



September 24, 2018

To SCAQMD NEAT Working Group:

The Sierra Club appreciates the SCAQMD Net Emissions Analysis Team's work to create a NO_x and GHG calculator to measure the cost and impact of emission reduction strategies for the buildings sector.

The NEAT Working Group has had several discussions and rounds of written comments on methane leakage in the gas system. Studies discussed to date have only included methane leakage in-front of the meter, i.e. from gas production to the distribution pipelines. The Sierra Club submits these comments to add a new report to the record: Fischer, Marc L, Wanyu R Chan, William W Delp, Seongeun Jeong, Vi H Rapp, and Zhimin Zhu. "*An Estimate of Natural Gas Methane Emissions from California Homes.*" Environmental Science & Technology (2018). The Fischer et. al. report estimates behind-the-meter methane emissions from residential gas use in California.

The Lawrence Berkeley National Laboratory research team studied behind-the-meter methane emissions in 75 homes across California, and found that the homes leaked roughly 0.5% of the gas that passed through the meter. Methane emissions from residential gas appliances are estimated at 35.7 (21.7–64.0) Gg CH₄/yr, equivalent to ~15% of California's gas CH₄ emissions. Twenty-five percent of this methane leakage is estimated to occur at the appliance pilot light.

If California is to achieve our air quality and climate goals, we must rapidly deploy all-electric appliances that can be powered by clean energy. Supporting further build out of the residential gas system would be counter to the South Coast's air quality and climate mandate.

Sincerely,

Rachel Golden

Senior Campaign Representative
Sierra Club