DOCKETED	
Docket Number:	22-DECARB-02
Project Title:	Building Decarbonization and Electric Vehicle Charging Equipment Web Guide
TN #:	246093
Document Title:	John Elgin McKenna Comments - Focus on Power Efficiency - Avoid Panel Upgrades and Unneeded Stress on the Grid
Description:	N/A
Filer:	System
Organization:	John Elgin McKenna
Submitter Role:	Public
Submission Date:	9/14/2022 4:24:51 PM
Docketed Date:	9/14/2022

Comment Received From: John Elgin McKenna

Submitted On: 9/14/2022

Docket Number: 22-DECARB-02

## Focus on Power Efficiency - Avoid Panel Upgrades and Unneeded Stress on the Grid

Dear Energy Commission,

I'm a father of an eight-year-old daughter and, because of global warming and the resultant climate change impacts, I'm very concerned about her future, the future of coming generations, and the future of all life on this planet, our only home. Electrification is a key requirement to preserving our future and a livable planet. So, it is important that we electrify intelligently.

Utilities are starting to see the need to encourage more efficient and more right-sized electrification that will get more customers' needs met without stressing the local parts of the grid like pole top transformers. etc. This will also help the workforce keep up with the growing number of homes that need to electrify.

Thank you for looking at the benefits of developing a website for helping buildings electrify with a focus on power efficiency (also called power optimization) to provide multiple benefits. The focus of the site should be as SB 68 intended - to focus on electrification without triggering expensive and time-consuming electric panel (panel) upsizing. This is what should make the CEC site different from other sites that simply show how to electrify in general with common, low efficiency, loosely controlled or uncontrolled equipment on leaky buildings. Just like from its earliest days, CEC efforts show how to build energy efficient buildings when we already knew how to build basic buildings. The new site will show how to electrify efficiently; and how to appropriately size equipment; and how to find the most efficient equipment; and how to find the types of controls that help fit full electrification and car charging for 20,000-60,000 miles per year on existing 100 Amp electric panels.

The benefits of power optimization extend beyond the property and up to the service lines and to the pole top transformers. This will reduce loads on the pole top transformers and help more households fully electrify before they have to be paused for the utility to upsize the transformer and perhaps also the feeder wires, substations, transmission lines, and the number of grid peaking resources.

For these reasons, and because of the Energy Commission's unique position and history showing the efficient ways of meeting our end use needs (comfort, hot water, lighting, etc). The SB 68 site should focus on power optimization and full electrification without the need to upsize electric infrastructure on site, on the service wires, on the poles in the neighborhoods and on the high voltage grid. The CEC has the potential to extend its expertise from just energy efficiency, to include power efficiency that enables more buildings to electrify and more vehicles to be charged at buildings so that climate

preservation can proceed at the rapid pace required.

Thank you for considering these comments.