

March 2, 2022

Via email: ettestimony@cga.ct.gov

**Conservation Law Foundation Testimony
In Support of S.B. 176, S.B. 177, and H.B. 5203
And in Opposition to H.B. 5200**

Dear Senator Needleman, Representative Arconti, and Members of the Energy and Technology Committee:

Conservation Law Foundation (CLF) respectfully submits this written testimony in support of S.B. 176, S.B. 177 (with amendments), and H.B. 5203, and in opposition to H.B. 5200. Founded in 1966, CLF is a nonprofit, member-supported, regional environmental organization that uses science-based legal advocacy to conserve natural resources, promote thriving communities, and facilitate a just transition to a clean energy economy for all in New England.

I. CLF Supports S.B. 177, Which Would Require a Study on Grid Resilience, but Adding More Detailed Requirements Would be Beneficial

CLF is highly supportive of S.B. 177, An Act Concerning Grid Resilience. A study on grid resilience is a critical first step for understanding the risks that utility infrastructure faces in Connecticut as well as what steps need to be taken to ensure reliability of the system.

We recommend that S.B. 177 be amended to describe in greater detail the components of the proposed grid resilience study to ensure that the information collected will allow PURA to develop strong recommendations for both its regulatory oversight of utility companies and the steps that individual companies should take to better protect their infrastructure and operations.

In conducting a study on grid resilience, the chairperson of the Public Utilities Regulatory Authority should work closely with representatives from each investor-owned utility company to assess the following:

- Costs incurred and recovered from ratepayers associated with damage to the grid from extreme weather events over the past ten years;
- Future projections for climate-related risks including changes in temperature extremes, humidity, precipitation, sea level rise, and extreme storms;
- Any standards developed and or implemented by utility companies to address changes in climate conditions as it relates to the reliability and resilience of the grid;
- Current efforts for both hazard mitigation and disaster response planning, including an evaluation of operations and infrastructure, capital investments, and a timeline for modifying operations and upgrading infrastructure to meet resiliency standards; and

- Efforts to communicate with and coordinate with environmental justice communities who will be most impacted by climate impacts to utility infrastructure.

We also recommend that the final study include both recommendations for what PURA should require per its regulatory authority to ensure grid resilience and what individual utility companies should do to better prepare the grid for climate change.

Finally, to ensure that the grid resilience study can consider all of the above factors, we recommend extending the deadline of the study to January 1, 2024. We believe that 12 months is the minimum amount of time needed to sufficiently gather and analyze this information.

II. CLF Supports H.B. 5203, Which Would Benefit Connecticut Ratepayers by Increasing Oversight over the Utility Companies and Shifting Certain Costs from Ratepayers to Company Shareholders

CLF supports H.B. 5203, which would make several changes to utility company cost-sharing mechanisms and increase regulatory oversight over the utilities. These changes would benefit ratepayers by changing current provisions that require ratepayers to pay for certain utility costs, rather than company shareholders, and by holding the utility companies more accountable to state regulators. As all Connecticut residents know, our energy costs are extremely high. Our electric rates are the highest in the continental U.S. and gas prices have soared this winter. These costs are simply unaffordable for many people, especially low- and moderate-income residents. Meanwhile, the utility companies continue raking in enormous profits: for example, Eversource recently reported more than \$1.2 billion in profits for the second consecutive year.¹

H.B. 5203 would be a step in the right direction to increase utilities' accountability and shift certain costs from ratepayers to shareholders. Below, we highlight two sections of the bill, which would increase regulatory oversight over utility advertising and prevent the utilities from recovering their lobbying costs from ratepayers. It is abundantly clear that the utility companies often act in ways that are not in the public interest, which warrants greater regulatory scrutiny, and that ratepayers are currently stuck paying for certain costs, like utility lobbying, that should be paid for by shareholders.

a. Section 4 Would Increase Regulatory Oversight Over Utility Advertising

Section 4 would require the gas and electric utilities to disclose how they use ratepayer money to fund their advertisements. Examples of the utility companies' questionable—and at times, illegal—advertising strategies over the past several years amply demonstrate why more scrutiny over the companies' advertising costs is necessary.

For example, last May, parents in Massachusetts were outraged to discover that their children were given pro-gas propaganda published by Eversource, which contained statements

¹ Brendan Crowley, Connecticut Examiner, *Eversource Reports More Than \$1.2 Billion in Profits for Second Consecutive Year* (Feb. 17, 2022), <https://ctexaminer.com/2022/02/17/eversource-reports-more-than-1-2-billion-in-profits-for-second-consecutive-year/>.

like “Natural Gas is Great” and referred to gas as a “safe, clean, efficient fuel.”² One activity booklet was titled “Natural Gas: Your Invisible Friend.”³ It’s unclear whether Massachusetts ratepayers paid for these activity booklets and whether Eversource intends to distribute those materials to children in Connecticut. Regardless, the company’s questionable decision to distribute pro-gas propaganda to schoolchildren raises concerns and indicates that greater regulatory scrutiny over the company’s advertising is warranted.

Here in Connecticut, PURA has been investigating the gas companies’ aggressive gas expansion marketing strategies.⁴ This investigation has shown that the gas companies routinely violated a state law requiring disclosure of advertising funding sources thousands of times over the past several years. In December, PURA issued a Notice of Violation and assessed a civil penalty of \$1,797,000 against Eversource for the company’s failure to disclose advertisement funding sources *over 3,500 times* in violation of Conn. Gen. Stat. § 16-19d(f).

Strikingly, the two Avangrid gas companies, Connecticut Natural Gas (CNG) and Southern Connecticut Gas (SCG), disclosed in this proceeding that they also violated this statute over 40,000 and 52,000 times, respectively, over the past four years.⁵ At this time, PURA has not issued a Notice of Violation for the CNG and SCG violations, but the evidence suggests that a civil penalty should be assessed against those companies in addition to Eversource. This docket is a vivid example of why greater scrutiny over the utilities’ advertising strategies is necessary.

b. Section 7 Would Ensure that Utility Shareholders Pay for the Companies’ Lobbying and Trade Association Costs, Rather than Ratepayers

Section 7 would ensure that utility company shareholders pay for utility lobbying, trade associations, and related activities. The utility companies can currently recover these costs from ratepayers, which is not an appropriate use of ratepayers’ money.

Utility lobbyists frequently lobby *against* bills that are in the public interest, notably those pertaining to clean energy and climate change: “A study from Brown University shows most legislation proposed over the last decade that would keep Connecticut on track to take action on climate change was derailed by lobbyists from the energy industry.”⁶ Companies should not be able to recover any of their lobbying costs from ratepayers.

Likewise, the utility companies should not be able to recover the costs of trade associations from ratepayers, as these entities lack transparency and often work against the

² Associated Press, ‘Your Invisible Friend’: Parents outraged by pro-gas booklets made by Eversource used in Mass. School (May 10, 2021), <https://whdh.com/news/your-invisible-friend-parents-outraged-by-pro-gas-booklets-made-by-eversource-used-in-mass-school/>.

³ *Id.*

⁴ PURA Docket No. 21-08-24, Petition of William Tong, Attorney General for the State of Connecticut, and the Office of Consumer Counsel for an Investigation of Eversource Energy Regarding Gas Expansion Marketing.

⁵ PURA Docket No. 21-08-24, Office of the Attorney General, Phase 2 Brief, 3 (Feb. 17, 2022), <http://www.dpuc.state.ct.us/dockcurr.nsf/8e6fc37a54110e3e852576190052b64d/c2e9550d01d29fd9852587ec0064cc2?OpenDocument> (citing CNG and SCG response to AG-40, dated Jan. 7, 2022).

⁶ J.D. Allen, WSHU, *Connecticut climate bills are killed by energy company lobbyists, study finds* (Dec. 16, 2021), <https://www.wshu.org/connecticut-news/2021-12-16/connecticut-climate-bills-are-killed-by-energy-company-lobbyists-study-finds>.

public interest. For example, last spring the media obtained slides that Eversource presented at an industry conference, which called for promoting gas and thwarting state attempts to promote electrification, a key strategy to address climate change.⁷ Eversource was identified as a member of the “Consortium to Combat Electrification”, run by the Energy Solutions Center, a trade group based in Washington, DC. Anti-electrification efforts are increasingly widespread around the country, as pro-gas industry groups with names like “The Empowerment Alliance” and “Partnership for Energy Progress” try to dissuade state and local decisionmakers from addressing climate change by accelerating the shift to widespread electrification.⁸ Clearly, ratepayers should not have to pay for utility companies’ participation in such endeavors. Section 7 of H.B. 5203 would ensure that the utility companies can no longer recover such costs from ratepayers.

III. CLF Supports S.B. 176, Concerning Shared Clean Energy Facilities, But Amendments are Needed to Strengthen and Improve the Bill

CLF largely supports S.B. 176, An Act Concerning Shared Clean Energy Facilities, but some changes are needed to further strengthen and improve the bill.

Shared clean energy facilities (SCEF), commonly known as shared solar, are an important component of Connecticut’s transition to clean energy. Many residents and businesses want access to clean energy but cannot install solar panels directly on their roofs. For example, the property may be too shady, the roof may not have adequate structural support for solar panels, or the landlord may not permit solar. Lack of access to clean energy is especially acute for Connecticut’s low-income and minority residents, who are more likely to rent their homes. Shared solar addresses this problem by allowing people to purchase clean energy from a solar installation that is not co-located on customers’ residences.

a. Increase the SCEF Program to 50 MW

Unfortunately, Connecticut has fallen behind other states with our current shared solar program, which is small in scale and behind schedule. We commend the Committee for resolving to expand the SCEF program. However, the proposed expansion from 25 MW to 35 MW is too modest and would not sufficiently expand the program. We urge the Committee to increase the SCEF program to 50 MW, which would double the current size of the program.

b. Increasing the Amount of SCEF Capacity for Low- and Moderate-Income Customers is a Positive Change and Should be Retained

We support the proposed increase in the percentage of electricity generated by SCEFs that must be “sold, given or provided” to low-income customers. Section 2 would increase that amount from 10 to 20%. It would also require at least 60% of total SCEF capacity to be “sold,

⁷ Yale Environment 360, *A Leading U.S. Utility Stealthily Fights the Electrification of Heating System* (May 4, 2021), <https://e360.yale.edu/digest/a-leading-u-s-utility-stealthy-fights-the-electrification-of-heating-systems>; Benjamin Storrow, E&E News, *Leaked docs: Gas industry secretly fights electrification* (May 3, 2021), <https://subscriber.politicopro.com/article/eenews/1063731537>.

⁸ Jeff Brady, NPR, *As Cities Grapple With Climate Change, Gas Utilities Fight To Stay In Business* (Feb. 22, 2021), <https://www.npr.org/2021/02/22/967439914/as-cities-grapple-with-climate-change-gas-utilities-fight-to-stay-in-business>.

given or provided to low-income customers, moderate-income customers or low-income service organizations.” The current requirement is only 10%, so this would be a significant increase.

c. Remove the Requirement that at least 40% of SCEFs be Located in Environmental Justice Communities

We suggest removing subsection (G), which would require at least 40% of SCEFs to be located in environmental justice communities. Such communities are frequently overburdened by energy infrastructure, and siting SCEFs in these communities could add to that burden without providing community benefits. The benefit provided by SCEFs for residents of environmental justice communities is access to affordable clean energy. Requiring a SCEF to be located in the community would not increase the community benefits, and in fact could impose siting burdens in some communities. Constraining the siting options for SCEFs could also raise costs, as there could be more cost-effective or otherwise superior siting locations outside of environmental justice communities. For these reasons, we urge the Committee to remove subsection (G).

d. The NRES Program Should be Expanded

CLF supports allowing commercial and industrial customers in the non-residential renewable energy tariff program (NRES) to use their entire rooftop space for solar generation. In addition, we suggest authorizing customers to construct solar canopies over their parking lots, as this is valuable but underutilized space that could be used to add solar capacity. A program adder of 6 cents per kWh for solar canopies could help incentivize solar canopies. Finally, we urge the Committee to increase the NRES program from 50 to 100 MW per year. Increasing this cap is necessary to meet demand and facilitate the state’s ability to meet its climate targets under the Global Warming Solutions Act.

IV. CLF Strongly Opposes H.B. 5200, Which Presumes that Connecticut Should Develop Hydrogen, Despite Little to No Evidence that this Makes Sense, and Would Convene a Task Force to Facilitate Hydrogen Development

CLF strongly opposes H.B. 5200, An Act Establishing a Task Force to Study Hydrogen Power. **Hydrogen is not a viable pathway to decarbonization in the near-term** because over 99% of hydrogen is currently produced from fossil fuels and is harmful to the climate, high costs and safety concerns associated with hydrogen, the inability to utilize hydrogen in existing gas infrastructure and appliances, and the nascent state of hydrogen research and development.

Section 1(a) is deeply flawed because it presumes that Connecticut should develop and incentivize hydrogen. The proposed hydrogen study must include, for example, “A review of regulations and legislation needed to guide the development and achievement of economies of scale for the hydrogen ecosystem in the state, an examination of how to position the state to take advantage of incentives and programs created by the federal Infrastructure Investment and Jobs Act, recommendations for workforce initiatives to prepare the state’s workforce for hydrogen fueled energy-related jobs, . . . [and] recommendations regarding funding sources for developing hydrogen-fueled energy programs and infrastructure.” **This omits the fundamental question of whether Connecticut should pursue hydrogen as a decarbonization strategy at all.** The 2022 Comprehensive Energy Strategy will likely address this question. It is premature to convene a

task force aimed at positioning Connecticut to take advantage of hydrogen when the available information indicates that hydrogen is not a viable decarbonization pathway in the near-term.

Section 1(b) is also problematic because many of the proposed task force members lack relevant expertise on hydrogen specifically. It is unclear whether representatives of the building trade, nuclear power plants, the state fuel cell coalition, the gas and electric utilities, or even the Green Bank have specialized knowledge about hydrogen, though they have expertise in energy-related matters more generally. If a task force were to be convened, it would be essential that the members have specialized expertise about hydrogen specifically.

Hydrogen research is still at a nascent stage, but massive amounts of resources will be funneled into research and development in the next several years due to federal funding and wide interest in the potential for hydrogen. Connecticut should hold off on convening any hydrogen task force until we have more information, derived from these federally funded studies, about the viability of hydrogen as a decarbonization pathway. If research later indicates that Connecticut should pursue the development of hydrogen for hard-to-electrify sectors, such as some heavy industrial applications, or for other uses, then the General Assembly should consider convening a task force at that time.

a. Over 99% of Hydrogen is Made from Fossil Fuels and is Not Climate Friendly

Hydrogen can be produced from fossil fuels, biomass, water, or a mix of sources.⁹ “Black,” “grey,” and “brown” hydrogen are produced from coal, fossil gas, and lignite, respectively.¹⁰ These types of hydrogen, being produced from fossil fuels, create considerable GHG emissions.¹¹ Currently, **over 99% of hydrogen is produced from fossil fuel sources.**¹² “Blue” hydrogen is derived from fossil fuels but aims to reduce emissions by implementing carbon capture and storage.¹³ However, research shows that blue hydrogen’s GHG emissions profile is actually *higher* than burning natural gas or even coal directly.¹⁴

“Green” hydrogen is derived from electricity produced from renewable energy sources.¹⁵ Globally, **less than 0.02% of hydrogen is produced from electrolysis powered purely by renewable electricity.**¹⁶ Green hydrogen does have potential as a decarbonization tool, notably

⁹ International Energy Agency, *The Future of Hydrogen: Seizing Today’s Opportunities*, 38 (2019), https://iea.blob.core.windows.net/assets/9e3a3493-b9a6-4b7d-b499-7ca48e357561/The_Future_of_Hydrogen.pdf.

¹⁰ *Id.* at 34.

¹¹ *Id.* at 32.

¹² *Id.* at 32.

¹³ *Id.* at 34.

¹⁴ David Kindy, Smithsonian Magazine, ‘Blue’ Hydrogen May Not Be a Very ‘Green’ Energy Source After All (Aug. 17, 2021), <https://www.smithsonianmag.com/smart-news/blue-hydrogen-20-worse-burning-coal-study-states-180978451/#:~:text=New%20Research-.Blue%20Hydrogen%20May%20Not%20Be%20a%20Very%20Green%20Energy%20Source%20After%20All&text=Hydrogen%20is%20often%20viewed%20as,though%2C%20might%20be%20a%20problem> (“A peer-reviewed study published in *Energy Science & Engineering*, an open-source journal, concludes ‘the greenhouse gas footprint of blue hydrogen is more than 20 percent greater than burning natural gas or coal for heat and some 60 percent greater than burning diesel oil for heat,’ according to the paper.”).

¹⁵ *Id.*

¹⁶ Sara Gersen & Sasan Saadat, Earthjustice, *Reclaiming Hydrogen for a Renewable Future*, 7 (Aug. 2021), https://earthjustice.org/sites/default/files/files/hydrogen_earthjustice_2021.pdf.

for hard-to-electrify sectors like certain heavy industrial applications. It does not, however, make sense for heating buildings or powering vehicles. Because it is more efficient to use renewable electricity directly¹⁷ (such as to power electric vehicles or electric heat pumps), green hydrogen should generally be limited to applications where electrification is not feasible.

b. The High Costs, Safety Concerns, Scarcity of “Green” Hydrogen, and High Emissions Profile of Hydrogen Produced from Fossil Fuels do not Support Hydrogen as a Decarbonization Strategy

The Massachusetts 2050 Energy Pathways Report found that “green” hydrogen is unlikely to scale until there are sufficient surplus quantities of renewable electricity for cost-effective production, which the report projected would occur in the 2040s at the earliest.¹⁸ And even in such a scenario, the report found that green hydrogen was likely to be cost-effective only in certain difficult-to-electrify sectors, with electrification still being more cost-effective in the buildings sector.¹⁹

In addition, there are significant safety concerns associated with hydrogen due to its higher flammability and leakage rates.²⁰ Hydrogen can cause pipe embrittlement,²¹ and it cannot be used safely in appliances that were designed for methane (natural gas).²² Upgrading existing gas infrastructure and appliances to safely transport and use hydrogen would require enormous investments.

In the near-term, hydrogen will not play a prominent role in helping Connecticut achieve its climate targets. The scarcity of “green” hydrogen, the high level of emissions associated with hydrogen produced from fossil fuels, which comprises the vast majority of this resource, and the significant costs and safety concerns indicate that significantly more research and development is necessary before hydrogen becomes a viable pathway to decarbonization. It is premature for the General Assembly to convene a task force to study hydrogen in Connecticut and irresponsible to assume that Connecticut should pursue hydrogen development without first asking the critical question of whether this makes sense.

Respectfully submitted on behalf of Conservation Law Foundation,

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¹⁷ Cara Bottorff, Sierra Club, *Hydrogen: Future of Clean Energy or a False Solution?* (Jan. 5, 2022), <https://www.sierraclub.org/articles/2022/01/hydrogen-future-clean-energy-or-false-solution>.

¹⁸ Buildings Sector Report: A Technical Report of the Massachusetts 2050 Decarbonization Roadmap Study, 5 (2020), <https://www.mass.gov/doc/building-sector-technical-report/download>.

¹⁹ *Id.* at 103.

²⁰ Sara Gersen & Sasan Saadat, Earthjustice, *Reclaiming Hydrogen for a Renewable Future*, 19 (Aug. 2021), https://earthjustice.org/sites/default/files/files/hydrogen_earthjustice_2021.pdf.

²¹ *Id.*

²² *Id.* at 27; Jairo Duran, *Safety Issues to Consider When Blending Hydrogen with Natural Gas* (Feb. 17, 2021), <https://processecology.com/articles/safety-issues-to-consider-when-blending-hydrogen-with-natural-gas>.