



**Via Electronic Submission**

July 13, 2023

Grid Modernization Advisory Council  
c/o Elizabeth Mahony, Commissioner  
Department of Energy Resources  
100 Cambridge Street  
Boston, MA 02110

Dear Chair Mahony and Members of the Grid Modernization Advisory Council,

On behalf of Advanced Energy United and the Northeast Clean Energy Council, we appreciate the opportunity to provide comment to the Grid Modernization Advisory Council (the "Council") on the Electric Sector Modernization Plan ("ESMP") "EDC Proposed Structure" dated June 1, 2023.

Advanced Energy United ("United") is the only national industry association that represents the full range of advanced energy technologies and services, including wind, solar, hydro, electric vehicles, grid enhancing technologies, and more. The goals of this collaborative ESMP effort closely aligns with United's mission to accelerate the transition to a 100% clean energy system in America.

NECEC leads the just, equitable, and rapid transition to a clean energy future and a diverse climate economy. NECEC is the only organization in the Northeast that covers all of the clean energy market segments, representing the business perspectives of investors and clean energy companies across every stage of development. NECEC members span the broad spectrum of the clean energy industry, including clean transportation, energy efficiency, wind, solar, energy storage, microgrids, fuel cells, and advanced and "smart" technologies.

With the ESMP process, Massachusetts has an opportunity to chart a decisive course towards a clean energy future that relies on a distribution system that reflects our dynamic, modern energy system. To succeed, our distribution grid must be open to the speedy interconnection of distributed energy resources ("DERs") of all kinds, not the barrier that it is so often today. Reducing the friction to DER interconnection will go a long way to increasing the reliability, and

resilience of our grid. This will require a DER interconnection process that is fast, low-cost, and predictable. Through our comments below, and through the efforts of the Council, the EDCs, and the Healey-Driscoll administration, we are hopeful that the eventual approval and execution of the ESMPs will mark a significant step in achieving our clean energy aspirations—safely, affordably, and reliably.

### **Sections 1 and 3: Explicitly Include Interconnecting Customers**

In Section 1.4, United and NECEC, through these comments, urge the EDCs to explicitly demonstrate how *interconnecting* customers and distribution customers experience the clean energy transition. We agree that both distribution and interconnecting customers are key stakeholders in this process with various interests that align in some instances and vary in others. Both types of customers should be included in the development of these plans. With regards to section 3.0 of the outline, we applaud the commitment to conduct ongoing and meaningful stakeholder engagement, and request that the outline specifically include outreach to “interconnecting customers.”

### **Section 4: Clarity on Geographic Parameters, Backlogs, and Queue Metrics**

For Section 4.0 which considers the Current Distribution System, we urge the EDCs to provide clarity that defines the geographic parameters that the EDCs will be using for sub-regions, which will help stakeholders make meaningful comparisons. Looking at section 4.1, United supports the interconnection queue key metrics reflected in New Leaf’s recent comments. We agree that it will be useful to understand the level of projects characterized as installed, pending, and withdrawn across the Commonwealth to understand DER opportunities as well as barriers, and make appropriate remediations to ensure equitable access to clean energy benefits. Finally, we urge the Council and the EDCs to include data about current interconnection queue times (time between filing of application to final permission to energize/operate, costs to interconnect (\$/kW), and success rates (no. of applications v. no. of projects that receive final permission to energize/operate).

### **Section 5: Grid Dynamics, Seasonal Considerations, and Energy Storage**

For Section 5, we encourage the explicit addition of the following entities – battery storage, seasonal issues, system peaks, and areas of congestion. In the next five to ten years, it is important to anticipate the adoption and integration of battery storage as resource to manage load and system peaks. Battery storage is and will continue to be an important asset to optimize grid resources in the face of varying conditions. Understanding general assumptions EDCs have about future system peaks and areas of congestion on the grid will help stakeholders and planners better engage in the ESMP process, as well as meaningfully prepare to address these issues.

Similarly, it is practical and necessary to include expectations for seasonality in context of future load forecasts. Massachusetts and neighboring states face an increasing risk due to winter reliability issues. More broadly, we are interested to learn how granular the load forecasts will be and whether participating stakeholders will have the ability to review that data.

### **Section 6: Technology Deployment**

Looking to Section 6.0 in Planning Solutions, in sub-section 6.3 for technology platforms EDCs plan to implement, it would be useful for the plans to include an explanation for why certain platforms were selected. We ask that the plans clearly demonstrate the purpose for these platforms and comment on why the selected options are superior to alternative approaches.

In this section, we hope that EDCs will carefully consider the existing or potential interdependence of components. For example, the outline lists ADMS as a tool EDCs plan to implement; ADMS may incorporate several grid modernization units, such as (D)SCADA, GIS, and other forms of monitoring tools. Understanding how the different platforms interrelate can be leveraged to optimize system efficiencies or combat adverse conditions. Additionally, this section is an appropriate area to consider how EDCs plan to better accommodate third party services in the near future. Although we recognize that this is a *distribution* system plan, we agree with comments by New Leaf (and AGO) that the EDCs should identify any enabling transmission infrastructure (with timelines, etc.) necessary to place the distribution assets into service.

Finally, we would urge the EDCs to describe plans to continue existing investments as a way to avoid stranded assets and deliver value, including the use of software, analytics, and other developments that leverage resources that have already been approved and are, in many instances, under way.

### **Sections 7 and 8: Electric Sector Modernization, Policy Drivers**

For Section 7.0, we request that EDCs define the criteria used to evaluate and select technologies to potentially fulfill the Electric Sector Modernization Plan. This will help stakeholders assess and understand the expected benefits from the portfolio of resources, which will contribute to a robust engagement process. Specifically for sub-section 7.2, we recommend that the 10-year chart representing the Investment Summary include timeframes and estimated costs.

Going forward, there are several factors that will shape our energy procurement and uses, as well as grid management practices. In Section 8.0 which considers Policy Drivers 2035-2050, we are interested to better understand how EDCs intend to balance multiple policy goals in the

Commonwealth and industry best practices, including (but not limited to) resilience, equity, reliability, cost-effectiveness, decarbonization, and security across efforts outlined in the underlying sub-sections (8.1 Buildings, 8.2 Transport, 8.3 DER, and 8.4 Offshore wind). In addition, we urge the EDCs to describe how these ESMPs fit into their overall business operations.

When assessing policy drivers and the scope of target demand areas, how are EDCs determining appropriate solutions and their associated risks? Do those factors change over the 2035-2050 time horizon? To inform the planning process, we recommend the ESMP outline include consideration of implementation complexity (such as time to execute) given reasonable estimates for technology adoption and maturation. Again, we request that EDCs explain how they plan to establish a scoring methodology (if any) and how they intend to make comparisons between technology proposals and their expected outlines.

### **Section 9: Cost Allocation and Behind the Meter Assets**

In Section 9.0 which seeks to build a decarbonized future in 2035-2050, we are supportive of the entities elevated in sub-section 9.1. Specifically, we applaud the inclusion of demand response (DR) and winter scenario planning in 9.1.1. These are critical issues that merit increasing attention to maintain system reliability and manage consumer costs. We hope that EDCs offer context that allow stakeholders to review underlying assumptions and estimates that inform planning in this area. In addition, we strongly urge the parties to include detailed proposals on how the EDCs plan to allocate the costs among distribution and interconnecting customers, taking into account the Department of Public Utilities' decision in DPU 22-47.

On behalf of Advanced Energy United and the Northeast Clean Energy Council, we appreciate your consideration of our observations and recommendations. We look forward to continuing to work with the EDCs and members of the Council to deliver a set of plans that drive Massachusetts's clean energy transition forward.

Sincerely,

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