by twenty percent. The efficiencies that that would bring to the system, the cost reductions that that would bring to the system, the environmental savings that that would bring to the system are tremendous. So the potential is out there. We really do believe it. It is out there, we just have to be able to figure out how to deploy it and scale it ultimately through the technology that we have available to do that.

Commission staff continues to work on the next phase of the project which is the National Action Plan on Demand Response. And the Commission staff spent the last year developing preliminary proposals on what should be included in the Action Plan through research and outreach to a broad range of interested persons and organizations. A discussion draft of possible elements of the Action Plan was distributed to many stakeholders for review earlier this year. Thus far, we have met with over 25 stakeholder groups, including the DRCC, representing almost 240 participants or organizations. And the Commission staff intends to complete these meetings with several remaining stakeholder groups in the next couple of months. In his talk yesterday, David Kathan reviewed the feedback we received from this outreach so far. The final Action Plan will specify the actions necessary to achieve the potential estimates included in each of the Assessment Scenarios, and will contain tools for assessing the impact of the scenarios on supply mix. The Action Plan will develop action items to achieve the estimated demand response potential in three key areas specified by law. First is a national communications program. Second is technical assistance to the states. And third is tools and support materials needed to implement demand response. So I think this Action Plan report is going to be very, very useful in working with the states to help implement and augment demand response to reach that potential that we showed in our demand response assessment. I want to explain the steps we will take over the next year to complete the Action Plan. The steps are first, release a revised and

expanded discussion draft in September/October with public comments due about a month later. We'll hold one or more public conferences to discuss the elements of the draft shortly thereafter. And then we'll release a draft of the National Action Plan near the end of the year, with another opportunity for public comment the first quarter of 2010. And then, as required by statute, the Final Action Plan will be submitted to Congress no later than 2010. So, as you can see, the Commission is committed to receiving input on the Action Plan from all interested stakeholders. Our Action Plan development process includes multiple opportunities for input. The staff is also arranging for substantial contractor support to do additional research, particularly in the development of the national communications plan, and to support the development of the Action Plan document.

And so with that, I hope we can work together in a collaborative way to move this Action Plan forward so that we can reach our full potential with demand response

Question and Answer

Question: This is for Chairman Wellinghoff, but anybody else can jump in. We see that, and John Arnold just hit it, that there's all this customer value, we talk about that a lot. We just had a polling yesterday of who was showing up. Part of what our community is lacking is the citizen utility boards, the AARPs. We saw that endorsed mark grid that didn't go whole hog on Smart rights and as DC Commissioner Rick Morgan has often said, "Smart grid with dumb rights doesn't get you very much." So what do we need to do as a community and what is FERC going to do to have low-income advocates, consumer advocates, elderly advocates not impeding it, which right now in some places they are an impediment to putting in the right portion; but actually demanding that real time pricing, time varying rates, are going to bring benefits to their constituency.

Chairman Wellinghoff: It is an issue, because we do have to start rolling out the benefits of dynamic pricing. Retail pricing, of course, is not in the purview of FERC. It is in the purview of the state utility commissions. But I think what FERC can do is, I think FERC can assist the states with developing the tools—as hopefully we'll do as part of our demand response action plan—to inform themselves and their consumers as to the benefits of dynamic pricing. And also, to inform themselves as to the alternative price structures that can be put in place to ultimately provide the most amount of consumers with the most amount of benefits. There are right ways and wrong ways you can do dynamic pricing. I think what we need to do is start getting some demonstrations going around the country, putting in place dynamic pricing to show the successes where all consumer groups—both low-income level consumers and more affluent consumers—can benefit from those dynamic pricing experiments. So we really need to get that going. We need to work with EEI and utilities and others to ensure that those types of information can be spread so that people can understand that they're not going to be hurt by dynamic pricing, in fact they can be helped, number one. Number two, those areas where we have concerns about low income consumers, we have to develop methodologies to deploy the technologies that those low-income consumers can utilize to better control their rates so they can control their bills and lower their bills. If you don't enable them with the technologies and just put the prices in place, they are going to be hurt, so you have to do what's necessary to ensure that they have the technologies available to them to adequately and effectively respond to those dynamic rates in ways that they then can see they can lower their bills.

Question: I think this is a question for the Congressman, well don't hand the microphone over just yet, I think it's also for [the Chairman]. In the FERC demand response report I noticed that to get to the highest penetrations of demand response really required engaging the consumer, which I took to mean the residential consumer as I read the report. There are a couple of critical pieces of information that consumers would either need or like to have and that's access to their real-time information in the home and I think it's also access to system-wide information, especially about the generation mix. So, if my wife wants to use energy when the wind is blowing, she needs to know what our system in Colorado is doing. Right now, we don't have access to that information and I don't think the utility is going to offer that up very readily. So the question is, and this is

why it's to both of you, is there a federal role here to either encourage or mandate that information become available or is that simply within the role of the states or can FERC in some way mandate that that information be made available or is it something that gets passed in legislation that allows consumers, that requires that utilities provide consumers access to their real-time information in the home and to the system-wide mix of energy?

Chairman Wellinghoff: I think certainly FERC can encourage be available. I don't think we could mandate it down at the retail level and wouldn't want to attempt to do so. But I think that type of information, in fact, should be available to consumers. They should have available to them and they should own, in fact, in my opinion, all that information of their own consumption. That's their information and it should be made available to them and they should have access to that through a number of means. And as far as information of the generation types that are being provided on the grid, a lot of utilities already do that but they don't do it in a dynamic way and that's where if we can't have dynamic pricing that will help inform consumers what types of generators are in fact providing services as those prices fluctuate. That, in fact, will be a signal in and of itself. So that's another reason why it's important to try and get those dynamic pricing policies and practices in place in states.

Question: My question is for the entire panel. I'm going to frame it and I can give each of you the question I'm posing to you. Cyber security is an enormous issue that I think is underaddressed here within the industry. And my question is, from a NERC and FERC perspective you have disparate standards that you're struggling with. I'm wondering when you're going to get a uniform standard and enforce those in a cyber security perspective. For the Congressman, I ask what type of oversight do you foresee in the next year? And from our private industry delegate, I'd ask what is, for example, what is Microsoft doing to address specifically cyber security issues in this context.

Chairman Wellinghoff: Rick is correct. NERC has a Smart Grid, excuse me, a cyber security reliability standards that FERC hasn't approved under our relationship with NERC. In addition to that, FERC has issued the Smart Grid policy statement that went out for comment and we're in the process of finalizing that contained in it a number of priorities for the development of the Smart Grid. The number one priority there was insuring that the communications protocol contains cyber security. So that will be issued to be used to inform [?] in their process of developing the protocols for the Smart Grid that will ultimately come back to FERC for approval as final Smart Grid rules.

Question: We spent a lot of time yesterday talking about dynamic pricing and we talked more about it today with the idea that if we can get there, some have suggested that if we can get to that place of dynamic pricing there will be no need for the wholesale DR programs that currently constitute the bulk of DR, I think at least in the Eastern half of the country now. And there's some question as to whether or not that's true. It's funny, during that meeting yesterday, at the beginning of that session I got a not indicating that a DR reserves event had started in ISO New England and by the end of the panel it had ended and I was just thinking that that's the kind of thing that wouldn't happen on [?].

That's the question, do you think that wholesale DR programs will continue to be needed even if we have dynamic pricing?

Chairman Wellinghoff: Yes, and here's why. Because those wholesale programs can be utilized to provide ancillary services. So we'll absolutely need wholesale DR programs to provide regulation services and potentially spin and reserve services to integrate in renewables. So, that will be the real application for the wholesale DR once we get in dynamic pricing. And that will continue to grow the more and more wind and solar that we put in the system the more need there will be for more regulation services and the ability to stabilize the grid and that will be where we're using those wholesale demand response services.