

Valentine, Velvet, EMNRD

From: Davidson, Florene, EMNRD
Sent: Monday, January 4, 2021 1:16 PM
To: Valentine, Velvet, EMNRD
Subject: FW: [EXT] permission to give public comment

Case 21528

From: Cris Moore <moore@santafe.edu>
Sent: Monday, January 4, 2021 12:50 PM
To: Davidson, Florene, EMNRD <florene.davidson@state.nm.us>
Subject: Re: [EXT] permission to give public comment

Dear Florene, thank you for your work on this important issue. The hearing officer instructed us to send our comments in writing to you for the record. Here are mine.

thank you,
Cris Moore

Thank you, members of the Commission, for this opportunity to speak. I know you have a long day ahead of you.

My name is Cris Moore. I'm a Professor at the Santa Fe Institute, and I'm speaking today as an individual.

I want to point out a connection between methane leaks and our use of natural gas in power and transportation. We often hear that natural gas is a low-carbon alternative to conventional fossil fuels: that it can act as a "bridge" to renewable energy. It's true that burning natural gas in a power plant produces only half as much carbon dioxide as coal does.

But first you have to get the gas to the power plant. As as you know, if any methane gets released into the atmosphere along the way, it is more powerful than carbon dioxide as a greenhouse gas — over 80 times as powerful in the short term, and over 30 times as powerful over a century.

It's an easy math problem to show that if more than about 3% of the methane gets leaked on its way to the power plant, the climate impact of natural gas is just as bad as coal. For transportation and fleet vehicles like buses and trucks, where natural gas is competing with diesel engines, the allowed leakage is even less — about 1%. That's all the way from production at the well, through the distribution system, to the engine. And for natural gas to compete with renewable energy, the margin of error becomes even smaller.

The upshot is that natural gas will not help us meet our climate goals unless this leakage is dramatically reduced — by up to 90% in some studies. And the increase we've seen over the past year shows that market forces alone are not enough for the industry to get this under control.

I urge you to strengthen this draft rule to prevent venting and flaring except when needed for safety; to have independent third parties verify leaks and repairs; to include all wells, as opposed to exempting the majority of them; and to require that existing wells meet these standards before permitting operators to drill new ones. And please remember that this is not a zero-sum game with the industry. Properly monitoring and preventing methane leaks will create jobs and avoid wasting a valuable product.

Thank you very much for your attention.

— Cristopher Moore
Professor, Santa Fe Institute
moore@santafe.edu
(505) 920-3444

On Jan 3, 2021, at 11:32 AM, Davidson, Florene, EMNRD <florene.davidson@state.nm.us> wrote:

You have been assigned a 2-minute time slot on January 4, 2021, in the 12:30 time frame.

Florene Davidson
Commission Clerk

From: Cris Moore <moore@santafe.edu>
Sent: Saturday, January 2, 2021 2:56 PM
To: Davidson, Florene, EMNRD <florene.davidson@state.nm.us>
Cc: Camilla Feibelman <camilla.feibelman@sierraclub.org>
Subject: [EXT] permission to give public comment

Sorry, I should have added that sometime early in the afternoon session (12:30-5) would be ideal.

thank you,
Cris

Hello,

I'm a physicist at the Santa Fe Institute. I would like to speak very briefly (~2 minutes) at the Oil Conservation Commission hearing on the Oil Conservation Division's proposed rule to reduce methane waste.

I can describe calculations showing that if more than about 2% of natural gas is leaked on its way from the well to the turbine, that its effective carbon emissions as a fuel source are just as bad as coal. Thus if

leakage is not brought down significantly, this contradicts the argument that natural gas is a “bridge fuel” for power generation.

Best,

Cris Moore
Professor, Santa Fe Institute
moore@santafe.edu

Cris Moore
moore@santafe.edu

The real danger is that such machines, though helpless by themselves, may be used by a block of human beings to increase their control over the rest of the race or that political leaders may attempt to control their populations through political techniques as narrow and indifferent to human possibility as if they had, in fact, been conceived mechanically.

— Norbert Wiener