



*Via online filing*

Dave Mehl  
Manager, Energy Section  
California Air Resources Board  
1001 "T" Street  
Sacramento, CA 95814

**Re: Support of Revised Greenhouse Gas Emissions Standards for the Fuel Cell Net Energy Metering Program**

Dear Mr. Mehl:

Sierra Club and Earthjustice write to express our support for the Air Resource Board's ("ARB") revised greenhouse gas emissions standard for Fuel Cell Net Energy Metering ("FC-NEM"). We support ARB's decision to base the standard off of the estimated long-run marginal emissions rate calculated by E3's Avoided Cost Calculator, and believe the standard will ensure the use of qualifying fuel cells reduces overall greenhouse gas emissions. Additionally, in order to help the Public Utilities Commission ("PUC") implement ARB's standard, we urge ARB to clarify that qualifying fuel cells are required to re-certify their compliance with each calendar year's new annual standard each year that the fuel cells seek incentives.

Assembly Bill 1637 requires ARB to ensure the FC-NEM greenhouse gas limit "reduces greenhouse gas emissions compared to the electrical grid resources, including renewable resources, that the fuel cell electrical generation resource displaces."<sup>1</sup> Modeling the marginal avoided emissions from a behind-the-meter resource, as the authorizing legislation calls for, necessarily requires generalizations. While E3's avoided cost model does rely on simplifications and assumptions about utility procurement and resource dispatch, we believe they are well-reasoned and justified. As ARB staff stated during the February 13, 2018 working group meeting, adding additional detail to the model is an endeavor with diminishing returns. Indeed, just as some stakeholders may argue for revised modeling assumptions that would function to weaken the proposed standard, accounting for other factors, such as increased renewable curtailment from an additional 500 MW of baseload resources from the fuel cell NEM program, would lower the proposed standard. Ultimately, Sierra Club and Earthjustice agree with ARB

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<sup>1</sup> Cal. Pub. Util. Code § 2827.10(b)(2).

that the Avoided Cost model used here is a rigorous and reasonable method for estimating avoided emissions and setting the greenhouse gas standard.

We do strongly recommend ARB explicitly clarify in the regulation that a fuel cell must perform better than the applicable annual greenhouse gas standard each year in order to continue to be eligible for FC-NEM compensation. ARB is required to update the schedule of annual greenhouse gas emissions reduction standards every three years.<sup>2</sup> Over the operating life of a fuel cell, ARB's greenhouse gas limit can be expected to continue to fall annually, reflecting increasing renewable penetration on the grid. At the same time, the fuel cell will age and its efficiency will degrade. It is therefore critical that fuel cells continue to demonstrate annually that they are in compliance with the greenhouse gas limit. Furthermore, because ARB is required by law to update the standard every three years, it is not permissible or possible to establish an average greenhouse gas emissions limit that would extend over the life of the equipment.

The greenhouse gas standard ARB sets will be implemented by the PUC. Clarifying that ARB's "annual" standard is a yearly compliance obligation will facilitate the PUC's faithful implementation of ARB's intention. We recommend ARB add a definition to section 95410 of the proposed regulation specifying that "annual greenhouse gas emissions standard" means the maximum level of a fuel cell's emissions, measured each year that it seeks incentive payments.

Sierra Club and Earthjustice encourage ARB to approve the revised standard, and send the FC-NEM program to the Public Utilities Commission for implementation. Thank you for consideration of these comments.

Respectfully,

/s/ Alison Seel

Alison Seel  
Sierra Club  
2101 Webster St., Suite 1300  
Oakland, CA 94612  
Telephone: (415) 977-5773  
Email: alison.seel@sierraclub.org

Matthew Vespa  
Earthjustice  
50 California St., Suite 500  
San Francisco, CA 94111  
mvespa@earthjustice.org  
Telephone: (415) 217-2123  
Email: mvespa@earthjustice.org

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<sup>2</sup> Cal. Pub. Util. Code § 2827.10(b)(1).