Lisa Vest
Public Hearing Officer
State of Delaware - DNREC
89 Kings Highway
Dover. DE 19901

Dear Ms. Vest,

I'm writing on behalf of the Delaware Chapter of the Sierra Club regarding the proposed implementation rules, "102 Implementation of Renewable Energy Portfolio Standards Cost Cap Provisions".

One of the key issues is what should be included when calculating the cost of compliance with the statute. We believe that the original intention was to encourage a transition to clean, renewable energy sources. The reasons included the health and mortality benefits of reducing fossil fuel pollution, as well as the urgent need to reduce the emission of carbon dioxide because of its contribution to raising global average temperatures and the resultant climate changes. These climate changes, with effects including drought, fires, extreme heat and cold events, sea level rise, increased disease ranges, national security risks and many others, will entail an unknown but certainly large cost to the nation, including us in Delaware.

Currently fuel cells powered by renewable fuels are allowed as an eligible energy resource. The costs for using fuel cells to comply with the RPS should not be counted in the calculation of costs of compliance. The natural gas used to power the fuel cells is not a renewable fuel. Natural gas usage contributes to greater carbon emissions and climate change, through leakages throughout the life cycle from hydro-fracturing the shale causing unpredictable leakage through the rock, leaks at the drill head, leaks from the transmission through pipelines all the way to the fuel cell. In addition, the 'fracking' process has many well-known problems resulting in air pollution and water pollution from the injections of the chemicals used to release the gas from the rock. It may be possible to find methane produced in a renewable way, but the reality of the marketplace is that the cheapest methane will be used and that is currently fracked gas. This allowance for fuel cells was grafted onto the legislation as a way to facilitate a business deal with Bloom Energy, and detracts from the encouragement of actual renewable resources. It's bad enough that it takes the place of actual renewable resources in meeting the requirement. The costs should not also be used to further limit development of the intended resources like wind and solar.

We agree that the legislation intentionally uses the words 'may freeze' in the statute and that the State Energy Coordinator (or Director of Climate and Energy) should use judgment in determining whether to freeze the RPS requirements. We agree that a freeze 'shall' be lifted if the costs of resumption can be expected to drop below the caps.

We support the listed considerations in section 5.4.

The benefits that accrue to the public at large have a real value. Delmarva's IRP has included a calculation of health and mortality benefits from renewable resources that are significant and lower costs that don't show up on the utility bill. The costs of climate change are reduced to the extent we do not add carbon dioxide to the atmosphere. It makes sense to use the federal cost of carbon as a starting point for quantifying some of these benefits as well as the costs of using conventional fossil fuels. The

costs to rate payers is not limited to what's on our utility bill. The show up in higher taxes from federal efforts to clean up disasters like the Gulf BP oil spill, pipeline leaks across the country, etc.

We can't know what future disasters are avoided, but we can be sure it is cheaper to prevent disaster than to recover from it. 'A stitch in time, saves nine.' This should be considered when assessing the costs and benefits. We need to build the non-fossil fuel, non-nuclear capacity before the climate crisis is finally acknowledged for what it is, and policy makers realize we have to immediately stop putting carbon dioxide into the atmosphere.

We should also consider that solar and wind power often eliminate the need to run the dirtiest, most expensive plants that get turned on when meeting peak loads. These renewable sources save us all money when this happens. We should be encouraging solar energy in particular for this benefit of producing more energy when it is most needed without an increase in cost.

When calculating the costs, the rules should be looking at the incremental increase from year to year, not the cumulative cost from the beginning of the program. It seems unrealistic to think we could shift to 25% renewable energy by 2025 and only increase the cost by 3% cumulatively vs conventional energy throughout the whole period. The 3%/1% calculation should look at the cost of taking the next step in the progression to 25% that year. We need to take into account the cost shifting that happens with non-renewable sources like fossil fuels and nuclear energy which makes them look cheaper than they really are.

Creating a growing demand for REC's and SREC's establishes a climate to develop the solar and wind business in Delaware. A growing RPS requirement creates and sustains jobs here in DE. We need a predictable demand so that resources at all scales can make rational decisions about investment.

The Director should have discretion to decide about a freeze and should fully consider all the benefits that offset the costs of this early state in the development of renewable resource industries. As volume grows, the costs have gone down. We should encourage this growth, just as we did, and still do, with fossil fuel subsidies and tax breaks, as we did, and still do, with automobiles by building all the infrastructure they require with money not included in the price of cars.

Discretion is necessary because the transition to renewable energy is absolutely necessary for the future of the economy. We can't always easily calculate the costs of fossil fuel energy and the benefits of renewables. That doesn't mean we have to ignore them, it means we use judgment.

Thank you for consideration of these comments.

Respectfully,

John Irwin

Chair, DE Chapter of Sierra Club