

May 13, 2019

Comments of the California Efficiency and Demand Management Council (The Council) for the Database of Energy Efficiency Resources for the program year 2021 (DEER 2021) and error correction program year 2019 and 2020.

I. Overview of the Council's Response to Solicitation for Comments

The California Efficiency and Demand Management Council (the "Council") appreciates the opportunity to respond to the request for Comment on the Database of Energy Efficiency Resources for the program year 2021 (DEER 2021) and error correction program year 2019 and 2020 issued on April 29, 2019. The Council is a statewide trade association of non-utility companies that provide efficiency, demand response and data analytics products in services in California. Our member companies employ many thousands of Californians throughout the state. They include implementation and evaluation experts, workforce training entries, and manufacturers of energy efficiency products and equipment. The mission of the Council is to support energy efficiency and demand management policies and programs for all Californians to create sustainable jobs, long-term economic vitality, stable and reasonably priced energy systems, and environmental improvement. We appreciate the past work completed by Energy Division ("ED") staff to continuously improve the DEER process and for the thought that went into the 2021 solicitation. The Council generally supports the solicitation recommendations but believes the DEER process can be further refined by:

1. Improving the DEER workpaper process by leveraging all available data
2. Opening of the DEER process to other building simulation software with a heavy emphasis on the Department of Energy's (DOE) EnergyPlus.

II. Improving the DEER workpaper process by leveraging all available data

The Council appreciates the efforts ED staff have put into improving the work paper submission process as part of the DEER bus stop process. These events include the November 2018 Workpaper Training hosted by the state investor-owned utilities and the California Public Utility Commission ("the Commission"), and the April 2019 Questions and Answers ("Q&A") webinar. However, the Council believes ED staff should review as part of this solicitation additional opportunities to improve the overall DEER workpaper process, including the

opportunity to include device level data patterns from implementer and industry installed smart devices. These devices, such as smart thermostats, are becoming increasingly common in California consumers homes and can be leveraged as a powerful data source to inform DEER measures. For example, smart thermostats data trends can be shared in anonymous fashion to inform assumed set points and runtimes for millions of Heating Ventilation Air Conditioning (“HVAC”) units throughout California’s climate zones. This data can be leveraged to not only correctly value the DEER thermostat schedule, traditional energy efficiency measures, such as air sealing, but also emerging technologies like grid-enabled heat pump water heaters. It is critical that the DEER process incorporates all available data into the modeling process to ensure that the most accurate energy efficiency savings are determined.

III. Opening of the DEER process to other building simulation software with a heavy emphasis on the Department of Energy’s (DOE) EnergyPlus software

The Council supports the opening of DEER process to the use of other building simulation tools and recommends the pending resolution include language directing ED staff to begin exploring the adoption of EnergyPlus immediately. As noted in the Solicitation other state venues including the California Energy Commission (“CEC”) are already using EnergyPlus, the Department of Energy’s open-source whole-building modeling simulation tool for state-sponsored work. The Council believes that the adoption of EnergyPlus into the DEER process would not only provide much-needed alignment between the two agencies at a state level, as the CEC has been using EnergyPlus for code compliance since 2013, but also align with activity occurring in local jurisdictions throughout the state. For example, local jurisdictions including, the Commission’s home city of San Francisco, are increasingly passing city ordinances target increasing efficiency in the existing building stock by requiring energy audits to be completed using EnergyPlus. These completed energy audits provide regulators and city officials with data of energy efficiency opportunities in the difficult to reach existing building stock. Unfortunately, due to the lack of symmetry between the Commission and city’s selected building simulation software, these findings cannot be quickly fed into Commission approved incentive programs for processing. This software barrier harms the customer experience, decreases customer participation and distorts cost-effectiveness at a time when the state needs to be rapidly increasing its energy efficiency savings not decreasing them.

Beyond this one concrete example, the Council believes there numerous other DEER program and additional proceeding benefits that will be gained by the Commission looking beyond the currently limited DOE2.2/eQUEST software, which is based upon one private firm’s

inputs, and take advantage of the federally supported, open source tool provided by DOE. By beginning to make the transition to EnergyPlus, the Commission and California's energy efficiency goals will benefit from more consistent model updates, additional software tools, and increase jurisdictional collaboration.

Conclusion

The Council appreciates the opportunity to provide comments on the Scope of Update for DEER. By ensuring the DEER process is leveraging all available data and beginning to take advantage of the benefits of the EnergyPlus software are important steps to ensure California achieve its energy and climate goals. The Council looks forward to future participation in efforts to continually improve the DEER process.

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Respectfully Submitted,

Nate Kinsey, Regulatory Affairs Manager
California Efficiency + Demand Management Council
1111 Broadway, Suite 300
Oakland, CA 94607
policy@cedmc.org