To the Washington Utilities and Transportation Commission:

Regarding rulemaking for Washington State's Clean Energy Transformation Act, and ways or sync with the state's Energy Independence Act, please accept my comments:

- 1. The Act (The Laws of 2019, Chapter 26, Section 7) does not provide a default entrisions rate for "greenhouse gas emissions other than carbon dioxide from unspecified electricity". Which is to say it doesn't specify whether the law covers the full carbon footprint of methane gas when utilities buy electricity on the short-term market, as the often do. I think the law should very definitely should include these "upstream" leaks and emissions, not just emissions at the smokestack. Moreover, we should be specific about two ways to measure this:
  - a. The law should specify that methane gas emissions be measured on a time horizon of 12 years, because: 1) the short-term effects of methane are very severe; 2) because current science as of 2018 says we must eliminate all fossil fuel emissions in no more than 30 years in order to avoid a high risk of catastrophe; 3) because the atmospheric life of methane before it oxidizes to CO2 averages 12 years, so it makes sense to match the measurement of methane's effects with the period when it actually has effects.
  - b. The law should account for the proper leakage rate of methane in production and distribution, which the EPA now considers to be 2.4% but will very likely become a higher figure, as history shows that methane leakage was previously understudied and underestimated, leakage estimates have risen dramatically as more leaks have been discovered and measured, and much of the leakage is in "last mile" piping infrastructure that has yet to be sufficiently measured (while the explosions of whole neighborhoods in Boston and the San Francisco Bay Area indicate this last-mile leakage is often severe).
- 2. I think the relevant Washington Administrative Code (WAC 480-109-300) should include language requiring utilities to report on greenhouse gas emissions occurring "during the gathering of fuel for electricity generators," to account for methane's upstream emissions.

Many thanks, David Camp 2729 W. Westover Rd. Spokane, WA 99208 Received Records Management

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