



Delaware Interfaith Power & Light

PO Box 911
Dover DE 19903

A religious response to climate change

January 22, 2014

The Honorable Collin P. O'Mara
Secretary
Department of Natural Resources and Environmental Control
89 Kings Highway
Dover DE 19901

Dear Collin:

Thank you for the opportunity to weigh in on proposed rules for when and whether to impose a freeze on Delaware's Renewable Energy Portfolio Standards (RPS). We believe the wording of the law clearly gives your agency discretion on whether to freeze the RPS even if certain cost conditions are present.

We also agree, as the proposed rule delineates, that any consideration of a freeze should weigh factors such as the overall energy market, avoided costs, health and mortality benefits, and the positive economic impacts of renewable energy in Delaware.

Delaware Interfaith Power and Light recognizes the progress that Delaware has made under Governor Markell's and your leadership toward improving our air quality and addressing climate change. As you know, we one of 40 state affiliates of a national faith-based organization committed to reducing the damage caused by fossil fuels on our health and our planet's health. We count 21 houses of faith with thousands of members here in Delaware and have an ambitious plan to grow our mission in 2014-15.

To put mandatory brakes on the RPS would be an unfortunate step backward at a time when renewable energy sources are clearly gaining momentum and creating jobs. The RPS discussion is somewhat analogous to the yard-waste ban debate during the last decade; once the uncertainty ended and both residents and businesses realized the ban was not going to be overturned, entrepreneurs sprang into action and new markets were created for the yard waste.

However, much more is at stake with RPS and other measures that ramp up the generation of renewable energy. Keeping energy affordable is indeed important, but focusing only on retail costs would be a grave mistake. Delmarva Power attempted to model the impacts of a changing power supply in its 2012 Integrated Resource Plan.¹

DEIPL quotes extensively from Delmarva Power's Integrated Resource Plan because so often the

¹ *Delmarva Power & Light Company Integrated Resource Plan, December 6, 2012, pp. 109-131. Detailed modeling methodology in Appendix 5.*

only focus during these debates on renewable energy is the retail cost of electricity in the here and now. **Here we have the regulated utility itself using extensive modeling to tell the other story – of millions of dollars saved, illnesses prevented, and deaths averted by moving away from coal and other fossil fuels to cleaner sources.**

The introduction to the Externalities section in the IRP states:

“Most of the available literature on environmental externality points to global warming and the human health effects of air emissions as dominating energy externalities. This was a primary consideration in shaping the process used by Delmarva to quantify environmental benefits and impacts.”

The report discusses health impacts such as cancer, chronic pulmonary disease, asthma, bronchitis, emergency room visits and lost work or restricted activities.

The modeling assessed the impacts of a changing fuel mix on emissions of fine particulate matter (PM_{2.5}), sulfur dioxide (SO₂), ozone, nitrogen oxide (NO_x), mercury and carbon dioxide (CO₂). The model studied the estimated impact on emissions of these pollutants over time (2013-2022) due to changes in state and federal regulations, including the RPS; declining demand because of increased efficiency; the Delmarva load forecast; and other factors.

At the risk of oversimplifying, the extensive modeling relies on a reference case to predict the following decline in emissions over time (page 119):

	2013	2014	2016	2018	2020	2022
CO ₂	4,691.27	4,193.34	4,882.17	4,450.71	4,571.98	4,358.14
SO ₂	9.70	3.90	4.07	4.39	3.64	3.33
NO _x	3.25	2.42	2..06	2.06	2.17	2.08

“Based upon the environmental health impact and benefit assessment, air quality within the Mid-Atlantic States and the State of Delaware is expected to improve from 2013 to 2022,” the Delmarva Power report states on page 124. “The expected reductions in emissions between 2013 and 2022 are due to implementation of emission control technologies required by state and federal rules, the closure of older facilities, fleet turnover of on-road motor vehicles and off-road equipment, the introduction of cleaner engine technologies, and the use of cleaner fuels, such as natural gas.”

The analysis continues to show a dramatic decrease in health costs due to the lowered emissions. These figures on page 128 show the high end and low end of predicted monetized health-related

benefits, measured in millions of dollars, just from a reduction in particulates:

Table 12
. Total BenMAP-Derived Monetized Health-Related Benefits for PM_{2.5} and Ozone (Millions \$2010 U.S. Dollars/Year) Associated with the Changes in Air Quality from 2013 to 2022.

	Delaware	
	High End	Low End
2013–2022		
PM-Mortality (Laden, 3% discount rate)	1,800	
PM-Mortality (Pope, 7% discount rate)		630
PM-Morbidity	45	45
Ozone-Mortality (Levy)	300	300
Ozone-Morbidity	6	6
<i>Total</i>	<i>2,151</i>	<i>981</i>
Total (2 significant figures)	2,200	980

According to the report: “The estimated human health benefits arising from the Reference Case by 2022 . . . are very significant. These results are affected by the expected changes in power plant emissions that can be attributed to a number of factors including:

- The expected operation of over 12 GW of new gas fired generation and retirement of about 2 GW of coal fired resources in PJM by 2022,
- Expected reductions in emissions from remaining coal generation,
- Increases in the expected implementation of renewable resources within Delaware and other Mid-Atlantic regions (including Delmarva Power’s renewable resource portfolio),
- Ongoing demand side management activity including the implementation of smart grid technology and associated dynamic pricing and load control programs.”

We urge you to keep moving in this direction – toward a cleaner, healthier, more sustainable Delaware and planet. Please don’t let our progress be slowed or reversed.

Sincerely,



Lee Ann Walling
Executive Director

cc: John Sykes, DEIPL Board President
Lisa Vest, Hearing Officer
Tom Noyes, Division of Energy and Climate