

REACH CODE NEWS BRIEF: MARCH 2023

NOW AVAILABLE! NEW 2022 MULTIFAMILY COST EFFECTIVENESS STUDY



Prepared by:
Frontier Energy, Inc
Misti Brucerl & Associates, LLC

Prepared for:
Kelly Cunningham, Codes and Standards Program, Pacific Gas and Electric



At its monthly Business Meeting on July 13, 2022, the Energy Commission approved reach codes adopted by four communities. The approved ordinances included:

The statewide Reach Codes team has published the 2022 Multifamily New Construction Cost-Effectiveness Study. Documenting cost-effective combinations of measures that exceed the minimum state requirements, the study considers low-rise and mid-rise multifamily building types and evaluates mixed fuel and all-electric package options in all sixteen California climate zones (CZs).

The team analyzed five measure packages for two prototypes (a 3-story loaded corridor structure and a 5-story mixed use structure):

- All-Electric Code Minimum
- All-Electric Code Minimum + PV
- Mixed Fuel Efficiency Only
- Mixed Fuel Efficiency + PV + Battery (this package only applies to the 3-story prototype)
- Mixed Fuel Efficiency + PV (this package only applies to the 5-story prototype)

Key takeaways from the analysis included:

- All-electric new construction is feasible and cost effective based on TDV in all cases
- All-electric packages have lower GHG emissions than mixed-fuel packages in all cases
- The new source energy metric combined with the heat pump space heating baseline in most climate zones encourage all-electric construction
- Electrification combined with increased PV capacity results in utility cost savings and was found to be On-Bill cost effective in all cases
- The mixed fuel efficiency and PV packages (and battery for the 3-story) were found to be cost effective based on TDV in all cases and cost-effective On-Bill in most climate zones
- Applying the CARE rates increased utility cost savings (in most CZs) for an all-electric building compared to a code compliant mixed fuel building, improving On-Bill cost-effectiveness

The results were presented at the March 8 webinar. Presentation materials are available [here](#) and the recording is available [here](#).

The full study report and Executive Summary are available [here](#).

UPCOMING EVENTS

April 6: 3C-REN training: [2022 Energy Code: Multi-Family](#)

April 11: The Climate Center: [California Climate Policy Summit 2023](#). Sacramento

April 12: Energy Commission Monthly [Business Meeting](#)

April 12: BayREN Training: [Residential Additions](#)

April 18: 3C-REN webinar: [Electrification Products for the Central Coast Climate](#)

April 19: Climate Group: [US Climate Action Summit 2023](#)

April 22: Earth Day

April 25-27: Aspen Institute Forum for Community Solutions and FSG: [Collective Impact Action Summit](#)



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NEW THIS MONTH!



Q&A WITH NEAL DESNOO AND MAYRA VEGA: USING IMPLEMENTATION TOOLS TO STREAMLINE REACH CODE COMPLIANCE

This is the first installment of a two-part series exploring implementation tools.

Neal DeSnoo has over 35 years of local energy policy experience, primarily serving the cities of Berkeley and Chicago. As a consultant, he provides guidance and support for the development of clean energy policies and projects, currently including the development of model reach codes and supporting materials. Previously Neal managed Berkeley's Office of Energy and Sustainable Development where he was responsible for providing strategic direction to the City's sustainability efforts and directly managing programs related to climate change, clean energy and green building.

Mayra Vega has over 10 years of experience in the power consulting industry and building energy efficiency research. She is currently a Senior Project Manager for TRC Companies. She has a background in engineering, with a specific emphasis in the utilities sector working with Sacramento Municipal Utility District (SMUD), Roseville Electric Utility (REU), Peninsula Clean Energy (PCE), Silicon Valley Clean Energy (SVCE), San Francisco Public Utilities Commission (SFPUC) and Central Coast Community Energy (CCCE).

Q: Can you tell us a little about how these tools came to be developed?

Mayra: In the previous code cycle, there were a number of local jurisdictions that were requesting help in the form of some practical checklists to help educate their internal permitting departments as well as applicants. The first edition of these checklists was developed then. For this code cycle, these prior versions were updated by the wide group of collaborators described below.

The achievement of creating a complete set of standardized checklists that will apply to virtually every type of project—whether it is a nonresidential new construction project or a single-family addition—means that local teams tasked with implementation and compliance now have a resource they can rely on day in and day out.

Q: Who was involved in developing the tools?

Neal: It really has been a statewide and highly collaborative effort. Not only is the statewide reach codes team involved, but there has been collaboration from the RENs, CCAs, individual jurisdictions, national organizations like Building Decarbonization Coalition, and individual consultants with deep expertise in reach code development and implementation.

The collaboration has been extremely successful and beneficial because any jurisdiction across the state can utilize the checklists, regardless of who their energy provider is.

Q: Who does use these checklists?

Mayra: They can be used by staff who developed the local reach code measure as a way of conducting internal training for permitting and plan checking staff. They will also be used by project applicants for use in submitting permit applications and getting project approval.

They help eliminate churn in the early stages of project permitting and save a lot of time both for applicants and plan checkers.

Q: Where can I get a set?

Neal: The resources are free and available on multiple websites, such as localenergycodes.com and bayareareachcodes.org. They're provided in a very user-friendly format as Word templates that can be branded by an individual jurisdiction if desired. Download new construction checklists [here](#) and checklists for additions/alterations [here](#).

Q: How do you see these evolving in future cycles?

Mayra: They're already evolving! We've seen specific jurisdictions use some specific checklists and identify aspects that can be improved or strengthened. That's one reason the collaboration has been so valuable. These tools can be improved continuously throughout the 2022 code cycle.

Neal: Yes, as more jurisdictions pass ordinances in the 2022 code cycle, there will be new needs emerging for checklists to include aspects that may not have been included yet. These are truly living assets that can and should continue to evolve.

Q: Who can local staff contact if they have questions or want to participate?

Mayra: We would be happy to reply to questions. Staff can email info@localenergycodes.com.

Neal: I'm happy to answer questions or accept feedback on existing checklists at desnoo.neal@gmail.com.

Next month, we'll take a look at the training materials being developed for local governments on use of these implementation tools.



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