



**U.S. Department of Energy
Electricity Advisory Committee Meeting
NRECA Conference Center
Arlington, VA
March 30, 2017**

Summary of Meeting

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Speakers, Guests and Members of the Public:

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NRECA

CARLOS BATLLE
MIT Energy Initiative

JOSEPH BRANNAN
North Carolina Electric Membership Cooperation

TOM EWING
Charged EV

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EAC Grid Modernization Initiative Working Group Activities and Plans

Anjan Bose, Grid Modernization Initiative Working Group Chair, updated the full EAC on the grid modernization Work Product that is underway. Mr. Bose explained that the paper is still in the outline stage and that the GMI Working Group is examining the projects being led by the DOE Grid Modernization Laboratory Consortium (GMLC), as well as –more broadly—reasons why Grid Modernization research is different from doing component- specific or technology- specific research. Mr. Bose shared that the work product will lastly include a set of recommendations to DOE regarding the importance of continuing to support Grid Modernization research, as well as regarding specific areas of research that the Working Group members feel deserve greater attention going forward. One example Mr. Bose provided was the need for a simulation platform that can support large-scale grid simulations. Considering batteries as an example, this simulation would build on existing capabilities to test specific battery technologies by simulating the impact of thousands of batteries if they were to be deployed on the western interconnection. Mr. Bose shared that the final section of the work product would identify hurdles to grid research that still exist, especially given that the grid is critical infrastructure and that modernization needs to allow for flexibility as component technologies continue to evolve in the future. Mr. Bose asked for questions from the rest of the EAC.

EAC Discussion of GMI Working Group Work Product

Chair Tierney highlighted the assumption listed by Mr. Bose that the Grid is a public good, and as such, that public-sector research is critical to supporting private electricity delivery. Mr. Bose agreed that some socialization of the cost of grid R&D was necessary. Mr. Zichella pointed out that the EAC had discussed on the first day the idea of the U.S. needing to maintain its competitive leadership in the grid space, and that grid modernization research is critical to this. Mr. Bose acknowledged that the recommendations in the Work Product did not yet include this angle. Mr. Ball highlighted that he agreed with a focus of the Work Product being grid flexibility to allow for forward planning. Ms. Lin commented that the GMI Work Product has areas of similarity to the Energy Storage Subcommittee Work Product on High Penetration of Energy Storage. Ms. Lin also raised the point that planning and reliability are perhaps decentralized in the future, which might be worth the GMI Working Group’s consideration. Mr. Bose replied that it’s true that the focus areas often overlap and that this specific product will be systems oriented.

EAC Power Delivery Subcommittee Activities and Plans

John Adams, EAC Power Delivery Subcommittee Chair, shared that the Subcommittee had met the previous day in person and had hosted a productive discussion. Mr. Adams introduced the Transmission-Distribution Interface (TDI) Work Product, which will be looking to understand how different regions of the country are dealing with greater penetrations of distributed energy resources (DERs) on the distribution systems, specifically as related to transmission planning. Mr. Adams announced that Heather Sanders has agreed to take on leadership of the report, as well as the Vice Chair position on the Subcommittee. Mr. Adams shared that the Power Delivery Subcommittee would be modeling their approach after the discussion process recently conducted

by the Energy Storage Subcommittee, with thanks to Ramteen Sioshansi for giving them that direction. Mr. Adams also outlined the Power Delivery Subcommittee's timeline for the Work Product going forward, which includes concluding expert calls and outlining the report by September of 2018 with the goal of presenting a paper to the full EAC at the June 2018 meeting.

EAC Discussion of Power Delivery Subcommittee Work Product

Chair Tierney led off with questions for Mr. Adams, asking about what the focal point of the Work Product was, as well as who the intended audience would be. Mr. Adams replied that his idea of the intent was for the Subcommittee to gather information on planning strategies underway and to give feedback on those to DOE. Assistant Secretary Pat Hoffman indicated that she would hope to see a discussion in the Work Product of where some of the leading-edge work is happening in integrated transmission-distribution level planning, as well as where some of the gaps are currently in R&D efforts. Phyllis Currie pointed out the need to look at different models within the industry, since public power and cooperative utilities may have different approaches than investor-owned utilities. Clark Gellings suggested that a wider range of distributed technologies ought to be considered, specifically citing power electronics as one area where further innovation may change the grid landscape. Chair Tierney commented that unless the grid is modernized to accommodate greater penetrations of DERs in a way that also allows for flexibility (with standards and other allowances for backup transmission), modernization alone is not enough to ensure the future grid will be able to meet changing demands. Ms. Sanders commented that she has shared a similar point at past meetings, but that it is worth repeating that equivalence needs to be considered. Specifically, if DERs are being used to offset new construction or investment, all tradeoffs need to be considered—what is not being built and what extra capacity may not be available, and how to account for the lack of these equivalent benefits. Merwin Brown suggested that the EAC broaden its focus on the future to look further ahead into a system that may or may not be so defined by DERs, but that will have to accommodate yet unknown technologies, perhaps that get implemented in a way that preserves the importance of the centralized transmission model. Chair Tierney thanked Mr. Adams for his presentation.

EAC Smart Grid Subcommittee Activities and Plans

Paul Centolella, EAC Smart Grid Subcommittee Chair, reviewed recent accomplishments of the Subcommittee and indicated he would share a progress report of the upcoming Work Product on the valuation and integration of DER. Mr. Centolella referenced recent academic research that evaluated how to push LMP pricing into the distribution system, such that the result is DLMP pricing. The Subcommittee, in studying existing research surrounding DER valuation, had determined that greater R&D may be needed, especially surrounding the interplay between providing real and reactive power. Several presentations to the Subcommittee by academic experts examining these issues have also driven the Subcommittee to consider what mixed model grid architecture might look like – that which combines centralized dispatch with transactive control. Mr. Centolella highlighted panels at the March 2016 EAC Meeting and June 2016 EAC Meeting that provided greater insight into what the future role of the distribution system operator (DSO) might look like and what potential benefits of a transactive energy system might be, respectively. Mr. Centolella also tied together other presentations heard by the EAC, such as that of Professor

Bill Sanders who discussed the value of integrating IoT devices into the grid.

Overall, Mr. Centolella used this background to pivot to a discussion of where the Subcommittee saw its work going in the near future. Largely due to the prevalence of questions raised by the GMLC surrounding the valuation and integration of DER, the Subcommittee decided that the upcoming Work Product should reflect not only the current prevalence of DERs on the grid, but also the role that DERs may be expected to play on the future grid. Mr. Centolella outlined three areas of particular focus for the Subcommittee, regarding DER integration and valuation: (1) what tools can be used to value DER, given variability in location and time use; (2) what R&D is being done currently on grid control, and (3) how do the fields of physical and cyber security consider issues related to the Internet of Things. Mr. Centolella concluded by sharing that the Subcommittee is preparing the Work Product with a target date of the June 2017 EAC meeting for presentation.

EAC Discussion of Smart Grid Subcommittee Progress and Work Product

Chair Tierney thanked Mr. Centolella for his presentation and fielded questions, first calling on Clark Gellings. Mr. Gellings asked that the Subcommittee consider energy efficiency applications within the portfolio of DERs. Ms. Sanders added that she supports including safety architecture in the range of grid technologies evaluated as well. Chair Tierney commented that given a general lack of clarity surrounding the grid edge, several Work Products currently proposed by various Subcommittees address quite similar issues: those generally surrounding the planning and operation of the grid system. Mr. Centolella acknowledged the areas of overlap and indicated that coordination among the Subcommittees could be useful. Chair Tierney took a moment to recognize EAC Member Nancy Pfund and to welcome her before moving on to others' questions. Mr. Bose commented that focusing only on DER could be too narrow of a view, since other grid assets – like storage—similarly impact (and even disrupt) traditional grid operations. Getting back to the point of subject overlap among Work Products, Chair Tierney indicated that there may be sufficient difference between topics but that greater clarity would be useful. Mr. Morris concurred with Chair Tierney's suggestion that greater discussion among Subcommittees could be useful. Ms. Currie raised the idea of publishing a sort of summary report from the EAC collectively that could focus on areas of overlap for which there are strong recommendations that DOE support research. Chair Tierney applauded the idea. Mr. Zichella argued that while some overlaps will always exist, the focus on how certain trends impact the structure and function of the grid as a whole will be the most important. He indicated that he saw value in keeping the perspective of how each Subcommittee's investigations related to larger scale changes that the grid is undergoing. Mr. Zichella echoed Ms. Currie's suggestion that EAC members pull out overall recommendations that point to a greater need for research in certain cross-cutting areas could be especially valuable. Mr. Brown suggested that the root of the issue is the structure of the EAC, which tends to prevent collaboration, but points to past Work Products on which multiple Subcommittees collaborated. Mr. Feller raised the final point that there could be value in the EAC facilitating the distribution of Work Products to those in the grid technology startup space, especially since a role of the EAC is to facilitate innovation. Mr. Centolella closed by thanking the EAC members for their input and thanking Pat Hoffman for her attendance.

Presentation of MIT Utility of the Future Study

Paul Centolella, Smart Grid Subcommittee Chair, introduced Carlos Batlle, Key Contributor to the MIT Utility of The Future study and Head of the Regulation and Systems Analysis Group at the MIT Energy Initiative (MITEI) Electric Power Systems Center. Mr. Batlle began by introducing the aims, tools, and contributors related to the MITEI Utility of the Future study. He also outlined the key assumptions of the study: that the future of the provision of electricity services would require examining new options for DERs and ICTs, focusing on Europe as well as the U.S. in evaluating development trends, and developing policy and regulatory recommendations that would facilitate effective utilization of all resources – both centralized and decentralized.

Mr. Batlle outlined the scope of the study in several parts. The first focus area was understanding DERs and the new ways of providing electricity services that they enable. This section of the presentation included discussion of the differences depending on whether the future is expected to be integrated or distributed regarding power generation.

Mr. Batlle introduced the second focus area as developing a framework for an efficient and evolving power system. This heading includes several more detailed areas of emphasis, from the development of a comprehensive and efficient system of prices and regulated charges for electricity, to determining the future of the regulated network utility business model. In addition, this section of the presentation also outlined how a distributed future could impact the structure of the electricity industry and how the re-evolution of short- and long-term electricity market design might proceed. Out of the section on rate-setting, Mr. Batlle also highlighted the importance of cost-reflective pricing and charges, based on individual injection and withdrawal profiles. In addition, he emphasized the need to optimize the granularity of price signals with respect both to time and to location. Capacity charges were addressed in two ways: in terms of forward-looking peak capacity charges, and in terms of scarcity-coincident capacity charges for generation. Overall, Mr. Batlle shared that the goal of pricing is not only to allocate network and policy costs, but also to satisfy distributional concerns without distorting efficient market incentives. On the topic of improved network regulation, Mr. Batlle emphasized the need for state of the art regulatory tools to reduce information asymmetry and manage uncertainty. Next Mr. Batlle presented on the need to revisit industry structure. A focus of the Utility of the Future study was on evaluating how to assign jurisdictional responsibility in order to minimize potential conflicts of interest. Updating electricity markets would include enabling new resources to participate and compete, as well as minimizing the interference of support mechanisms for clean technologies in electricity markets. Overall, Mr. Batlle supported allowing restructured markets to function with less interference than is present today.

The third section of the presentation highlighted insights on the economics of DERs and the competition between centralized and DERs currently taking place. Careful evaluation of the economic opportunities and costs of DERs—especially in terms of locational value, was highlighted as one key area of study. This section encompasses not only cost-effective deployment of distributed resources, but also better utilization of existing assets to achieve potential cost savings.

Fourth and finally, Mr. Batlle turned his attention to the policy and regulatory toolkit that would be necessary to support the Future Power System. This kit would include proactive policy and

regulatory reforms, facilitation of energy efficiency at greater penetrations, and in general a series of tools to support the development of a system robust to the series of structural changes underway that is yet agnostic to technological differences. In summary, the Utility of the Future Study proposed a toolkit that: (1) can be gradually implemented with existing technology and reasonable regulatory measures, (2) sets a level playing field for competition of centralized and distributed resources, and (3) enables an efficient outcome regardless of the future development of technologies or policy objectives.

EAC Member Questions and Comments for Carlos Batlle on MITEI's Utility of the Future Study

John Adams asked Mr. Batlle for clarification on whether he was suggesting that an annual capacity market doesn't make sense but that it needs to be done by time of day, as well as split amongst the different components of the charges. Mr. Batlle assented, adding that the rates and tariffs needed to reflect costs, especially when market conditions change rapidly. Mr. Adams followed up by asking whether Mr. Batlle had a vision of an algorithm for these changes. Mr. Batlle indicated he didn't, but that the complexity could begin to be addressed by starting at the distribution level costs and working up from there, implementing simple time of use tariffs.

Jim Lazar asked why the Utility of the Future (UOF) study had not compared its recommendations to the traditional foundational principals of rate design. Mr. Batlle cited that by considering two types of costs – marginal and average— (Mr. Batlle and Mr. Lazar disagreed over the number and types of costs) and then determining what customer behavior dictates when customers are responsive to changing costs in the form of rates. Mr. Lazar reframed his question, asking whether the UOF framework allows perfectly elastic customers who can concentrate their consumption in zero-cost times to free-ride on the system. Mr. Batlle clarified that these customers would not pay nothing, but would instead pay up to the point at which any higher charge by the utility would prompt them to defect from the grid.

Janice Lin asked two questions. First, at a high level, she asked whether Mr. Batlle had any preliminary recommendations, even of where to start with implementation. Second, she asked if Mr. Batlle could elaborate on the topic of revisiting the industry structure. To the first question, Mr. Batlle answered that the implementation process is dependent on the extent to which a given locality is in a rush to make reforms, before elaborating. To the second question, he structured his discussion around comparisons to existing structures, as well as the potential for innovation. Comparing the evolution of the electricity market to that of the gasoline market, he raised the topic of whether DSOs will become more prevalent. He also brought up discussions over the use of storage to illustrate what authority ought to be delegated to the market versus the company managing a market facility.

Nancy Pfund asked why the UOF study slide of the consortium who supported the work did not include new market entrants. Mr. Batlle asked her to clarify which companies and Ms. Pfund cited SunPower and Tesla as examples. Mr. Batlle contested that the MIT process included consultations with new entrants, especially EnerNoc. Ms. Pfund reiterated her position that research needs to be inclusive of new market participants.

Paul Roberti asked whether the UOF framework is still dependent on a business case that relies on

a hardwire-connected network, citing the telecom industry as one in which the old model of business was made obsolete by cellular communication. Mr. Battle answered that he fully agrees with Mr. Roberti's statement, and that he sees the question as one of compensation. He indicated that the utilities will ultimately need to decide how to recover their costs, and which services will be used to do so. The UOF study is advocating to give consumers the choice over how they are delivered power; what that means for the utility is an impact, not a determinant. Mr. Roberti's follow-up question cited Mexico as an example, who conducted an auction process for solar subsidies. Mr. Battle concurred that he would advocate for auctions for subsidies, as countries like Mexico, but also Germany, France, Chile, etc. are already doing.

Paula Carmody asked how MIT's total focus on economics can be reconciled with the reality facing electricity customers, and especially how other voices – including customers and new market entrants – will be included in the conversation. Mr. Battle began by reinforcing that the UOF team does not see themselves as academics, but as experts with experience in witnessing the development of electricity systems in many countries. Nevertheless, he concurs that a wider range of market participants ought to take over and tackle these issues.

Chair Tierney thanked Mr. Battle for participating, noting that the discussion about how the utility structure would continue to evolve and impact the operation of electricity markets is one that the EAC will continue examining

Presentation from FERC

Sue Tierney, EAC Chair, introduced FERC Acting Chairman Cheryl LaFleur, noting that this was Ms. LaFleur's second time serving in her current role. Chair Tierney shared the thanks and appreciation of the EAC for Ms. LaFleur's taking the time to contribute remarks to the advisory committee.

Ms. LaFleur opened her remarks by thanking Chair Tierney for having her and indicated that it was a pleasure to see so many colleagues around the table. Ms. LaFleur introduced Jessica Cockrell, an advisor in her office, before offering the standard disclaimer that she does not speak for FERC and that she would discuss rulemakings, but not discuss pending adjudicated cases. Ms. LaFleur explained that her new position – as acting Chairman – is the latest in a long list of leadership roles that she has held at FERC. She also commented that while FERC's actions are limited during the time that it lacks a quorum of commissioners, the ability of FERC staff to protect customers is supported by certain provisions of delegated authority. Ms. LaFleur commented that when examining the policy-driven FERC orders that have been issued during her time at FERC, the low number of Commissioner dissents is reflective of substantial staff comprise. Given the ability of Commissioners to compromise in the past, Ms. LaFleur reiterated that she is optimistic regarding working with the new Commissioners that President Trump will nominate and being able to continue the tradition of reaching consensus. Ms. LaFleur also announced her current plan to serve out the remainder of her term. Ms. LaFleur indicated that with respect to a number of rulemakings and open policy inquiries undertaken by FERC in the past year, she would be able to comment on those that relate to electric markets & transmission, but not MLP taxation or other pending rulemakings. She asserted that building a record for the rulemakings allows for transparent

outlining of options regarding rulemaking priorities.

Ms. LaFleur then elaborated on five specific priorities that she sees as requiring particular focus in the near future. The first is price formation, regarding which FERC has undertaken a two year effort to sharpen competitive wholesale electricity market rate-setting so that it reflects the real cost of keeping the lights on. This initiative is supported by a NOPR on fast start resources that went out in December of 2016. The second focus area is storage and other distributed energy resources. The NOPR on DER aggregation issued in January of 2017 has two key components: it proposes a participation model for energy storage to ensure that different market rules and tariffs don't erect barriers to the services storage could provide, and it calls upon the RTO/ ISOs to work out the various tariff provisions that are necessary to allow those DERs behind the meter to be aggregated and to bid into electricity markets as wholesale resources. The third focus area is transmission competition, specifically the follow up to FERC Order 1000 that reinforced transmission planning and cost allocation rules and increased cost allocation in the transmission world. One key question surrounding transmission is how competitive bidding and competitive pricing can foster greater overall market competition for transmission. The fourth focus area is revisiting FERC's interconnection rules to evaluate whether barriers to new technologies exist or can be mitigated. Finally, the fifth focus area is the Commission's use of data. Ms. LaFleur indicated to the EAC that collective brainstorming will be necessary regarding how both policymakers and regulators make use of collected data.

Ms. LaFleur next shared news on several initiatives from FERC. A recent Technical conference yielded takeaways regarding the potential modernization of PURPA, she indicated. Of special interest is what FERC may be able to do to tighten PURPA regulations, as well as whether PURPA is necessary in a world driven by declining cost curves for renewables. Ms. LaFleur commented that another issue teed up to be taken on by the new commission is the question of market rules versus state initiatives to choose resources. States can be unhappy with the procurement choices made by ISOs, so regulators at all levels need to consider the allocation of jurisdictional authority. While the States created the markets, Ms. LaFleur noted, the markets only exist with the buy-in of the states, so market-specific solutions may be necessary. To conclude her presentation, Ms. LaFleur commented on a recent Executive Order changing a White House Council on Environmental Quality (CEQ) rule that required consideration of greenhouse gas impacts through the National Environmental Policy Act (NEPA) review process.

EAC Member Questions for FERC Acting Chairman LaFleur

Jeff Morris led off questions for Ms. LaFleur, asking what her thoughts were about accommodating states' rights versus resolving conflicts at the federal level. Mr. LaFleur indicated that in our complicated ecosystem of federal and state authority, whatever contributes value the most for the customer over the system should prevail. Perfect rationality is where everything is optimized, but the base goal is making sure that customers aren't overpaying or double paying

Heather Sanders asked, regarding interconnection, is connection to distribution voltages participating in the wholesale market something FERC will look into. Ms. Sanders cited challenges in wholesale distribution access tariffs vs. Rule 21 for participation in the wholesale market. Ms. LaFleur answered that there are different scenarios in different places, i.e. CA already having

cluster interconnection that have already achieved a lot of what FERC wants them to do. On the other side of the problem is wind interconnection in Maine, showing the balance is not solved everywhere. It would be optimal if a couple states stepped forward to help FERC figure out a solution.

Nancy Pfund asked how Chairman LaFleur sees the process of data transparency and legislation to open up data access unfolding. Ms. LaFleur replied that the new ISP rule shows this issue is bigger than just electricity. Rules used to be about personally-identifiable information and not violating customer protection. FERC confidentiality issues currently include national security, as well as conflict between limiting information about the grid and providing access to scientists for research and development.

Jim Lazar referred to the 1970's, when power contracts used to be available for discovery, since Form 1 used to require the utility to list their wholesale data. He asked what ability FERC has to help return to this transparency. He added that the ISOs do a good job promoting transparency by publishing clearing prices, but doesn't help smaller utilities who are trying to negotiate bilateral contracts. Ms. LaFleur evaluated the break points at which transparency was lost: the introduction of competition among service providers, and 9/11, when the Confidential Energy Infrastructure Information Act came out. Starting from here, FERC is trying to do the best job possible of making decisions regarding what should be confidential. Ms. LaFleur gave conversations about the Strategic Transformer Reserve and how to anonymize and store data as current issues at hand.

Paul Centolella asked how FERC thinks about the development of DERs and the implication for markets, as well as what kinds of information FERC is looking at in connection to this issue. He specifically asked about zonal versus nodal pricing. Ms. LaFleur answered that FERC probably hasn't thought about it in the way that Mr. Centolella presented it. Back in 2010-2014, FERC was battling more foundational issues in DR. On resources that can actually feed in, like batteries or solar PV, FERC is back where it was in 2010 with DR, i.e. defining FERC's role, but Ms. LaFleur hopes the Commission can figure out how to do this type of process more quickly now and with future technologies, with buy-in from market players.

Pam Silberstein asked what progress is being made on gas-electric coordination 2.0. She shared that NRECA members are experiencing new demands on gas-fired generators as a result of higher penetration of intermittent resources in markets, which in turn leads to new requirements of the gas supply chain (including pipelines). Ms. LaFleur answered that FERC is not eager to step back in trying to change the gas day. She however also stated that there's room for innovation regarding pipelines offering more services.

Sue Tierney asked whether the industry is marching inexorably toward a more contract-heavy market. She noted there are markets already where capacity balancing has been done at the market level instead of at the state level. Ms. LaFleur answered that the jury is still out on whether the political will exists to set up a competitive market design that will produce the desired resources. As Chairman, she is asking for work on what incentives have driven resources that come into the market, post-restructuring. She added that something will be lost if just default to not using the market for resource adequacy at all.

EAC Energy Storage Subcommittee Activities and Plans

Merwin Brown, EAC Energy Storage Subcommittee Chair, asked for feedback from Committee members on the plans of the Energy Storage Subcommittee. Mr. Brown led off the discussion by introducing a Work Product that was being developed to examine various challenges and opportunities for the grid associated with a High Penetration of Energy Storage (HPES) future. Mr. Brown indicated that the HPES Work Product would use a scenario-planning approach to develop expectations of grid impacts and recommendations for DOE support. He shared that the Energy Storage Subcommittee would be holding an in-person working meeting immediately following the close of the full in-person meeting, which would be dedicated to building out the HPES Work Product. Mr. Brown also announced that the report may be ready by the June in-person EAC meeting, but that there was a chance it would be pushed to later in 2017.

Mr. Brown next provided a short overview of other schedules or proposed Work Products. He shared that a Work Product on challenges and opportunities associated with Thermal Storage technologies would be led by Ake Almgren and was targeted for presentation at a meeting later in 2017. He also shared that former EAC member Tom Sloan had agreed to help Ramteen Sioshansi develop a Work Product this year that focuses on lessons learned regarding rate, tariff and regulatory design for energy storage technologies. Third, Mr. Brown indicated that a Work Product focused on energy storage's role in modernized electric grid security would be led by Janice Lin. This work product was developed out of past EAC work products – such as the 2015 Work Product on accomplishments of the American Recovery and Reinvestment Act (ARRA) – which identified storage as an element of interest for modernization of the electric grid. A core activity of this Work Product will be a facilitated, discussion-oriented session with invited panelists and other expert guests, to take place at the June 2017 full EAC meeting. Lastly, Mr. Brown announced that the Energy Storage Subcommittee would be undertaking its next EISA 2007-required Biennial Storage Assessment in 2018, with the expectation that a product will be presented potentially at the September in-person meeting of that year.

EAC Subcommittee Work Product Discussion & Suggestions

Heather Sanders suggested that in addition to examining current and proposed rate practices, the Subcommittee should also evaluate associated capabilities and technologies. Ms. Sanders volunteered to help Mr. Sioshansi with this study. Ms. Lin commented that part of the inspiration for the extended Panel session on storage for resilience and reliability was the new administration's infrastructure priority plan. After the meeting, Ms. Lin announced that the Subcommittee would develop a Whitepaper to be shared with the full EAC. Ms. Lin also requested that EAC members identify contacts of theirs who might be key speakers or participants for this session.

Public Comments

None.

Wrap-up and Adjourn March 2017 Meeting of the EAC

Sue Tierney, EAC Chair, thanked Merwin for leading the Energy Storage Subcommittee meeting that would be occurring immediately following the adjournment of the full EAC meeting. Chair Tierney called for Public Comments, of which there were none – indicated above. She finally thanked the committee for putting effort and thought into the planning and execution of meetings to ensure they are both productive and constructive, before finally thanking Acting Assistant Secretary Hoffman for joining the EAC for the duration of the meeting. Acting Assistant Secretary Hoffman thanked the Committee members for attending and reiterated that DOE wants to continue to be forward-leaning in thinking about the issues facing the nation and the electric grid. Chair Tierney formally adjourned the March 2017 Meeting of the EAC.

Respectfully Submitted and Certified as Accurate,



Susan Tierney
Analysis Group
Chair
DOE Electricity Advisory Committee

06/26/2017

Date



Carl Zichella
Natural Resources Defense Council
Vice-Chair
DOE Electricity Advisory Committee

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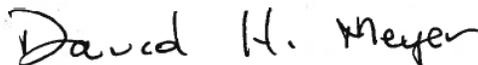
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