

DOCKETED

Docket Number:	21-IEPR-06
Project Title:	Building Decarbonization and Energy Efficiency
TN #:	240110
Document Title:	I'm in Control comments on smaller commercial buildings
Description:	N/A
Filer:	System
Organization:	I'm in Control
Submitter Role:	Public
Submission Date:	10/20/2021 12:50:58 PM
Docketed Date:	10/20/2021

*Comment Received From: I'm in Control
Submitted On: 10/20/2021
Docket Number: 21-IEPR-06*

I'm in Control comments on smaller commercial buildings

Additional submitted attachment is included below.

I'm in Control
58 West Portal Avenue #113
San Francisco, CA 94127
415-970-0200
PublicSubmission@ImInControl.com



October 18, 2021

The Honorable J. Andrew McAllister
Commissioner, California Energy Commission
Docket Unit, MS-4
Docket No. 21-IEPR-06
715 P Street
Sacramento, CA 95814-5512

Dear Commissioner McAllister:

Thank you for the wide-ranging IEPR workshop on Grid-Interactive Efficient Buildings and the opportunity to introduce a different viewpoint on GEBs. We strongly support the Commission's attention on both continuous energy efficiency and Demand Response to reduce customer cost, meet climate objectives, and improve grid resiliency.

Our boots-on-the-ground GEB experience is with small and mid-sized commercial buildings (under 50,000 square feet), estimated to be 100,000 in California. These needs and recommendations are quite different from most which are based on larger buildings. This is because:

- Control and monitoring projects are smaller, \$5-15,000
- Engineering and paperwork under current programs are excessive for these projects
- No resident facilities engineer
- Less management and maintenance attention
- Geographically dispersed in a local government or K-12 school portfolio
- EE and DR services and programs must be integrated to gain acceptance

We attach an abridged copy of the comments we submitted to ALJ Fitch under Rulemaking 13-11-005. They detail changes which would enable rapid uptake of both grid interaction and EE in this smaller building market.

Thank you for your consideration of these differing requirements, and the impact that program changes could make on California's objectives.

Yours very truly,

A handwritten signature in black ink that reads 'Kirk Oatman'.

Kirk Oatman
Co-Founder

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking Concerning
Energy Efficiency Rolling Portfolios
2013)
Policies, Programs, Evaluation and
Related Issues.

Rulemaking 13-11-005
(Filed November 14,

**REPLY COMMENTS OF I'M IN CONTROL ON EMAIL
RULING
REQUESTING COMMENTS AND RECOMMENDATIONS
ON ENERGY EFFICIENCY BY SEPTEMBER 10, 2021,
TO ADDRESS
GOVERNOR'S PROCLAMATION OF JULY 30, 2021**

INTRODUCTION

I'm in Control respectfully submits these Reply Comments pursuant to "E-mail Ruling Requesting Comments/Proposals to Address Governor's Proclamation of July 30, 2021" (Ruling) of Administrative Law Judge (ALJ) Fitch. These comments refer to comments previously filed in the first round of responses to this ruling. We appreciate the opportunity to do so as a recent new Party to the proceeding.

SUMMARY

I'm in Control is a vendor of energy-reducing and demand response control and monitoring systems for small and mid-sized commercial buildings. Our systems serve

older existing commercial buildings under 50,000 sqft, with no central chiller/boiler, and with no central BMS (or a broken or outdated BMS). We estimate 100,000 of such buildings in California which, when aggregated, can contribute significantly to the objectives of the Governor’s proclamation. Additionally, because installation is straightforward, large numbers of sites could be brought online quickly, meeting the summer 2021/2022 objective. We have deep experience with sales and operations of such technologies in these buildings, such that our comments are based in “boots on the ground” observations.

All statements and comments in this document refer only to our served segment of small and mid-sized commercial buildings where we have expertise; we do not take a position on the application of any of these statements to other segments such as large buildings, industrial, residential, or agricultural. This document consists of 2 sections:

1. Our comments and support for certain comments filed in the first round of this request by the ALJ.
2. To further detail the reasoning for our comments in #1, we are including as reference the document which we previously filed timely as a “Public Comment” in the first round prior to gaining Party status to this proceeding.

COMMENTS ON ROUND 1 COMMENTS

<This section deleted for comments on IEPR workshop on Grid-Interactive Efficient Buildings >

REFERENCE: PREVIOUS COMMENTS SUBMITTED AS “PUBLIC COMMENT”

Background

- This document exclusively addresses older existing commercial buildings under 50,000 sqft, no central chiller/boiler, no central BMS (or a broken or outdated BMS). We estimate 100,000 in California. Our company has extensive experience and detailed data on these buildings.
- The objective of these recommendations is to improve efficiency and DR in the maximum number of these buildings in the shortest period of time.
- Current timelines to mitigate the risk of capacity shortages demand immediate and fundamental changes to the operation of efficiency and DR programs for these buildings.
- DOE studies universally project potential efficiency savings of 30% in commercial buildings. Our system consistently reduces whole-building consumption by 20% or more via optimized control. It can also discover 5-10% additional wasted consumption, addressable by very low-cost projects.
- You understand that smaller buildings are different from larger buildings: Lower kWh/year means lower savings per building; projects are smaller, \$5-15k; less facilities & management attention to each building; geographically dispersed in an owned portfolio; no resident facilities engineer
- Individual privately-owned buildings are hard to address. Large commercial portfolios, schools and local government are more effective to reach. This may affect targeting of marketing campaigns for programs.
- Low-cost measures recommended for these buildings in this document: HVAC control; control and monitoring of heavy equipment & refrigeration; BMS's; sensors.

High-cost measures excluded from this document: solar, LED lighting, HVAC replacement & component retrofit (e.g. VFDs, etc)
- CPUC and CEC must of course justify regulation on energy reduction and resiliency. However, building owner/operators recognize significant, sometimes

equal, savings on maintenance operations and occupant comfort from BMS control projects -- these should be emphasized in programs.

- Convincing the customer to implement a combined EE and DR project is complex and expensive. Justifying benefits of combined efficiency and DR increases value to customer and is highly recommended.

Top level recommended policy concepts

1. In essence declare installation of a new BMS and related control devices in any existing building without a BMS (or one that failed) under 50,000 sqft to be a "deemed" measure, effective immediately across all appropriate programs without modification or an approval process. Thus no "custom" calculations or paperwork would be required.
2. Eliminate all but the most minimal program paperwork for such small projects (e.g. under \$15,000) for smaller buildings (e.g. under 50,000 sqft):
 - Attest that the project was actually done
 - List of size and type of controlled equipment
 - Setback changes for daily and DR periods
 - Enrollment in DR program
 - For M&V, set a small (5-10%) kWh reduction requirement in subsequent years with a simple exception process for changed business operations.
3. Enrolling a smaller-building customer in a DR program is often challenging. Simplify requirements and the process across all participants, with additional training for utility representatives for this class of customer.
4. Assign a small number of auditors to spot-check a random sample of projects with significant penalties for fraud.
5. Eliminate any barriers (technical, paperwork, calculations) for projects and their financing in these smaller buildings to implement both energy efficiency and demand response together - incent the combination for both program implementers and customers. Example is recommendation #1 above.
6. Rely on program portfolio Total System Benefit per R.13-11-005 as the full measure of success and eliminate the detailed calculations required for each installed project (per #1 above), since indeed some small number of projects will

underperform. Transparently report this change publicly as saving both ratepayers and government money.

7. Eliminate or simplify qualification for installers so owners can use their familiar electrical and HVAC contractors or even self-install, only for certified easy-to-install BMS's.
8. Increase support and eventually mandate integration with CHEEF (GoGreen) financing, which already authorizes BMS and control projects as "deemed." (Early analysis found 12%+ electric reduction for financed projects.)
9. Don't institute new programs for this objective, which require lengthy, expensive and exclusionary contracting processes; modify existing programs to modify regulation in a manner acceptable to all interested parties.
10. Ensure that implementers of existing programs are fully and fairly incented for these changes, with emphasis to achieve speed and volume of installations, e.g. increase spending on marketing and outreach.
11. For every point above, discover and minimize the barriers for government entities, to enable comprehensive application of upcoming state and federal funding. Particularly:

Schools have no in-house energy expertise, so they must currently hire expensive consultants to design projects and manage the overwhelming paperwork.

Cities and counties don't have bandwidth to work on projects for their smaller buildings, often are forced to budget the entire project in the current fiscal year, and cannot justify projects across departments for energy versus maintenance savings.

Recommendations:

 - Clarify and simplify requirements and paperwork for "deemed" measures.
 - Work with the Treasurer's office and independent financing providers to structure and guarantee solutions which are legally accounted for as annual operating expense in government entities
12. Specifically integrate these concepts comprehensively into the School Energy Efficiency Stimulus Program and its School Reopening Ventilation and Energy Efficiency Verification and Repair Program to maximize and speed uptake.

13. Provide special consideration for these buildings in implementation of MIDAS.
E.g. include the SGIP concepts of hour-ahead and day-ahead forecasts for locational price signals, since this strongly drives how automated control of limited assets is optimized for a pricing period.
14. Directly address the split-incentive issue for these buildings: Support enablement of financing and payment programs to cross the lessor/lessee boundary, i.e. who paid for a project versus who benefits from the project; Advocate for legislation which allows long-term tenants to undertake certain efficiency projects with defined passage of ownership.
15. Add a small kicker to a project for including a live dashboard in a public area of the building showing energy activity and savings to increase awareness among public visitors and building occupants.
16. For the longer term, begin developing program terms which acknowledge that these BMS's installed now can be extended later to assist site-installed solar and storage to be even more effective.

CONCLUSION

We appreciate this opportunity to provide input to these important considerations for the Ruling and hope that we have in some way contributed to the Governor's objectives.

Dated: September 10, 2021

Respectfully submitted:

/s/ R. Kirk Oatman
I'm in Control
58 West Portal Avenue, #113
San Francisco, CA 94127
Tel: (415) 970-0200 x707
Email: PublicSubmission@imincontrol.com