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TESTIMONY OF LESLIE ANDERSON

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BEFORE THE RHODE ISLAND HOUSE COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES

Concerning H 5279 RELATING TO STATE AFFAIRS AND GOVERNMENT – ENERGY SITING

On behalf of the Propane Gas Association of New England (PGANE), which represents propane marketers and suppliers across Rhode Island, we appreciate the opportunity to provide comments on H 5279 Relating to State Affairs and Government – Energy Siting. Our members provide clean-burning EPA recognized alternative energy to over 50,000 residential homes, as well as to commercial and agricultural customers across the Ocean State. As an alternative energy association, we OPPOSE H5279 because we believe it has the potential to lower energy diversity and reduce the state's resiliency.

Energy diversity is critical to ensure that Rhode Island can meet its energy service needs in a manner that is adequate, reliable, secure, and sustainable. Propane is the perfect partner for resiliency needs. Resiliency and energy security are of fundamental importance in protecting the critical infrastructure within the state, ranging from commercial and municipal needs such as backup power generation for hospitals to residential needs such as boiling water and cooking food. To ensure the safety of our citizens, when there are electrical disruptions from winter storms, climate disasters, or cyber terrorism, it is essential that the state promote an energy like propane, which is sustainable, green, and resilient. For these reasons, propane needs to be an integral part of the Rhode Island's energy structure, and H5279 has the potential to reduce energy diversity, by requiring additional licensing requirements for critical infrastructure. We have just witnessed a complete failure of energy infrastructure in the middle of our country and parts of the south that were devastating for the citizens living in these areas. The need for resilient energy diversity should be at the forefront of all policymakers, if we are to learn any lessons from these destructive events.

Our industry, **comprised of numerous small family-owned local businesses**, needs to have a strong customer base year-round in order to thrive and be able to handle extreme weather needs for the state. Unfortunately, the legislature has included small business propane companies who have a small bulk storage facility in the definition of energy facilities and made them subject to the siting act. This bill would add additional expense to future permitting costs for small businesses and it would likely deter critical infrastructure, so necessary for the state's citizens as a back up energy.

Propane is the unsung energy hero of extreme weather events, and if climate change is going to increase the likelihood of these events as many predict, then we need to make sure that Rhode Island has a healthy vibrant propane industry to step in and provide energy security during these emergencies. Just look at the number of citizens in Texas lined up for propane to cook and boil water in February to attest to the necessity of reliable portable energy. Propane generators kept the lights on at hospitals and at homes with backup generators when there was no other energy source.

For the most recent reminder that propane is the portable energy needed during times of crisis, consider COVID - 19. During the pandemic, propane was the primary energy used to heat outdoor testing sites, including critical biomedical sites such as Lonza in NH, where workers were tested prior to entering the facility to conduct COVID research. Lonza is

currently manufacturing the Moderna coronavirus vaccine. Propane was also used for handwashing stations and hot showers for the homeless, as well as a source of outdoor heating for businesses, restaurants, and testing sites throughout the state. The pandemic is just one recent of example of how propane provides energy security and should be part of any resilient energy strategy.



PGANE commends the State for its desire to promote energy efficiency, reduce greenhouse gas (GHG) emissions, improve air quality, and foster healthier, more vibrant communities. However, we are concerned that the legislature has overlooked the value of our industry's contributions and mis-categorizes propane as a fossil fuel and not as a beneficial by-product and alternative energy. Rhode Island policy makers are creating an energy pyramid with electricity squarely at the top. State officials overlook how these policy-driven electrification efforts will impact consumers, businesses, and the environment, and put us at greater risk by reducing energy diversity. The narrative that decarbonization is only possible through electrification is false. We also reject the perceived notion that, from an environmental perspective, there is no difference between thermal fuels. Propane has many positive attributes that should be recognized. **Clean propane energy accelerates decarbonization and access to clean propane ensures environmental equity on the path to net zero.**

Centralized electricity generation is incredibly inefficient and wasteful; energy is lost during each step of the delivery process (i.e., power generation, distribution). For context, the federal government's Energy Star Program gives propane, which is a primary energy source, a source-site ratio of 1.01, compared to 2.80 for electricity from the ISO NE grid.¹ This means is takes 2.80 units of electricity to produce and deliver one unit of energy to a home, compared to only 1.01 for propane. Propane is much more efficient at delivering energy than drawing electricity from the grid.

Heating homes and water, which are energy-intensive applications, in the Ocean State with propane reduces demand for grid electricity. This is notable because during periods of prolonged cold weather, when demand for energy is high, ISO New England has, in the past, relied on oil-fired generation for baseload electricity production.² Oil-fired generation is especially inefficient;³ it is also particularly dirty.⁴

¹ <u>https://portfoliomanager.energystar.gov/pdf/reference/Source%20Energy.pdf</u>

² <u>https://www.iso-ne.com/static-assets/documents/2018/01/envtlupdate_20180130.pdf</u>

³ https://www.eia.gov/electricity/annual/html/epa 08 01.html

While electrons must travel from a generation plant to an end-user by way of power lines, propane can be easily and economically transported in multiple ways, including pipeline, rail and over-the-road vehicles.⁵ From an energy resilience perspective, the ability to move propane in this fashion is quite beneficial. If the ultimate goal is clean energy that is affordable and reliable, then we should be increasing energy options for consumers, not restricting them.

Using propane furthers the fundamental environmental goal to **Reduce, Reuse, and Recycle**⁶ as promoted by EPA. Most people do not realize that propane is a beneficial biproduct of natural gas processing. Approximately five percent of natural gas processing produces propane. Indeed, a global surplus of propane exists and is projected to continue for the next decade.⁷ If propane is not captured and beneficially used to offset another energy source, it is simply burned off. Thus, **propane should be promoted as key component of Rhode Island climate policy**, since reuse of this underutilized biproduct is essentially carbon neutral (surplus biproduct is wasted energy). Good environmental stewards would recognize this fact and reclassify propane to help further the state's emissions reductions. Since propane that is not used is simply wasted, usage of propane should be defined as carbon neutral.

Affordable propane systems promote environmental justice by providing clean energy solutions for Rhode Island families unable to afford high-cost systems. Solar and wind will require energy storage and if we limit our energy sources, we do so at the risk of causing harm. Propane is a perfect partner with renewable energy as it is the cleanest backup for solar installations and wind turbines. Unlike toxic battery storage, propane is a recognized clean alternative fuel which is one of the reasons it is also the preferred partner with solar in net zero housing.⁸ In addition, propane is nontoxic and has no ozone depleting chemicals, unlike electricity transformers which contain SF6 the most potent of all greenhouse gases. Propane microgrids are also a viable solution and can partner with solar microgrid installations to provide dependable clean energy. Rhode Island should be looking at ways to expand the usage of propane and increase local storage so that it is available to meet the demands of increased weather events.

It is also important to note that there are no zero emission energy sources. There are carbon impacts from all energy sources. The materials needed to create solar panels, wind turbines, and electric batteries creates massive amounts of carbon during their production, which often comes from coal powered power plants in other countries. All energy sources also have environmental impacts beyond air emissions. The International Renewable Energy Agency calculates that by 2050, the disposal of worn-out solar panels will constitute over double the tonnage of all of today's global plastic waste. Worn-out wind turbines and batteries will add millions of tons more waste, creating a whole new environmental challenge.⁹

Today, more than ever before, we must be cautious as we draft a plan to improve the health of Rhode Island families, not only to ensure environmental equity in areas of disparity within Rhode Island, but also to prevent environmental

- ⁴ <u>https://www.iso-ne.com/static-assets/documents/2018/01/envtlupdate_20180130.pdf</u>
- ⁵ <u>https://afdc.energy.gov/fuels/propane_production.html</u>
- ⁶ <u>https://www.epa.gov/recycle</u>
- ⁷ https://www.wlpga.org/wp-content/uploads/2019/07/Sustainable-Development-Goals-Contributions-of-LPG.pdf
- ⁸ Zero Net Energy Infographic New England Edition | Propane.com
- ⁹ Solar Panels Are Starting to Die. What Will We Do With the Megatons of Toxic Trash? Mother Jones

detriment to the health of families in other parts of the globe. The atmosphere knows no boundaries, so the reduction of emissions in Rhode Island should not increase emissions in other parts of our planet. Promoting battery technology through the promotion of electricity is currently inflicting environmental harm to a much more egregious extent amongst the poorest and most disadvantaged communities. Locations such as the Democratic Republic of the Congo have plaintiffs who have filed lawsuits against Tesla and other companies that are buying cobalt from these locations to make their electric batteries. ¹⁰ Non-renewable heavy metals like cobalt and lithium are harmful to the environment both when extracted and at end of life.¹¹

Our industry is concerned about the environment and is actively working to reduce carbon emissions. **The propane industry is reducing millions of tons of carbon emissions each year.** Across the globe, propane is being used to solve the world's greatest health threat, indoor air pollution caused primarily by burning wood for cooking and heating. Over 3.5 million people die annually from cooking with solid fuels. This leads to deforestation at an alarming rate in many developing countries and causes enormous carbon dioxide emissions. Moving one family from wood to propane saves over one ton of CO2 per year. In India, the propane industry has partnered with the Indian government to move 3 million people annually from solid fuels to propane, saving over 3 million tons of CO2 emissions per year for the last three years. In addition, moving 50 families to propane from wood saves an acre of rainforest land. Across the globe propane is being used improve human health, reduce carbon emissions, and reduce deforestation. Propane is also literally improving the lives of women around the globe. Once women and girls switch from gathering wood, an activity that takes up to six hours per day and is fraught with danger including snake bite and rape, women are freed to become educated, and spend more quality time with their children.¹² Rhode Island needs to join in this effort recognized by many countries around the globe, and partner with propane as a solution for reducing carbon dioxide emissions.

Rhode Island policymakers should embrace a more pragmatic approach to attain their clean energy and climate goals. A narrow approach heavily skewed towards electricity is shortsighted and will have real ramifications for energy consumers and industry, as was demonstrated this month in Texas. Ultimately, if these electrification policies are implemented at the extent of energy diversity, they will result in reduced business investment, fewer jobs, a retrenchment of clean, low-carbon energy options for consumers, an increase in environmental justice inequities, and a decrease in energy security.

PGANE welcomes the opportunity to further engage with Rhode Island to craft sound environmental and climate policies going forward. Thank you again for the opportunity to provide comment, and we ask you **to vote No on H5279 Energy Siting.**

¹⁰ <u>https://www.business-humanrights.org/en/latest-news/lawsuit-against-apple-google-tesla-and-others-re-child-labour-drc/</u>

¹¹ <u>https://www.atsdr.cdc.gov/phs/phs.asp?id=371&tid=64</u>

https://www.theguardian.com/global-development/2019/dec/18/how-the-race-for-cobalt-risks-turning-it-from-miracle-metal-to-deadly-chemical

¹² <u>https://www.wlpga.org/key-focus-areas/cooking-for-life/</u>