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Subject: Proposed CALGreen 2022 Regulations for Residential EV Infrastructure

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Unwarranted Exceptions

I recommend removing the following exception from both Residential and Non-Residential CALGreen:

1.1 (Residential) and 1b (Non-Residential): "Where there is no local utility power supply or the local utility is unable to supply adequate power."

It seems highly unlikely that a utility wouldn't be able to deliver the power required by CALGreen. I therefore fail to understand the rationale for this exception (which is not noted in either the ISOR or the CAM).

Regardless of the utility's ability or willingness to supply adequate power, rooftop solar is a major industry already, and can get much bigger by 2023 by adding solar canopies over parking and driveways sufficient to power both the building and all the vehicles associated with it, stationary batteries to store the electricity produced, predictive energy management systems and charging stations & ports. This is the best set of charging infrastructure to support full battery-electric vehicles, which are already the most economical form of drive train, and will soon offer the most range and flexibility.

This technology integration, which is already in use around the world at the early adopter level, results in such substantial savings for the home or business owner, when financed with no net negative cash flow, that it frees them from dependence on the utility, and in fact will on average increase disposable income by around 25% after financing is paid off, when vehicles are held until their million-mile electric drive trains finally reach end of life in 20 to 40 years. This estimate is based on widely accepted estimates that 15% of personal income is used for transportation and 10% for energy in the United States.

At a minimum, a family of basic minimum designs should be developed in collaboration with the battery and solar industries, and permitting the project should include an analysis (like a solar energy audit) of the likely load in 2030 when disruptive technologies (a la Tony Seba), coming by 2023, result in conversion of existing vehicles to BEV, early termination of ICE vehicle sales due to the bottom falling out of the market (like for buggy whips and horses after the launch of the

Model T) by 2027, and the end of fossil fuels use by 2030 (which leading scientists say makes it possible to stabilize global warming by 2040).

There should be an aggressively escalating schedule of the percent of parking spaces in every project that must be designed and delivered as EV Ready and EV Capable in each year that a project is permitted, leading **linearly or highly front-loaded, not back-loaded,** from 50% EV Capable today, through 50% EV Capable and 50% EV Ready by January 1, 2023, to 100% EV Ready by 2027. CEC should publicize the regulations prior to adoption if possible, and at minimum by the day after the adoption vote, warning all developers and contractors that they must comply fully by the earliest possible date of the regulations taking effect. We cannot allow present profits to get in the way of future societal recovery from the disaster of fossil fuels used and growing past their buried social license termination date of 1980 to 1990.

I've done calculations based on our technology development plan for the next decade. You may choose to soften it a bit -- but if / before you do, please consider fully the price that indigenous peoples and wildlife, as well as the American public, will pay for your hesitation. I am happy to answer questions and paint additional word pictures.

Regards, Mark Roest Sustainable Energy Inc.