



## Department of Energy

Washington, DC 20585

July 23, 2018

MEMORANDUM TO THE DEPARTMENT OF ENERGY  
ELECTRICITY ADVISORY COMMITTEE

FROM: Bruce Walker, Assistant Secretary  
Office of Electricity

SUBJECT: DOE Response to the Recommendations Set Forth in the Electricity  
Advisory Committee Report "The Transmission-Distribution Interface",  
dated June 25, 2018

I want to thank the members of the Electricity Advisory Committee (Committee) for your thoughtful recommendations regarding how we can work together to better understand and address coordination issues beginning to emerge across the transmission-distribution interface. DOE realizes that the deployment of variable and distributed resources within and at the edge of the grid is challenging traditional, compartmentalized approaches for planning, operations and market design and requiring that we begin to coordinate these activities across the transmission, distribution and, even, customer domains. DOE agrees with your recommendations and especially appreciate the collaborative approach that you put forward.

I look forward to continued discussions on this matter and am committed to ensuring a strong and fruitful working relationship between the Committee and this office. If you wish to discuss this matter further, my staff is available to meet with the Committee, as needed.

Thank you.



**Recommendation #1: Based on work undertaken to date, the DOE should create a series of educational briefings that focus on key coordination architecture principles (e.g., laminar decomposition, tier bypassing, observability, and scalability), which form the basis for comparing and guiding T-D coordination models.**

DOE will organize a set of briefings where we can share and discuss recent work by DOE and others with Committee members on the application of grid architecture for enabling a critical examination and comparison of T-D coordination models. These briefings will include discussions on essential architectural considerations that can be applied to the development of workable coordination frameworks. We will begin to schedule the briefings immediately and will plan to complete this activity within a two-month period.

**Recommendation #2: The DOE should assess and report on the status and planned efforts by stakeholders, including FERC, NERC, ISO/RTOS, utilities, public utility commissions (PUCs), municipalities, co-ops, etc., to improve coordination across the T-D interface.**

DOE will leverage recent studies and engage in discussions with responsible organizations, e.g., the Federal Energy Regulatory Commission (FERC), the North American Electric Reliability Corporation (NERC), Independent System Operators/Regional Transmission Operators (ISOs/RTOs), state public utility commissions, and others to assess and report on the status and trajectory of T-D coordination efforts. This effort will include a comparative assessment of regional efforts and identify gaps in institutional processes and technological capabilities, e.g., planning models. Throughout this effort, we will regularly report to the Committee on findings leading to a determination of OE's role in addressing T-D coordination issues. We hope to complete this activity over the next six months; however, the scope of the effort will depend upon the level of participation with stakeholders to be determined through discussions with the Committee.

**Recommendation #3: The DOE should develop guidance by providing a process framework that can inform the development of holistic strategies for T-D coordination.**

DOE will work collaboratively with the Committee to determine a best approach for informing the development of holistic coordination frameworks, including developing guidance, as recommended, if determined to be useful. We would expect that any guidance developed would not prescribe a specific model or set of requirements, but rather provide key considerations and approaches that can be used to inform the development of holistic T-D coordination frameworks. This activity will require approximately six months to complete after the comparative assessment mentioned above and it leverage materials currently being developed through the DOE grid architecture and Next-Generation Distribution System Platform (DSPx) efforts.

**Recommendation #4: The DOE should leverage the EAC membership by providing regular briefings for EAC members to share guiding architectural principles, present findings, and obtain additional direction (from the EAC) on the scope of the effort.**

Throughout the effort, DOE will provide briefings to the Committee on advancements in grid architecture theory and its practical application, e.g., through the DSPx activity, and through this dialogue obtain additional direction on the scope of the effort.