DOCKETED	
Docket Number:	22-BSTD-02
Project Title:	2022 Energy Code Compliance Software & Documents
TN #:	242797
Document Title:	NRDC Comments on Draft ACM Manuals
Description:	N/A
Filer:	System
Organization:	NRDC
Submitter Role:	Public
Submission Date:	4/25/2022 2:57:25 PM
Docketed Date:	4/25/2022

Comment Received From: Pierre Delforge

Submitted On: 4/25/2022 Docket Number: 22-BSTD-02

## **NRDC Comments on Draft ACM Manuals**

Additional submitted attachment is included below.

## Dear Commissioner McAllister,

The Natural Resources Defense Council (NRDC) submits the following comments on behalf of its more than 450,000 members and activists in California who are advocating for affordable and equitable decarbonization and clean air policies to help mitigate the climate crisis and advance a sustainable economy. These comments are in response to the draft Alternative Calculation Method (ACM) Reference Manuals published March 25, 2022. NRDC is still conducting a detailed review of the ACM and testing the beta software and is submitting these initial comments with the intent of submitting more detailed comments within the next few weeks.

The ACM is a critical component of the Title 24 implementation documents as it spells out the rules for the compliance software used in the performance path, including how the baseline mechanical systems are set in the standard design. This has been an issue of particular interest to NRDC as these baseline system types affect the ability of all-electric systems to comply. Historically, the ACM has typically used gas baseline systems which have made it difficult or effectively impossible for efficient all-electric designs to comply. We greatly appreciate the work of the CEC in the 2022 code cycle to reduce these barriers through new electric baselines for certain building and system types as well as updated time dependent valuation (TDV) values and the new time dependent source energy (TDS) metric. While there is still further work to be done to alleviate these barriers, such as improving electric-system modeling capabilities and expanding electric baselines to multi-zone system types, we appreciate the progress that has been made in the 2022 cycle.

## Non-Residential

From our initial review, it does not appear that the system map published in Table 2 of the ACM fully aligns with the prescriptive baseline systems for single-zone systems published in Section 140.4(a)2 of Title 24 Part 6. Specifically, the ACM limits the heat pump baselines to buildings less than or equal to 3 floors. The heat pump baselines should apply to all systems less than a rated cooling capacity of 240,000 Btu/hr, as described in Section 140.4(a)2 that was adopted by the Commission. If the CEC is concerned that this will provide too large of a credit for central multizone systems (when compared to the single zone heat pump baselines), then the baseline could change for buildings greater than 3 stories with proposed multizone systems as currently drafted in the ACM. However, in the case of a building greater than 3 stories with proposed single zone systems, the baselines from Section 140.4(a)2 should apply.

## Multifamily

Based on our initial review, NRDC supports the baseline heating systems as implemented in the ACM for multifamily buildings. As specified in Section 170.2(c)3, the baseline system type for multifamily buildings is a heat pump in almost all climate zones. These baselines as implemented make an important step towards reducing barriers to efficient electrification in multifamily buildings.

NRDC plans to continue to review the ACM manuals and conduct testing of the software and will submit supplementary comments in the near future. We appreciate the opportunity to review and comment.

Sincerely,

Pierre Delforge