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Energy and Climate Transition Policy Priorities

Dear Governor-Elect Healey,

Congratulations on your victory in the recent election. Acadia Center is confident that you will continue your impressive dedication to fighting climate change that you displayed as Attorney General as Governor of the Commonwealth. As you move toward taking office, we are sure you are receiving enormous amounts of input, both from the environmental community and others, on what your policy priorities should be. Acadia Center shares many of these priorities (and has signed on to multiple coalition letters) and wanted to take the opportunity to highlight additional priorities that we believe to be particularly significant.

RESPECT: Reforming Energy System Planning for Equity and Climate Transformation

Acadia Center recently developed a framework for ensuring that state oversight of utility operations align with climate and equity goals, known as RESPECT. RESPECT stands for "Reforming Energy System Planning for Equity and Climate Transformation." RESPECT proposes a modernized framework for how the Commonwealth can modernize its approach to utility oversight so that our utilities make investment decisions to ensure that investments in our energy systems are aligned with state goals to address climate pollution, further environmental justice, and lower consumer costs. Today, utilities plan the electric and gas distribution systems they own and operate and have strong financial stakes in the outcomes of their planning decisions—resulting in a significant conflict of interest.

Acadia Center identified three key problems with utility planning and regulatory oversight: (1) utility planning is siloed between electric and gas utilities, which causes overspending, reduced reliability and resilience, and more climate pollution; (2) current planning processes do not prioritize equity and environmental justice; and (3) utilities have a financial interest in the outcomes of their planning decisions, creating significant conflicts of interest.

RESPECT proposes a new framework for how the grid and gas networks should be planned that will help ensure that our energy systems help meet state goals to reduce climate pollution, further environmental justice, and lower consumer costs.

Conduct Comprehensive Planning

States should conduct "all-in" independent energy system planning that incorporates meaningful stakeholder input, including voices that have been ignored to date. Comprehensive planning should consider supply- and demand-side resources, as well as climate requirements, environmental justice impacts, and need to transition and electrify across the state.

Separate Planners and Owners

States should create neutral, statewide Planning Entities that are designed to look for solutions beyond utility boundaries and across fuels, leaving traditional utilities free to focus their efforts on business development in alignment with climate and equity mandates.

Implementation of the RESPECT reforms is particularly crucial for resolving the issues regarding the future of the gas utility and planning for the electrification transition. Acadia Center adopts the proposals concerning the Future of Gas (DPU 20-80) docket set forth in the document submitted as "Beyond Gas Healey Transition Team Memo" and highlights our recommendations from the Clean Heat Commission report below. But we believe RESPECT to be the missing puzzle piece that could bring these reforms together through coordinated, conflict-free planning. We urge you to adopt these concepts as policy priorities and work to implement them. Legislation expected to be filed this upcoming legislative session by Representative Natalie Blais and Senator Joanne Comerford will provide concrete language for this proposal.

Mass Save Reform

Updating the administration, funding sources, cost-benefit framework, and focus of the Massachusetts energy efficiency programs will make them a more effective tool to fight climate change and lower consumers' bills, while keeping the best of what has made them among the best in the nation.

The Mass Save programs have done great things for Massachusetts consumers – delivering billions in energy savings, GHG reductions, and benefits to the grid. But in the next few years (especially 2025-2027 and forward), Massachusetts will need to utilize these programs to accelerate implementation of state policy on electrification, greenhouse gas reductions, and health benefits. For the energy efficiency programs to be a successful tool to fight climate change, both the sources of funding and the benefits delivered by the programs must move from a utility-based system (procuring resources for the grid with ratepayer funds), to one that achieves climate, equity and clean energy priorities encapsulated in state law by delivering climate and health benefits through a variety of funding sources, including tax dollars.

Funding electrification primarily through electric rates is counterproductive and raises electric bills; instead, funding should increasingly come from sources outside of utility bills, such as tax dollars, federal grants, and even funds that would otherwise be spent on gas pipe replacement. At the same time, with the programs' increased focus on greenhouse gas reduction and equity, the non-energy benefits delivered by the programs will soon eclipse the energy system benefits.¹

¹ Already, the programs' increased policy focus has resulted in the Non-Energy Impacts (NEIs) of the programs making up the majority of benefits in some programs. For 2019-2021, 27% of benefits from the gas portfolio of programs overall, and

Additionally, the utilities' current business models create significant conflicts of interest with electrification, the co-delivery of renewable energy, and the future role of natural gas. Although the gas programs now have a binding target to collectively reduce 2030 emissions by 371,000 metric tons of CO2 through the 2022-2024 Plan², in their primary business, gas utilities continue to plan for extensive oil-to-gas conversions and have an incentive to encourage customers to use installed heat pumps minimally, to avoid reducing demand for gas.³ This is evident in the 2022 data on heat pump installations, which show that electric programs install heat pumps at a rate ten times higher than the gas programs⁴ (though still not fast enough to meet our climate goals) and incentives from gas companies are far more likely to be partial displacements, rather than full-building electrification.⁵ Indeed, as every electric IOU in Massachusetts has a gas company counterpart, electrification writ large is much slower than needed to meet our climate goals. For instance, through Q2 2022, the programs provided incentives for 5,263 new construction units heated with gas, 1,006 new units heated with propane, and even 20 new units heated with oil, but only 461 new units with electric heating (presumably heat pumps).⁶

The Mass Save programs need to be re-designed to deliver electrification at the rate needed to achieve climate targets. The new program design may need to involve administration by a public entity (as recommended by the Clean Heat Commission, discussed in more detail below). But changes should be carefully approached, so as to not lose the benefits and progress of the current programs, including the transparency and essential leadership provided by stakeholder input provided through the Energy Efficiency Advisory Council. Acadia Center looks forward to collaborating with your administration to create and implement needed program design changes.

More Accurate Modeling

As you are aware, in D.P.U. Docket 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* (also known as the Future of Gas), the Department of Public Utilities tasked the natural gas distribution utilities with developing recommendations for changes to their business models to allow the state to meet its climate goals of net zero by 2050. The utilities hired Energy and Environmental Economics (E3) to develop scenarios and models compliant with the 2050 target to assist in the development of recommendations.

Exhibits.pdf

^{58%} of the low-income gas programs were NEIs. The same studies found 12% of electric benefits were NEIs, and rapidly increasing. https://ma-eeac.org/wp-content/uploads/EEAC-EMV-Briefing-October-2022-final.pdf at 8 2022-2024 Term Sheet at 2-3. https://ma-eeac.org/wp-content/uploads/2022-2024-Term-Sheet-10.26.21-Final-with-

³ See, e.g., DPU 22-149, National Grid 2022-2027 Long-Range Resource and Requirements Plan, Initial Filing at p. 68-69, laying out plans to convert all buildings subject to the Boston Building Emissions Reduction and Disclosure Ordinance (BERDO) from oil-to-gas heating by 2024, and install fewer than 8,000 heat pumps through the EE programs by 2027. The majority of these will be hybrid heat pumps, which the company assumes will switch to use of the legacy gas system below 30 degrees F, saving such minimal amounts of gas that the design day load for the gas system is not impacted.

⁴ Bi-Annual KPI #3, Residential electrification quantities. Available at: https://ma-eeac.org/wp-content/uploads/2022-Q2-KPI-EWG-Reporting revised-for-circulation.xlsx

⁵ Of the six gas companies, only Eversource Gas has incentivized any residential heat pumps for full displacement of gas (the vast majority of installs being partial displacements, maintaining the gas system and customer base). *Id.*⁶ Quarterly KPI #3, Residential New Construction by Heating Fuel. *Id.*

Unfortunately, Acadia Center and other stakeholders <u>found a number of critical and troubling flaws</u> in the E3 analysis. While several of these problems with E3's analysis could (and should) have been fixed after issues were raised, many of the flaws in E3's analysis are the result of repeating known flaws in the Massachusetts Greenhouse Gas Inventory ("MA Inventory").

Since they are simplified models of very complex systems, all greenhouse gas (GHG) inventories implicitly have limitations. It's important to understand the ramifications of these limitations, particularly when they cause a skewed perception of the preferred policy pathway. E3's analysis in this case repeats four concerning shortcomings of the MA Inventory that directly impact the 20-80 modeling and resulting conclusions and policy recommendations. The shortcomings are:

- Failing to account for out-of-state emissions from the extraction and transmission of fuels including natural gas, renewable natural gas (RNG), biodiesel, hydrogen, and synthetic natural gas (SNG) that are ultimately consumed in Massachusetts.
- Using an outdated global warming potential (GWP) value for methane and failing to consider methane emissions on the 20-year timescale that is most relevant to state's net zero emissions goal.
- Dramatically underestimating the level of methane leaks from the natural gas system within Massachusetts.
- Making the blanket assumption that biofuels (including RNG and biodiesel) are GHG-neutral.

When contemplating the significance of these GHG accounting issues in the MA Inventory and E3 analysis, it's important to remember that two of the alternative fuels, renewable natural gas (RNG) and synthetic natural gas (SNG), being put forward as key to decarbonizing the gas distribution system are chemically identical to natural gas. The largest component of all three fuels is methane. Due to the technical limitations of blending hydrogen into the gas system, RNG and SNG combined account for over 90% of the energy flowing through the pipes in 2050 in several of the scenarios analyzed by E3, including the Hybrid Electrification scenario.⁷

If more reasonable and scientifically accurate GHG accounting principles are used, Hybrid Electrification and other scenarios that rely heavily on RNG and SNG do not achieve a 90% reduction in gross statewide GHG emissions by 2050. Without more detailed analysis related to lifecycle emissions of RNG and the GHG impacts of methane leaks along the RNG supply chain, both of which E3 failed to perform, it's difficult to determine how far short the Commonwealth will fall of its net zero goal if the LDCs rely on RNG to the extent proposed in scenarios like Efficient Gas and Hybrid Electrification. That being said, updates to New York State's GHG accounting for natural gas emissions revealed that 47.3% of total emissions associated with natural gas consumption in New York are the result of methane leaks along the entire gas supply chain. Research has indicated that methane leaks along the RNG supply chain are comparable, and in many cases higher, than methane leaks along the natural gas supply chain. This demonstrates that any strategy relying

⁸ Acadia Center analysis based on data provided in New York State Department of Environment Conservation 2021 Statewide GHG Emissions Report, Appendix A, Table A1, page 17 https://www.dec.ny.gov/docs/administration pdf/ghgsumrpt21.pdf

⁷ D.P.U 20-80 Independent Consultant Report: Technical Analysis of Decarbonization Pathways Figure 15, page 50. https://thefutureofgas.com/content/downloads/2022-03-21/3.18.22%20-%20Independent%20Consultant%20Report%20-%20Decarbonization%20Pathways.pdf

on simply swapping out the type of methane (e.g. fossil gas to RNG) piped through the gas system will fall well short of the Commonwealth's net zero target. Despite multiple requests from stakeholders during early stages of the analysis, E3 refused to include a sensitivity analysis on any of the underlying GHG accounting assumptions summarized above.

Only by using flawed and outdated assumptions as a crutch do multiple scenarios, including the Hybrid Electrification and Efficient Gas scenarios, achieve a 90% reduction in gross GHG emissions. If the Commonwealth allows these scenarios to play out in the real environment of Massachusetts, they will be far more expensive to consumers, carbon-intensive, and damaging to the environment. We urge you to move swiftly and update the Massachusetts Greenhouse Gas Inventory to account for these discrepancies.

ISO-NE and Regional Energy Reform

As you know, ISO-NE is the regional organization designated to manage New England's energy markets and transmission system. ISO-NE must evolve rapidly in order to enable the region to meet its climate goals, modernize its economy, and strengthen reliability to meet existing and new demands. Without strong leadership and pressure from states like Massachusetts, we do not expect ISO-NE to adopt these changes in time. We look forward to supporting your leadership in this area and urge rapid and concerted action.

Right now, ISO-NE does not consider state climate goals in its decision-making--a huge obstacle to the clean energy transition. As a NEPOOL stakeholder, Acadia Center has asked ISO-NE to include with every major proposal an assessment of its impacts on state policy, including decarbonization, consumer cost, and environmental justice. Acadia Center has also joined others including your Attorney General office in pressing for new FERC rules that will require ISO-NE to consider state policy in planning a modern regional grid. In addition, it is critical that ISO-NE take input early and often from both the states and impacted communities in all regional planning, particularly planning related to transmission.

Acadia Center is also pressing for swift action on winter reliability. Acadia Center has issued a <u>report</u> and filed <u>comments</u> at FERC identifying the winter reliability problem and outlining solutions, including its <u>recommendation</u> that the states immediately commence work with ISO-NE to ramp up strategic winter demand response that is targeted to support regional grid needs, while working to identify targeted energy storage that can be expedited to support the grid in time for winter 2023-2024. Acadia Center asks your administration to take action now on these recommendations before it is too late to save consumers money and avoid blackout risks ahead of next winter. Under no circumstances should the administration accept fossil fuel shortcuts when clean energy alternatives can be seized now with advance planning.

Finally, the regional electricity markets are failing to bring online the clean energy and storage that the region so badly needs to support electrification, avoid blackouts, and decarbonize for the protection of our communities. The administration must lead on coordinated state-regional initiatives to establish modernized wholesale electricity markets and/or multi-state solicitation venues that properly incentivize rather than discriminate against clean energy and energy storage. The solutions may include a forward clean energy market or an alternative such as a cross-state clearinghouse that advances both well-planned clean energy and transmission infrastructure in a holistic and long-range manner. Such a clearinghouse should also provide opportunities for public input, including early input from potentially impacted communities.

Acadia Center looks forward to partnering with the administration on these issues. We respectfully ask that the administration take a strong role on its own, through NESCOE, and through multi-state initiatives to

press for governance reform and accountability at ISO-NE and to ensure that the region doesn't continue to fall behind on a clean and equitable energy transition.

Transmission

As the Commonwealth moves forward with large-scale clean energy procurement, the need for new electric power transmission infrastructure is far too often left out of the discussion. Acadia Center, both individually and as a part of coalitions, has tried to make evident the need for collaborative, long-term transmission planning and cost allocation reform, as well as multi-state coordination on major transmission projects including transmission for offshore wind. We urge your administration to keep transmission needs front and center as it moves forward. As part of the New England for Offshore Wind coalition, Acadia Center has helped develop transmission principles which we would like to see utilized to protect our communities, while providing maximum benefit with minimum impact. These principles, known as "B.A.S.I.C.S.", ask for the following:

- Benefit impacted communities Target benefits to affected communities to help offset impacts, such as setting aside protected green space, cleaning up brownfields and investing in the local workforce and economy, in accordance with community input.
- Avoid, minimize, and mitigate environmental impacts Minimize the overall amount of new infrastructure needed through optimized, well-planned systems while avoiding or minimizing impacts on ecosystem services, considering cumulative environmental impacts and mitigating unavoidable impacts.
- Secure environmental justice Avoid and minimize new impacts on already overburdened and historically disadvantaged communities whenever possible, while strengthening equity in planning processes and weighing the cumulative environmental, economic and health impacts of any new infrastructure proposed in or near environmental justice communities.
- Inclusive and early stakeholder engagement Consult stakeholders, including communities in potentially impacted areas, in the early stages of planning when alternatives are still being considered and new alternatives can still be identified.
- Coordinate on transmission investments Serve as many needs across the region as possible with each transmission investment in order to increase consensus and reduce overall impacts and costs.
- Supply local jobs and economic development Lift up workers and communities by providing high-quality, local union jobs and training via registered apprenticeships and project labor agreements, while driving workforce and supplier diversity and encouraging a domestic supply chain for the expansion and maintenance of our region's electric grid.

Acadia Center has also filed <u>several sets</u> of comments at FERC to help re-envision the transmission planning process to provide more benefits for less cost, reduce harms to environmental justice and other communities, and to ensure that state policies including decarbonization goals are integrated into more effective planning of the modernized transmission system that we need to deliver clean power to our communities. In partnership with New England for Offshore Wind, we have written <u>comments</u> commending Massachusetts and the other New England states for working closely on the recent RFI for regional transmission solutions.

We urge continued close collaboration among all the states in evaluating and rapidly advancing opportunities for a networked offshore grid to deliver offshore wind while improving resilience and reliability, including seizing upcoming opportunities for federal funding. We also urge establishing a coordinated plan for early outreach within all the states to communities that may be affected by infrastructure development within those states, including environmental justice communities, focusing on outreach at the planning stage rather than waiting until the development stage when it may be too late to affect outcomes.

Clean Heat Commission Recommendations

Acadia Center also wishes to call special attention to the recently released report from the Massachusetts Commission on Clean Heat. This report delivered a strong proposal for real progress on decarbonization, and Acadia Center supports many of the recommendations and encourages your administration to consider adopting them. We particularly wish to highlight the following recommendations:

- Finally Saying the Future is Electric: Despite not mentioning the DPU 20-80 "Future of Gas" docket or the gas utility business model at all, the report directly identifies that "[t]he Commonwealth's long-term building decarbonization strategy requires transitioning customers from existing pipeline gas infrastructure to electric infrastructure and, where appropriate given technical and financial feasibility, networked geothermal districts."
- Identifying the Need for Joint Energy System Planning: The report proposes that the Governor and Legislature direct the DPU and DOER to conduct statewide joint energy system planning across Massachusetts' gas and electric utilities and municipal gas and electric companies and in conjunction with key stakeholders and communities. This recommendation is extremely similar to RESPECT, outlined above.
- Embedding Equity, Engagement, and Representation in Decision-Making: Centering equity, engagement, and representation in all aspects of our Commonwealth's building decarbonization principles and practices is critical to ensuring that no ratepayer is left behind. The report recommends that these core principles inform the design of all programs and policies. Acadia Center wholeheartedly agrees.
- Focusing on Institutional Coordination and Alignment: As Acadia Center has been arguing across the region for years, our climate goals are only as strong as the agencies empowered (or not) to implement them. Without buy-in from every entity across our state government, we will not be able to achieve our net zero requirements. The report's recommendation for cross-cutting coordination will be critical to the Commonwealth's success.
- Ending Investment in New Gas Infrastructure: The report echoes what Acadia Center and other climate champions have been highlighting about natural gas infrastructure in a bold and powerful statement. "Investments that would support new or increased natural gas infrastructure or capacity should instead be deployed to advance measures that help support the net zero future."
- Considering New Ideas Like a Clean Heat Standard: Although details on the specifics of the proposed Clean Heat Standard (CHS) remain sparse, if properly designed, the CHS could serve as another valuable policy tool for cost-effectively electrifying and improving the efficiency of

- buildings in the Commonwealth without driving up costs to electric ratepayers. The details of how biofuels and hydrogen are treated in the CHS will be of critical importance and Acadia Center is looking forward to engaging on this topic as the details of the CHS get fleshed out.
- Being More Realistic About the Decarbonization Potential of Alternative Fuels: Unlike the DPU 20-80 "Future of Gas" analysis that completely ignored lifecycle emissions from biofuels the CHC is clear about the need for a science-based, full lifecycle analysis of various biofuels to determine their carbon intensity. This is an essential step for determining whether supporting the use of specific biofuels in buildings via policy makes sense. The report also highlights that alternative fuels are "...not a long-term solution for most of Massachusetts' building stock."
- Creating One-Stop Shopping for Climate-Positive Projects: Acadia Center agrees that Mass
 Save could use some reforms and that the whole suite of building decarbonization programs
 should get pulled together under an umbrella that provides a single point of contact for
 consumers. But the devil is in the details on the Building Decarbonization Clearinghouse, and we
 would hate to lose the transparency and stakeholder leadership brought about through the
 Massachusetts Energy Efficiency Advisory Council (EEAC).
- Expanding Building Benchmarking: Acadia Center has supported DOER's work to expand building labeling and energy scorecards for years and continues to think it is one of the best ways to demonstrate the value of decarbonized buildings to owners and renters. The report's recommendation to expand existing energy labeling programs to cover buildings under 20,000 feet is critical for driving rapid deployment of energy efficiency in residential and smaller commercial buildings.
- Funding the Transition with New Resources: The report recognizes that ratepayer funds, payments from regulated suppliers, and market-based funds may not be enough to finance the decarbonization of buildings that we need. Although the discussion of using taxpayer funds focuses on effective use of federal funds, rather than opening the state coffers, we appreciate the willingness of the Commission to think creatively about how we're going to pay for this. The Climate Bank, too, has the potential to inject needed finance dollars into this cause.
- Creating Strategies for Decarbonizing the Affordable Housing Sector: Creating strategies for decarbonizing affordable housing represents an incredible opportunity for the next administration, or a potential for major failure if not properly centered. We simply cannot afford to leave our LMI households and environmental justice (EJ) populations behind, and the report astutely recognizes that fact.

Additional Supported Recommendations from the Commission on Clean Heat

- Workforce Training and Education
- Research and Development
- Public Outreach and Awareness
- Expanding Green Communities and Leading by Example
- Electric Operating Cost Reductions

Regional Coordination

Climate change is not only a local issue. Emissions from other states impact our Commonwealth, and our emissions do the same. Our region is strongest when it works together. The success of programs like RGGI demonstrate how regional approaches to policy can not only have strong environmental benefits, but powerful economic impacts as well. Some recommendations listed above, like transmission reform or the development of a clean heat standard, may benefit from utilizing a regional approach. We urge you to continue the national leadership you showed as Attorney General and continue to pursue regional approaches to decarbonization strategies.

Acadia Center looks forward to working closely with your administration as we move forward. We welcome the opportunity to meet with new staff to discuss policy priorities and learn about any ways that our organization can be useful in achieving our decarbonization requirements. If you have any questions or concerns, please do not hesitate to reach out.

Sincerely,

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