



THE COMMONWEALTH OF MASSACHUSETTS  
OFFICE OF THE ATTORNEY GENERAL  
ONE ASHBURTON PLACE  
BOSTON, MASSACHUSETTS 02108

MAURA HEALEY  
ATTORNEY GENERAL

(617) 727-2200  
(617) 727-4765 TTY  
www.mass.gov/ago

May 28, 2021

Mark D. Marini, Secretary  
Department of Public Utilities  
One South Station, 5th Floor  
Boston, MA 02110

**Re: *Investigation by the Department of Public Utilities On Its Own Motion Into Electric Distribution Companies' (1) Distributed Energy Resource Planning and (2) Assignment and Recovery of Costs for the Interconnection of Distributed Generation, D.P.U. 20-75.***

Dear Secretary Marini:

The Massachusetts Office of the Attorney General (“AGO”) submits the following comments in response to the Hearing Officer Memorandum (“Memorandum”) announcing procedural next steps and directing the Electric Distribution Companies (the “EDCs”)<sup>1</sup> to file system planning analysis proposals to implement the distribution system assessment process.

## **1. Introduction**

On October 22, 2020, the Department of Public Utilities (the “Department”) opened this docket and issued a straw proposal that would set forth certain distributed energy resource (“DER”) planning requirements, as well as a common system modification fee. Memorandum, at 1. The Department’s October 2020 Straw Proposal contemplated a long-term system planning process “to identify distribution system infrastructure investments needed to meet the Commonwealth’s clean energy and climate policy objectives.” On March 24, 2021, the Department issued the Memorandum, which established the deadlines of April 23, 2021 for the EDCs proposals and May 7, 2021 for stakeholder comments on those proposals.<sup>2</sup> Memorandum, at 3 (March 24, 2021).

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<sup>1</sup> The EDCs include three electric distribution companies in Massachusetts: NSTAR Electric Company d/b/a Eversource Energy (“Eversource”); Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid (“National Grid”); and Fitchburg Gas and Electric Light Company d/b/a Unitil (“Unitil”).

<sup>2</sup> On April 30, 2020, the Hearing Officer granted a request for an extension of time to file initial comments to May 28, 2021, which was reaffirmed by a May 7, 2021 Hearing Officer Memorandum.

Pursuant to the Department’s direction in the Memorandum, the EDCs filed individual System Planning Analysis Proposals on April 23, 2021. Memorandum, at 3. The EDC System Planning Analysis Proposals (“Proposals”) seek to address the Department’s Straw Proposal by gathering company-specific plans to identify system upgrades to accommodate forecast load growth and distributed generation (“DG”) facility interconnection. *Id.* If enacted, the Department’s Straw Proposal would establish a long-term system planning program, where the EDCs would be required to conduct a system planning analysis that would, *inter alia*, enable cost-effective interconnection of DG facilities. *Id.*

The AGO remains committed to promoting and accelerating the adoption and connection of DG resources. Each of the Proposals attempt to balance the safe and reliable operation of the distribution system with the need to facilitate quicker connection of additional solar, battery storage, and other emerging DG technology. The AGO appreciates that the Department solicited—and the EDCs provided—these Proposals and provided the AGO with an opportunity to comment. The Department’s process is an important step towards implementing system planning process which meets the needs of our electric grid *and* the Commonwealth’s clean energy and greenhouse gas emissions reductions goals.

The AGO’s comments focus on reactions to the plans and corresponding recommendations regarding: (1) the need for a comprehensive planning process that includes not just the interconnection of DG, but also considers related adjudications, investigations, and pending statutory or policy implementations before the Department; (2) the development of more comprehensive load forecasting for the plans while connecting it to the role that forecasting plays in DG interconnection, rather than a load forecast driven by interconnection of DG; (3) increased stakeholder involvement; and (4) the Proposals’ failure to more fully consider and involve mitigation techniques and technologies.

## **2. Comments**

### **a. The Department Should Address System Planning as a Comprehensive Review.**

System planning will be a large undertaking that will include the EDCs, the Department, and stakeholders. The time and money expended to carry out yearly plans that plan for ten years of grid use and upgrades should be handled in as efficient and comprehensive manner as possible to avoid unnecessary costs and wasted efforts. The Proposals respond to the Department’s call for system planning analysis for the interconnection of DG, specifically. However, given the multiple competing and/or complimentary adjudications, investigations, and policy implementation underway at the Department (or required in the future by recent statutory changes), planning should not be so narrowly focused. System planning should evolve to include all potential system-related issues. Among the issues that should inform and/or be

included in the Proposals are: the anticipated grid modernization investment plans,<sup>3</sup> allowed performance-based rates (“PBR”), the 2022–2024 energy efficiency three-year plans, the future of gas investigation (D.P.U. 20-80), and implementation of the 2021 climate bill<sup>4</sup>—including net zero greenhouse gas emissions by 2050,<sup>5</sup> a new net zero stretch energy building code, expanded utility-owned solar and storage, more offshore wind generation, and consideration of environmental justice community impacts. Individually, these proceedings or updates have significant impact on the electric distribution grid but are yet to be considered collectively in grid planning. Currently, the Proposals do not fully address the impacts resulting from both potential new generation/storage and electric load growth.

Perhaps in recognition of the need for a more comprehensive approach, the Memorandum directed the EDCs to develop Proposals that address “system upgrades to accommodate forecast load growth *and* DG facility interconnection.” Memorandum, at 3 (emphasis added). The focus of the Proposals leans heavily on interconnecting DER. However, the Proposals ignored or barely recognized the system-related issues listed above, which is short-sighted, inefficient, and results in incomplete system planning. Rather, the Department and the EDCs should broaden the scope of the system planning analysis to rightly consider these issues, either in this docket or a future proceeding.

Expanding the scope of the Proposals would further two important goals. First, it would minimize ratepayer costs by avoiding unnecessary expenses with an overbuild of the system or charging for efforts already funded in another program. For example, in the situation where targeted deployment of rooftop solar and storage in a community which adopts the stretch energy code to absorb the associated increased electric load, will the Proposal ignore how this connection could offset or reduce the need for a feeder or substation upgrade and simply require the costly upgrades? Likewise, PBR is already established to “enable initiatives designed to address climate change and foster a clean energy economy, in furtherance of the ommonwealth’s clean energy goals.” *Petition of NSTAR Electric and Western Massachusetts Electric*, D.P.U. 17-05, at 382–81 (November 30, 2017) (*see also* *Petition of National Grid*, D.P.U. 18-155, at 53). Although Eversource and National Grid have the ratemaking treatments in place to address certain system upgrades to deal with interconnection or load growth, neither Proposal mentions the availability of PBR or how that interacts with the planning for interconnecting DG.

Second, setting aside the cost concern, the practical impacts of duplicating efforts—either in the planning stages, or the actual construction of infrastructure—is inefficient and burdensome on the EDCs, the Department, Stakeholders, and residents of host communities. Treating the planning for grid modernization, PBR, energy efficiency plans, electrification, clean energy deployment (DG and beyond), and net zero emissions goals in separate silos fails to plan

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<sup>3</sup> The filing of the next three-year grid modernization plans for calendar years 2022 to 2024 is expected on July 1, 2021. *Grid Modernization Plan*, D.P.U. 15-120-D/D.P.U. 15-121-D/15-122-D, at 6 (May 12, 2020).

<sup>4</sup> *An Act creating a next-generation roadmap for Massachusetts climate policy* (the “Roadmap bill”) St. 2021, c. 8 (March 26, 2021).

<sup>5</sup> Amending the *Global Warming and Solutions Act* (“GWSA”), St. 2008, c. 298.

for the entwined nature of those issues. The result will be inefficient planning and potentially duplicated efforts. Absent a comprehensive planning view, the Proposals will be stunted or ineffectual.

Further, parties will not be harmed by the additional time necessary to carry out comprehensive system planning, which incorporates these identified issues because the Department contemplates a “provisional system planning program to address imminent DG interconnection concerns.” Memorandum, at 2. Thus, with the immediate concerns addressed, the Department, EDCs, and Stakeholders are free to develop a cost-conscious and efficient system planning process which includes the full breadth of known and emerging system impacts.

The Proposals offer a significant head start to the development of comprehensive system planning. With the knowledge gained from the Proposals (including associated stakeholder comments) and perspective offered in the recent proceedings or filings for the various competing issues, the Department should, in this docket or a future docket, expand the scope of distribution system planning beyond just the interconnection of DG to include all the collective undertakings of the Department in an effort to reduce ratepayer cost and eliminate duplicative efforts.

#### **b. Load Forecasting**

Among the most critical issues to improve upon in a comprehensive system planning process is the treatment of load forecasting. In the Memorandum, the Department called for the EDCs to identify “system upgrades to accommodate forecast load growth and DG facility interconnection.” Memorandum, at 3. Based on the Proposals, it appears that the EDCs interpreted the Department’s directive narrowly, focusing only on load growth associated with DG facilities. While each of the Proposals offered includes some indication of forecast load, those appear to rely heavily on how the interconnection of DG is likely to impact load calculations. The Proposals do not explore the circumstances impacting load growth from both electrification and DG, nor do they include a calculation of this more complete load forecast.

For example, the National Grid Proposal recognizes load growth from electrification but fails to incorporate that in Task 1 or 2 deliverables. National Grid System Planning Analysis Proposal, at 12 (April 23, 2021) (“National Grid Proposal”). Eversource appears to include electrification in its Probabilistic Forecast, however, this is not explicitly described. Eversource System Planning Analysis Proposal 2 and Attachment 1, at 31 (April 23, 2021) (“Eversource Proposal”). Further, while Eversource mentions a holistic approach it is also clear that the “driver for this assessment is the growth in distributed energy resources (DER).” *Id.* at 1 and Attachment 1, at 31. Until separately describes system forecasting from the DER forecast, however, the two are combined in a “overall system load forecast.” Until System Planning Analysis Proposal, at 4 (April 23, 2021) (“Unutil Proposal”). The Unutil Proposal fails to discuss electrification impacts on load forecast or its system forecasting entirely. *See id.*

DG interconnection must not happen in a vacuum. Any load forecast should account for a more accurate picture of load *growth* due to increased electricity usage associated with electrification. Electrification has been identified as a necessary tool to help the Commonwealth meet its goal of net zero greenhouse gas emissions by 2050. Thus, electrification is a key driver

of the developing stretch code as well as ongoing Department proceedings including grid modernization; electric vehicle charging infrastructure; energy efficiency (specifically with respect to the anticipated growth of heat pump incentives in the next energy efficiency three-year plan); and the future of gas explored in D.P.U. 20-80. Accordingly, a more accurate and comprehensive picture of the load *growth* due to increased electricity usage from electrification should be the threshold for any load forecast, with the addition of DG or other technologies building on that threshold. Unfortunately, the Proposals appear to dismiss or minimize the impact of electrification as it relates to this exercise.

At a minimum, the Proposals require additional detail on how load forecasting will include firm calculations of electrification and how said calculations apply in the Proposals. Ideally, load forecast should contemplate the entire universe of expected load growth on the distribution system, not just that load growth which is limited to DG.

### **c. Stakeholder Involvement**

The Proposals each address stakeholder involvement in the planning process. As presented, the Companies argue that limited engagement is necessary to protect sensitive company information. While a balance between stakeholder involvement and protecting the security and proprietary nature of each company's grid is wise, the extent to which stakeholder involvement is limited in designing these system plans is disappointing. Outside input is integral to developing a ten-year forward looking plan seeking to interconnect technology that is typically developed, configured, and installed by certain stakeholders rather than the EDCs themselves. Stakeholder involvement can and should help with the critical thinking needed to develop system plans in a way that avoids delays or misunderstandings.<sup>6</sup> Moreover, as this need for system planning is partially driven by the stakeholder community, it is reasonable to expect these stakeholders to offer solutions, including technical information. This type of dialogue between the EDCs and stakeholders is critical to planning a future smart and integrated system and should be injected in more phases/tasks of the Proposals.

The limitation on stakeholder involvement in the planning process, as proposed by the EDCs, also speaks to the need to adopt the recommendations of the AGO to explore the broader DG interconnection issues through the DER Stakeholder Working Group (including the Pre-Integration Planning Steps and the DER Integration Roadmap). Initial Comments of the Office of the Attorney General at 4-6 (December 23, 2020). As previously detailed in the AGO proposal, these broader DG interconnection issues can be addressed before and during EDC system planning. *Id.* Indeed, as the AGO-proposed process would allow for deeper technical discussions between stakeholders and the EDCs, the EDCs can gain necessary information for inclusion in their individual system plan with less worry about exposing sensitive company information. The AGO proposal does not obviate the need for stakeholder involvement in the system plans entirely. Rather it can help reduce the amount of stakeholder involvement in one planning process by supplementing with the other.

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<sup>6</sup> Discussions in D.P.U. 19-55 often stalled due to the lack of current knowledge by the EDCs on technical questions.

The Proposals are notably silent on the need for stakeholder involvement from environmental justice communities regarding the topic of siting planning for the planned interconnection infrastructure. These communities too often bear the unequal burden of hosting utility infrastructure and are therefore a unique stakeholder group deserving particular attention. Moreover, environmental justice communities must be at the table from the beginning of the planning process to explore what and when interconnection infrastructure is needed (particularly in the determination of mitigation offsets, as discussed further below) and how to plan where the infrastructure should be located. The Proposals must provide details as to how environmental justice stakeholders will play a role in the process.

**d. The role of potential mitigation measures in System Plans.**

It is critical that Proposals for system planning—which should include fuller load forecasting as described above—should approach interconnection upgrades with the intent to include as many mitigation measures as possible. Mitigation measures will help reduce the need to build larger infrastructure in the densely populated Commonwealth of Massachusetts. Moreover, mitigation measures can maximize the value of individual electrification technologies which may offer the EDCs benefits, if the system is constructed in a way to accommodate the technologies. This will necessitate planning for back office and staffing upgrades as well as technical upgrades for the system. As these types of investments will not be tied to a specific DG project, they should be considered in the overall planning and cost calculations for system planning.

The respective Proposals address mitigation with varying degree of specificity. Eversource provides a detailed non-wires (“NWA”) framework which the company developed in Q1 2021. Eversource Proposal, Attachment 2. The overall system planning proposal for Eversource, however, assumes the buildout of substations as the primary system planning tool to interconnect DG. *Id.* The National Grid and Unitil Proposals each mention NWA as an afterthought, late in the planning process. National Grid Proposal at 25; Unitil Proposal at 8. Additional detail with respect to the considerations given NWA by National Grid and Unitil are necessary. Eversource’s NWA Framework offers a starting point for stakeholders to discuss and improve upon. Overall, the Proposals should incorporate more mitigation/NWA considerations as part of the standard suite of EDC solutions.

Mitigation efforts or NWA are complex and will require company investment. Given the need for increased electrification to meet the Commonwealth’s 2050 climate goals, every tool available should be deployed to incorporate the added load from electrification and the addition of new DG. This will require the rethinking of how the EDCs serve customers and interact with individual meters, with a goal of creating a smarter, more flexible distribution grid which can be leveraged by mitigation efforts or NWA. The upcoming grid modernization dockets will likely explore the interaction between mitigation efforts/NWA on daily grid operations, but the Department should not miss the opportunity to consider similar distribution grid flexibility in the forward-looking plans contemplated in this docket

The Eversource NWA Framework notwithstanding, exploration of mitigation efforts and NWA currently available or near-market ready would take place if the Department requires the

long-term planning process proposed by the AGO in December as well. Initial Comments of the Office of the Attorney General Appendix B at 17-19. The intention of the AGO's DER Integration Roadmap is to allow for updates and breakthroughs to be shared by subject matter experts with the EDCs. *Id.*, at 5.

### **3. Conclusion**

The AGO appreciates the opportunity to review the EDC Proposals and offer comments and recommendations. The AGO respectfully requests that the Department adopt the recommendations in these comments.

Sincerely,

/s/ Elizabeth Mahony

Elizabeth Mahony

Shannon Beale

Ashley Gagnon

Assistant Attorneys General

Energy and Telecommunications Division

cc: Kate Zilgme, Hearing Officer