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CL Response to CEC Docket No 20-RENEW-01 Request for Comments 2021-04-01

Additional submitted attachment is included below.



April 1, 2021

Natalie Lee Deputy Director, SEES California Energy Commission Docket No. 20-RENEW-01 Docket Unit, MS-4 1516 Ninth Street Sacramento, CA 95814-5512

Dear Deputy Director Lee -

Thank you for the opportunity to submit comments on this important program.

We were encouraged by AB841's inclusion of the School Reopening Ventilation and Energy Efficiency Verification and Repair Program, and appreciate the CEC's efforts to support our schools to this end.

We're writing to submit some additional information with regards to the "Revised Staff Draft Guidelines School Reopening Ventilation and Energy Efficiency Verification and Repair Program Guidelines," outlined below.

Recommendations

- Conventional wisdom holds that reaching higher ventilation levels indoors necessitates more outdoor air (OA) and air changes per house. This is not the case. California's public schools can offset the increased financial costs and carbon emissions associated with higher ventilation levels by deploying substantive energy efficiency measures. This is a win-win for all parties involved, including the environment.
- Providing staff, parents, students and other stakeholders with real time indoor air quality data at each school is the best way to ensure their concerns are met. It also increases the school's transparency, a key part of the ESG metric.
- 3. We applaud the focus of the HVAC assessment on filtration, ventilation, demand control ventilation, and coil condition. However, we think there's a crucial missing element in the HVAC assessment requirements related to energy consumption. Adapting ventilation patterns, demand control ventilation and using HVAC systems to reduce risk of viral transmission can have significant

1



impacts on energy usage and therefore costs. The CEC should require multi-measure whole building energy modeling to be included as a mandatory element of any proposal submitted and final report completed under this grant program.

Specific Citations with suggested insertions are listed below;

Chapter 2 HVAC Assessment Report, Section D. Please consider inserting a new sub-section:

8) Computer-based whole building energy modeling analysis output to estimate future energy costs will be submitted which takes into account all proposed HVAC replacements, upgrades, or modifications.

Chapter 2 Project Requirements, Section B HVAC Assessment and Maintenance Requirements, Subsection 5, Additional Requirements. Please consider instering a new section:

D. The Licensed Professional will use a computer driven whole building energy simulation to complete an analysis of the energy consumption and cost impacts of the HVAC modifications over a typical meteorological year (TMY) and submit the outputs of the simulation as part of the Assessment.

Chapter 4, Project Completion and Reporting Section B, Reporting.

The baseline for determining reductions in emissions of greenhouse gases and energy savings from the SRVEVR Program shall be the energy demand and emissions of GHG that would have occurred if ventilation and filtration recommendations for reopening schools were met without the assessment, adjustment, maintenance, repairs, and efficiency upgrades funded under the SEES Program. The Licensed Professional will use a computer driven whole building energy simulation to complete an analysis of the installed modifications and submit the outputs following project completion.

<u>About Us</u>

Our team has eliminated more than 14 power plants worth of carbon emissions from commercial buildings across the US by leveraging data to surface hard-to-identify energy efficiency and operational optimization measures.



Using machine learning, our AI platform, CLUES®, has analyzed more than 100MM square feet of commercial real estate and 5 billion points of building energy data.

We've also launched a real time, occupant-facing dashboard for indoor air quality measurements to help address concerns about viral mitigation, wildfire-produced particulate matter, and carbon dioxide within indoor spaces.

Regards,

Harris Cohn

Harris Cohn VP, Business Development San Francisco