

February 07, 2022

BY ELECTRONIC MAIL

info@rggi.org

RGGI, Inc. Staff
Regional Greenhouse Gas Initiative, Inc.
90 Church Street, 4th Floor
New York, NY 10007

February 7, 2022

Re: RGGI Third Program Review Request for Comments Regarding IPM Modeling Approach

Dear Andrew McKeon and Members of the RGGI Board:

Dominion Energy submits these comments regarding the Regional Greenhouse Gas Initiative's request for further input on the modeling approaches raised during the 2021 Program Review stakeholder meeting held on December 8, 2021. We appreciate the opportunity for continued participation in the stakeholder outreach process.

The materials distributed for the December 8th meeting included stakeholder input on the modeling approaches, for which we have included recommendations and comments below:

- The RGGI states are seeking comment on how to consider the availability and pricing of hydrogen and renewable natural gas, since these technologies were not previously modeled in the 2017 program review. Hydrogen and renewable natural gas are evolving technologies, therefore pricing forecasts are limited and are likely volatile in the short-term as the market matures. Because of this uncertainty, we would recommend for hydrogen and renewable natural gas to be included in the modeling assumptions using high-level placeholders in the short-term in order to evaluate and make updates once some of the uncertainty over these future technologies and projected costs have been resolved.
- The Integrated Planning Model (IPM) considers additions to existing capacity in planning or construction stages that are assumed to be firm and relies on transmission capabilities to help meet regional electricity demand. The 2017 Program Review Approach included capabilities of the most recent ISO reports and modeling and does not anticipate changing this approach for the Third Program Review. The 2017 approach included conventional fossil fuel generation in its analysis which factored in many years of operating performance and studies of reliability performance. The potential approach will introduce electricity generated from solar and wind, which are evolving technologies. Studies are underway to evaluate and identify reliability issues and solutions so that they can be integrated into the planning of our transmission projects. It is critical for ICF to factor these studies into the

modeling approach for a more accurate picture of transmission capabilities that are required to help meet regional electricity demand.

- The proposed Integrated Planning Model (IPM) considers energy storage buildout and relies on energy storage deployment to manage peak load and transmission resources in the projected model. Energy storage capacity additions were not previously modeled during the 2017 program review. As a result, specific considerations should be factored into the Third Program Review modeling approach. In addition to assuming a 4 and/or 6-hour storage duration, an additional 8-hour storage duration should be included to accurately capture the storage length of the technology along with what is currently getting modeled in certain Integrated Resource Planning (IRP) scenarios. The projected model should also capture standalone storage applications or photovoltaic storage applications to be selected in front of the meter. Since this technology is evolving, studies are underway to evaluate and identify reliability issues and solutions so that they can be integrated into the bulk power system. It is critical for ICF to factor these studies into the modeling approach for a clearer view of these developing technologies that are intended to meet regional electricity demand. One good example is a recent study titled “Energy Storage: Impacts of Electrochemical Utility-Scale Battery Energy Storage Systems on the Bulk Power System” published by NERC in February 2021.
- RGGI Inc. is seeking comment on the firmly planned capacity changes for offshore wind that were included in the presentation slide deck presented to the stakeholders on December 8, 2021. The offshore wind goals that were presented for Virginia were not correct. The following values should be used instead:

2,587 MW online in 2026;
5,200 MW online in 2035

This is consistent with the Report of the Virginia Secretary of Natural and Historic Resources and Virginia Secretary of Commerce and Trade, which was released on January 1, 2022.

Dominion Energy appreciates the opportunity to share our input for consideration with RGGI Inc. and the RGGI states on the Third Program Review. If you have any questions, please contact Liz Willoughby at 804 273-3740 or E.Willoughby@dominionenergy.com.

Sincerely,



Jason E. Williams
Vice President, Dominion Energy Environmental Services