

Wes Moore, Governor
Aruna Miller, Lt. Governor
Josh Kurtz, Secretary
David Goshorn, Deputy Secretary

January 2, 2024

The Honorable Bill Ferguson President, The Senate of Maryland H107 State House Annapolis, Maryland 21401-1991

The Honorable Adrienne Jones Speaker, Maryland House of Delegates H101 State House Annapolis, Maryland 21401-1991

Re: Submission of the Renewable Energy Portfolio Standard Study

**Agency:** Maryland Department of Natural Resources

**Report Authority:** Public Utilities Article § 7-714(f)(4), 2019 (MSAR #11476)

Dear President Ferguson and Speaker Jones:

The Department of Natural Resources will not meet the legislatively tasked date of January 1, 2024 for the 100% Renewable Portfolio Study. DNR anticipates that this report will be completed by July 1, 2024 if there are no additional changes to the scope and if external contractors are fully funded and continue to provide their models.

The Clean Energy Jobs Act of 2019 (SB516) requires the Power Plant Research Program (PPRP) to conduct a supplemental study to assess the overall costs and benefits of increasing the Renewable Portfolio Standard (RPS) to a goal of 100% renewable energy by 2040. This supplemental study is in follow-up to an earlier study of the RPS conducted a few years earlier and finalized in 2019. In planning the scope of the 100% Study, it was apparent there was interest in also evaluating the costs and benefits of meeting a 100% Clean Energy Standard by 2040, which would allow energy from non- and low-carbon-emitting sources such as advanced nuclear energy and natural gas generation using carbon capture and storage (CCS). By statute, the results of the supplemental study were due to the Governor and General Assembly on or before January 1, 2024.

The 100% Study is being led by PPRP's socioeconomic integrator, Exeter Associates (Exeter also led the previous RPS study published in 2019). Exeter's role is to oversee all the technical aspects of the study, manage the subcontractor conducting the energy modeling, and draft the final report based on results of up to 20 modeled scenarios forecasting Maryland's energy future. Exeter subcontracted with Vibrant Clean Energy (VCE) to perform modeling evaluations of various renewable and clean energy scenarios using VCE's WIS:dom capacity expansion and production cost model. VCE has conducted comparable studies to the Maryland 100% study and has substantial technical expertise and a wealth of renewable resource data that Exeter believed would be valuable in evaluating a 100% standard.

Most of the delay can be attributed to difficulties faced by VCE. After kicking off the study with a stakeholder working group in August 2021, VCE had significant difficulty in getting its model to run with all the assumptions and inputs developed by the workgroup. Additional delays resulted from issues with key personnel at VCE (a serious health issue faced by the company CEO, followed by the departure of the project's lead programmer). By the time the model was ready to run, significant legislation had passed including the enactment of the Inflation Reduction Act in August 2022 and, to a lesser extent, the enactment of an 8.5 GW offshore wind energy goal and a 3 GW energy storage goal, which forced additional changes to VCE's model and added to the delay. Initial model runs (Business-as-Usual, 100% RPS, 100% RPS with Calvert

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Cliffs, and 100% Clean) were only presented to the workgroup in May 2022. Subsequently, VCE was sold to another company, and further delays resulted from staffing, such that only 17 of the model runs have been completed with 3 more pending as of today.

A second factor weighing on completing the 100% Study developed more recently and stems from diminished funding for the project. PPRP has a 5-year contract with Exeter to provide technical support with socioeconomic issues related to energy. Most of this work relates to PPRP's handling of licensing review of new energy generation and transmission line projects that require a Certificate of Public Convenience and Necessity (CPCN). When the 100% Study was formulated in 2019, it was believed that the contract had the resources to carry out its usual tasks as well as to support the 100% study. This would not turn out to be the case. With increasing CPCN caseload, inflation escalating labor category rates, and the loss of a key team member to illness, PPRP found itself with insufficient funds to complete the 100% Study. PPRP worked on a request for a contract modification, and the Board of Public Works approved that modification on December 13, 2023.

In summary, PPRP will not be able to complete the legislatively mandated supplemental report by January 1, 2024. Should you have any questions or comments regarding this extension, please feel free to contact our Director, Legislative and Constituent Services, Dylan Behler directly at 410-260-8113 or by email at dylan.behler@maryland.gov.

Sincerely,

Josh Kurtz Secretary

cc: Sarah Albert (5 copies)

Dylan Behler

Maryland Public Service Commission/Chairman Hoover

Maryland Energy Administration/Director Pinsky