STATE OF DELAWARE
DIVISION OF ENERGY & CLIMATE
100 W. WATER STREET
SUITE 5A
DOVER, DELAWARE 19904

Department of Natural Resources
and Environmental Control

Phone: (302) 735-3480
www.dnrec.delaware.gov/energy

MEMORANDUM

TO: Philip Cherry
Director
Division of Energy & Climate

FROM: Thomas Noyes
Principal Planner for Utility Policy
Division of Energy & Climate

DATE: April 27, 2016

SUBJECT: Public Comments on Renewable Energy Portfolio Standards Cost Cap Determination

Executive Summary

Section 7.4 of Regulation 104 Implementation of Renewable Energy Portfolio Standards Cost Cap Provisions ("regulation") provides for a public comment period of 15 business days after the Director of the Division publishes his determination as to whether to freeze the RPS in the *Register of Regulations*.

> 7.4 The public will have 15 business days from the publication of the Director's determination to offer comment. The Director may alter or amend the determination based on review of the public comments.

Section 7.4 of the regulation provides for the Director to make a final determination after comments have been received and reviewed:

> 7.5 The Director shall make a final determination, including effective date, provide public notice to the Registrar, and notify electronically and by mail the PSC, the Commission-Regulated Electric Company and other interested parties within 15 business days of the close of public comments.

The public comment period ended April 22, 2016. The division has received four comments on the RPS cost cap determination:

1. Professor Jeremy Firestone
2. David Stevenson on behalf of the Caesar Rodney Institute (CRI)
3. Bruce Burcat on behalf of the Mid-Atlantic Renewable Energy Coalition (MAREC)
4. Dana Sleeper and others on behalf of the Maryland, DC, Virginia Solar Energy Industry Association (MDV-SEIA) and allied businesses and organizations

The comments are attached. Some comments relate to the calculation and determination. Others suggest revision of the regulation. I have reviewed the specific points in each of these comments below.

None of the comments raise issues that give cause to revise my recommendation to you to not freeze the RPS. Thus I recommend that you not revise your determination to not freeze the RPS.

Review of the Comments

Professor Jeremy Firestone

Professor Firestone argued that the Director does not have discretion in the present circumstances, but that the benefits cited preclude you from freezing the RPS:

> Although the analysis embodied in the Determination would lead the Director not to freeze either program, the Director has no discretion to exercise. The statute is clear that the Director only has authority to exercise discretion if a cost cap is exceeded. Since under the Department's analysis no cost cap was exceeded, the Director is without authority and there is no discretion to exercise. It is only in those instances when the cost caps are exceeded, that the Director may consider whether or not to institute a freeze and to exercise his discretion. While the outcome is the same here, it is important to recognize that in such circumstances, the Director is wholly without legislative authorization to institute a freeze even should he or she desire to do so.

I respectfully disagree with Professor Firestone's reading of the regulation. The regulation spells out a sequential process. First, the Division is tasked with calculating the cost of compliance as provided for in Section 4.0. Second, if the cost of compliance exceeds one of the cost caps, the Director is tasked with making a determination as provided for in Section 5.0. Given the present facts, you as Director do have discretion to freeze or to not freeze the RPS.

The disagreement is about process, not the conclusion. While Professor Firestone's interpretation differs from ours, he does point out that "the outcome is the same here." Whether one agrees with our interpretation or with Professor Firestone's, the end result is the same.

Caesar Rodney Institute

David Stevenson, representing the Caesar Rodney Institute, offered several comments. First, he argued that "QFCP compliance cost must also be included." The comment that QFCP costs must be included in the overall cost of compliance is not consistent with the regulation.

Second, he argued that the figures used in Delmarva Power's externality benefits should be revised to refer to different published figures:

> The calculation used an updated estimate from July, 2015, for the Social Cost of Carbon but used out of date rates from the EPA for the $/ton value of reduction of NOX and SO2.

First, Section 5.7 of the regulation provides that "[t]o the extent possible, the externality savings should be consistent with the current IRP filed by the Commission-Regulated Electric Company, except where other published methods or studies are determined to be more appropriate." The figures used in the calculation were taken directly from the 2014 IRP.

However, to better understand Mr. Stevenson's point, I looked up the tables he referenced that showed a lower externality cost for NOx and SO2. The table, from EPA Clean Power Plan report, presents PM2.5 externality benefits in the year 2020, expressed in 2011 dollars using 3 percent and 7 percent discount rates. (Attachment 5) Using projected future externality costs to describe present costs is problematic for two reasons: First, factors affecting the costs could be different in the future. Second, using future figures requires the use of an appropriate discount rate.

Mr. Stevenson further argues that the PJM emissions rates used in the IRP are out of date. The emissions rates, while slightly different than the rates used in the 2014 IRP, do not significantly alter the conclusions.

Third, Mr. Stevenson argues that "only jobs supported by the SREC auction should be counted" in the calculation of solar jobs, and that jobs supported by the SEU upfront purchase and the Green Energy Fund (GEF) should not be included. Mr. Stevenson perhaps overlooked the fact that GEF grants for solar PV installations are included in the cost of compliance. GEF grants are used to support small scale PV, whether the grantee sells SRECs in the annual auction, sells SRECs on the spot market, or uses the SEU upfront grant.

You will recall that the economic impact analysis has already been adjusted to eliminate the risk that we are measuring activity to build capacity outside of Delaware. It is my view that the economic benefits calculation has be sufficiently refined to ensure that we are not claiming benefits that cannot be reasonably and conservatively attributed to RPS compliance.

Fourth, Mr. Stevenson argues that the cost of compliance should include future SREC costs:

> However, the cost of those auctions is spread out over twenty year contracts and doesn't show up in current Compliance Year costs.

The assertion is not consistent with the statute and the regulation, both of which refer to the cost of compliance within a compliance year. 26 *Del. C.* § 354(i) & (j) refer to "the total cost of complying with this requirement during *a compliance year*." (Emphasis added.)

The definition of the SREC cost of compliance in the regulation is likewise clear:

> "Solar Renewable Energy Cost of Compliance" means the total costs expended by Commission-Regulated Electric Company to achieve the applicable RPS percentage standards for solar photovoltaic renewable energy *during a respective compliance year*. (Emphasis added.)

Finally, Mr. Stevenson argued that the economic effects of higher electricity rates should be considered in the calculations. The statute and the regulation are specific in defining the cost of compliance; neither mentions that the cost of compliance should be augmented by economic analysis of the wider impacts of those costs.

Mid-Atlantic Renewable Energy Coalition (MAREC)

Bruce Burcat, writing on behalf of MAREC, was broadly supportive, though he did offer two technical points:

> First, the renewable energy added through the standard will not displace the average fuel mix, as assumed in the analysis, but will instead displace the marginal mix of fuel… [T]there is more coal in the marginal mix than in the average mix, so the amount of emissions reduced will actually be higher than that assumed in the analysis.

The chart he refers to shows that the amount of coal power in the marginal fuel mix is 51.75 percent, significantly higher than the amount of coal power (36.6 percent) in average fuel mix Mr. Burcat has a sound point here, though it would not change the recommendation to not freeze.

Second, Mr. Burcat notes the lack of results for the cost suppression effect:

> Second, the cost suppression benefits were not included in the analysis. While we understand that this is because a method for determining them has not been established yet, not including them assumes the value is zero, which is most certainly not the case.

Again, Mr. Burcat has a sound point. I hope to further develop our methods (working with NREL) to be able to include cost suppression effects in the future.

Mr. Burcat concludes, "MAREC supports the decision not to freeze the cost cap for the renewable portfolio standards."

Maryland, DC, Virginia Solar Energy Industry Association (MDV-SEIA)

Dana Sleeper submitted a letter on behalf of the MDV-SEIA that was signed by representatives of members including SolarCity, NSAI Energy, Paradise Energy, the Energy Freedom Coalition for America, Salt Energy Group, Virginia Solar LLC, Community Power Network, Solargaines, PRX Energy LLC, Sungevity, RER Energy Group, CMI Solar and

Electric Inc., Standard Energy Solutions, and GRID Alternatives. The letter is broadly supportive of the calculations and determination:

> DNREC's Determination to not freeze the solar PV RPS carve-out is reasonable and justified.

The letter concludes, "we support the Director's decision not to freeze the RPS."

Summary

Three of the comments were supportive of the calculations and determination. Of these, two took issue with some of the specific methods or procedures we used in ways that would still lead to the same conclusion. One commenter, Mr. Stevenson, offered criticisms of our methods which I did not find convincing. Having reviewed the comments, I recommend that you not revise your determination to not freeze the RPS.