COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF PUBLIC UTILITIES

Petition of Massachusetts Department of Energy Resources for Requesting the Department of Public Utilities Open an Investigation into a Seasonal Heat Pump Rate

D.P.U. 25-xx

PETITION

Pursuant to M.G.L. chapters 25, 30A, and 220 C.M.R. 1.04(1), the Massachusetts Department of Energy Resources (DOER or Petitioner) requests that the Department of Public Utilities (Department) take certain action pursuant to this Petition regarding opening an investigation into a seasonal heat pump electric rate. DOER is committed to advancing rate design and ratemaking that aligns with the Commonwealth's decarbonization goals while simultaneously prioritizing affordability. To address this need, the Petitioner, along with the Massachusetts Clean Energy Center (MassCEC), the Office of the Attorney General (AGO), and the Executive Office of Energy and Environmental Affairs (EEA) established an Interagency Rates Working Group (IRWG) tasked with advancing near- and long-term rate solutions and innovations. This Petition requests the Department find it appropriate to open an investigation on seasonal heat pump rates that will direct the electric distribution companies (EDCs or Companies) to:

1. Establish, or modify, an optional seasonal heat pump rate for residential customers with seasonally differentiated volumetric delivery rates, inclusive of each Companies' base distribution charge and all reconciling

mechanisms¹ to reduce energy burden for customers transitioning to electric heat pumps;

- 2. Prepare, or revise, a seasonal heat pump rate tariff for residential customers;
- Begin preparations for the implementation of seasonal heat pump rates as each Company prepares tariff filings for the Department to ensure the rate offerings are available to customers by fall 2025;
- 4. Prepare marketing, education, and outreach plans that incorporate the customer-centric principles identified in the IRWG recommendations for review and approval in addition to the proposed tariff; and
- 5. Report on enrollment, customer outcomes, energy usage, and bill impacts consistent with IRWG recommendations, expanding on the Department's existing reporting requirements established in approving Unitil and National Grid's seasonal heat pump rates.²

In support of this Petition, the Petitioner states the following:

 The IRWG, consisting of representatives from EEA, DOER, MassCEC, and the AGO, was formed to advance near- and long-term electric rate design and ratemaking that aligns with the Commonwealth's decarbonization

¹ G.L. c. 25, §§ 19 (a) and 20 (a) establishes a requirement for the Companies to charge all customers 2.5 mills per kilowatt-hour for energy efficiency programs and 0.5 mill per kilowatt-hour for the development and promotion of renewable energy projects, respectively. DOER recognizes that these two reconciling mechanisms may not be differentiated but supports the differentiation of all other reconciling mechanisms. ² *Petition of Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid for Approval of a General Increase in Base Distribution Rates for Electric Service and a Performance-Based Ratemaking Plan,* D.P.U. 23-150, Order at 509-513; *Petition of Fitchburg Gas and Electric Light Company d/b/a Unitil for Approval of a General Increase in Base Distribution Rates for Electric and Gas Service and a Performance-Based Ratemaking Plan,* D.P.U. 23-80/81, Order at 406-409.

mandates and affordability priorities. The IRWG recognizes the need for new approaches to electric rate design that can support an affordable clean energy transition while preserving the core purpose of rates to recover electric system costs.

- 2. The IRWG studied barriers and opportunities for electric rates to support the Commonwealth's energy transition and identified existing electricity rates as a barrier to widespread electrification and achieving the Commonwealth's decarbonization mandates while prioritizing affordability.
- 3. In the Commonwealth, households switching from fossil fuel heating (including natural gas or delivered fuels) to electric air-source heat pumps may experience increases in their overall heating costs, driven by the current rate levels and rate designs for electricity.
- 4. Without an alternative rate offering that addresses this barrier, households are unlikely to adopt heat pump technology at a pace and scale necessary to achieve the Commonwealth's electrification targets and decarbonization mandates, as outlined in the Commonwealth's Clean Energy and Climate Plan for 2050.
- 5. The Department found that "rate design changes . . . require significant examination and discussion, and the larger issue of how to utilize rate design as a tool to assist in reaching the Commonwealth's climate goals is better suited for a statewide discussion in a different proceeding."³

³ D.P.U. 23-150, Order at 510.

- 6. The IRWG conducted a robust stakeholder engagement strategy over the course of 2024 that included more than 10 stakeholder sessions that leveraged presentations, listening sessions, dialogue-based workshops, open office hours, and several opportunities for public comment. The IRWG considered stakeholder perspectives from consumer and advocacy organizations, EDCs, municipal light plants, electricity suppliers, distributed energy resource providers, distributed generation providers, and the general public.
- Through this robust stakeholder engagement, the IRWG identified broad support for the seasonal heat pump rates. Stakeholder support for the seasonal heat pump rates is further detailed in <u>Exhibit B</u>.
- 8. An optional heat pump rate with seasonal differentiation will reduce winter heating costs for air-source heat pump customers while remaining costreflective in the near-term. The seasonal heat pump rate can be costreflective and result in costs being comparable to or lower than costs for fossil fuel heating (including delivered fuels or natural gas).
- 9. The seasonal heat pump rate will lower winter charges when the electric grid is less strained and additional usage does not increase system costs, thereby promoting customer affordability, while minimizing incremental grid costs until the transition from summer-peaking to winter-peaking occurs.
- 10. The optional seasonal heat pump rate can be set on a revenue neutral basis (*i.e.*, minimizing cost-shifting to non-participating customers), such that

based on the expected higher winter usage for heat pump customers, the rate will still recover the same level of costs as from an average non-participating residential customer. Previously, the Department found that a heat pump rate does not constitute an explicit subsidy, nor an explicit grant or gift of monies from other rate classes to those taking service under the heat pump rates.⁴

- 11. In 2024, the Department found that seasonal heat pump rates are "a reasonable, cost-efficient solution to mitigate the potential high bills associated with heat-pump implementation faced by residential and low-income customers within the context of current rate structures, while maintaining a rate structure that accurately reflects the cost to serve customers during this stage of electrification."⁵
- 12. The Department declined to direct Unitil and National Grid to modify reconciling mechanisms as DOER recommended and indicated that "further investigation is required to analyze the range of potential bill impacts, as well as additional annual administrative costs, that would result from such a modification."⁶
- 13. The IRWG determined there are important modifications to the seasonal heat pump rates the Department approved for Unitil and National Grid that are necessary to ensure the rates can reduce energy burden for customers switching from natural gas to heat pumps, as further detailed in <u>Exhibit A</u>.

⁴ *Id.* at 511.

⁵ *Id.* at 510.

⁶ D.P.U. 23-80/81, Order at 407-408; D.P.U. 23-150, Order at 513.

- 14. Seasonal heat pump rates must include larger winter differentiation than the currently approved rates provide to ensure customers' heating costs do not increase so much as to become a barrier to transitioning from gas heating to electric heat pumps.
- 15. Establishment of such a seasonal heat pump rate for all EDCs is crucial to advance the Commonwealth's affordability and decarbonization goals. The Massachusetts Clean Energy and Climate Plan (CECP) for 2025/2030 estimates that 572,000 residential heat pumps will need to be deployed by 2030 to achieve sector-specific emissions sublimits.⁷ Similarly, the Program Administrators' recently filed Massachusetts 2025-2027 Three-Year Energy Efficiency and Decarbonization Plan will support the installation of heat pumps in 119,000 households.⁸ To support and accelerate the pace of heat pump deployment necessary to achieve policy goals in the coming years, it is crucial to put in place supportive rate designs as rapidly as possible. Therefore, the Petitioner recommends a schedule that would allow for implementation of these rates across utilities in Massachusetts to enable customer enrollment by next winter heating season (2025/2026).

⁷ Massachusetts Executive Office of Energy and Environmental Affairs, *Clean Energy* and *Climate Plan, Workbook of Energy Modeling Results* (Aug. 2023) available at <u>https://www.mass.gov/doc/massachusetts-workbook-of-energy-modeling-</u> <u>results/download.</u>

⁸ Mass Save, *Massachusetts 2025-2027 Three-Year Energy Efficiency and Decarbonization Plan* (Oct. 31, 2024), available at <u>https://ma-eeac.org/wp-content/uploads/Exhibit-1-2025-2027-Three-Year-Plan.pdf</u>.

- 16. The AGO supports DOER's request and intends to actively participate in any proceeding in response to this Petition.
- 17. DOER includes the following Exhibits as attachments to this Petition:
 - a. <u>Exhibit A:</u> *Near-Term Rate Strategy Report* identifies rate designs that better support the adoption of electrification in Massachusetts in the near-term, or prior to the widespread deployment of advanced metering infrastructure (prepared by Energy & Environmental Economics, Inc.).
 - b. <u>Exhibit B:</u> *Near-Term Rate Strategy Recommendations* outlines the IRWG's near-term recommendations, providing detailed explanation of the recommended seasonal heat pump rate.
 - c. <u>Exhibit C:</u> *Illustrative Seasonal Heat Pump Rate Design* demonstrates the rate impacts of the Department-approved seasonal heat pump rate and the IRWG-recommended seasonal heat pump rate.
 - d. <u>Exhibit D:</u> Seasonal Heat Pump Rate Reporting Template provides a template for reporting key measures the IRWG recommended tracking and monitoring.
- Petitioner respectfully requests, pursuant to M.G.L. chapters 25, 30A, and
 C.M.R. 1.04(1) the Department open an investigation on seasonal heat
 pump rates as described above.

DOER respectfully requests the Department approve this petition as described herein.

Respectfully submitted by,

Massachusetts Department of Energy Resources

By its attorney,

Un P. Cmill

Colin P. Carroll 100 Cambridge Street, 9th Floor Boston, MA 02114 <u>colin.carroll@mass.gov</u>

January 31, 2025

COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF PUBLIC UTILITIES

Joint Petition of Massachusetts Department of Energy Resources and the Massachusetts Office of the Attorney General for Requesting the Department of Public Utilities Open an Investigation into a Seasonal Heat Pump Rate

D.P.U. 25-xx

APPEARANCES OF COUNSEL

Please enter my appearances on behalf of the Massachusetts Department of Energy Resources in this proceeding.

Respectfully submitted,

)

)

)

)

)

)

Un P. Cml

Colin P. Carroll Department of Energy Resources 100 Cambridge Street, 9th Floor Boston, MA 02114 (617) 626-7300

January 31, 2025