**From:** brian.g.henning@gmail.com
**To:** Rector, Andrew (UTC)
**Cc:** UTC DL Records Center
**Subject:** Comment on Docket UE-190652
**Date:** Sunday, November 3, 2019 3:57:37 PM

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Dear Commissioners and UTC Staff,
Please accept these comments on Docket UE-190652 related to rulemaking concerning the EIA. If possible, please confirm receipt and recording into the public record.

I am specifically interested in responding to your questions related to carbon dioxide equivalent (Questions 7 and 9) and methane (Question 10).

> #7 Do stakeholders have concerns with the additions of the statutory definitions for "carbon dioxide equivalent" and "greenhouse gases"?
> #9 The Laws of 2019, Chapter 288, §§ 2 and 7, define "greenhouse gas" and "carbon dioxide equivalent." However, the Laws of 2019, Chapter 288, § 7, does not provide a default emissions rate for greenhouse gas emissions other than carbon dioxide from unspecified electricity. How should the Commission's rules specify an emissions rate for greenhouse gas emissions other than carbon dioxide from unspecified electricity? What data source(s) and methodology should the Commission use to establish a default emissions rate from greenhouse gases other than carbon dioxide?
> #10 The Laws of 2019, Chapter 285, § 15, requires natural gas companies to put a price-per ton cost on greenhouse gas emissions, including "emissions occurring in the gathering, transmission, and distribution" processes. Should WAC 480-109-300 include language requiring electric companies to report on greenhouse gas emissions occurring during the gathering of fuel for electricity generators?

My comments:
The Act (The Laws of 2019, Chapter 26, Section 7) does not provide a default emissions 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 they often do. We 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:

1. The global warming potential (GWP) of methane used for calculating "carbon dioxide equivalent" should use the most time horizon most appropriate to the gas in question. If a century is used, methane has a GWP of x25-36 CO2. However, given that methane only lasts in the atmosphere for on average 12 years, it would be more appropriate to use the shorter timeframe of 20 years, which pegs its GWP at x87 CO2. The full climate impact of methane needs to be reflected in the calculation of carbon dioxide equivalent. This is especially important, given the 2018 IPCC Special Report on 1.5°C, which says that we now have little more than a decade to dramatically reduce climate pollution. This short window of opportunity makes using the shorter time horizon for methane even more important and appropriate.
2. The law should account for the proper leakage rate of methane in production in 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 that last-mile leakage is often severe). At a 3.2% leakage rate methane is just as bad as coal, with the CETA of 2019 is banning by 2025. a

For a helpful discussion on the problems with methane, especially an explanation of its greater global warming potential and the problem of “upstream” leakage, consult this helpful document by Sierra Club: Fracked Gas: The Next Big Climate Fight.

Sincerely,

Dr. Brian G. Henning, Ph.D.
2603 N. Atlantic St.
Spokane, WA 99205
509.270.7908