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Sent: Monday, November 25, 2019 11:28 AM

To: Welch, Virgil@ARB <Virgil.Welch@arb.ca.gov>

Subject: Asm. Friedman call follow up

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Virgil –

Following call with Chair Nichols, Asm. Friedman asked me to send this letter again, to be sure it makes its way to Chair Nichols. I believe she told my boss she would review it and respond.

Also including specific list of issues my boss intended to share at meeting.

Appreciate your attention to this and happy to discuss in more detail.

Thanks,

Lawrence

Lawrence Lingbloom

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CALIFORNIA LEGISLATURE

STATE CAPITOL
SACRAMENTO, CALIFORNIA
95814

October 21, 2019

Mary D. Nichols, Chair
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Dear Chair Nichols:

We write to bring to your attention our concerns that ARB's long-overdue implementation of Assembly Bill 1637 (Low, 2016) appears to be off track and may not be consistent with the requirements of the statute or the intent of the Legislature.

AB 1637 extended and revised the statute requiring investor-owned electric utilities to offer a net energy metering (NEM) tariff to customers using eligible fuel cell generators. Among its provisions, AB 1637 required ARB, not later than March 31, 2017, to establish a schedule of annual greenhouse gas (GHG) emissions reduction standards for a fuel cell electrical generation resource. This replaced the prior statute's requirement that eligible fuel cells meet the GHG emission factor established by the Public Utilities Commission (PUC) for purposes of the Self Generation Incentive Program (SGIP).

We were surprised to learn that ARB staff has proposed a GHG emissions standard for fuel cells that allows for more GHG emissions than any prior standard established by the PUC, dating back to 2011, and which appears to be higher than the emission rates for existing natural gas fuel cells. If adopted, the standard will have the perverse effect of forcing ratepayers to subsidize natural gas use by as much as 603 megawatts of fuel cell generation that is no more efficient than any number of recently-constructed natural gas power plants subject to ARB's cap and trade regulation.

We do not think the statute permits, or the Legislature intended, ARB to set the bar so low. In place of the prior SGIP standard, AB 1637 requires the GHG standards set by ARB to "ensure that each fuel cell electrical generation resource...reduces greenhouse gas emissions compared to the electrical grid resources, including renewable resources, that the fuel cell electrical generation resource displaces, accounting for both procurement and operation of the electrical grid."

We agree with our colleague Assemblymember Low that ARB should adopt a strict GHG standard that ensures fuel cell operations are cleaner than the grid. We also recognize that the

annually-adjusting standard required by AB 1637 justifies a different approach than the PUC has adopted for the SGIP, particularly in future years. However, the starting point must be significantly more stringent than the current staff proposal to comply with the statute and assure ratepayers' support of fuel cells through NEM spurs increased efficiency and cleaner fuels.

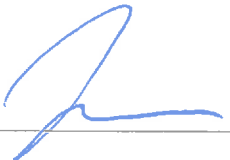
In addition to the plain language in the statute, there is an abundant record in the analyses and hearing testimony prior to votes on AB 1637, as well as the related bills that preceded AB 1637 (AB 1530 and AB 674) to support the common-sense conclusion that the new standard established under AB 1637 should be more stringent than the SGIP standard the Legislature chose to replace.

The Legislature's decision to give the job to ARB was intentional. From our perspective, it was motivated by our confidence in ARB and our expectation that ARB would do a better job than the PUC.

For context on this point, please see the attached letter sent to PUC President Michael Picker in 2015 regarding a proposed decision to adopt a GHG emission factor of 360 kg/MWh. The PUC ultimately adopted a more stringent, declining standard, which remains in effect for purposes of SGIP eligibility. The same concerns outlined in the 2015 letter apply today, only more so because we have since enacted laws to increase the Renewables Portfolio Standard and advance building decarbonization.

We expect ARB to set a standard that will promote innovation, requiring fuel cells to improve efficiency and/or use low-carbon fuels to achieve GHG emissions rates that keep pace with our broader efforts to decarbonize the grid.

Sincerely,


AD 43


AD 29


AD 41


SD 11

CALIFORNIA LEGISLATURE

STATE CAPITOL
SACRAMENTO, CALIFORNIA
95834

August 4, 2015

Michael Picker, President
Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

RE: Proposed Decision Revising The Greenhouse Gas Emission Factor to Determine Eligibility to Participate in the Self-Generation Incentive Program

President Picker:

As you know, we are working with Governor Brown and our colleagues in the Legislature to establish long-term targets and measures to reduce greenhouse gas emissions, including specific measures to increase renewable energy and reduce emissions from the electricity and natural gas sectors. As a primary regulator of the electricity and natural gas sectors, the Public Utilities Commission plays an integral role in this effort, and the Commission's commitment to use its authority to achieve greenhouse gas emission reductions is essential to address climate change.

Last year, the Legislature reauthorized the Self-Generation Incentive Program (SGIP) until 2021, which represents a commitment of an additional \$415 million in ratepayer funds to support the installation of new distributed energy resources which are expected to be in operation through 2030 and beyond.

Prior to including the reauthorization of SGIP in SB 861, the Legislature held multiple hearings and reviewed the performance of the program. Among other things, we found that the program was delivering minimal greenhouse gas emission benefits at extremely high costs, representing a poor value for ratepayers and not meeting the intent of prior SGIP reauthorization legislation. One of the reasons for the program's lackluster performance has been a greenhouse gas emission factor based on irrelevant and outdated emissions data and assumptions.

For these reasons, SB 861 included a series of SGIP "reforms," including requiring the Commission to update the greenhouse gas emission factor "based on the most recent data available to the State Air Resources Board for greenhouse gas emissions from electricity sales in the self-generation incentive program administrators' service areas as well as current estimates of greenhouse gas emissions over the useful life of the distributed energy resource, including consideration of the effects of the California Renewables Portfolio Standard."

Michael Picker
August 4, 2015

In light of all this, we are deeply disappointed with your proposed decision, which meets neither the letter nor the spirit of the statute. Rather than updating SGIP with an eye toward achieving direct GHG emission reductions from the \$415 million investment, as well as supporting innovations that will produce additional reductions and other public benefits, the decision requires a paltry five percent reduction in GHG emissions compared to the existing standard which is outdated and ineffective. In fact, the decision appears to be skewed to maintain eligibility for existing technologies operating on 100 percent conventional natural gas. We don't think this is consistent with the state's long term climate and energy goals.

We also note that existing natural gas technologies could meet a more stringent standard and produce significant greenhouse gas emission reductions, even with no improvements in efficiency, if they were required to use renewable directed biogas from in-state sources.

Not only does the result not meet the Legislature's intent, your process has apparently disregarded the plain requirements of the statute. Based on a review of the record, as well as reports of Commission and ARB staff, the Commission has not meaningfully consulted with ARB, has not requested the most recent data available to ARB, even though ARB has confirmed its availability, and has not adjusted the standard according to emissions in each SGIP administrator's service area.

If your decision is adopted, SGIP will continue the increasingly absurd practice of subsidizing natural gas consumption, supporting existing technologies that have already taken hundreds of millions of dollars from SGIP and other public subsidies without producing substantial efficiency improvements, cost reductions, or general benefits to ratepayers, squandering the \$415 million ratepayer investment authorized by SB 861 and undermining our collective efforts to clean the grid and transition away from fossil fuels.

Let's do better for our ratepayers and our climate. We urge you reconsider your proposed decision and lead the Commission to adopt a stronger standard.

Sincerely,



Assemblymember Das Williams
Chair, Natural Resources Committee



Assemblymember Richard Bloom
Chair, Budget Subcommittee on Resources
And Transportation



Assemblymember Anthony Rendon
Chair, Utilities and Commerce Committee

Cc: Commissioners
Lynn Sadler, Director, Office of Governmental Affairs

Why is CARB proposing a "GHG reduction" standard for fossil fuel cells that actually *increases* allowable GHG emissions?

AB 1637 requires CARB to adopt GHG emissions reduction standards to ensure that each fuel cell participating in the Fuel Cell Net Energy Metering (FCNEM) tariff reduces GHG emissions compared to the electrical grid resources, including renewable resources, the fuel cell displaces, accounting for both procurement and operation of the electrical grid.

Issues with CARB's proposed FCNEM GHG Emission Standards Regulation:

1. CARB staff proposes a GHG standard of **409 kg/MWh** in 2017, declining thereafter at 2.5%/year (i.e., 399 in 2018, 389 in 2019, 379 in 2020, 370 in 2021, and 360 in 2022).
2. CARB's GHG standard replaces the Self Generation Incentive Program (SGIP) GHG factor set by the CPUC, which was **334 kg/MWh** in 2016 (the most recent year prior to AB 1637), and is **325 kg/MWh** in 2019.
3. CARB's proposed standard reverses a decade of increasingly stringent GHG standards for distributed generation subsidy programs, dating back to SB 412 (Kehoe, 2009). Pursuant to SB 412, the CPUC adopted an initial GHG factor for SGIP of **379 kg/MWh**. (Prior to AB 1637, the SGIP GHG factor also served as the GHG standard for FCNEM.)
4. Following March 2014 Assembly oversight hearings re: poor performance/value of SGIP, SB 861 (Budget, 2014) required the CPUC to update the SGIP GHG factor.
5. Pursuant to SB 861, the CPUC adopted a GHG factor of 334 kg/MWh for 2016, declining to 321 kg/MWh for 2020. The Legislature was well aware of this when it chose to replace SGIP as the GHG standard for FCNEM and instead require CARB to set the standard via AB 1637. The Legislature's explicit and reasonable expectation was that CARB would set a more stringent standard than the CPUC. Fuel cell advocates were aware of this as well. In fact, they resisted the switch to CARB, proposing the standard be set by the CEC or remain at the CPUC.
6. In April 2016, Bloom Energy itself proposed to set a GHG standard of 379 kg/MWh in statute instead of the provision requiring CARB to set the standard (see April 26, 2016 version of AB 1530). This version of AB 1530 was rejected, and Bloom Energy was required to restore the prior language approved by Assembly Natural Resources Committee, which was later inserted into AB 1637 in a gut and amend on August 18, 2016.
7. The GHG standard CARB staff proposes is such a huge step backwards, it is unlikely to have any binding effect, even in the sixth year, 2022, when it is 360 kg/MWh.
8. According to the CPUC, 106 fuel cell projects were interconnected under the FCNEM tariff in 2016 (the most projects in the program's history) when the SGIP standard was 334 kg/MWh.
9. According to the CEC, at least 19 natural gas power plants emitted GHG at a *lower* rate in 2017 than the 2017 "GHG reduction" standard of 409 kg/MWh proposed by CARB for fuel cells. Of course, these plants are not considered GHG reducing relative to the grid. They are considered major GHG

emitters, subject to cap and trade. Allowances must be obtained to cover their GHG emissions, which generates revenue for utility climate credits and GHG reduction projects.

10. The FCNEM tariff may induce the installation of up to 603 MW of natural gas fuel cell generation through 2021, which will continue to operate, becoming less efficient with age, over the same 10-20 year span when the state has committed to achieve at least 60% renewables and push toward 100% zero-carbon electricity.
11. It is inconceivable that CARB would endorse subsidizing customers to make long-lived investments in natural gas generation (in place of IOU/CCA-provided electricity subject to RPS and SB 100) that is significantly dirtier than the grid on average and even dirtier than prevailing market-based gas generation technologies (i.e., combined-cycle gas turbines).

2017 GHG emissions rates (kgCO₂/MWh)

| | |
|--|------------|
| CARB staff proposed “GHG reduction” standard for fuel cells | 409 |
| CPUC Self Generation Incentive Program eligibility | 332 |
| PG&E grid average | 95 |
| SCE grid average | 249 |
| SDG&E grid average | 208 |
| Recent gas plants ¹ : | |
| - Inland Empire | 373 |
| - Cosumnes | 376 |
| - Pastoria | 376 |
| - Sunrise | 377 |
| - Elk Hills | 378 |
| - Palomar | 378 |
| - Moss Landing | 381 |
| - Blythe | 383 |
| - Lodi | 383 |
| - Magnolia | 386 |
| - Russell City | 387 |
| - Colusa | 388 |
| - Otay Mesa | 388 |
| - Gateway | 389 |

¹ These combined-cycle gas turbines, constructed in the past 20 years, are considered major GHG emitters and subject to mandatory reporting and cap and trade. However, all are more efficient (i.e., lower CO₂ emissions rate) than the “GHG reduction” standard proposed by CARB staff for fuel cells. Source: California Energy Commission, 2017 Quarterly Fuel and Energy Reports (QFER).