



The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC UTILITIES

D.P.U. 20-75

October 22, 2020

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.

VOTE AND ORDER OPENING INVESTIGATION

I. INTRODUCTION AND PROCEDURAL HISTORY

Pursuant to its ratemaking authority under G.L. c. 164, § 94 and its superintendence authority under G.L. c. 164, § 76, the Department of Public Utilities (“Department”) opens an investigation into two issues for electric distribution companies (individually “Distribution Company” and together “Distribution Companies”):^{1,2} (1) distributed energy resource planning and (2) the associated assignment and recovery of costs related to the distributed generation (“DG”)³ process and infrastructure modifications needed to interconnect DG to a Distribution Company’s electric power system (“EPS”).

On May 22, 2019, the Department opened Distributed Generation Interconnection, D.P.U. 19-55 to investigate the interconnection of DG in Massachusetts, pursuant to the Standards for Interconnection of Distributed Generation tariff (“DG Interconnection Tariff”) and Distributed Generation Interconnection, D.P.U. 11-75-E (2013). Through our decisions in D.P.U. 19-55, we have taken steps to improve the DG interconnection process in consideration of our objectives (1) to preserve the safety and reliability of the EPS and (2) to provide transparent and uniform technical requirements, procedures, and agreements to make interconnection as predictable, timely, and reasonably priced as possible. Through this

¹ The Distribution Companies subject to the Department’s jurisdiction are Fitchburg Gas and Electric Light Company d/b/a Unitil, NSTAR Electric Company d/b/a Eversource Energy, and Massachusetts Electric Company and Nantucket Electric Company each d/b/a National Grid.

² All memorializations throughout this Order shall also apply to Attachment A.

³ For the purposes of this Order and the attached Straw Proposal, the Department intends the term DG to refer to any type of facility that must submit an application under a Distribution Company’s DG Interconnection Tariff, regardless of whether it actually generates electricity (e.g., energy storage systems).

Order, the Department proposes a new distributed energy resource planning process with the purpose of assessing optimal solutions for the interconnection of DG facilities, taking a long-term planning perspective. Also, the Department seeks comment on methods for the assignment and recovery of costs associated with the DG interconnection process and system modifications needed for interconnection.⁴ These proposals and requests for comment are presented as a Straw Proposal as set forth in Attachment A.

Furthermore, the Department has engaged the assistance of experts through the United States Department of Energy's ("DOE") Office of Electricity to assist in its investigation of the assignment and recovery of costs associated with the interconnection of DG. The experts will lend their technical expertise to Department.⁵ The Department's decisions in this matter will be its own official determination and will not be reflective of the DOE's opinions or positions on the topics under investigation.

II. DISTRIBUTED ENERGY RESOURCE PLANNING, COST ASSIGNMENT & RECOVERY

A. Introduction

In setting rates for utility service and otherwise providing for the recovery of costs by utilities, the Department applies the basic principle of cost causation; that is, the entity responsible for cost to be incurred is responsible for payment of the costs (cost responsibility follows cost incurrence) ("Cost Causation Principle"). See, e.g., Aquarion Water Company of Massachusetts, D.P.U. 08-27, at 167 (2009); Gas Unbundling, D.T.E. 98-32-B at 31

⁴ In Distributed Generation Interconnection, D.P.U. 19-55, the Department began investigating cost assignment and recovery in connection with DG interconnection.

⁵ The Department's ex parte rules shall also apply to the DOE experts with regards to this docket. See 220 CMR 1.02(9).

(1999); Boston Gas Company, D.P.U. 96-50 (Phase I), at 133-134 (1996); Electric Industry Restructuring, D.P.U. 96-100, at 51 (1996); Boston Gas Company, D.P.U. 93-60, at 331-337, 410, 432 (1993); Boston Edison Company, D. P. U. 1720, at 114 (1984); Generic Investigation of Rate Structures, D.P.U. 18810, at 14 (1977). In instances of public policy⁶ or where other discernable beneficiaries are identified, costs might be assigned and recovered from other than just the entity responsible for the cost.

For the interconnection of DG, consistent with the Cost Causation Principle, an interconnecting customer pays a Distribution Company for certain user fees and for system modification costs. DG Interconnection Tariff, §§ 3.10 (Table 6), 5.0; see also, Distributed Generation, D.T.E. 02-38-B (2004). During the Department's examination of DG interconnection issues, stakeholders have expressed strong interest in the Department's investigation of alternatives to the Cost Causation Principle for the assignment and recovery of DG interconnection costs.

In D.P.U. 19-55, stakeholders submitted several proposals with alternatives to the Cost Causation Principle in response to the Department's solicitation. The Department identified two proposals for further investigation and sought detailed proposals that could be implemented in the near term:

1. a proposal for residential and small commercial DG facilities that have historically not been required to pay for infrastructure modifications;
and

⁶ For example, transition costs, G.L. c. 164, § 1G, energy efficiency, G.L. c. 25, § 19(a), renewable energy, G.L. c. 25, § 20(a), or net metering, G.L. c. 164, § 139(c).

2. a proposal for medium and large DG facilities that are currently subject to the Cost Causation Principle.

D.P.U. 19-55, Hearing Officer Procedural Memorandum at 3-4 (December 26, 2019).

On February 28, 2020, in D.P.U. 19-55, the Department received proposals for cost assignment and cost recovery from: (1) Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid, (2) NSTAR Electric Company d/b/a Eversource Energy, (3) the Department of Energy Resources, (4) the Massachusetts Office of the Attorney General, (5) the Northeast Clean Energy Council, and (6) Pope Energy.⁷ On April 30, 2020, the Department held a virtual half-day technical conference and allowed for the entities that submitted alternative cost allocation proposals to provide ten-minute presentations and for stakeholders and Department staff to ask questions following the presentations. Stakeholders expressed an interest in prioritizing this topic and requested a Department decision by early 2021, if possible.

Upon review of the proposals and feedback received at the technical conference, the Department determines that, in addition to near-term changes, development of a long-term approach is warranted. While more readily implementable approaches may offer incremental advancements with respect to the treatment of interconnection costs over the current cost assignment and cost recovery provisions, which already provide for cost sharing among groups of interconnecting customers through group study and the line extension policy,⁸ these

⁷ The Department recognizes the hard work and resources expended by the stakeholders in the development of their proposals and hereby incorporates the proposals into this docket for background and reference. These proposals are included as attachments to this Order and are referred to as Atts. B-1 through B-6.

⁸ Group study allows multiple projects within a common area to be studied simultaneously and share study and system modification costs. Revisions to

may be insufficient in the long run in light of the Commonwealth's clean energy mandates.⁹ While the Commonwealth continues the development of approaches for achieving the clean energy mandates,¹⁰ it is reasonable to expect that meeting this mandate will impact the distribution system, whether through accelerated deployment of DG and electric vehicles, increased load growth resulting from efforts to decarbonize other sectors, or in some other form. The Department, therefore, proposes alternatives to the Cost Causation Principle that includes both near-term and long-term approaches.

B. Distributed Energy Resource Planning

The Distribution Companies' distribution systems are the backbone of a reliable EPS and an effectively planned distribution grid is critical for providing essential electric service to customers. The distribution system enables interconnected DG facilities to export electricity and provide grid services, it provides electric service when DG facilities are not

Section 3.4.1 of the Standards For Interconnection of Distributed Generation Tariff, D.P.U. 17-164, at 1 (April 8, 2020). Pursuant to the line extension policy, new DG facilities that interconnect to a circuit that was upgraded within three to five years are assessed a share of the relevant system modification costs. Together, group study and the line extension policy provide for a more equitable sharing of system modification costs among groups of interconnecting customers and improve the efficiency of the interconnection process. D.P.U. 17-164 at 12, 19, 23; See M.D.P.U. Nos. 3A, App. B-3; 269 § 5.3; 1316 § IV.5.

⁹ The Global Warming Solutions Act (An Act Establishing the Global Warming Solutions Act ("GWSA")) requires a reduction of greenhouse gas ("GHG") emissions in Massachusetts of 25 percent below the 1990-statewide emissions level by 2020, and a reduction in GHG emissions of 80 percent below 1990 levels by 2050. G.L. c. 21N, § 3; St. 2008, c. 298.

¹⁰ The Executive Office of Energy and Environmental Affairs is undertaking a planning process to identify cost-effective and equitable strategies to ensure Massachusetts meets the emissions reductions set for the in GWSA and achieves net zero emissions. See: <https://www.mass.gov/info-details/ma-decarbonization-roadmap>.

generating, and it provides critical grid stability in terms of maintaining voltage and frequency. With the growth of DG, evolving customer needs and interests, and the importance of environmental considerations in making system investments, the Department finds it appropriate to consider a new system planning process. The Straw Proposal would require a system planning analysis for infrastructure investment in consideration of clean energy and climate policy objectives, incorporation of DG investments, and development of associated planning criteria.

C. Assignment and Recovery of Costs

The proposals submitted by stakeholders in D.P.U. 19-55 materially informed the Department in the development of the Straw Proposal regarding assignment and recovery of costs associated with DG interconnection. The Straw Proposal focuses on improving the efficiency of the interconnection process by allowing for proactive investment in system modifications that will facilitate the timely interconnection of DG facilities, which we expect will benefit all ratepayers in the long run by providing the flexibility needed to design optimal solutions that can take into account the evolving needs of the distribution system, which extend beyond the interconnection of DG. The Department's intent is to promote timely and cost-effective infrastructure investment for the benefit of all ratepayers. The Straw Proposal enables proactive investment through ratepayer funding, with cost recovery from fees recovered from future interconnecting DG facilities intended largely, if not fully, to offset costs borne by ratepayers in order to minimize the impact on ratepayers. The Department also explores whether additional modifications to the interconnection cost assignment and recovery methodology, including the establishment of common system

modification fees, are warranted. The Straw Proposal is designed to guide efficient deployment of DG across the Commonwealth by establishing clear cost signals necessary to inform DG development decisions. In support of the development of DG, the Department's clear objectives for the treatment of costs for DG interconnection are transparency, clear cost signals for interconnecting customers, and reasonable costs for ratepayers.

III. ADDITIONAL PROPOSALS

As stated above, the proposals submitted in response to the Department's solicitation in D.P.U. 19-55 are included in this docket. These proposals have informed the Department in the structure and content of the Straw Proposal. In the course of this investigation, the Department may explore aspects of these proposals for further analysis. At this time, the Department finds it appropriate to include questions regarding the Attorney General's proposal for short-term action aimed at the management of interconnected capacity. Specifically, the Attorney General has outlined proposals for (a) power control limiting and (b) dynamic curtailment. The Department intends to consider whether it is feasible and appropriate to implement these or similar programs in the short-term.

IV. SUBMISSION OF COMMENTS

In the Straw Proposal, the Department has included directed questions for comment in connection with each section. In addition to providing responses to these questions, commenters are invited to identify and address other concepts within the scope of the matters identified in this proceeding. Commenters are invited to make joint submissions where practical. **Comments are due December 17, 2020 by 5:00 p.m. and reply comments are**

due January 14, 2021 by 5:00 p.m.. After the Department reviews all comments, we will determine any further process. The following is the process for making submissions.

At this time, all filings will be submitted only in electronic format in recognition of the difficulty that parties and the Department may have filing and receiving original copies. On March 10, 2020, Governor Baker issued a state of emergency related to COVID-19 for the entire Commonwealth of Massachusetts. Ordinarily, all parties/participants would follow Sections B.1 and B.4 of the Department's Standard Ground Rules (D.P.U. 15-184-A, App. 1 (March 4, 2020)); however, until further notice, parties/participants must retain the original paper version and the Department will later determine when the paper version must be filed with the Department Secretary. Importantly, all large files submitted must be broken down into electronic files that do not exceed 20 MB. Comments shall be submitted to the Department in electronic format by e-mail attachment to peter.ray@mass.gov and hearing officer katie.zilgme@mass.gov. The text of the e-mail must specify: (1) the docket number of the proceeding (D.P.U. 20-75); (2) the name of the person or company submitting the filing; and (3) a brief descriptive title of the document. The electronic filing should also include the name, title, and telephone number of a person to contact in the event of questions about the filing. This Order and all subsequent related documents and filings submitted to the Department and/or issued by the Department will be available on the Department's website as soon as is practicable at <https://eeaonline.eea.state.ma.us/DPU/Fileroom/dockets/bynumber> (insert 20-75). A paper copy of the filing will not be available for public viewing at the Department's offices due to the state of emergency. For further information regarding this Order, please contact Katie Zilgme, Hearing Officer, Department of Public Utilities, at katie.zilgme@mass.gov.

Additionally, the Department will hold a conference call on **Wednesday, November 4, 2020 at 1:00 p.m.** to allow interested stakeholders to ask procedurally based questions to Department staff. The Hearing Officer will contact all entities on the distribution list for D.P.U. 19-55 via electronic mail, as soon as practicable, with additional scheduling information.

V. ORDER

Accordingly, the Department

VOTES: That, consistent with our ratemaking authority under G.L. c. 164, § 94, and our superintendence authority under G.L. c. 164, § 76, to open an investigation into the electric distribution companies' (1) distributed energy resource planning and assignment and (2) recovery of costs in connection with infrastructure modifications needed to interconnect distributed generation to a company's electric power system; and it is

ORDERED: That the Secretary of the Department shall send by electronic means a copy of this Order to each electric distribution company subject to the jurisdiction of the Department under G.L. c. 164 and to all entities on the distribution list in D.P.U. 19-55.

By Order of the Department,

/s/
Matthew H. Nelson, Chair

/s/
Robert E. Hayden, Commissioner

/s/
Cecile M. Fraser, Commissioner