

Subject: EV Mandate

Date: Tuesday, May 23, 2023 at 3:19:14 PM Eastern Daylight Time

From: James Murphy

To: HearingComments, DNREC (MailBox Resources)

Ladies and Gentlemen:

I hold a Bachelor of Electrical Engineering Degree from the University of Delaware, I am licensed as a Master Electrician in Delaware and Maryland and I have been twice appointed by Governor Carney to the Delaware Board of Electrical Examiners (Vice President).

In view of my background and experience, I find myself at a loss for words regarding what I consider to be an ill advised EV mandate. I don't know where to begin. I see no consideration to the fact that we are now on the edge of a total electrical grid meltdown with the ever increasing state population versus limited generating, transmission and distribution capacity. Over the last decades, we have seen the shutdown of many of the Delaware electrical generating facilities. The Edgemoor plant is gone and Indian River is slated for closure. The capacity of the Delaware City generating facility plant has been dedicate to only the Delaware City refinery. One of the New Jersey Nuclear Plants is nearing the end of it's life span.

I hear of no plans in the interim to build new power generating capacity. Wind and solar is a wonderful idea in theory but in reality, we need "spinning capacity" on standby for when the wind stops blowing and the sun don't shine. I wonder how long it takes from the planning stage to actually bring a new coal, nuclear or gas powered plant on line. How many will be built on the east coast between now and 2035?

I won't bore you with the often repeated details regarding the lack of infrastructure to transmit and distribute electricity to the hundreds of thousands of charging stations expected to be required if this mandate is to succeed. Is anyone aware of the technical concerns regarding the introduction of Distributed Energy Sources (DER) as more an more solar and wind systems are interconnected into a grid not designed to handle this added load. DER addition is compounded by the fact the existing infrastructure is under increasing stress and conductors, transformers, relays, circuit breakers, etc. are reaching or are beyond their expected life. (Source: EC&M - February 2023)

I also wonder if anyone has done any analysis regarding impact to the fossil fuel industry in light of this mandate. I anticipate more refineries closing as gasoline demand goes down. The oil industry doesn't like to operate a facility under capacity. (I have over 30 years experience in the petrochemical and oil refining businesses.) With less demand, I anticipate the opposite of normal economic reaction. Less demand will mean less production and higher pricing for all other petroleum based products.

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