HAWAIʻI GAS
THE CLEAN ENERGY COMPANY

Testimony to the
Committee on Energy and Environmental Protection and the Committee on Housing

Tuesday, February 4, 2020
9:45 AM
Conference Room 325, Hawaii State Capitol

House Bill 2700

Chair Lowen, Chair Brower, Vice Chair Wildberger, Vice Chair Matayoshi and members of the committees,

Hawaii Gas provides these **comments** on HB 2700.

Hawaii Gas shares your commitment to home safety and agrees that new homes should be built to meet best-practices safety standards established by government, industry and watchdog experts. At Hawaii Gas, we institute those best-practices safety measures every day in our pipeline infrastructure, our installations, and our consumer practices.

Our pipeline distribution system is regulated under the federal pipeline safety code, which falls under the jurisdiction of the Department of Transportation's Pipeline and Hazardous Materials Safety Administration's Office of Pipeline Safety. We have extensive safety infrastructure in place throughout our system, including 24/7 safety operators, the ability to remotely shut down gas in the event of over-pressurization, and automatic block valves in the distribution system that can independently sense pressurization issues and adjust accordingly. The natural gas distributed through our pipeline system is, as required by federal law, also odorized with non-toxic chemicals that smell like rotten eggs so that it can be easily and quickly detected by residents.

Hawaii Gas participates with and adheres to codes as established by other federal, state, and county agencies and councils, including the State Fire Council under DLIR, which is tasked with the adoption of state fire code, the county fire departments, Hazard Evaluation and Emergency Response Office under the Department of Health, and the Hawaii Emergency Management Agency.

The National Fire Protection Association (NFPA) also publishes more than 300 consensus codes and standards to minimize the possibility and impact hazards such as fires, which are adhered to in Hawaii and around the country. The issues covered in this bill have been addressed by NFPA 54, the national fuel gas code, as it establishes the standards for safe gas use in residential homes.

It is imperative to correct some of the premise statements in the bill's preamble in order to correctly focus on the problem this proposed bill tries to solve. Section 1 and proposed amendments to the statutes imply and isolate the use of gas appliances as a cause of diminished indoor air quality and assert that gas appliances commonly lead to gas leaks, fires, and explosions. Government data and recent studies consistently show that indoor air quality is impacted by countless environmental conditions—everything from mold, poor ventilation, pesticides, asbestos, cleaning products, cooking fueled by electricity and gas, furniture and carpet off gassing, and even pet dander. In none of the studies is there any conclusion that gas is a contributor to indoor air quality in a significant way.

Similarly, the assertion that gas is a leading cause of leaks or residential fires and explosions is erroneous. Data from the Honolulu Fire Department illustrates that fires started by electrical sources are seven times more likely than gas, based on a ten-year report from 2009-2019.

While the risks associated with natural gas-powered appliances (like cooktops) are extremely low, there are too many other ways that residents might unwittingly find themselves facing harm. It's in everyone's best interest that **all** new homes be included in this bill, including non-natural gas serviced homes. To limit the bill to those homes only utilizing natural gas does not recognize the numerous ways to boost home safety and leaves too many people at risk. The legislature may want to strive to protect everyone, regardless of their fuel source. As this bill's reference to "gas detection systems" is vague, the legislature may also need to clarify and establish standards.

Natural gas appliances are among the most regulated appliances, requiring installation and inspection by professionals to ensure their safe usage. In Hawaii, where gas cooktops are often selected for home use, ventilation hoods are required, thus mitigating the even rare possibility of any accidents. It is the industry standard to recommend to all end-users that their best-practice to keep their natural gas appliances operating safely and efficiently is to ensure the appliances are checked and maintained annually by a licensed, qualified professional.

Appliances and tools in residential environments require various sources of fuel, including electricity, gasoline, diesel, and natural gas. While not found in Hawaii because of our warm climate, heating systems that rely on aging or poorly maintained boiler-based systems could lead to carbon monoxide and are a concern on the Mainland. More often in Hawaii, carbon monoxide can result from idling cars in garages, power tools used in poorly ventilated areas, or from the improper use of generators, lanterns, portable camping stoves, and other such devices in enclosed environments. Additionally, there are numerous known fire hazards in homes, including kitchen fires, improper use of appliances and power tools, and lithium batteries found in household equipment and accessories.

Finally, while we defer to the Board of Realtors on the issue of disclosures in HRS §508D, this statute addresses seller disclosures of material fact, timing, forms, exemptions, exclusions, remedies, due care, etc. It does NOT mandate a list of disclosures. Instead, the seller must provide a "disclosure statement" that purports to fully and accurately disclose all material facts

relating to the residential real property being offered for sale. Opening the door to legislative mandates of specific disclosures would likely create legal concerns and conflicting requirements.

Thank you for the opportunity to testify.

SIERRA CLUB OF HAWAIʻI

HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION

HOUSE COMMITTEE ON HOUSING

February 4, 2020 9:45 AM Room 325

In SUPPORT of HB2700: Relating to Gas

Aloha Chair Lowen, Chair Brower, and members of the committees,

On behalf of our 20,000 members and supporters, the Sierra Club of Hawaiʻi **supports SB2700,** which requires gas detection systems for new homes that are constructed with gas appliances and requires disclosure of gas appliance hazards in real estate transactions.

The "Results of the California Healthy Homes Indoor Air Quality Study of 2011-2013: Impact of Natural Gas Appliances on Air Pollutant Concentrations" was published in early 2015. The report was completed by the Berkeley National Laboratory with funding from the U.S. Department of Energy Building America Program and California Energy Commission. The following excerpts were taken from the report, which states:

> "Residential natural gas appliances can produce pollutants including carbon monoxide, nitrogen dioxide, formaldehyde and ultrafine particles. Numerous studies have found that homes with gas cooking burners and/or gas appliances with pilot burners tend to have indoor concentrations of combustion-related pollutants that are higher than similar homes without gas appliances, and that sometimes exceed U.S. national ambient air quality standards.
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> There are many studies showing associations between exposure to pollutants generated by gas appliances and adverse health impacts, with many of the studies focusing on nitrogen dioxide. The most recent, 2010 EPA assessment for carbon monoxide concluded that "a causal relationship is likely to exist between relevant short-term exposures to carbon monoxide and cardiovascular morbidity, whereas the available evidence is inadequate to conclude that a causal relationship exists between relevant long-term exposures to carbon monoxide and cardiovascular morbidity". Formaldehyde is a known human carcinogen and exposures at levels that occur in homes have been linked to respiratory pathology. A recent study found higher lung function and lower odds of asthma, wheeze, and bronchitis among children whose parents reported using kitchen ventilation when cooking with gas compared to children living in homes in which kitchen ventilation was not used with gas stoves.

> The findings of this study show (1) that use of natural gas cooking burners substantially increases the risk of elevated carbon monoxide, and (2) that gas cooking and the presence of pilot burners on cooking and heating appliances within the living space are associated with elevated nitrogen oxide and nitrogen dioxide are consistent with prior studies and demonstrate that there is still a need to address these indoor air quality challenges in California (and likely other U.S.) homes. Smaller homes are more impacted by pollutant emissions from unvented cooking and pilot burners."[1]

We believe gas detection systems for new home construction are a beneficial way to monitor gas leaks and help minimize the potential negative health impacts of using gas appliances. Likewise, disclosure of gas appliances upon real estate transactions help to inform and protect potential buyers so that they understand and acknowledge the risks of purchasing a home that relies upon gas cooking stoves and other appliances.

Thank you very much for this opportunity to provide testimony in **support of HB2700.**

Mahalo,

Jodi Malinoski, Policy Advocate

[1] Mullen, Nasim A., et al. "Results of the California Healthy Homes Indoor Air Quality Study of 2011-2013: Impact of Natural Gas Appliances on Air Pollutant Concentrations." *Indoor Air*, ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY, 17 Mar. 2015, www.osti.gov/servlets/purl/1236693.

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Submitted By	Organization	Testifier Position	Present at Hearing
Jennifer Azuma Chrupalyk	Individual	Support	No

Comments: