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<td><strong>Project Title:</strong> 2022 Energy Code Update Rulemaking</td>
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<td><strong>TN #:</strong> 238217</td>
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<td><strong>Document Title:</strong> NRDC Additional Comments</td>
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Comment Received From: NRDC
Submitted On: 6/15/2021
Docket Number: 21-BSTD-01

NRDC Additional Comments

Please see attached PDF.

Additional submitted attachment is included below.
Dear Commissioner McAllister and Energy Commission Staff,

June 15, 2021

Re. Additional Comments on the Title 24 2022 Express Terms Released May 6, 2021, Docket Number 21-BSTD-01

On behalf of the Natural Resources Defense Council (NRDC), we submit the following comments in response to the California Energy Commission’s (CEC) draft code language (Express Terms) for the 2022 Title 24 Efficiency Standards released May 6, 2021. These comments are in addition to the joint comments submitted on June 4, 2021; these previously submitted joint comments highlight NRDC’s top priorities for the 2022 standards. The following comments expand on one issue raised in the joint comments and highlight additional substantive comments.

**Expansion of Previous Comment**

**Fan Power Requirements** – As submitted in joint comments to the docket, NRDC supports the updated fan efficiency requirements both as proposed in the IOU’s CASE report and in the 45-day language. While the requirements in the 45-day language represent a weakening of 3-10% from what was proposed in the CASE report, this change is based on reasonable adjustments to assumptions that more accurately account for the components in fan systems, and the overall savings from the fan power requirements are still significant. While we support the adjustments made in the 45-day language, we would oppose any further weakening of the fan requirements, in particular as they relate to packaged systems. It is important to note that the fan requirements are a design requirement that would fall to the design engineer to comply with. The designer has many tools to meet the fan power requirements, including improved duct design, system type and design, and equipment selection. The fan requirements proposed are not an equipment level requirement and would not eliminate any specific packaged systems. A further reduction in the requirements aimed at alleviating the requirements for packaged systems is unnecessary and would result in wasted energy.

It is notable that fan energy use of these packaged systems is not currently captured in the federal test procedure or standard and therefore the only current way to address this fan energy use is through how these units are applied as allowed by building codes. While there was an agreement to amend test procedures for these units by 2019 to include fan energy use, DOE has not taken any action on this test procedure. Given the lack of federal action to reduce fan energy use in packaged units, addressing this

1 https://appliance-standards.org/sites/default/files/Term_Sheet_FINAL_June152015.pdf
energy use through how these units are applied under code as proposed is reasonable and will result in significant energy savings.

**Additional Substantive Comments**

**Parking lot lighting controls** (page 221 and 447) – We do not support the newly added exception 4 to Sections 130.2(c)3 and 160.5(c)2C which would exempt parking lot luminaires less than 78 watts from motion sensing control requirements. We recommend that these luminaires continue to be required to comply with motion sensing control requirements. We also recommend that the acceptance test for automatic scheduling controls for outdoor lighting proposed in the draft express terms be reinstated.

**Single family roof deck insulation** (Page 333) – We support the language originally proposed in the draft express terms which would have required roof decks (i.e. the sheathing layer on top of a roof’s structural members) of newly constructed attic systems to be insulated to a U-factor of 0.178. The 45-day language weakens this proposed requirement by increasing the U-factor allowed to 0.184, exempting climate zones 1-3 and 5-7, and exempting buildings with ducts and air handlers in conditioned space. We do not support this weakening and recommend that the CEC revert back to the language proposed in the draft express terms.

**Altered fenestration U-factors** (page 552) – We support the slight strengthening of U-factor requirements for altered curtainwalls proposed in Table 180.2B from those proposed in the draft express terms. The values proposed are still reasonable and affordable. Given the limited opportunities to upgrade fenestration efficiency and the long lifetime of fenestration, strengthening these requirements is important and impactful.

**Mandatory single-family dimming controls** (page 338) – We support the strengthening of Exception 2 to Section 150.0(k)2F, which reduces the threshold for an exemption from the dimming control requirements from 50 watts to 20 watts. This threshold makes sense given the low wattage and increased efficacy of LED fixtures. For example, a central bedroom light fixture could easily fall under the 50-watt threshold (and may still fall under the 20-watt threshold) but dimming controls would likely save energy in this application.

Sincerely,

Pierre Delforge
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