

## DOCKETED

<b>Docket Number:</b>	16-IEPR-07
<b>Project Title:</b>	Nuclear
<b>TN #:</b>	211794
<b>Document Title:</b>	Gene Nelson, Ph.D. Comments: Details Regarding Possible Under-Reporting of Fugitive Methane Leakage During Exploitation 06 13 16
<b>Description:</b>	N/A
<b>Filer:</b>	System
<b>Organization:</b>	Gene Nelson, Ph.D.
<b>Submitter Role:</b>	Public
<b>Submission Date:</b>	6/13/2016 1:08:38 PM
<b>Docketed Date:</b>	6/13/2016

*Comment Received From: Gene Nelson, Ph.D.*

*Submitted On: 6/13/2016*

*Docket Number: 16-IEPR-07*

## **Details Regarding Possible Under-Reporting of Fugitive Methane Leakage During Exploitation 06 13 16**

The first part of the attached file (see last paragraph) is an article posted in the online blog, "Retraction Watch" on 13 June 2016. It is a republished copy of recent "Inside Climate News" article. A summary of the controversy described in the re-published article is that the inventor of some key technology utilized in instrumentation for measuring fugitive methane emissions criticizes what appear to be biases leading to underreporting methane emissions, particularly during the extraction and production phases of natural gas production. Natural gas is mostly methane, a potent greenhouse gas with 100 times the Greenhouse Gas (GHG) impact relative to CO<sub>2</sub> within a 10-year time frame. The lead author of the key, 90% industry-funded recent EDF study that argues for the status quo regarding EPA regulation of fugitive emissions appears to ignore the concerns raised by the instrumentation inventor. This lead author inaction finally prompted an environmental group, NC Warn to petition to the Inspector General of the EPA for an independent investigation. The petition is appended to the Inside Climate News article.

The significance for California electric power production is underscored by an informational poster that I and members of Californians for Green Nuclear Power and Thorium Energy of Silicon Valley recently observed at the headquarters of the California Independent System Operator (Cal-ISO) during a public tour. Natural gas is the energy source for 58.8% of all electricity produced in California.

Currently, power produced by emissions-laden natural gas is less costly than power produced by emissions-free nuclear power. However, nuclear power from Diablo Canyon Power Plant provides important voltage and frequency stabilization to the California power grid with a typical capacity factor in excess of 90%. In today's regulatory environment, none of the above benefits of nuclear power are given economic value.

Regulations should be promptly revised to reflect the significant economic value of each of these nuclear power advantages, particularly in light of the significant subsidies provided to solar and wind power production - both technologies are emissions-free but have low capacity factors with random fluctuations and fail to provide voltage and frequency stability to the California power grid.

Furthermore, in most locations, natural gas "peaker" plants are used to backup solar and wind's intermittency without acknowledging the fugitive emissions associated with the extraction, production, and distribution that are tied to that natural gas use. Instead, we receive the persistent messaging that natural gas is "clean" when in reality its use is a significant contributor to global warming. For the above reason, this concern also extends to solar and wind power.

In order to save CEC server space, the attachments to this comment are located in the 16-IEPR-02 docket (Natural Gas.)

The TN is: 211793

and the web link is: <http://tinyurl.com/fugitive-emissions>