

May 18, 2021

VIA ELECTRONIC FILING

Jeffrey R. Gaudiosi, Esq.
Executive Secretary
Public Utilities Regulatory Authority
10 Franklin Square
New Britain, CT 06051

RE: Docket No. 13-06-02RE05, Investigation of Connecticut's Local Distribution Companies Proposed Expansion Plans to Comply with Connecticut's Comprehensive Energy Strategy—Program Review

Dear Mr. Gaudiosi:

Save the Sound and Sierra Club respectfully submit the following comments in response to the Office of Education, Outreach, and Enforcement's (EOE's) Request for Written Comments dated April 27, 2021 in the above-captioned proceeding. Save the Sound and Sierra Club urge EOE to end the gas expansion program as soon as possible, as the program is outdated, contrary to Connecticut's climate commitments, costly for ratepayers, and only serves to lock the state into burning more fossil fuels in the coming years. Connecticut must focus on transitioning away from reliance on fossil fuels rather than subsidizing further expansion of fossil fuel infrastructure.

Specifically, Save the Sound and Sierra Club recommend the following:

- 1) The gas expansion program should be ended as soon as possible, and under no circumstances should the program be extended beyond its original term. Connecticut should instead transition to incentivizing building electrification to achieve deep decarbonization of the buildings sector.
- 2) Connecticut should open a docket to explore the retirement of the gas system, following the lead of Massachusetts and California. Such a docket should incorporate recommendations on how to retire the system, anticipate environmental justice and labor impacts, and identify steps to mitigate those impacts.
- 3) Changes are necessary to the marketing of heating systems to customers. Local Distribution Companies (LDCs) should cease marketing gas to new customers and should instead provide educational resources about energy efficiency and heat pumps.
- 4) EOE should provide transparency on how gas expansion program funds have been spent, including the number and cost of interconnections for residential, commercial,

and industrial customers, and should highlight any gas-fired power plants that have utilized the gas expansion program to interconnect.

- 5) Fossil gas vehicles should not be subsidized through the gas expansion program, nor with any other ratepayer or state funds, as electrification is the clear path forward for decarbonization of the transportation sector.

I. The Gas Expansion Program Should be Ended as Soon as Possible

In order to achieve Connecticut's climate commitments, the state must transition away from fossil fuels in the buildings sector rather than expand reliance on gas, which is primarily composed of methane. Methane is a greenhouse gas that is 84 times more potent than carbon dioxide in the first 20 years after its release,¹ and is still 28-36 times as potent after 100 years.² Emissions from extraction and distribution of methane are significant and have been underestimated—a recent collection of peer-reviewed studies commissioned by the Environmental Defense Fund (EDF) found that leaks from the oil and gas industry emit as much as 13 million metric tons of methane a year, which is 5 million metric tons more than previously estimated by the EPA.³ Expansion of the gas distribution system and the addition of new customers only lock Connecticut into emitting more greenhouse gases (GHGs) in the next 15-20 years,⁴ in contravention of Connecticut's climate commitments. Continued expansion of the gas system is also costly for ratepayers and increases the risk that ratepayers will end up funding stranded infrastructure.

a. The Gas Expansion Program is Inconsistent with Connecticut's Climate Commitments and Policies, Which Require a Transition Away from Fossil Fuels

The gas expansion program is plainly inconsistent with the binding targets of Connecticut's Global Warming Solutions Act (GWSA), which requires a reduction in greenhouse gas (GHG) emissions of 45 percent below 2001 levels by 2030, and 80 percent below 2001 levels by 2050.⁵ Compliance with the GWSA requires deep decarbonization of the buildings sector, as over 80 percent of Connecticut residential, commercial, and industrial buildings are currently heated with fossil fuels and non-electric thermal load from Connecticut's building sector currently contributes 30 percent of Connecticut's total GHG emissions.⁶ As noted in Connecticut's most recent greenhouse gas inventory report, "[t]o achieve deep

¹ Environmental Defense Fund, Methane: The other important greenhouse gas, <https://www.edf.org/climate/methane-other-important-greenhouse-gas>.

² US EPA, Greenhouse Gas Emissions: Understanding Global Warming Potentials <https://www.epa.gov/ghgemissions/understanding-global-warming-potentials>.

³ Environmental Defense Fund, Major studies reveal 60% more methane emissions, <https://www.edf.org/climate/methane-studies>.

⁴ Heating systems generally last 15-20 years. National Association of Home Builders, Study of Life Expectancy of Home Components (February 2007), p. 11.

⁵ 2020 Integrated Resources Plan (Draft), at 162 ("Decarbonization of thermal energy must accelerate in the coming decades in order for Connecticut to meet its statutory economy-wide targets of 45 percent GHG emissions reductions by 2030 and 80 percent reduction by 2050."). Connecticut's greenhouse gas reduction requirements are codified at Conn. Gen. Stat. § 22a-200a.

⁶ Governor's Council on Climate Change, Building a Low Carbon Future for Connecticut, p. 34, Dec. 18, 2018.

decarbonization across all sectors, electrification of energy end uses is essential. This will require shifting away from utilizing fossil fuels to power transportation and building thermal loads to electric technologies that have no direct emissions. Widespread deployment of electric technologies such as electric vehicles and heat pumps will be a primary means to achieve deep economy-wide reductions.”⁷ EOE should recommend an end to the gas expansion program as soon as possible in order to comply with the binding emissions reduction targets of the GWSA.

The gas expansion program is outdated and inconsistent with Connecticut’s current policy priorities, which favor a transition away from fossil fuels in line with the GWSA. The Governor’s Council on Climate Change’s report on reducing GHG emissions 45% by 2030 recommends that Connecticut “transition building fossil fuel thermal loads to efficient renewable thermal technologies.”⁸ Executive Order 3 also recognizes that building electrification will be a critical part of Connecticut’s strategy as it pursues decarbonization of the electric sector, stating that “[i]n order to...ensure that strategic electrification strategies for decarbonizing the transportation and buildings sectors will result in real emission reductions, DEEP shall...analyze pathways and recommend strategies for achieving a 100% zero carbon target for the electric sector by 2040.” The 2018 Comprehensive Energy Strategy also recognizes the need to transition to “more aggressively pursue deployment of [renewable thermal technologies] within the building sector.”⁹

The most recent report of the Governor’s Council on Climate Change underscores the importance and urgency of transitioning our building sector away from fossil fuels and increasing deployment of renewable thermal technologies. Among its list of priority near-term recommendations for action within the building sector are: (1) transition building fossil fuel thermal loads to efficient renewable thermal technologies, (2) expand education and awareness efforts to increase uptake of zero- and low-carbon technology, and (3) improve training and technical capacity of workforce for renewable thermal technology installations and standards.¹⁰

The current docket provides a critical opportunity to reevaluate the gas expansion program and to plan for an end to the program, consistent with Connecticut’s climate objectives and the originally envisioned lifespan of the program. Notably, DEEP’s 2013 Comprehensive Energy Strategy that initially recommended the gas expansion program only envisioned a seven-year plan, not a ten-year plan.¹¹ Given that DEEP itself did not intend for the gas expansion program to extend beyond 2020, ending the program as soon as possible would be in line with DEEP’s original recommendation. Further, the authorizing legislation for the program only required that the LDCs submit “a customer conversion plan and schedule for a ten-year period” to PURA¹²—there is no requirement in that legislation that the program continue for the full ten-year period.

⁷ Department of Energy and Environmental Protection, 2017 Connecticut Greenhouse Gas Inventory, at 5, March 2020.

⁸ Building a Low Carbon Future for Connecticut, at 36.

⁹ 2018 Comprehensive Energy Strategy, at 91-92.

¹⁰ Governor’s Council on Climate Change, Taking Action on Climate Change and Building a More Resilient Connecticut for All: Phase 1 Report: Near-Term Actions, at 34, January 2021.

¹¹ See 2013 Comprehensive Energy Strategy, at 139.

¹² Conn. Gen. Stat. § 16-19ww(a)(1).

EOE has specifically solicited comment on whether the gas expansion plan is consistent with the directive in Executive Order 3 (EO3) to pursue a carbon-free electric sector by 2040—a target of which DEEP has recommended codification in its 2020 Integrated Resources Plan.¹³ Given that the gas expansion program is being utilized by Yankee Gas to fund the expanded infrastructure required to interconnect the proposed 650 MW gas fired power plant known as Killingly Energy Center,¹⁴ the gas expansion program is in direct contravention of EO3’s 2040 goal, as construction for the plant will begin just as the state must begin transitioning away from reliance on gas in the electricity sector. Although the annual SER filings lack transparent data on whether other plants have used gas expansion program funds to interconnect to the gas system, there may be other gas-fired plants that ratepayer funds have subsidized as well.

b. Investment in the Gas Expansion Program is Costly for Ratepayers and Will Likely Lead to Stranded Infrastructure

The gas expansion program is costly for ratepayers, and the costs to continue the program are rising, thereby increasing the likelihood that ratepayers will end up funding stranded infrastructure. Since the inception of the program, ratepayers have subsidized millions of dollars in incremental operation and maintenance costs and on rebates for conversions to gas. As PURA explained in its December 2020 decision in this docket, “all three LDCs’ average cost to connect new services has increased significantly since the inception of the system expansion plan.”¹⁵ PURA noted that from 2014 through 2019, the average costs per new service and new customer doubled for Connecticut Natural Gas Corporation and for the Southern Connecticut Gas Company and tripled for Yankee Gas Services Company.¹⁶

Further, maintaining the expanded gas system will become increasingly expensive for ratepayers as the system ages. As infrastructure ages, ratepayers will bear the burden of increasing costs to safely operate and maintain the system.¹⁷ Costs to ratepayers will increase in coming years as rising infrastructure costs coincide with declining demand due to greater energy efficiency and the state’s transition away from fossil fuels.¹⁸ Those costs will be spread among fewer customers as a growing number of households with the means to do so convert to more economical electric appliances to avoid increased gas expenses, leaving low income ratepayers with an even higher energy burden.¹⁹

¹³ 2020 Integrated Resources Plan (Draft), at 7, 141-142.

¹⁴ PURA Dkt. No. 20-06-22, Yankee Gas Services Company Application for Approval of a Special Contract, Final Decision (Jan. 13, 2020).

¹⁵ PURA Dkt. No. 20-03-16, Review of the 2019 System Expansion Reconciliation Mechanisms Filed by Connecticut Natural Gas Corporation, The Southern Connecticut Gas Company, and Yankee Gas Services Company, Decision, December 23, 2020, p. 12.

¹⁶ *Id.*

¹⁷ California Energy Commission, Energy Research and Development Division, Natural Gas Distribution in California’s Low-Carbon Future, Draft, October 2019, p. iii, <https://ww2.energy.ca.gov/2019publications/CEC-500-2019-055/CEC-500-2019-055-D.pdf>; Carmelita Miller, et al., The Greenlining Institute, Equitable Building Electrification: A Framework for Powering Resilient Communities, p. 9 (September 2019).

¹⁸ Carmelita Miller, et al., The Greenlining Institute, Equitable Building Electrification: A Framework for Powering Resilient Communities (September 2019).

¹⁹ Carmelita Miller, et al., The Greenlining Institute, Equitable Building Electrification., at 9.

Connecticut's aging gas distribution system is already increasingly becoming leak prone. A 2019 Sierra Club study of methane leaks conducted on public streets in Hartford estimated 4.3 methane leaks per road mile, up from 3.4 methane leaks per road mile observed in 2016.²⁰ The study also found 3.6 leaks per road mile in Danbury in 2019.²¹ This increase is despite significant investment from utilities to replace faulty gas lines.²² Connecticut Natural Gas, which serves the Hartford area, replaced 37 miles of aging pipes in 2016²³ and Eversource, which serves Danbury, has replaced more than 175 miles of gas lines in Connecticut since 2012.²⁴ Connecticut's gas utilities in recent years have reported an average percentage of lost and unaccounted for gas of 1.64%.²⁵ And this percentage may be underestimated—a 2015 study in Boston, Massachusetts found gas leak rates of approximately 2.7% from transmission, distribution, and end use, which was two to three times larger than predicted by inventory methodologies and industry reports.²⁶

Further, continued expansion of the gas distribution system will likely result in ratepayers funding stranded infrastructure, posing significant risk to gas customers. As utilities are forced to reduce and eventually eliminate gas sales in order to comply with the GWSA and as the state pursues decarbonization by decreasing gas demand and increasing building electrification, the number of gas customers will decrease, which in turn will reduce the usefulness or the need for gas system assets, resulting in stranded infrastructure.²⁷ With this in mind, utilities should be spending ratepayer funds in a way that is consistent with the need to reduce and ultimately cease burning fossil fuels rather than on investments that will increase total fixed system costs.

In addition to the costs to ratepayers expand and maintain the system, the system is also costing the state hundreds of millions of dollars a year to address the health impacts of gas in buildings. A recent study from the Harvard T. H. Chan School of Public Health, published in *Environmental Research Letters* in May 2021, found that health impacts from nitrogen oxides (NO_x) and volatile organic compounds (VOCs)—two of the pollutants associated with burning gas specifically—cost the state an estimated \$309 million and \$104 million in health impact costs, respectively.²⁸ The harm to human health caused by gas use and the associated costs to the state further demonstrate that Connecticut must end the gas expansion program.

²⁰ Tim Keyes, et al., Connecticut Mobile Methane Leaks Survey and Analysis Results, April 1, 2019.

²¹ *Id.*

²² See Bill Cummings, Study: Natural gas pipelines leaking in Danbury, other cities, Connecticut Post (April 11, 2019).

²³ Southern Connecticut Gas, Press Release: SCG & CNG Continue to Expand Energy Choice in Connecticut, Feb. 13, 2017.

²⁴ Bill Cummings, Study: Natural gas pipelines leaking in Danbury, other cities.

²⁵ PURA Dkt. No. 20-01-74, 2020 PURA Report to the General Assembly Concerning Lost and Unaccounted for Gas, June 24, 2020.

²⁶ Kathryn McKain, et al., Methane emissions from natural gas infrastructure and use in the urban region of Boston, Massachusetts, Proceedings of the National Academy of Sciences, February 17, 2015.

²⁷ Andy Bilich, et al., Environmental Defense Fund, Managing the Transition—Proactive Solutions for Stranded Gas Asset Risk in California, 2019, https://www.edf.org/sites/default/files/documents/Managing_the_Transition_new.pdf.

²⁸ Jonathan J Buonocore et al, A decade of the U.S. energy mix transitioning away from coal: historical reconstruction of the reductions in the public health burden of energy, 2021 *Environ. Res. Lett.* 16 054030, <https://iopscience.iop.org/article/10.1088/1748-9326/abe74c/pdf>.

II. Connecticut Must Prioritize Electrification in Order to Achieve Deep Decarbonization of the Buildings Sector

Rather than continuing to expand reliance on gas, Connecticut must shift to promoting building electrification and adoption of heat pumps. As concluded in the 2018 Comprehensive Energy Strategy, renewable thermal technologies such as air and ground source heat pumps and solar water heaters “offer important means to decrease reliance on fossil fuels and sharply reduce residential, commercial, and industrial GHG emissions. This potential—and the need for deep GHG emissions reductions in these sectors to meet the 2050 target required under the Global Warming Solutions Act—means Connecticut needs to more aggressively pursue deployment of [renewable thermal technologies] within the building sector.”²⁹ The Governor’s Council on Climate Change also named beneficial electrification as a primary means for Connecticut to achieve deep decarbonization of the building sector,³⁰ and stated that “[b]eneficial electrification of building thermal-energy end-uses such as space heating and cooling and water heating will reduce GHG emissions and total customer energy consumption and costs over the life of the technology.”³¹ Indeed, electric heat pumps reduce carbon emissions compared to gas appliances even with today’s electric grid,³² and as the electric grid becomes even cleaner electric heat pumps will lead to further emissions reductions.³³

a. Electrification Presents the Lowest Cost Pathway to Decarbonization for Connecticut

As multiple analyses have shown, building electrification presents the lowest cost pathway to achieving decarbonization goals as opposed to other combustible fuels delivered through the gas distribution system such as renewable natural gas, synthetic gas, and hydrogen. One such study from New Jersey found that “electrification reduces annual costs by 50% in 2050, compared to retaining gas use in buildings” if the state is to meet its emissions target of 80% reduction below 2006 levels by 2050. The New Jersey study also found that “electrification is the most cost-effective path to achieving further emissions reductions” beyond the 80% reduction target.³⁴ A study in California found that “building electrification is likely to be a lower-cost, lower-risk long-term strategy compared to renewable natural gas (RNG, defined as biomethane, hydrogen and synthetic natural gas, methane produced by combining hydrogen and carbon)” while noting that electrification also “leads to significant improvements in outdoor air quality and public health.”³⁵ A similar study from Washington, found that a high electrification

²⁹ 2018 Comprehensive Energy Strategy, pp. 91-92.

³⁰ Building a Low Carbon Future for Connecticut, at 13.

³¹ Building a Low Carbon Future for Connecticut, at 36.

³² Sherri Billimoria, et al., Rocky Mountain Institute (“RMI”), The Economics of Electrifying Buildings: How Electric Space and Water Heating Supports Decarbonization of Residential Buildings, p. 11 (June 2018); Rocky Mountain Institute, The Impact of Fossil Fuels in Buildings: A Fact Base, p. 11 (Dec. 2019).

³³ RMI, The Impact of Fossil Fuels in Buildings, at 11.

³⁴ 2019 New Jersey Energy Master Plan: Pathway to 2050, http://d31hzhk6di2h5.cloudfront.net/20200127/84/84/03/b2/2293766d081ff4a3cd8e60aa/NJBPU_EMP.pdf.

³⁵ California Energy Commission, The Challenge of Retail Gas in California’s Low-Carbon Future, Technology Options, Customer Costs, and Public Health Benefits of Reducing Natural Gas Use, CEC-500-2019-055-F (Apr. 2020), at iii.

scenario would cost about \$0.1 billion, which is less than 0.1% of GSP, whereas a renewable fuels scenario would cost \$6.1 billion by 2050.³⁶ And yet another study from Portland, Oregon found that the high electrification scenario is the cheapest “across a range of alternative fossil fuel price and end-use electric technology cost projections.” The average household would experience a reduction in monthly energy costs of around \$50 by 2050 in 2016 dollars.³⁷

b. Electric Heat Pumps Are Also More Cost-Effective for Individual Customers Over the Life of the Equipment

Further, gas may not be the most economical option for customers, especially in new construction. Analysis commissioned by the California Energy Commission concluded that electrification is the lower cost alternative when compared to gas, finding that electrification of buildings, and particularly the use of electric heat pumps for space and water heating, leads to lower energy bills for customers in the long run.³⁸ Although California’s climate differs from that of Connecticut, similar conclusions have been reached in studies focusing on the New England region. A Rocky Mountain Institute study of heat pumps in Providence, Rhode Island, found that heat pumps were the most cost-effective option in new construction as compared to gas, oil, or propane heating systems.³⁹ Also, as highlighted in the 2018 Comprehensive Energy Strategy, a recent study by Cadmus Group found that heat pumps, and especially versions optimized for cold climates, “routinely are cost-effective in single-family homes in Massachusetts and Rhode Island, which have climates and energy prices comparable to Connecticut’s.”⁴⁰

III. PURA Should Open a Docket to Explore a Just and Equitable Transition Off of the Gas System

Following the lead of Massachusetts⁴¹ and California,⁴² Connecticut should open a docket to explore the retirement of the gas system in a just and equitable manner and consistent with the state’s climate goals. The docket should examine the gas distribution industry, regulatory, and policy changes needed to support the achievement of the state’s mandated GHG emission limits and should anticipate environmental justice and labor impacts and identify steps to mitigate those

³⁶ Evolved Energy Research, Deep Decarbonization Pathways Analysis for Washington State, Prepared for Washington Office of the Governor and Office of Financial Management, December 16, 2016.

³⁷ Evolved Energy Research, Exploring Pathways to Deep Decarbonization for the Portland General Electric Service Territory, Prepared for Portland General Electric, April 24, 2018.

³⁸ California Energy Commission, Final Project Report, The Challenge of Retail Gas in California’s Low-Carbon Future (April 2020), <https://ww2.energy.ca.gov/2019publications/CEC-500-2019-055/CEC-500-2019-055-F.pdf>.

³⁹ Rocky Mountain Institute, The Impact of Fossil Fuels in Buildings: A Fact Base, p. 11 (Dec. 2019).

⁴⁰ 2018 Comprehensive Energy Strategy, pg. 93-94.

⁴¹ Massachusetts Department of Public Utilities, 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, Vote and Order Opening Investigation (Oct. 29, 2020) (Stating that the purpose of the investigation is “to examine the role of Massachusetts gas local distribution companies . . . in helping the Commonwealth to achieve its 2050 climate goals.”).

⁴² See Public Utilities Commission of the State of California, Order Instituting Rulemaking to Establish Policies, Processes, and Rules to Ensure Safe and Reliable Gas Systems in California and Perform Long-Term Gas System Planning, January 16, 2020 (stating “the Commission will . . . implement a long-term planning strategy to manage the state’s transition away from natural gas-fueled technologies to meet California’s decarbonization goals.”).

impacts. Continuing to interconnect new customers to the gas system hinders Connecticut from reaching its climate commitments and increases the likelihood of ratepayers funding stranded infrastructure.

Opening such a docket now is necessary to ensure that necessary changes can be implemented with sufficient lead time to comply with 2050 emission reduction mandates. Coordinated planning will be necessary to address affordability concerns, particularly as the number of gas customers declines as Connecticut electrifies its buildings sector, in order to ensure that customers who already bear the highest energy burdens are not left to cover increasing distribution rates as the LDC's revenue requirement is spread over a diminishing customer sales base. Such a process is also necessary to determine how much additional LDC investment in the system is prudent in the next 30 years to ensure a safe and reliable gas distribution system as statewide gas demand declines, rather than continuing to invest hundreds of millions of dollars in leak prone pipes when Connecticut may not need that infrastructure for its full depreciable life. The docket should aim to develop non-pipes alternative frameworks to address these concerns, similar to those being developed by utilities in New York.⁴³

A just and equitable plan will ensure all residents can afford to heat their homes; protect income, benefits, and pensions for utility workers and retirees; create good union jobs and make new jobs available to people who have been excluded from living wage employment; ensure that gas workers are retrained into commensurate jobs with good benefits; and encourage community input and engagement in the process. By beginning to plan now for transitioning off of the gas system, Connecticut will both avoid unnecessary financial burdens on ratepayers as costs to maintain and safely operate an aging gas system increase and reduce the risk to ratepayers of funding stranded infrastructure.

IV. Additional Recommendations Relating to the Gas Expansion Program

a. Changes to Marketing Practices Are Necessary to Shift Toward Electrification

Several changes are necessary to the LDCs' marketing of gas to encourage the necessary shift toward building electrification. LDCs should cease marketing gas to new customers and should instead be required to provide educational resources about energy efficiency and heat pumps. New York utilities provide a model for this shift in communication to customers—a joint proposal by New York State Electric & Gas Corporation and Rochester Gas and Electric Corporation states that “the Companies will modify their websites, customer mailings, emails, and marketing material to remove promotion of natural gas.” Such modifications include replacement of a link encouraging conversion to gas with a link that “describes programs and incentives available to customers for opportunities to reduce gas use or consider alternate forms of energy consumption.” The New York utilities also agreed to discontinue the use of the phrase “heat smart” in connection with the promotion of gas and to provide information about New

⁴³ See e.g., Consolidated Edison Company, “Proposal for Use of a Framework to Pursue Non-Pipeline Alternatives to Defer or Eliminate Capital Investment in Certain Traditional Natural Gas Distribution Infrastructure.” NYPSC Case 19-G-0066, Filed September 15, 2020. (Hereinafter “ConEd NPA Proposal”), page 3.

York State Energy Research and Development Authority sponsored on-bill financing when providing information about energy efficiency programs and heat pumps.⁴⁴

Connecticut utilities should similarly modify their marketing practices to remove promotion of gas and encourage a shift toward energy efficiency and electrification. In particular, LDC websites must be revised insofar as they currently highlight several misleading claims about the purported benefits of gas, including claims that gas is “clean”⁴⁵ and “environmentally friendly.”⁴⁶ Connecticut Natural Gas and Southern Connecticut Gas also promote that customers can “reduce [their] carbon footprint [by switching to gas] due to fewer harmful emissions than oil.”⁴⁷ These claims omit that emissions from methane leaks during the extraction process and throughout gas transportation infrastructure⁴⁸—including LDC distribution pipelines⁴⁹—contribute to climate change and significantly offset any purported climate benefits of burning gas as opposed to other fossil fuels.⁵⁰ The LDCs should be required to cease promoting such misleading claims about the benefits of gas.

In addition to changes to LDC marketing practices, the Energize Connecticut website could be restructured to serve as a centralized repository for customer information relating to heating options, laying out a suite of options and providing information relating to availability, incentives, health and environmental impacts, and lifecycle cost information for electric heat pumps versus gas heating and cooling to enable customers to make informed decisions.

⁴⁴ Case 19-E-0378, Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of New York State Electric & Gas Corporation for Electric Service, Joint Proposal Appendix M, New York State Electric & Gas Corporation – Gas, Rochester Gas and Electric Corporation – Gas, pg. 3.

⁴⁵ Eversource (d/b/a Yankee Gas), *Why Switch to Natural Gas?*, <https://www.eversource.com/content/ct-c/residential/switch/choose-natural-gas/why-switch>; Connecticut Natural Gas, *Benefits - Natural gas is an affordable, clean, convenient, domestic, and versatile fuel source*, <https://www.cngcorp.com/wps/portal/cng/converttogas/whyswitch/benefits>.

⁴⁶ Connecticut Natural Gas, *Benefits - Natural gas is an affordable, clean, convenient, domestic, and versatile fuel source*, <https://www.cngcorp.com/wps/portal/cng/converttogas/whyswitch/benefits/>; Southern Connecticut Gas, *Benefits - Natural gas is an affordable, clean, convenient, domestic, and versatile fuel source*, <https://www.socnngas.com/wps/portal/scg/converttogas/whyswitch/benefits/>.

⁴⁷ *Id.*

⁴⁸ PBS, *The U.S. Natural Gas Industry is Leaking Way More Methane than Previously Thought* (Jul. 4, 2018), <https://www.pbs.org/newshour/science/the-u-s-natural-gas-industry-is-leaking-way-more-methane-than-previously-thought>.

⁴⁹ Sid Perkins, Science, *Major U.S. Cities are Leaking Methane at Twice the Rate Previously Believed* (Jul. 19, 2019), <https://www.sciencemag.org/news/2019/07/major-us-cities-are-leaking-methane-twice-rate-previously-believed> (“A new study has found that leaks of methane, the main ingredient in natural gas and itself a potent greenhouse gas, are twice as big as official tallies suggest in major cities along the U.S. eastern seaboard. The study suggests many of these fugitive leaks come from homes and businesses—and could represent a far bigger problem than leaks from the industrial extraction of the fossil fuel itself.”).

⁵⁰ Benjamin Storrow, Scientific American, *Methane Leaks Erase Some of the Climate Benefits of Natural Gas* (May 5, 2020), <https://www.scientificamerican.com/article/methane-leaks-erase-some-of-the-climate-benefits-of-natural-gas/>.

b. EOE should provide transparency on how gas expansion program funds have been spent

The LDC System Expansion Reconciliation filings are difficult and time consuming to interpret in order to understand how ratepayer funds have been spent on the gas expansion program. It is therefore challenging for the public to meaningfully participate in this docket and provide comments assessing the gas distribution program. The draft report produced by EOE should address this problem by including a summary of how gas expansion program funds have been spent, including the number and cost of conversions and new connections for residential, commercial, and industrial customers. The summary should also include a list of any gas-fired power plants that have utilized the gas expansion program to interconnect in addition to Killingly Energy Center.

c. Fossil gas vehicles should not be subsidized through the gas expansion program

The gas expansion program should not be expanded to include subsidies for fossil gas vehicles. Such vehicles should not be subsidized through any ratepayer or state funds, as there is broad consensus that the path forward to decarbonize the transportation sector is electrification.⁵¹ As noted in section 1.a, above, Connecticut's most recent greenhouse gas inventory report recognizes that "[t]o achieve deep decarbonization across all sectors, electrification of energy end uses is essential. This will require shifting away from utilizing fossil fuels to power transportation and building thermal loads to electric technologies that have no direct emissions. Widespread deployment of electric technologies such as electric vehicles and heat pumps will be a primary means to achieve deep economy-wide reductions."⁵²

Connecticut has developed a comprehensive plan for reducing greenhouse emissions from the transportation sector and, like the building sector, a foundation of this plan is the widespread electrification of light, medium, and heavy duty vehicles.⁵³ In order to support and accelerate the necessary transition to vehicle electrification, Connecticut has joined regional agreements to expand the penetration of light-duty electric vehicles (EVs),⁵⁴ expand the deployment of public and private fleet and transit zero-emission medium and heavy-duty vehicles and foster the use of electric trucks in densely populated areas,⁵⁵ and establish a cap on carbon emissions from motor vehicles.⁵⁶ Support for this vehicle electrification effort has been the subject of PURA's ongoing grid modernization efforts.⁵⁷

⁵¹ See e.g., NPR, *Governors Urge Biden To Order 100% Zero-Emission Car Sales By 2035*, <https://www.npr.org/2021/04/21/989463166/governors-urge-biden-to-order-100-zero-emission-car-sales-by-2035>.

⁵² 2017 Connecticut Greenhouse Gas Inventory, March 2020, at 5.

⁵³ Connecticut DEEP, *Electric Vehicle Roadmap for Connecticut: A Policy Framework to Accelerate Electric Vehicle Adoption*, April 21, 2020.

⁵⁴ State Zero-Emission Vehicle Programs Memorandum of Understanding, October 24, 2013.

⁵⁵ Multi-State Medium- And Heavy-Duty Zero Emission Vehicle Memorandum of Understanding, July 10, 2020.

⁵⁶ Transportation and Climate Initiative Program Memorandum of Understanding, December 21, 2020.

⁵⁷ PURA Docket 17-12-03RE04, PURA Investigation into Distribution System Planning of the Electricity Distribution Companies – Zero Emission Vehicles.

V. Conclusion

Save the Sound and Sierra Club appreciate EOE's consideration of the above comments in its reexamination of the gas expansion program. EOE should recommend an end to the gas expansion program as soon as possible so that Connecticut can transition away from fossil fuels and meet its climate commitments.

Respectfully submitted,

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