



RE: Comments to the International Code Council Appeals Board 2019 Regarding the Group B Code Changes – CE 217 Parts I and II

Dear Mr. Pfeiffer,

The Southwest Energy Efficiency Project (SWEEP) would like to submit the following comments for consideration by the Code Council Appeals Board. We also request to participate in the Appeals Board hearings to be held on September 3. We appreciate the opportunity to comment.

As the lead proponent on the CE-217 proposals, we encourage the Board to honor the wishes of the ICC membership, 82% of whom voted in favor of CE217-19Part 1, for electric vehicle (EV) infrastructure requirements in commercial buildings, and 70% in favor of CE217-19Part 2, for EV infrastructure requirements in residential buildings. The CE-217 code proposal followed the procedural rules established by the ICC and to reverse the decision would discredit and undermine that process.

Over the next couple of decades, millions of gas-powered cars will be replaced with electric vehicles. State and local governments around the country have adopted bold transportation electrification goals to accelerate EV market growth and unlock the economic and environmental benefits of EVs more quickly. In addition, every major automaker in the world has announced a plan to electrify a significant portion of their vehicle fleet over the next 3-5 years. The number of available EV models in the U.S. will grow from 48 in 2020 to over 100 in the next 5 years, and include over 20 electric SUV and pickup truck models.¹

To recharge all these new EVs, we're going to need millions of new charging ports. The good news is that well over 90% of this new fueling infrastructure is already built in the form of our electric grid. Buildings provide the connection points for electric consumer appliances like TVs, air conditioners, and now, electric vehicles.

With vehicle electrification, transportation is becoming an inseparable part of the building energy system, and by requiring EV charging infrastructure in new buildings, the IECC will undoubtedly improve total system energy efficiency. EV drivetrains do not produce waste heat and are 3.5 times more energy efficient than internal combustion engine vehicles. In addition, the Level 2 charging infrastructure proposed by CE-217 is 12-20% more efficient than Level 1 charging through a typical 120V wall outlet.²

1

<https://docs.google.com/spreadsheets/d/1afvO61imZTXXshPW--v3WMcIWODKN6fRjrgj1dWwGFE/edit?usp=sharing>

² <https://avt.inl.gov/sites/default/files/pdf/fsev/SteadyStateLoadCharacterization2015Leaf.pdf>

The cost to retrofit an existing building with charging stations can be cost-prohibitive for many, especially those living in multi-unit dwellings. For these building owners, the installation of EV charging infrastructure is four to six times less expensive when included during the initial construction phase as opposed to a retrofit. Given the momentum toward widespread EV adoption, the cost to pre-wire new buildings with EV charging infrastructure should be compared to the higher cost of installing the same equipment at a later date, rather than the cost of avoiding such equipment altogether.

New buildings are built to last for at least 100 years, so it's critical that charging infrastructure is incorporated at the pre-construction stage to ensure that new buildings can accommodate the charging needs of future EV-owners. At least 40 local governments around the country, from Denver to Atlanta to Seattle, large and small cities, have adopted EV infrastructure requirements in their local building codes to provide safe, easy, and low-cost access to electric vehicle charging³. Many more are excited by the prospect of adopting the 2021 IECC EV infrastructure requirements.

Sincerely,

Matt Frommer
Senior Transportation Associate
Southwest Energy Efficiency Project

³ <https://www.swenergy.org/transportation/electric-vehicles/building-codes>