DOCKETED	
Docket Number:	19-BSTD-03
Project Title:	2022 Energy Code Pre-Rulemaking
TN #:	235410
Document Title:	Natural Resources Defense Council Comments - NRDC Comments on Nonresidential Air Distribution
Description:	N/A
Filer:	System
Organization:	Natural Resources Defense Council
Submitter Role:	Public
Submission Date:	10/23/2020 11:17:44 AM
Docketed Date:	10/23/2020

Comment Received From: Natural Resources Defense Council Submitted On: 10/23/2020 Docket Number: 19-BSTD-03

## NRDC Comments on Nonresidential Air Distribution

Additional submitted attachment is included below.

Dear Commissioner McAllister and Energy Commission Staff:

On behalf of the Natural Resources Defense Council (NRDC) and its more than 450,000 members and activists in California advocating for affordable and equitable decarbonization and clean air policies in buildings to help mitigate the climate crisis, we respectfully submit the following comments in response to the California Energy Commission's (CEC's) October 7, 2020 Workshop on Nonresidential Air Distribution measures proposed for the 2022 Title 24 Standards.

NRDC supports the fan power, Fan Energy Index (FEI), and duct sealing requirements proposed in the Investor Owned Utility (IOU)'s final Codes and Standards Enhancement (CASE) report and discussed during the workshop. These measures harness the energy efficiency opportunities available in one of the major energy uses in non-residential buildings: the fans and fan systems that deliver ventilation, heating, and cooling. The combination of both a fan power and FEI requirement will help ensure large energy savings across all fan systems while also ensuring that fans are efficient at their selection point.

Requiring fan systems greater than or equal to 1 kilowatt of load to meet prescriptive fan power allowances based on their configuration and components allows designers flexibility in how to meet the requirements while achieving guaranteed energy savings. Coupling this fan power limit with an FEI requirement will capture additional energy savings by setting a floor that ensures that every installed fan is selected at a minimum level of efficiency for its intended operating point. The FEI requirement of greater than 1 proposed is reasonable and will not be a burden on engineers. Furthermore, aligning the FEI requirement with ASHRAE will reduce the burden for engineers that are designing buildings across state lines. Finally, the duct sealing and testing measures proposed will further increase the savings for fan systems by reducing duct leakage and ensuring that heating and cooling energy is delivered to its intended location.

Combined, these measures result in significant cost-effective energy savings by harnessing available efficiency opportunities in fan systems through fan power limits and

complementary measures. We strongly encourage the CEC to adopt these measures as part of the 2022 Title 24 Standards.

Sincerely,

Pierre Delforge Senior Scientist Natural Resources Defense Council