December 23, 2020

Matthew Nelson, Chair

Massachusetts Department of Public Utilities

One South Station, 5th Floor

Boston, MA 02110

Re: Inquiry by the Department of Public Utilities on its own Motion into the Assignment and Recovery of Costs for the Interconnection of Distributed Generation, D.P.U. 20-75

Dear Chairman Nelson;

The Solar Energy Business Association of New England (SEBANE) and our collective solar and storage members appreciate the Department's consideration of comments from stakeholders discussing DPU 20-75 straw proposals. We also thank the Department for its commitment to implementing fair and equitable solutions to complex interconnection cost allocation and distribution system planning obstacles.

Accomplishing economy-wide electrification objectives requires thousands of new MWs of clean energy. To deploy these resources cost-effectively, regulators and policymakers must address several challenges and obstacles facing interconnection and distribution system planning. Throughout the document, SEBANE highlights the urgency for near- and long-term solutions to address cost allocation issues, interconnection queue delays, and distribution planning needs benefiting customers and the Commonwealth.

SEBANE again thanks the Department for putting forward this straw proposal for comments for consideration.

Mark Sylvia
President, SEBANE

DPU 20-75

(1) Refer to Section II, Distributed Energy Resource Planning Requirements. Please discuss the effectiveness of this proposal, specifically:

1. **The Department has identified the following list as solutions that address potential system needs. If you disagree with any solution included on this list, please explain why. Please identify and explain any additional solutions.**

   i. **Technologies for Voltage Control on the Distribution System**

   SEBANE thanks the Department for considering voltage control technologies and supports further examination to meet the system needs.

   ii. **Distribution Bulk Transformer Addition or Replacement**

   SEBANE thanks the Department for considering distribution bulk transformers – whether to deploy additional transformers or replace/upgrade existing resources – and supports further examination to meet the system needs.

   iii. **New Bulk Station**

   SEBANE commends the Department for considering the examination of Distribution Energy Resource (DER) planning requirements on a holistic basis. Our organization and our members believe immediate and long-term interconnection cost allocation solutions must be considered as the Commonwealth enacts more ambitious clean energy deployment and carbon mitigation policies. In addition to the technologies and solutions outlined above, we would respectfully include: upgrades and expansions of existing distribution systems, transmission substations that serve distribution needs, transmission and distribution line reconductoring, communications equipment and technologies that improve services, circuit protection equipment, capacity banks, and other technologies that support and accommodate reverse power flow.

2. **Should transmission studies and costs be included in proactive system planning as it relates to interconnection? Explain your reasoning.**

   SEBANE believes Massachusetts electric distribution companies (EDCs) play a critical role in maintaining reliability. EDCs are responsible for ensuring

investments support transmission and distribution upgrades, increase transmission capacity to limit line congestion, and accelerate clean energy deployment to electrify transportation and building to meet climate and carbon emission goals. But this should not take place in a black box. SEBANE supports holistic DER planning to improve transmission and interconnection limitations that have hindered the advancement of solar and storage projects. SEBANE encourages the Department to also consider in the planning process, the increasing demand for solar resources and the Commonwealth's focus on integrating electric vehicles and other resources when assessing necessary distribution and transmission investments. The Department should do what it can to help reduce line congestion, interconnection delays, and send appropriate price signals to businesses and customers eager to invest in solar and other distributed energy. Such salutary effects can result from a planning process that fully recognizes the desire in the market to install solar resources. Lastly, SEBANE respectfully encourages the Department to engage industry stakeholders and EDCs to participate in discussions to review and provide feedback supporting DER planning and infrastructure investments to reach consensus in a robust, equitable, and transparent manner.

3. **Should the distribution system assessment identify projects that provide broader benefits beyond enabling incremental DG capacity? If so, explain:**
    i. **what benefits should be considered,**

    SEBANE supports the identification of projects that provide broader benefits beyond enabling DG capacity. We believe DER assessments should consider several variables including, but not limited to: economic savings to customers achieved through a reduced need for peak generating assets (lowering the clearing price for wholesale electricity, benefits to ratepayers through improved service, improved reliability, economic development opportunities stemming from transmission and infrastructure construction, job creation, increased access

to solar resources in low- or middle-income communities, reduced carbon emissions, improved health outcomes, and a reduction in unplanned outages.

ii. **how these benefits should be quantified, and**

SEBANE suggests considering quantifiable factors like annual savings for customers, carbon and GHG reductions, and improved interconnection application timelines leading to increases in behind the meter solar adoption.

iii. **the appropriate method for cost assignment and recovery.**

SEBANE supports the straw proposal concept of paying for CIP through reconciling charges that are applied to all benefiting ratepayers. Charges could then be reimbursed by projects paying a fixed fee-per-kW for the available capacity used.

4. **Should there be a cap on the dollar-per-kW billed to each Facility that benefits from the Capital Investment Project? If so, please explain how the cap should be determined.**

SEBANE believes there should be a cap applied to each facility that benefits from CIPs. The Department could consider adopting varying levels of fees based on project size and type and recognizing the general system benefits that will flow from a given transmission system improvement

(2) Refer to Section III, Common System Modification Fees. Please discuss the effectiveness of this proposal, specifically:

a. Simplified Facilities

i. **Is a Common System Modification Fee appropriate for Facilities using the simplified interconnection process? If so, provide a proposed method for establishing such a fee.**

Historically, projects subject to the simplified interconnection process were exempt from system modification fees due to their small size. Since 2018, 25,981 total simplified interconnection process applications have been filed with National Grid triggering $3.414 million in total system modification charges and

averaged about $3,425 per customer.[1] This unreasonable upfront cost presents a steep financial burden for residential customers.

Despite its popularity, the simplified interconnection process that triggers an upgrade results in a financial barrier for customers in Massachusetts as other cost-sharing structures are not available. Furthermore, strategies that support group studies create extended delays and increased costs in cases where other projects included in the study drop out. While SEBANE agrees with the Department that a Common System Modification (CSM) Fee may be appropriate as more simplified projects are planned and executed, the Department should ensure reduced interconnection delays for simplified projects. SEBANE could support the establishment of a fixed fee for the simplified process that includes a cap. The Department, working with stakeholders and EDCs, could convene experts to identify what the true cost of interconnection and infrastructure needs are when determining the fixed cost for CSM. SEBANE would also caution the Department from retroactively imposing costs on projects awaiting interconnection studies, as it will have a chilling impact on developers considering future investments in Massachusetts.

ii. What types of upgrades should be funded by a Common System Modification fee for Facilities using the simplified interconnection process?

SEBANE recommends CSM fees fund DER upgrades that improve reliability and efficiencies for the distribution system serving multiple beneficiaries, modifications that increase capacity, or to improve services for customers. These upgrades could include substation transformer replacements; reconductoring of distribution feeders; distribution protection measures; and transmission upgrades triggered by resources interconnecting to the distribution system.[2]

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[1] DPU 20-75 National Grid Information Request, 10/22/2020

[2] DPU 20-75 Att.A-Proposal_10.22.2020, page 9; Other interconnection related costs would be borne by the Interconnecting Customer(s) separately. These include: (1) Administrative Fees; (2) costs associated with the installation and construction of the Facility; and (3) specific equipment the customer(s) requires to interconnect to the Distribution Company's system. Examples of specific upgrades and equipment the customer may require to interconnect to the Distribution Company's system include: (1) on-site distribution work (e.g., poles conductor,

iii. How would such a fee interact with the system planning process described in Section II? Should fees collected from Facilities using the simplified interconnection process be used to offset the costs of Capital Investment Projects approved through the proposed distribution system planning process?

SEBANE would encourage the Department to convene stakeholders or a technical conference to examine how to best allocate collected fees to ensure a wide range of customers are benefiting from the CIP and CSM projects. Such process must include addressing significant delays in the interconnection approval queue, transformer upgrades and DER adoption, and how EDCs ratepayers, and developers pay for interconnect costs. Interconnection infrastructure must keep pace with the rapid deployment of solar resources to achieve statewide climate objectives.

b. Expedited and Standard Facilities

i. Is a minimum Common System Modification Fee appropriate? If so,

1. Provide a proposed method for determining such a fee.

SEBANE supports a fixed dollar-per-kW fee for CSM Fee collection for facilities governed by the Expedited and Standard interconnection process. To determine an appropriate fee, the Department should consider hosting stakeholder collaborative or a quarterly technical conference to share planning studies, discuss outcomes, and receive stakeholder input. Projects governed by the Expedited and Standard interconnection process may also be obligated to cover system upgrades that only benefit the project or for projects that are considered a standalone system as opposed to upgrades that benefit more than the individual project, i.e. upgrades that enhance reliability to many customers.

2. Explain why the proposed fee levels are appropriate considering the level of investment required to support the types of investments the fee is intended to cover.

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metering, reclosers, switches, etc.); (2) wires that exclusively serve the interconnecting Facility; (3) direct transfer trips; and (4) any other required upgrades

Interconnection charges imposed on distributed energy resources should reflect the value of solar resources and the estimates related to interconnection costs including the construction of transmission lines, permitting costs with the utilities, substation costs, and other start-up costs. SEBANE believes forward-thinking policies that improve interconnection and distribution system, reduce congestion, and accelerate interconnection timelines would benefit all ratepayers through the rapid adoption of clean energy resources that reduce carbon emissions, helping the Commonwealth reach its net-zero goals.

3. **Explain how proposed fee establishes clear price signals, provides cost certainty, and limits ratepayer costs.**

   SEBANE supports the adoption of a cost-sharing mechanism based upon the true cost to interconnect that does not exceed the fixed dollar-per-kW fee. For example, this would serve as a price signal by driving solar projects to be located in areas where interconnection costs could be lower than the fixed dollar-per-kW fee. Additionally, this concept would not burden ratepayers with increased interconnection costs rather it would serve as a benefit to ratepayers.

4. **Explain how such a fee would interact with the distribution system planning process described in Section II.**

   During the DER planning stage, the Department, industry stakeholders, and the EDC identify opportunities to ease constraints, upgrade distribution infrastructure, and expand capacity to accommodate rapid transportation and housing electrification. This planning, similar to the DER planning, should occur on an annual basis to forecast load growth potential and other critical factors that accelerate the achievement of climate goals. Following the planning stage, the Department must adopt policies that improve interconnection requirements, system impact study timelines, and cost allocation principles in the short-, medium-, and long-term. These solutions must support the rapid decarbonization policies and increased adoption of solar and other clean energy resources advanced by the Legislature and Baker administration.

ii. Is a fixed Common System Modification Fee appropriate? If so,

1. **Provide a proposed method for establishing such a fee.**

   SEBANE supports past proposals submitted by the New England Clean Energy Council (NECEC) establishing a system modification fee that a) assesses fees on standalone projects that only benefit a singular customer and b) application of fees on all those who stand to benefit from distribution and transmission upgrades or construction.

2. **Explain how the proposed fee levels are appropriate considering the level of investment required to support the types of investments the fee is intended to cover.**

   Understanding that a variety of factors determine an appropriate development site, SEBANE would support minimum and maximum interconnection fees based on project size and existing capacity availability.

3. **Explain how proposed fee establishes clear cost signals, provides cost certainty, and limits ratepayer costs.**

   SEBANE believes that the proposed fee structure provides businesses with interconnection cost certainty. Furthermore, interconnection and distribution system planning will ensure that necessary investments and upgrades are made. These upgrades and distribution improvements increase reliability, support electrification goals, and reduce congestion which benefits all customers.

iii. Explain how such a fee would interact with the distribution system planning process described in Section II.

1. **As part of your explanation indicate whether a maximum price for Common System Modification Fees is appropriate.**

   SEBANE encourages the adoption of a maximum price. Should costs to interconnect exceed the maximum price, the remaining balance could be collected from ratepayers who stand to benefit from the added capacity and transformer upgrades**.** As more projects come online to support the Commonwealth's clean energy requirements, distribution capacity will become

constrained, exacerbating congestion and dramatically increasing interconnection costs which prompt projects to withdraw from the queue. This will hamper the adoption of solar.

2. **If a maximum price is appropriate, explain how such a cap would be determined.**

   SEBANE would support a cost ceiling as a measure to provide businesses with some sort of certainty on maximum interconnection costs. The Department, working alongside stakeholders and industry groups, should determine a prudent cap that enables greater solar development. SEBANE also urges the Department considers striking a balance between near-term and long-term upgrade needs to improve services and reliability for customers.

iv. **Should Common System Modification Fees be based on nameplate capacity and/or export capacity?**

1. **If you propose that the fees be based on a combination of the two, please clarify how they should be weighted.**

   SEBANE does not have a recommendation for this proposal.

v. **Since it is unlikely a Common System Modification Fee would cover all necessary upgrades:**

1. **Provide a proposed method for how to determine which upgrades would be covered by the funds collected.**

   SEBANE encourages the adoption of a stakeholder collaboratives to ensure a transparent and robust planning process ensues. This planning effort could also incorporate state agencies, regional transmission authorities, EDCs, industry officials, and non-profit groups in the Commonwealth. This effort could incorporate diverse DER forecasting and load growth analysis to appropriately address immediate and future interconnection needs.

2. **Explain if such upgrades covered by the Common System Modification Fees would be subject to Department approval.**

SEBANE recommends the Department work expeditiously to approve prudent and necessary investments that provide the greatest value to Massachusetts' stakeholders and customers