ADVANCED ENERGY ECONOMY (AEE) WEBINAR - ORDER 745 AND THE FUTURE OF DEMAND RESPONSE:

AN INTERVIEW WITH STOEL RIVES LLP PARTNER JON WELLINGHOFF

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Malcolm Woolf, AEE Senior Vice President, Policy and Government Affairs, conducted the interview.

Woolf: …FERC Order 745 and the future of demand response. We're obviously going to talk about the controversy and litigation involved in the order, and where we go from here. By way of background, I serve as Senior VP of Policy for AEE. AEE is a business association representing all forms of advanced energy, technologies and services. Our members our involved in a whole array of technologies, whether it's energy efficiency, demand response, natural gas generation, renewables, wind, solar, hydro, EV cars, biofuels, smart grid, if it's a technology and innovation and helps makes energy clean, secure and affordable, those are our members. I'm pleased to say that we've got over 1,300 registered for today's webinar. So this is obviously a topic of great interest. And I am thrilled that we are joined today by former FERC Chairman Jon Wellinghoff. John, are you with us?

Wellinghoff: I am with you, Malcolm. It's great to be here. Thank you very much.

Woolf: Thank you. I appreciate you joining us for this fireside chat. By way of background, Jon served as Chairman of the Federal Energy Regulatory Commission from 2009 to 2013, and was Chair when FERC Order 745 was issued. During his tenure, Jon earned a reputation as a real thought leader. He was widely recognized for understanding the opportunities offered by advanced energy technologies, and was a true leader on demand response, smart grid, renewables, and in trying to figure out how to integrate the new 21st century technologies onto today's grid. So there is nobody better to join us for this conversation.

Let me then just dive straight into it. Maybe the best way to start is with a big picture perspective. Jon, as you see demand response to technologies maturing, what do you think of as the role of demand response, and other low curtailment strategies in our emerging electricity system?

Wellinghoff: The role of demand response is multiple. First, it has the ability to in essence be an energy resource that is equivalent to generation resources and do so on a very robust way across our economy given the advances in technology. So it can in fact provide energy capacity ancillary services and has demonstrated the ability to do so. More importantly, because of its flexibility, it also has the ability to allow us to more fully integrate in the variable resources of sun and wind that are increasing in our society and become an increasing part of that energy and a

necessary part of the energy mix to get us to a low carbon, no carbon society. So, I see demand response as really the glue that could hold together a low carbon society.

The other aspect of demand response, because it can provide these services that I first mentioned, it can do so at generally a lower cost than traditional generation resources. So by doing that at much lower cost, it can provide significant savings to consumers and those savings are necessary as we change our resource base and go to a lower carbon society.

Woolf: A few of the things that you just mentioned in terms of demand response being so cost effective and being able to [inaudible] technologies, those are new. You've seen demand response technologies mature over time. Before we get too far into it, why don't you just comment a little bit about how you've seen the technologies actually evolve and what that means for us today.

Wellinghoff: Certainly. On the technology side, and this is a very important point, we have seen vast advances. When you look back at initial load management as it was called back in the 80s, we had radio control boxes that were attached to air conditioners by utility companies that would be signaled on a periodic 15 minute basis to cut off, signal off an air conditioning unit for a 15 minute period out of an hour, and utilities like Nevada Power installed 60 to 70,000 of these units on air conditioners throughout Las Vegas, for example, in an area that I was extremely familiar with and worked in during that period of time. That's advanced now to extremely sophisticated technologies that can be put in to both residential and commercial facilities and do so in a way that is completely transparent and completely unobtrusive to the occupants of those facilities. Can do things like lower lighting levels by such small increments that the occupants can't even notice [inaudible] in lighting but yet do so in a way that can provide capacity reductions into the system and do things like turn water heaters on and off automatically in ways that can in essence provide frequency response by regulation into the grid system in PGM and do so much more cost effectively than the ancillary services that would be provided by a combustion turbine generator that would have to be ramped up and down so all of these technologies now are advancing, because we have more sophisticated communications, more sophisticated sensing, and controls, and all of those controls and sensing technology that can be interconnected with the Web can be done in a much less expensive manner because these technologies are getting cheaper and cheaper to do. We've got light bulbs now that are individually IP addressable, and in essence you can IP address any in use home or business and do so in a way that can control that load discretely, in a very [inaudible] way to be used to help the overall grid system work better.

Woolf: The technology innovation has been amazing. I still have one of the interruptible load devices on my HVAC at my house, and it works great and BG & EE gives me rewards on those peak summer afternoons, but the technology has moved so far beyond that, it really is wonderful.

So in light of those technological innovations, what was FERC Order 745 designed to achieve, what were you trying to do?

Wellinghoff: Well, before we start with Order 745, I think it's important to go back from a regulatory and legal standpoint to talk about how FERC got to 745 that related to energy in the wholesale markets and energy being supplied by demand response product in essence, and how that was really an evolution from FERC's initial statutory authority under the Federal Power Act. If you look at Sections 824(d) and 824(e) that really relate to FERC's responsibility to ensure that rates are just and reasonable and not unduly discriminatory. That's FERC's basic charge, so in doing that, FERC initially regulated the sale of wholesale electricity on a cost to service basis, and then at some point, in the 1990s, FERC began to understand that by opening up markets, we ultimately could provide for reducing prices to consumers substantially with a market-based system rather than a cost to service rate-based system.

So FERC, through a series of orders, then started to put in place market structures with independent system operators and regional transmission organizations that had these wholesale markets that were independently operated and put into place a number of rules that in essence helped inform those markets with different products and different structures that allowed them to be just and reasonable. And one of the products that FERC determined that was necessary to put into a market to make it just and reasonable in the early 2000s was demand response. And so they implicitly took from their Federal Power Act authority the authority to put into those markets this thing called demand response that is changes in customer's load to make those markets more just and reasonable and to ensure that consumers got a fair deal with those electric markets.

And then in 2005, the Congress made it very explicit, that FERC has the authority over demand response in wholesale markets. In the 2005 Energy Policy Act, and there was two aspects of that Act. One was Section 12.3 of the 2005 Act where the Congress told the Commission to encourage deployment of advanced transmission technologies, and one of the technologies that they listed under that group of technologies was controllable load, which in essence is demand response. In fact, that was number one on the list.

And then further in the 2005 Energy Policy Act, in Section 1252(f) the Congress said that specifically the FERC, the Commission, is responsible to ensure that there are no unnecessary barriers to demand response participation in energy capacity and ancillary service markets. They shall be eliminated by the Commission. So that very explicitly said the Commission does have authority over demand response. And so from that, the Commission then in 2008, or excuse me, 2007 put employees over 890 that authorized nongenerational resources that including demand response to provide specific ancillary services and at 2008, the Commission put in Order 719 that implemented reform to remove barriers of development use of demand response resources in organized wholesale markets. Again, the Commission explicitly recognizing that demand

response was a product that needed to be incorporated into those markets to make those markets just and reasonable. So from all of that, then FERC looked at how specific products were being compensated and saw that the organized wholesale market had a number of compensation schemes, each one of the RTOs had different compensation schemes where demand response and energy markets finally came to FERC then enacting Order 745 where they, in that order, said you need to ensure that when you're paying an organized wholesale market, paying demand response, that you pay at the same amount that a generator gets. That is the LMP, the locational marginal price. So, there is a long history of FERC first implicitly incorporating demand response from its implicit authority under the Federal Power Act, and then explicitly Congress telling FERC to continue with that effort and FERC continuing to do so under Orders 890 and 719, that finally then culminated in Order 745, which related to the price paid to demand response in energy markets.

And I'll note that neither Order 890 or 719 were challenged with respect to FERC's jurisdiction over demand response. I mean, there was a challenge on rehearing, but FERC in fact addressed that and it was never appealed. So again, we have to look at demand response in that entire historical context of a practice that in fact will make energy markets, wholesale energy markets, just and reasonable.

Woolf: One of the things that strikes me in listening to that history is that all of those decisions, first of all they took place in different administrations with different parties, but they also took place relatively recently. We're not going back generations, this is really a maturation of the technology over the last decade or so. My sense is that demand response is really in a short amount of time starting to play a really big role in the wholesale markets. Would you just comment on the track record of demand response today?

Wellinghoff: It's playing a huge role in those markets, and it has done so since at least 2005, 2006, so for a 10 year period, as it's ramped up and the technologies have become more sophisticated, there have been increasing evidence of the savings the demand response can provide. For example, there was one week in the summer of 2006, and I remember this because I came to FERC in the summer of 2006, and I that one week, in PGM alone, demand response being put into the market in that summer period where there was very high demand, resulted in $650 million in savings to consumers, because demand response was available to lower prices, to lower the prices that were having to be paid in those energy markets during that week period where we had a very hot peak summer period in that week. And so, that was one example in just a week period. And then if you look at what the PGM internal market monitor has estimated that demand response saved in the capacity markets and PGM, he's indicated that in the 2013, 2014 base residual auction, that demand response saved over $11.8 billion and in the 2017, 2018 auction, over $9.3 billion. And so, putting that in context, if you look at the 17, 18 auction itself, without demand response, capacity costs would have to more than double, would have to increase by 124% if in fact there was no demand

response in that PGM wholesale capacity auction. So you can see the magnitude of the savings and the magnitude of the costs if we can't continue with demand response to consumers that would result based upon how effective and efficient and cost effective these resources are.

Woolf: Those numbers are really, just absolutely staggering. $11.8 billion in savings from 2014 alone and that's just in the PGM [inaudible].

Wellinghoff: That's correct.

Woolf: So that's part of 14 [inaudible] but nationwide it would be even larger. It really is a staggering, staggering how fast the industry has grown, and how it has contributed to stabilizing markets. So I think that takes us to the court case in the litigation. Do you want to maybe try to, an update on the status of FERC Order 745, where it stands in the courts?

Wellinghoff: Sure, I would be happy to. As most people know, the United States' lists are general as in fact files for FERC, this happened on January 16, and I think that action in and of itself really indicates the level of importance of the issue and the confidence also of the Solicitor General in this appeal. I mean, you don't get, I was at FERC and we asked the Solicitor General to appeal a number of issues at FERC or to the Supreme Court that were FERC related issues, and it's not an easy thing to convince the Solicitor General to do so. And it is solely in the Solicitor General's discretion to petition for cert for that appeal. FERC cannot do it on their own. They have to have the Solicitor General agree to do that for them.

And I think it's also informative that agencies including FERC and EPA, DOE, DOD, and GSA and the White House all weighed in to the Solicitor General, urging the Solicitor General to move forward with this appeal, and the Solicitor General in fact did file cert. Other parties have filed cert as well. EnerNOC, PGM industrial customers, the Miso transmission customers, Energy Connect, which is a subsidiary of Johnson Controls, they've all filed for cert as well to the U.S. Supreme Court, so we're awaiting now that decision which probably will happen sometime in April.

At this point in time there is another 30 days for other parties to file, either amicus briefs supporting that cert petition of the Solicitor General or if they were a respondent down below they could file a respondent's brief to the Supreme Court supporting the position of the Solicitor General. So that decision, again, hopefully will be made by the Supreme Court in April for it to take it up either in the fall term of 2015 or the fall term of 2016. I have a great degree of confidence that in fact the Supreme Court will take this case, I think, because of its importance, and because of the track record of cases being requested by the Solicitor General, there's a very high proportion of those cases where cert is granted, it's not like a cert petition coming from a private party where about 10% of those petitions are granted much, much higher, over 50% of the Solicitor General's petitions in fact, are granted by the Supreme Court, and I think just the

parties who are in this case and the money that's at stake for consumers, indicates how tremendously important the decision will be going forward for consumers and for the integrity of the wholesale market as well.

Woolf: Thank you. So if I'm understanding correctly, in terms of timing, the Supreme Court is likely to make a decision whether or not to take the case during this term. So kind of in the April, June timeframe, and then if it does take the case, oral arguments and a decision probably wouldn't come to the next term. So we're likely not to, assuming that they take the case, we're not going to get a decision until 2016 likely. Is that right?

Wellinghoff: That's probably the case, yes.

Woolf: Okay. There's going to be uncertainty for some time. Why don't we turn to the DC Circuit Decision itself. It was a 2:1 decision. As best as you can, could you kind of try to articulate what the majority opinion, what drove them to this result?

Wellinghoff: Well, that's a good question, Malcolm. I obviously disagree with the majority opinion. I think that what drove them to the result was a misunderstanding of this history that I just laid out with respect to FERC, and the consequences as a result. But as I understand it, I mean, they're trying to say that in some manner, demand response is a retail product, which I think if you view it in its actual sense, there's no way that you could construct demand responses of retail product. It literally is a product that informs wholesale markets and affects, directly affects, wholesale markets in a very substantial way. And that direct effect on wholesale markets clearly in my opinion gives FERC jurisdiction over demand response.

So the reasoning of the majority in this case is somewhat opaque to me. I in fact support and endorse the dissent that Judge Edwards wrote, which was a very lengthy and very detailed, and I think well-reasoned dissent, and does lay out a lot of the things that I've already talked about with respect to FERC's authority and implicit authority under Sections 824(d) and (e) of the Federal Power Act. But for some reason, the majority got it in their head in some way that because you have a retail customer who is changing their usage, that somehow is a retail product but ultimately it would be like saying that a generator buying a ton of coal at retail, therefore makes the generation coming out of that generator a retail product because they bought coal at retail to put into the steam turbine to make electricity. What aggregators do is they buy something from a retail entity, that is a retail consumer, but they then aggregate it together and they put it into a wholesale market, and it effects wholesale markets, so it in no way is a retail product.

Woolf: And the, I mean, the basic legal issue that the court had to grapple with was, has FERC overstepped its bounds because the states have exclusive jurisdiction over retail markets, and FERC is focused on wholesale markets, and so they ended up having to, or chose to, grapple with the issue of, is demand response wholesale or retail? [Inaudible] kind of existential to some extent trying to figure, dance on the

head of that pin. One thing that struck me as interesting was that neither the, there was no disagreement among the judges about the value of demand response. They've all seemed to recognize that it was incredible valuable and plays a role on the electricity market, but they were disagreeing on whether it should be considered a wholesale product or a retail product.

Wellinghoff: In part. I mean ultimately FERC clearly has exclusive jurisdiction over wholesale electric markets, so the issue is, does demand response directly impact and inform that wholesale electric market, and I think if you look at the facts and you look at the operation of demand response and the way it is aggregated by third party aggregators and bid in at a wholesale level and participated in a wholesale level, there's no question that it is in essence wholesale in nature, and retail and under the state's jurisdiction.

Woolf: I've read some things by folks suggesting that the DC Circuit ruling is fairly narrow whereas I know a number of other commentators think that it is very broad. What's your thoughts on how big a deal this is?

Wellinghoff: I think it's a huge deal because the way I read the majority opinion, they do not limit their opinion simply to the energy market that 745 addresses. They have a very sweeping, with a very sweeping hand say that FERC has no jurisdiction over demand response. And they don't [inaudible] to the energy markets. That then portends the possibility and in fact this possibility has already been [inaudible-break in recording] by First Energy and others in the capacity markets that this could extend the capacity markets, could extend the ancillary services markets, and then, if you carry their logic as far as they've carried it, you could say it not only applies to demand response but it applies to everything that is on the other side of the meter, including energy efficiency, that also is in fact bid into wholesale markets as a wholesale product, and storage from batteries, and distributed generation from solar PV, Cogen and everything else on the other side of the meter. If you use the majority's logic here, all that could be destroyed as something that are viable products that can be part of the wholesale market, and I think if you do that, also the wholesale markets will fall apart.

Woolf: I thought it was interesting. I took a quick look at the Solicitor General's cert petition I guess filed earlier this week, and one example that he suggested, if you had an entity that was over-subsidizing demand response, that could interfere with the effect of the wholesale market and since obviously FERC has responsibility to issue [inaudible-recording] wholesale market is functioning properly, of course FERC would have authority to weigh in in that circumstance and questioning why wouldn't they have jurisdiction here.

Wellinghoff: And let me give you another example. If in fact you bring this back to the states and say that FERC has no jurisdiction, somebody in fact could aggregate and manipulate demand response in ways that could in fact cause the wholesale markets to be manipulated. In other words, play those markets, financial and physical markets in ways that could manipulate the markets and FERC couldn't

reach into that to stop that market manipulation under the majority's opinion. So in essence, we could induce a way to manipulate a wholesale market under FERC jurisdiction without FERC having any authority to do anything about it. And that's a ridiculous result. But that in fact is the result that you achieve if you agree with the majority opinion.

Woolf: So let's dive into a little bit on winners and losers here. The power generators throughout the litigation, the Electric Power Supply Association, clearly they're a winner thus far. Is it as simple as power generators not wanting the competition from demand response or what's motivating…

Wellinghoff: I don't think it is that simple in that I really believe in their heart of hearts the generators don't want demand response to go away completely from those wholesale markets either. Number one, I really think that that argument was a throw-away argument, that they filed with the Circuit Court of Appeals, and as such, I don't think they ever expected it to succeed, but now that it has succeeded, I think they understand that they may be the short-term winners, but they could be the long-term losers because I can see FERC now looking at wholesale markets if the Supreme Court doesn't take cert and saying look, these markets are not just unreasonable without all these products helping to ensure that costs are as reasonable for consumers as possible, and because we cannot have jurisdiction over these products anymore and therefore cannot control them. Therefore we have to go back to cost-based rate regulation to market-based rates and markets have to be shut down. And if you do that, generators are going to be making a lot less money ultimately under a cost-based system than they would be under a market-based system. So I think generators have the potential here to lose significant amounts. Of course it's the consumer that loses immediately, $11 billion, $9 billion, $11 billion and $9 billion in 2017 that we talked about that already the market monitor and PGM has already quantified, and that's just the one RTO as you pointed out. That's the quantity magnitude of losses to consumers that's going to go on for years and years and years if in fact this Circuit Court decision, DC Circuit Court decision, is upheld. And that's going to be the real tragedy for this country, and the bigger tragedy of course beyond that is, again, if the wholesale markets fall apart, we don't have the opportunity to incorporate into the efficiency in those markets to ensure that consumer prices are low, that we have [inaudible] amounts of renewable generation put into those markets, and we can't reduce a carbon to the level that we believe appropriate. In fact, Navigant has done an estimate that demand response can directly reduce carbon emissions by as much as 19.5 million metric tons overall. That's like taking 4 million cars off the road, or 5 large coal plants. So again, if we don't have this opportunity to incorporate this very cost-effective product in the markets we lose all around.

Woolf: That's a really good point. It would be very simple to save that taking the 11.8 billion that PGM found it would cost if you didn't have demand response in 2014, well, if you didn't have demand response the generators would get money, so that's what's motivating them. But it's actually a lot more nuanced. In fact, in

that Solicitor General cert petition, he cited to some DUE documents highlighting that in various circumstances in the country, we wouldn't be able to keep the lights on. We'd have to [inaudible] reliability turns if it wasn't for demand response. So it is not a linear relationship.

Wellinghoff: Yeah, that's right. There are huge reliability issues that demand response can in fact help support. Especially given that we're moving more to natural gas and natural gas supplies may have issues with respect to ensuring we enough gas to the right place at the right time at the times, the peak loads, both in the summer and also more importantly now in the winter with the polar vortex that we had. Demand response was brought in during that polar vortex in substantial quantities in New England, in other jurisdictions where they had RTOs that had access to demand response, and affected substantially the ability to maintain reliability in the system. So that's a very important point, that demand response has environmental impacts, it has cost impacts, and has reliability impacts, and they're all positive, they're all very positive and without it, they're going to be costs and concerns for our entire system.

Woolf: So we focused the conversation thus far on demand response. Let's broaden it a little bit to kind of the other forms of demand-side resources. Whether it's energy efficiency or energy storage, it seems as if those technologies, even just computer generation, could be in the crosshairs as you commented earlier. What's your thought on this decision if the Supreme Court were not to take cert, how wide do you think the repercussions could be?

Wellinghoff: Well, I think, you know, there are certain sectors that have again short term gains to achieve that will try to push this as far as possible. You can see that first energy right out of the box try to push this beyond just energy into capacity. I think if that succeeds, then I think the next step to follow is energy efficiency which is a product very similar to demand response, it's an aggregated product, it's brought in and bit into a wholesale market. I think the reasoning, again, of the DC Circuit, if it stands, the majority could apply, and I think then once you apply at the energy efficiency, then the next step is to any other product that is a product on the consumer side of the meter that is under the consumer's control that somehow could be characterized falsely as a retail product, even though it would be aggregated and sold into a wholesale market and affect that market. So I think it has potential to spread very widely in ways that could severely dampen the growth of energy efficiency, severely dampen the growth of battery storage on the customer side of the meter, severely dampen solar PV on the customer side of the meter, and combine heat and power cogent systems on the customer side of the meter. If all those systems were restricted from taking their excess product capabilities and using those to be able to participate in the wholesale market for the purpose of reducing costs, we have to remember that demand response that's in the markets now ultimately is paying large dividends, hundreds of millions of dollars in PGM alone. The businesses, schools, governments and institutions that have all received the money, payment for participating in demand response. So it's not only the overall savings in a region that go to every single consumer, the

billions of dollars that we've talked about, but it's the hundreds of millions of dollars that's actually paid to the individual institutions, goals, hospitals, industries, like the aluminum industry I know participates, stores like Walmart participates, that go to reducing their expenses and their bottom line as well as individual consumers, and I know that there is a large amount of homes and residences that participate in demand response as well, that are aggregated up into wholesale markets who have to look at the losses to all of those individuals, as well as the overall losses to consumers in general, and they are significant.

Woolf: It was not a narrowly written decision. We've talked about the power generators, we've talked about the impact on consumers. Let's switch gears a little bit and talk about federalism. At one level, the DC Circuit Court decision says that this is a decision that FERC exceeded its jurisdiction and therefore leaves it in the retain hands of the states. You would think that states from a federalist perspective would like that. But my understanding is, that isn't the case here. Can you share a little bit about what you've heard is the state reaction to the decision?

Wellinghoff: My understanding is there is no state with the exception of apparently Louisiana that's not even an organized wholesale market and I'm not sure why Louisiana apparently submitted something to the DC Circuit. I saw I guess in a footnote in one of the briefs I read, the cert petitions I read. But apparently there is no state that is supporting FERC being exercised of its jurisdiction here over demand response. Ultimately, I believe all states recognize that their consumers are benefitted by having robust demand response and organized wholesale markets that can drive down costs for their consumers. So I don't think this is a federalism issue. I don't think it's a state jurisdictional issue in that also in Order 745, it's rather explicit, and I think it's also contained in Order 719 that in fact if any state law or regulation does not permit a retail customer to participate in the wholesale market, the state doesn't have to allow it. So the state can opt out, ultimately, of participation by…

Woolf: Existing law, the way it's structured now.

Wellinghoff: …yeah, the way it's structured now. They can say no and a number of states have done that in the Midwest I know, in Miso, and so it's up to the state to decide whether or not there are benefits to their consumers or not. Most states have voted and decided, voting in the sense they authorized or allowed their consumers to participate in these wholesale markets because they see the vast benefits to them. But people who talk about this as a state/federal issue I think are misinformed, because they don't understand the level of authority that has been retained by the states here under the orders that FERC has issued, and those orders are very explicit with respect to that.

Woolf: I want to make sure I save some time for questions from our webinar participants, so why don't we turn to kind of an outlook. If the Supreme Court takes the case, what's your guess? Are you optimistic or pessimistic?

Wellinghoff: If the Supreme Court takes this case we're going to win. I have a great deal of optimism based upon my reading of Judge Edwards' dissent, my understanding of the history and authority of FERC, I would expect the demand response in organized wholesale markets. I think the DC Circuit's majority opinion will be overturned and I believe that we in fact will win this hands down.

Woolf: I like it. Not a lot of equivocating there. We will win. If it goes the other way, or if for whatever reason takes [inaudible], could a series of state-by-state solutions in aggregate replicate the benefits on the wholesale market? Is there, how could that work?

Wellinghoff: History has shown that that is not going to be the case. If you look at the states that are not in organized wholesale markets, where they do not have the ability to have their citizens participate in those markets through demand response actions and provide demand response products into those wholesale markets, you do not see the level of savings and the level of activity and participation with demand response. There's no comparison. Look at PGM that over a period of five to seven years was able to develop as much as 15,000 megawatts of demand response in that wholesale market. There is no individual state or group of states that compare anywhere near to that. So there are states that certainly had that opportunity outside of wholesale markets where a wholesale market doesn't exist, southeast being one area, the other being the western United States with the exception of California, and one of the states or groups of states in those areas have had any measure of success with demand response that comes anywhere close to what was able to be done in an organized wholesale market under a market based system where people can bid in and receive compensation for what they are doing in a fair and open and transparent way. So I think the track record shows that we can't duplicate the success with existing state programs. The only way I can see you potentially going to a more robust system would be to put in place a restructured entity at the distribution level. And I've actually suggested this in a paper I wrote in the August issue of the Public Utilities Fortnightly, August 2014 issue, and the suggested structure is putting in an independent distribution system operator. In other words, you do at the distribution level what we're now doing at the RTO level. At the ISO RTO level you have an independent entity who runs the distribution system. Maybe then if you did that, and had an open platform with a marketed distribution level you might be able to put in as much robust demand response to drive down costs for consumers, to provide environmental benefits, to provide reliability benefit that we have now in areas like PGM in New England and New York, but again, that would require you completely restructuring the distribution entity into an independent operator of that system. But history shows us, under the current system, we can't do it.

Woolf: I think that's a pretty powerful argument. We don't have to speculate about what states could do, we could actually look at the existing market and see how many states still haven't taken advantage of this resource today, and that does not bode well for what the market would look like, or state's ability to try to capture a piece of this if the Supreme Court doesn't intervene.

All right. We've got about 15 minutes left. Let me turn to questions we received from our webinar attendees. We've got, as I mentioned earlier, a lot of folks who are listening in. Thanks to many of you for submitting questions in advance. We've tried to group these and pick up some of the themes and some of the questions that are, have been asked most often, because there's no way we're going to be able to get to all of them. So let me dive into it and see how many questions we can get to.

Wellinghoff: Sure.

Woolf: First off, if the DC Circuit Opinion holds, what are the implications regarding auctions that have already taken place? Is it possible that these auctions are going to have to be rerun without the participation of the [inaudible]?

Wellinghoff: That's an excellent question, one that I think is feared and raises the most concerns of the existing demand response aggregators and their customers. What happens to those existing auctions if they have to be rerun, etc. I think they would have to be rerun. I mean what's, it may be the next question you have in your hand, but one that comes next is, not only that, but would there have to be refunds for past auctions if in fact under this DC Circuit Decision, they're saying that jurisdiction is ultra vires, that it's illegal, which is an extreme position, and as such it could have all kinds of implications potentially. And I think the refund issue is one that hopefully is at some level of discretion at FERC and FERC would not go that far. But as far as the other auctions that have taken place, that's an open question, but a very difficult one that certainly falls down on the side of unfortunately having to undo those auctions.

Woolf: I would hope that if it was such a change it would be prospective and not affect the existing auctions, but based on the DC Circuit Decision, it sounds like FERC may not even have discretion to do that.

Wellinghoff: Certainly if FERC undertook the discretion to do it only prospectively and to maintain the existing auctions, I suspect there would be another court challenge and if that DC Circuit Opinion was upheld and utilized to support that court challenge, I think there is a jeopardy there. I think there is definitely a legal jeopardy there with respect to those existing auctions.

Woolf: All right. Well that's…

Wellinghoff: Malcolm, that's why we have to win here, right? You know? We don't want to go down that road for so many reasons. We really don't want to go down that road.

Woolf: I certainly have been made to believe [inaudible] certainly agrees with you. So the next question from one of our listeners, however, goes down that route. If the court decision is not overturned, and FERC decides that the reasoning applies to capacity as well, what advice would you offer states that want to continue using DR? I think your suggestion of…

Wellinghoff: …I would…

Woolf: …be organizing the distribution market.

Wellinghoff: That's correct. I would offer states, that they go to an IDSO model, that the move to an independent distribution system operator model, which is a model I think they need to go to anyway. I mean, regardless of what happens with respect to the DC circuit opinion, I think it's a much more robust model and a much more efficient and cost effective model over consumers. It will provide even more products into the market because it will also look at local distribution market products, not just wholesale level products as well that potentially could have a market for voltage bar support and a deferral of investment distribution level and other things. But I think if the decision stands, it's then essential for states the very quickly and very hard look at a new model for the distribution system being an independent distribution system operator that operates those assets, that plans on those assets that operate the market at the distribution level, and the only thing that the distribution utility would be doing, is they would own the assets and maintain them, just like the transmission owners do now at the RTO YSO level.

Woolf: I'm not much of a gambler, but I can't imagine that happening at the local level. Can't imagine most investor-owned utilities wanting, I think some of them are exploring that model, but I can only imagine the fights we'd have if that's the solution to this. That's not going to be easy.

Wellinghoff: Well, you know, we had fights at the RTO level forming RTOs but ultimately transmission owners thought it was in their best interest to give over the operation and planning of their systems to an independent entity, because now that planning is being done by an independent third party, and so the investments that they make are in essence ratified independently, and they don't have to stand for prudence reviews and stand subject to this allowance for those investments that they normally would under a system that didn't have an independent operator. So there are some advantages to an independent distribution system operator. It lowers risk for the owner of those assets, it provides them with more flexibility in their investments and gives them a way to ensure that they get a return on their investments on a consistent basis.

Woolf: One of our listeners has asked about a different potential solution, which is if the DC Circuit Court is not reversed, and FERC cannot require RTOs to compensate demand response resources on power generators, could they do so anyway even if FERC doesn't require them to do so if the states ask them to. So if the states affirmatively approve a wholesale demand response market, could states opt into it as opposed to opting out? What's your thought about that option?

Wellinghoff: I don't see how that would work in the sense that once the product is in the market, how does FERC control it? How does FERC insure that there is no manipulation, no market manipulation, how do they do enforcement and oversight? FERC right now enforces, does enforcement and oversight on demand

responses by the new generators, and they've gone after demand response providers that have done things that they believe were inappropriate and they've gotten fines from them, and they have the ability to stop them from doing bad things. Just like not all generators are good actors, not all demand response aggregators and providers are good actors. So if the states just opt into these things and you have this other product in there that FERC has no jurisdiction over, there's no enforcement mechanism, there's no enforcement authority. That makes no sense. That just can't work.

Woolf: That's a really good point. I was actually, I hadn't even thought of that. I was just thinking of the difficulties of getting 14 states, you know, PGM, to agree to opt in, you've got different elections…

Wellinghoff: Yeah.

Woolf: …states could be opting in, in and out, you wouldn't [inaudible] certainty that you'd probably need.

Wellinghoff: Right, and they could opt in under different sets of rules and different sets of structures. In PGM you know, I think there's 13, 14 states in PGM. Each one could have a different weight opt in and under a different set of rules. That's just a nightmare.

Woolf: That certainly as you said, that's why we've got to win. So…

Wellinghoff: But I think the fatal flaw though is the enforcement. The fatal flaw is the enforcement. There's no enforcement. You can't have a product in a market with no enforcement. That makes no sense.

Woolf: Right, and with confidence in the market, that's a good point. All right, before I get to the final question, we are coming towards the end of our webinar. I did want to make two plugs to nature folks are aware of [inaudible]. First of all, this is a series of webinars that AEE is conducting. We've got another webinar being scheduled for February. Please stay tuned. We're going to focus on reliability and EPA's clean power plan, the role that advanced energy technology can play in addressing some of the potential reliability concerns, so another noncontroversial topic. So please look for more information about that, about this time in February. I also wanted to flag the website that is on the screen right now. A number of the demand response companies have bandied together and put together the website www.keapdr.org, Keap DR.org a lot more information about demand response and FERC Order 745 for those of you who want to learn more. So Jon, my final question to you is kind of big picture. From this court case, who do you think are the biggest winners if this case, if the DC Circuit Court is upheld?

Wellinghoff: Nobody. There's nobody that wins here. On the long term, long picture, the environment doesn't win, reliability doesn't win, consumers don't win, and ultimately generators don't win either because it will, I believe, put the wholesale

market into chaos. And chaos that could devolve into FERC having to pull back to a cost to service, rate based regulation structure that no generator wants to see.

Woolf: And moves us back 20 years.

Wellinghoff: Yup.

Woolf: All right. Well let's hope it doesn't come to that. Very pleased that the Solicitor General saw fit to appeal the decision to the Supreme Court. It certainly, dramatically increases the odds that the Court will take the case. Jon, thank you very much for joining us today. I think our participants have learned a lot and enjoyed the conversation and kind of on behalf of them, and on behalf of AEE, thank you for joining us, and thank you for all of your leadership and work on this issue.

Wellinghoff: Thank you, Malcolm. I enjoyed it very much.

[End of recording.]