

Date: September 9, 2022

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To: Mr. Bernard Logan, Clerk
Virginia State Corporation Commission
Attention Document Control Center
P.O.Box 2118
Richmond, VA 23219

Re: PUR - 2021-00142
Petition of Virginia Electric Power Company
for Limited Reconsideration

COMMENTS of CFACT

Sir:

In its Petition for Reconsideration, the Virginia Electric Power Company ("Dominion") requests that the Commission remove the "performance guarantee" adopted by the Commission in its Final Order dated Aug 5, 2022. Dominion states that "the Commission's unprecedented imposition of an involuntary performance guarantee condition on its approvals is untenable", and that if the performance guarantee is ordered, "it will prevent the Project from moving forward and the Company will be forced to terminate all development and construction activities".

We believe, on the contrary, that a performance guarantee is essential to protect ratepayers in this unprecedented situation. To that end we offer the following derivation of the proper performance requirement, which we respectfully request the SCC to implement a factually supported Dominion OSW capacity factor threshold requirement

1. Introduction

Dominion's petition reopened the 42% issue includes this key statement:

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*"In addition to exceeding the Commission's legal authority, by adopting the performance recommendation of the Office of the Attorney General's Witness Norwood in a mere five lines of pre-filed testimony—for a 42% capacity factor threshold measured on a rolling three-year average, the Commission has imposed a requirement that is contrary to the **factual support** it purports to rely upon, improper in scope, and unreasonably vague in application."* (Emphasis added)

We are proposing a different threshold, one based on the VCEA compliance plan in Dominion's 2021 IRP update, so it is clearly based on factual support. It happens to be higher than 42%, in fact it is a minimum of 50%.

Note that this is a legal threshold, a performance requirement. It is what Dominion must do, not the wind, in order to maintain system reliability. It is not a specified capacity factor for the OSW project. On the contrary, it is a "make or buy" requirement for the project to maintain reliability.

2. Derivation of the minimum threshold

The crunch begins in 2026 with the planned shutdown of roughly 2,600 MW of combustion generating capacity being completed that year. This capacity is replaced with a combination of solar power and the OSW wind project. See Figure 2.2.3: Alternative Plan C (nameplate MW) in the IRP update for specifics.

Something like 8,000 MW of solar capacity has been built or contracted for by then, so there may be no reliability problem during the day. But at night there is only the 2,600 MW OSW capacity, which is just equal to the shut down combustion capacity.

There is some battery storage capacity but it is very small compared to the needed amount. There is a planned storage capacity of about 800 MWh which at the standard 4 MWh per MW gives just 3,200 MWh. But 2,600 MW for, say, 12 hours when there is no solar requires 31,200 MWh or roughly ten times as much. In fact that storage would likely all be needed to try to reliably get 12 hours of supply out of the solar generators.

If the OSW make or buy requirement is one half a day then that equates to a 50% capacity factor, not the proposed 42%.

3. Discussion

This 50% required OSW capacity factor does not mean the project will physically produce this much electricity. It is a legal "make or buy" reliability requirement.

Given the pronounced intermittency of OSW there will have to be significant power purchases to maintain reliability under this VCEA compliance plan, no matter what required capacity factor is

specified. That this 50% is greater than the expected project output is thus irrelevant. This is a "make or buy" capacity factor.

Note that a more refined analysis of Dominion's VCEA compliance plan is likely to lead to an even larger requirement. In particular, the period of solar generation is likely to be considerably less than 12 hours in winter.

Respectfully submitted and requested,

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