

# CCDC

## CALIFORNIA CLEAN DG COALITION

July 22, 2019

California Air Resources Board  
1001 I Street  
Sacramento, CA 95814

**Re: Preliminary Discussion Draft Fuel Cell Net Energy Metering Greenhouse Gas Emission Standards**

California Air Resources Board:

The California Clean DG Coalition (CCDC) appreciates the opportunity to provide these comments on the Preliminary Discussion Draft Fuel Cell Net Energy Metering (NEM) Greenhouse Gas (GHG) Emission Standards. CCDC is an ad hoc group interested in promoting the ability of distributed generation (DG) system manufacturers, distributors, marketers and investors, and electric customers, to deploy DG. Its members represent a variety of DG technologies including combined heat and power (CHP), renewables, gas turbines, microturbines, reciprocating engines, and storage.<sup>1</sup> Through these comments, CCDC requests that the California Air Resources Board (CARB) modify the Draft 2030 Update to affirm the role of CHP in contributing to greenhouse gas (GHG) emission reduction goals, and supporting the integration of more renewable generation into the California grid.

***Inclusion of Line Loss Factor***

One of the major benefits of distributed generation is the avoidance of electrical transmission and distribution (T&D) losses. CCDC encourages CARB to include a T&D loss factor in setting the 2017 emissions factor. California's Self Generation Incentive Program uses a "line loss factor" of 8.4%.<sup>2</sup> Using this factor, the 2017 emissions standard would increase from 409 kg/MWh to 446 kg/MWh. Appropriate corresponding adjustments should also be made to the proposed GHG emission standards for years 2018 through 2022.

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<sup>1</sup> CCDC is currently comprised of Cal Microturbine; Capstone Turbine Corporation; Caterpillar, Inc.; Clearway Energy; Cummins, Inc.; DE Solutions, Inc.; EtaGen, Inc.; Hawthorne Power Systems; Holt of California; MMR Power; Penn Power Systems; Peterson Power Systems; Solar Turbines, Inc.; and Tecogen, Inc.

<sup>2</sup> <https://www.selfgenca.com/documents/handbook/2017>

***Support for Annual Reduction***

CCDC encourages CARB to provide supporting documentation for the 2.5% annual reduction in the standard. This level of reduction implies, based on the logic used to generate the standard, that the number of hours that renewable resources are on the margin is expected to increase from 110 hours in 2017 (1.3%) to 1,138 hours in 2022 (13%), which seems unrealistically high. Given that the standard will be updated for 2023 based on public data, but not to exceed the 2022 standard, CCDC encourages CARB to use a supportable methodology for determining the annual reduction percentage.

***Conclusion***

CCDC appreciates CARB's consideration of these comments on the Fuel Cell NEM GHG emission standards.

Sincerely,

California Clean DG Coalition