## Comments by EtaGen on the Second Public Workshop of the GHG Emissions Reduction Standard for the Fuel Cell NEM Program

## Introduction

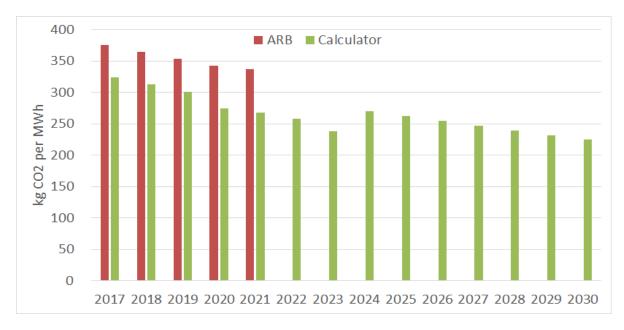
Driven by its mission to bring affordable, reliable, and clean power to the world, EtaGen has developed advanced power generation technology that unlocks the full potential of distributed generation. EtaGen's linear generator technology uses a low-temperature reaction of air and fuel to drive magnets through coils to efficiently produce electricity -- providing customers an unmatched combination of economic value, resiliency, and GHG savings.

EtaGen has been an active participant in these proceedings and appreciates the opportunity to submit comments in response to the Second Workshop held by the Air Resources Board ("ARB").

## Comments

EtaGen asks for clarification on several discrepancies between the CPUC's Avoided Cost Calculator ("Calculator") and the avoided emissions factors proposed by ARB in the Draft Regulation Order.

The plot below shows the avoided emissions factors from the Calculator (tab "Emissions", row 60, and starting in column D, converted to kg/MWh below) and those proposed by ARB. Why do the emissions factors not match? Why do the avoided emission factors from the calculator increase in 2024? What, if any, inputs to the Calculator were modified by ARB? What are the transmission and distribution losses that are used? In order for stakeholders to be able provide constructive feedback, it would be especially useful for ARB to state these assumptions.



In addition to the aforementioned questions about the Calculator used by ARB, EtaGen strongly disagrees with discounting the avoided emission factors by the Renewable Portfolio Standard ("RPS") percentage. Discounting the avoided emission factor by the RPS percentage has been

proposed in CPUC rule makings based on the argument that, since behind-the-meter ("BTM") fuel-based generation reduces demand on the grid, the IOUs can purchase less renewable energy in order to meet their RPS targets. However, this logic is inherently flawed for two reasons. First, pursuant to California Public Utilities Commission ("CPUC") rulemaking, BTM generation is not considered in IOU capacity planning processes and, therefore, could not impact renewable procurement. Second, in 2013, passage of Assembly Bill 327 changed the law such that the RPS percentage is now a floor, not a cap, thereby giving utilities the authority to contract/purchase an amount of renewable energy greater than the mandated RPS percentage (in the event that there is lower demand).

Just as reductions in demand from energy efficiency improvements do not impact renewable energy procurement, reductions in demand from BTM fuel-based generation also do not impact renewable energy procurement. For these reasons, it would be improper and inaccurate to include any adjustments to the avoided emissions factors based on the RPS or any other perceived potential impacts on renewables procurement.

## Conclusion

In order to provide transparency around the avoided emission factors and encourage more productive feedback from stakeholders, EtaGen believes that it is important for the ARB to explain the following:

- 1) The assumptions and inputs used by ARB to determine the proposed avoided emissions factors (e.g., modifications to the Calculator, line losses, etc...)
- 2) The reasoning for assuming that BTM generation displace long-term renewable procurement by IOUs

EtaGen appreciates the opportunity to provide feedback to the ARB and looks forward to their response.

Respectfully submitted,
/s/
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Dated December 20, 2017

<sup>&</sup>lt;sup>1</sup> See Order Instituting Rulemaking to Integrate and Refine Procurement Policies and Consider LongTerm Procurement Plans, R. 13-12-010 (Dec. 19, 2013), available at <a href="http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M147/K780/147780118.PDF">http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M147/K780/147780118.PDF</a>

<sup>&</sup>lt;sup>2</sup> See Assembly Bill 327, at page 5 of 32, <a href="http://www.leginfo.ca.gov/pub/13-14/bill/asm/ab\_0301-0350/ab\_327\_bill\_20131007\_chaptered.pdf">http://www.leginfo.ca.gov/pub/13-14/bill/asm/ab\_0301-0350/ab\_327\_bill\_20131007\_chaptered.pdf</a>