

July 1, 2020

Via Electronic Mail

Attn: Abhilasha Wadhwa,
Energy Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102
Abhilasha.Wadhwa@cpuc.ca.gov

Re: CEJA, NRDC and Sierra Club's Informal Comments on SB 1477 Data Development

Dear Ms. Wadhwa,

The California Environmental Justice Alliance ("CEJA"), the Natural Resources Defense Council ("NRDC") and Sierra Club respectfully submit these informal comments on the California Public Utilities Commission's ("Commission's") June 17, 2020 SB 1477 workshop discuss data needs related to the BUILD and TECH programs. As discussed below, CEJA, NRDC and Sierra Club request that the Commission ensure that data needs are consistent with the State's long term vision of drastically reduced gas use, prioritize equity considerations, and only focus on electrification consistent with the Commission's decision in the SB 1477 proceeding.

1. Data Needs Should Be Developed Consistent with the State's Long Term Vision and Inform Multiple Proceedings

CEJA, NRDC, and Sierra Club agree with the Commission's staff that the data framework and process should be developed with consideration of the State's long term vision anticipating widespread replacement of gas technologies and gas utility assets, and an overall reduction in demand for gas.¹ Planning for these needs is important to ensure that we have the data necessary to enact the type of policies and measures necessary to meet California's greenhouse gas ("GHG") goals and requirements. In particular, we believe that the data collection process begun for the BUILD and TECH programs should be leveraged to assist the Commission with the data needs in the long term gas planning proceeding, Rulemaking 20-01-007.² Like the BUILD and TECH programs, the Commission's long term gas planning proceeding shares the goal of reducing our reliance on the gas system, and it will be examining how to best manage gas infrastructure in light of the substantial declines in gas demand necessary to meet the State's GHG goals and requirements.

¹ See, e.g., Order Instituting Rulemaking in D. 20-01-007, (Jan. 16, 2020).

² See D. 20-01-007, Assigned Commissioner's Scoping Memo and Ruling (April 23, 2020) at 6 (acknowledging "other ongoing efforts related to data gathering and mapping needs that may directly affect Track 2 of this proceeding, and that additional data beyond what other proceedings are collecting may be needed" and stating, "Energy Division will be coordinating all data needs with related proceedings to ensure a complete data set and avoid any duplicative efforts.")

Specifically, the State’s long term vision should include meeting the requirements of SB 100 and the policy outlined in Executive Order B.55-18. SB 100 requires 60 percent renewable energy by 2030, and then sets a goal of 100 percent carbon-free and renewable energy by 2045. SB 100 does not include energy from gas combustion in the definition of renewable resources, and aims to reduce fossil fuel use by increasing “zero-carbon” resources. Although the statute does not define what qualifies as “zero-carbon,”³ the Legislature notes that “[d]isplacing fossil fuel consumption” is a priority when increasing renewable resources.⁴ This necessarily implies a phase out of fossil fuel resources, and certainly not expanding or retrofitting gas resources.⁵

Allowing for the indefinite continuation of combustion sources contradicts the equity goals of SB 100. The intent of SB 100 and its predecessors is to encourage clean energy development and innovation; to reduce fossil fuel combustion and air pollution; and in so doing, to promote equity.⁶ Gas power plants and supporting facilities are disproportionately located in disadvantaged communities (“DACs”), present significant social costs, pose a threat to the health and safety of the surrounding community, and contribute greatly to reduced air quality.⁷

Furthermore, assuming gas operating into 2050 is inconsistent with Executive Order B-55-18, which declares a new statewide goal to achieve carbon neutrality as soon as possible, and no later than 2045. As the California Energy Commission determined in its Integrated Policy Research Report (“IEPR”) “[t]here is a growing consensus that building electrification is the most viable and predictable path to zero-emissions buildings” and is “*essential* to California’s strategy to meet its GHG reduction goals for 2030 and 2050.”⁸ Given the significant declines in gas demand necessary across all sectors to meet California’s climate objectives, it is critical to measure ways to reduce, and not expand, our reliance on gas and its infrastructure as Mr. Colvin from EDF discussed in his presentation.

2. Equity Considerations Should Be Central to Developing Data Needs

As Ms. Katie Wu from Gridworks discussed in her presentation, equity considerations should be central for developing data needs to help inform future policy development. Disadvantaged and low-income communities and residents face significant barriers to developing the technologies necessary to decarbonize their homes, and they also face higher energy burdens and energy insecurity. These burdens and barriers are exacerbated by climate change and rising temperatures. We further agree that access to quality data is a crucial first step to help ensure that these communities are not left further behind in the decarbonization transition. Given that a significant portion of the budget for the BUILD and TECH programs is targeted to low-income

³ Sen. Bill No. 100 (2017–2018 Reg. Sess.) (2).

⁴ Sen. Bill No. 100 (2017–2018 Reg. Sess.) § 2 (Pub. Util. Code § 399.11, subd. (b)(1)).

⁵ The Senate Committee also noted that the term “zero-carbon” resource is purposefully left undefined, but stated that these resources *should displace* fossil fuel use.

⁶ See Sen. Bill No. 100 (2017–2018 Reg. Sess.) § 2 (Pub. Util. Code § 399.11); *supra* Part I.A.(i).

⁷ See Cushing, et al., *A Preliminary Environmental Equity Assessment of California’s Cap-And-Trade Program* (Sept. 2016) USC Dornsife p. 4

<https://dornsife.usc.edu/assets/sites/242/docs/Climate_Equity_Brief_CA_Cap_and_Trade_Sept2016_FINAL2.pdf> (noting a correlation between GHG emitting facilities and the amount of air pollution).

⁸ Docket No. 18-IEPR-01, *2018 IEPR Update Volume II* at 28, 32 (Mar. 21, 2019) (emphasis added), https://ww2.energy.ca.gov/2018_energypolicy/documents/.

housing,⁹ the data developed through BUILD and TECH could be particularly important for examining equity considerations.

Ms. Wu presented three types of community-based metrics that should be considered: community resilience, energy burden, and health impacts. We discuss all three of these metrics along with accessibility to the program for all qualifying residents.

- A. *Accessibility to Programs for Renters and Multi-Family Housing* – Low-income and disadvantaged communities face a number of barriers for development of building decarbonization programs, including the fact that 70 percent of California’s low-income population are renters, and 47 percent of the low-income population lives in multi-family housing.¹⁰ It is difficult to ensure that low-income renters benefit from potential decarbonization upgrades while ensuring a property owner’s participation. This split incentive issue is particularly difficult in low-income multi-family housing where buildings may be master-metered. A survey conducted by Evergreen Consultants found that this is one of the primary barriers that prevents low-income households from participating in energy programs.¹¹ This issue, along with the possibility of displacement, must be addressed to meaningfully reduce the gap between renter multifamily housing and the rest of the state. These barriers often lead to disparities in the adoption of programs that can lower energy costs. For example, many high-density, low-income areas in Los Angeles served by SCE score low on the amount of net-energy metered rooftop solar per 1,000 people.¹² Given this significant barrier, data is needed to measure how the BUILD and TECH programs address barriers related to home ownership and how these programs prevent the potential displacement that can result from the adoption of home improvements. Data from the ability of the programs reduce barriers to renters and avoid potential displacement could be used to develop future programs and policies.
- B. *Accessibility due to Outreach and Marketing* - Insufficient outreach can lead to a disconnect between potential programs and reaching the communities that need them the most. Low-income customers may have distrust of programs marketed to them unless an organization that they trust is included in the outreach. Language barriers can also inhibit participation. For example, Evergreen found that households that speak Asian languages “have lower participation rates than low-income households in general suggesting the need for more exploration of their needs and opportunities to engage them.”¹³ Given the significant percentage of funds in the BUILD and TECH program that are targeting low-income households and/or supposed to benefit low-income households, measuring the effectiveness of outreach is important to improve upon for future programs.

⁹ See D.20-03-027, pp. 19, 57, 97, 109-110.

¹⁰ CEC, SB 350 Barriers Report, p. 12.

¹¹ See CEC, SB 350 Barriers Report, p. 13 (citing Evergreen Report).

¹² CEC Tracking Report, p. 2.

¹³ See Evergreen Consulting, Needs Assessment for the Energy Savings Assistance and the California Alternative Rates for Energy Programs, p. 115 (Dec. 15, 2016) available at <https://www.cpuc.ca.gov/iqap/>.

- C. *Energy Burden* – As Ms. Wu correctly described, low-income community members face significant energy burdens. Some estimates have found that low-income families have to pay up to 15 percent of their income on energy bills compared to 2 percent for higher income families.¹⁴ In a recent study by Evergreen Consulting, a third of low-income households indicated that they struggle with energy bills either often or constantly, and most of them said they could not heat or cool their homes any less to try to lower their energy bills without negatively impacting their household.¹⁵ Bills in some areas of the state are also very high. For example, more than 23,000 households in SCE low-income census tracks received an August 2014 electricity bill more than \$300.¹⁶ The degree of hardship varies depending on location and circumstances. As Evergreen summarized, “[l]ow-income households in all major housing types face some form of elevated [energy] hardship, but the type of hardship varies by housing type of ownership status.”¹⁷ Measuring these energy burdens in relation to decisions to decarbonize is essential information for developing measures that target ways to reduce this significant barrier. In assessing energy burdens, the Commission should also take this opportunity to develop data through BUILD and TECH to add to the state’s understanding of the non-energy benefits from electrification resources. As noted in the Gridworks presentation, the 2019 Greenlining and Energy Efficiency for All publication highlights “...an equitable transition will respect people’s and communities’ right to self-determination and will seek to build trust among communities that may view clean energy as a false choice that is forced upon them without consideration of their wishes and needs.”¹⁸ The BUILD and TECH pilot programs could provide the Commission with additional opportunities to gather data to tackle the energy burden barrier to electrification, such as informing the “rebound effect,” or how to deploy technologies successfully in DACs, as the state transitions away from gas. In other words, these programs provide the Commission with the opportunity to replace that “false choice” with an informed choice, especially given these programs’ extensive outreach and education efforts.
- D. *Community Resilience* – As Ms. Wu raised, measuring community resilience is important, especially in light of the changing climate conditions. Measurements of community resilience should look at workforce and whether jobs are centered in the community; displacement protections and whether programs ensure that community members are not displaced; and development of resilience centers and resources to ensure that communities continue to have power. This consideration is important as PSPS events become more of a reality. In a power loss situation, low-income and disadvantaged communities do not have the same resources as other communities to

¹⁴ CEC, SB 350 Barriers Report, A-1, p. 12.

¹⁵ See Evergreen Consulting, Needs Assessment for the Energy Savings Assistance and the California Alternative Rates for Energy Programs, p. 7 (Dec. 15, 2016) available at <https://www.cpuc.ca.gov/iqap/> (hereinafter Evergreen Report)

¹⁶ CEC Tracking Report, p. 11.

¹⁷ See Evergreen Consulting, Needs Assessment for the Energy Savings Assistance and the California Alternative Rates for Energy Programs, p. 75 (Dec. 15, 2016) available at <https://www.cpuc.ca.gov/iqap/>.

¹⁸ Greenlining Institute, Equitable Building Electrification Framework for Powering Resilient Communities, <https://greenlining.org/publications/reports/2019/equitable-building-electrification-a-framework-for-powering-resilient-communities/>.

respond to these outages, and the loss of power can quickly become a catastrophe, especially for vulnerable community members. With the development of the BUILD and TECH program, community resilience metrics should be developed and data gathered to ensure that community resilience in the most vulnerable communities continues to improve as the State decarbonizes.

- E. *Health Impacts* – We also agree with Ms. Wu that health impacts associated with decarbonization should be quantified. This includes quantification of the resultant improvements in both indoor and outdoor air quality that might result from decarbonization measures. NO_x is produced from buildings that burn gas at a higher rate than from power plants because buildings are not equipped with pollution control equipment. In fact, buildings in California produce almost seven times as much NO_x as power plants.¹⁹ Measuring the reductions of air pollution is especially important because many parts of California are not attaining protective health standards for ground ozone and particulate matter.²⁰ NO_x, which is emitted when gas is burned, is a precursor for both fine particulate matter and ground ozone. Thus, reducing NO_x from both electrical generation and buildings is likely to be an important way for California to come into attainment with health protective standards. Thus, each ton of pollution matters especially in disadvantaged communities in California since many air basins throughout the State are not attaining ambient air standards. In fact, “[i]n its 2015 Clean Power Plan, the U.S. Environmental Protection Agency estimated the 2020 health benefit of reducing NO_x emissions to be highest in California, at \$22[,000]-49,000/ton in PM_{2.5} specific benefits and \$14[,000]-59,000/ton in ozone-specific benefits.”²¹

3. Data Should Be Focused on Electrification, Not Fossil Gas Alternatives, Consistent with the Focus of the BUILD and TECH programs.

During the workshop, a number of utilities presented information on the possibility of alternative fuels replacing fossil gas. This possibility should not be explored in the data from the BUILD and TECH programs, consistent with the Commission’s decision in the SB 1477 proceeding.

In D.20-03-027, the Commission rejected utilities’ numerous requests for the inclusion of biomethane and synthetic gas and hydrogen into the pilot programs.²² In particular, the Commission stated “[i]ncentive eligibility for the BUILD Program shall be limited strictly to new residential housing building projects that are all-electric and have no hookup to the gas

¹⁹ NRDC, *Gas Appliances Pollute Indoor and Outdoor Air, Study Shows*, <https://www.nrdc.org/experts/pierre-delforge/gas-appliances-pollute-indoor-and-outdoor-air-study-shows>

²⁰ CARB, *Air Quality Standards*, <https://ww3.arb.ca.gov/research/aaqs/aaqs2.pdf>

²¹ Elena Krieger, et. al, *A Framework for Siting and Dispatch of Emerging Energy Resources to Realize Environmental and Health Benefits: Case Study on Peaker Power Plant Displacement*, ENERGY POLICY 96 (2016), 302-313.

²² D.20-03-027, p. 91 (“We decline to adopt the recommendations by SWG, SoCalGas, and CHBC for the inclusion of renewable natural gas and hydrogen into these pilot programs.”)

distribution grid.”²³ As the Commission reasons, “limiting natural gas line extensions are of strategic policy value to California and it is not appropriate to provide BUILD program incentives for projects that ultimately require natural gas infrastructure extensions to serve one or more home appliances.”²⁴

Given the Commission’s clear direction limiting BUILD and TECH to electrification, data developed from the BUILD and TECH programs should not be focused on alternative fuels, but rather should be limited to electrification consistent with the strategic policy value that the Commission affirmed.

4. Additional Data Needs for Gas System Planning Should Be Publicly Available

There is currently extremely limited publicly accessible data on the gas system. The lack of data precludes informed decision making on targeting electrification efforts in a manner that would avoid further capital investment in the gas system. As a start, each utility should be required to provide downloadable gas infrastructure maps that provide at least the following information:

- the book value, age, and location of existing gas distribution and transmission infrastructure;
- leakage rates (if known) and estimation of leakage rates (if not known);
- locations of Aldyl-A pipe; and
- any areas where pipeline replacement is anticipated within the next 10 years.

In addition, the gas utilities should also provide data on total annual ratepayer subsidies for gas line extensions under Gas Rules 15 and 16 for the last 10 years. If feasible this data should be broken down to building type and relative density of building location (e.g. urban, suburban, rural).

Thank you for the opportunity to present these informal comments.

Sincerely,

/s/ Merrian Borgeson

Merrian Borgeson
Representing NRDC

/s/ Deborah Behles

Deborah Behles
Representing CEJA

/s/ Matt Vespa

Matt Vespa
Representing Sierra Club

cc: Service List for R.19-01-011

²³ D.20-03-027, p. 4.

²⁴ D.20-03-027, pp. 65-66.