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Mark D. Marini, Secretary  
Sara Smegal, Hearing Officer  
Massachusetts Department of Public Utilities  
One South Station, Fifth Floor  
Boston, Massachusetts 02110

Via Email: [dpu.efiling@mass.gov](mailto:dpu.efiling@mass.gov)

**Re: D.P.U. 20-80, Investigation by the Department of Public Utilities on Its Own Motion into the Role of Gas Local Distribution Companies as the Commonwealth Achieves Its Target 2050 Climate Goals**

Dear Secretary Marini and Hearing Officer Smegal:

Harvard Law School's Emmett Environmental Law & Policy Clinic (the "Clinic") respectfully submits these comments regarding the Department of Public Utilities ("DPU") development of a framework for evaluating Net Zero Enablement Plans and other decarbonization proposals. The transition to a low-carbon future has the potential to promote valuable innovation in the gas sector that can benefit local distribution companies ("LDCs"), consumers and the environment. At the same time, such a transition is likely to come with costs. As such, decisions about the energy system raise fundamental questions about how to balance system-wide and consumer-level benefits with costs to individuals, particularly individuals who are less able to participate in or benefit from the transition.

DPU's mandate to "prioritize safety, security, reliability of service, affordability, equity and reductions in greenhouse gas emissions"<sup>1</sup> underscores the importance of equity as both an outcome and evaluation criteria in assessing proposals regarding how LDCs can contribute to meeting the Commonwealth's climate change mitigation mandates. Equity, however, can be difficult to measure and assess, particularly as a metric separate from issues like affordability and safety. We commend Energy + Environmental Economics ("E3"), the LDCs and stakeholders for addressing equity in these proceedings and propose building on this discussion by formalizing an approach to discussing and evaluating equity. These comments therefore propose a framework for measuring equity as a stand-alone objective in a way that considers the distribution of both the positive and negative impacts of transitioning the energy system. This

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<sup>1</sup> M.G.L. c. 25 § 1A.

framework, which builds on the concept of energy justice, can be used to assess high-level plans and specific projects and encompasses the equity-related considerations raised by the LDCs and E3 in their reports.<sup>2</sup>

These comments do not address the full scope of work that the LDCs and E3 have conducted or opine on any particular proposed path forward. Rather, the intent is to support ongoing consideration of equity issues by LDCs and stakeholders by providing a mechanism that allows for consistent comparison across proposals through an agreed framework.

## **I. Proposed Framework for Equity**

There is no single definition of equity or standard for knowing when equity has been “achieved.” Nor is it a concept that lends itself to a static measurement system. However, adding structure to what at times can be an amorphous concept will support comparison of projects by allowing some quantification of how projects contribute to the goals of equity. In this vein, the Clinic posits that, generally speaking, the overarching objective is to protect consumers and workers from a disproportionate share of the costs to transition to a low-carbon future and provide for equitable distribution of and access to benefits from the transition. This objective is consistent with goals articulated by the LDCs<sup>3</sup> and criteria proposed by E3 and can be further broken out into the following three principles:

1. Reducing, or at a minimum not increasing, energy burdens on low-income consumers;<sup>4</sup>
2. Preventing disproportionate distribution of the costs or negative impacts associated with building, operating and maintaining energy generation, distribution and transmission systems; and

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<sup>2</sup> This framework draws on the Clinic’s experience working on grid modernization and energy transition issues. *See, e.g.*, Clinic comments in DPU dockets 20-80, 15-120, 15-121, 15-122 and 15-155; *see also* Aladdine Joroff, “Energy Justice: What It Means and How to Integrate It into State Regulation of Electricity Markets,” Environmental Law Institute (2017).

<sup>3</sup> *See, e.g.*, Eversource, “Operating Plan,” DPU 20-80 (March 18, 2022), pgs. 9 and 22 (“The focus on ensuring benefits of the clean energy transition to environmental justice and other populations is critically important, as is mitigating negative and/or disproportionate impacts.”); National Grid, “Net Zero Enablement Plan,” DPU 20-80 (March 18, 2022) pg. 2 (“[W]e are committed to keeping affordability, equity, safety, and reliability at the forefront of everything we do.”)

<sup>4</sup> “Energy burden is defined as the percentage of a household’s income spent on home energy bills. In Massachusetts, the average energy burden is about three percent. However, the average energy burden for low-income populations is about 10 percent, and, in certain neighborhoods, energy burden is as high as 31 percent.” Kimberly Clark, “Reducing Energy Burden: Resources for Low-Income Residents,” Metropolitan Area Planning Council (Jan. 28, 2022).

3. Supporting equitable distribution of and access to real benefits from a modern energy system, including energy generation, distribution and transmission systems.<sup>5</sup>

While there are of course interconnections between equity and other aspects of DPU’s review, such as affordability and individual access to reliable energy, equity is a stand-alone objective and metric. For example, consideration of energy burdens is separate from DPU’s mandate to consider affordability: DPU could approve LDC plans or actions that increase the overall cost of energy or allow for greater price fluctuations, but that is a separate question from how such costs are distributed across consumer groups. Thus, while equity may be a crosscutting consideration, it also should be treated as a separate objective.

## II. Application of the Framework for Equity

We recommend that DPU use the framework for equity throughout planning processes, from broad regulatory proposals to ratemaking cases to pilot projects, to assess equitable impacts on an ongoing and iterative basis. The proposals currently in front of DPU include a range of actions that reflect the LDCs’ recommendations to pursue a portfolio approach that uses several of the pathways and scenarios assessed in E3’s report. In addition to the series of pilot projects proposed by the LDCs, DPU has been asked to investigate broader changes, such as “the role of accelerated depreciation to align cost recovery of gas distribution costs with the utilization of the distribution system, rather than the useful life of the assets that make up the distribution system.”<sup>6</sup> DPU can use the framework to assess the equity impacts of both pilot projects and higher-level regulatory or policy decisions.

Generally speaking, the framework is not envisioned as creating a stand-alone screening tool or litmus test for proposals. A process for using the equity framework could entail the following steps:

1. **Propose actions for transitioning to a low-carbon future**, *e.g.*, shorter depreciation periods for new gas infrastructure, new networked geothermal systems or hybrid electrification of a neighborhood.

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<sup>5</sup> An issue that overlays these substantive principles of equity is the need for outreach and opportunities for participation, *i.e.*, components of procedural equity. In the context of this proceeding, increasing energy literacy can empower consumers to take greater control over their energy usage, become more involved in energy decisions, and increase customer buy-in for decarbonization technologies and strategies. Making the proceedings in DPU 20-80 and related dockets transparent and accessible should include recording all hearings, technical meetings and other sessions.

<sup>6</sup> E3 and ScottMadden, “Common Regulatory Framework and Overview of Net Zero Enablement Plans,” DPU 20-80 (March 18, 2002), pg. 22 (presenting accelerated depreciation as an option to “mitigate customer affordability and equity concerns to the extent that gas customers decrease over time as the LDCs pursue decarbonization and electrification strategies.”)

2. **Outline the impacts of each proposal**, *e.g.*, what are its effects, if any, on issues such as, but not necessarily limited to: costs, public health, number, type and quality of jobs, infrastructure like roads and energy systems, environmental quality and climate resiliency. To the extent these impacts can be quantified, such as the expenses outlined in E3’s “technology packages” and estimated volumetric rates and totals costs of ownership to non-migrating consumers,<sup>7</sup> it will support a more quantitative comparison of proposals.

More detailed *examples* of impacts to consider, where information is available, include:

- Upfront costs for new appliances, equipment or weatherization and availability of subsidies or other financial assistance
- Changes in distribution, transmission, administrative or other costs to energy consumers over the long-term, taking into account maintenance of existing gas infrastructure
- Changes in combined energy and electricity bills
- Changes to LDCs’ customer base
- Improvements to indoor air quality
- Changes in demand for work by gas system and non-gas system employees and contractors
- Number, type and quality of new jobs and resources for any necessary worker transition training
- Removal of existing or development of new energy infrastructure, such as gas pipelines or electric distribution lines
- Disruption to public roads and access to critical services or small businesses
- Reduction of methane leaks
- Contributions to climate resiliency, such as additional access to cooling for hot weather days

E3 and the LDCs have proposed evaluation criteria to measure many of these impacts. For example, E3 looked at the combustion of fuels as a proxy for measuring air quality and estimated the scale of the LDC workforce that will need to transition as a data point for workforce transition.<sup>8</sup> More specifically, E3 assessed the energy burden for low-income consumers remaining on natural gas for each pathway it assessed.<sup>9</sup> As noted by the LDCs and stakeholders, these criteria can be expanded and built upon.

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<sup>7</sup> E3 and ScottMadden, “Technical Analysis of Decarbonization Pathways,” DPU 20-80 (March 18, 2022), pgs. 101-103.

<sup>8</sup> *Id.* at 12.

<sup>9</sup> *Id.* at 104.

3. **Assess the “equity” of the impacts using the three principles of equity** outlined above: energy burdens, distribution of negative impacts, and distribution of and access to the benefits of a proposed action. The equitable impact of a proposal may vary based on the underlying circumstances, such as location of a project or recipient of a service. Therefore, to the extent data are available, this assessment should evaluate impacts as a whole and as applied to different (a) location characteristics, *e.g.*, environmental justice communities, age of housing stock, density of development, or mixture of uses and (b) consumer groups, *e.g.*, income, existing energy burdens, size of business, or landlord versus tenant relationships.
4. **Use the results of the equity assessment as one data point for comparing proposals.** This process does not dictate minimum results that a proposal would need to achieve regarding equity to proceed. While it is unlikely that any one action can advance equity across all impacts, and some may be neutral regarding equity, the framework can support a multi-factored analysis of the allocation of burdens and benefits of decarbonization proposals that helps rank projects from an equity perspective.

Although not required to perform this analysis, in many instances it may be helpful to establish a baseline from which equity is measured. For instance, it is important to know not only what an action itself will cost but also how it will change comprehensive costs for consumers. As an example, electrification costs that include replacing appliances have a different impact on owners with appliances at the end of their useful life versus appliances that are being retired early.

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Because addressing equity often requires consideration of resources, opportunities and burdens at the individual or neighborhood level, there is unlikely to be a one-size-fits-all decarbonization pathway from an equity perspective. However, consistently considering the equitable impacts of Net Zero Enablement Plans and other decarbonization proposals, including holistically across component steps, can help further DPU’s mandate to promote equity. The framework proposed in these comments is just one approach to creating a uniform system for measuring the ideas put forth by the LDCs, E3 and other stakeholders but is flexible enough to incorporate new ideas and data. If DPU prefers another approach, we encourage it to develop a straw proposal that all parties can react to so that DPU, the LDCs and stakeholders have a consistent method going forward for evaluating equity.

Thank you for your attention to these comments.

Sincerely,



Aladdine Joroff, Senior Staff Attorney & Lecturer  
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