Delaware Energy Users Group

16 Robin Drive
Hockessin, DE 19707

May 31, 2018

Via email

Mr. Thomas G. Noyes
Principal Planner for Utility Policy
DNREC
100 W. Water Street, Suite 5A
Dover, DE 19904

RE: Delaware Energy Users Group Comments for the Offshore Wind Task Force Report Recommendations

Dear Mr. Noyes:

The Delaware Energy Users Group (DEUG) offers the following comments to the Offshore Wind Task for the Offshore Wind "three" key report recommendation questions issued in your email of May 10, 2018.

SUMMARY STATEMENT

DEUG recommends that the Task Force issue their report with the recommendation that Delaware stop/postpone efforts to promote/approve offshore wind projects.

Offshore Wind projects are not financially viable at this time. Costs are substantially greater than other onshore wind and solar renewable generation projects as well as the more traditional generation projects. Delaware large energy consumers can not support increased costs to subsidize Offshore Wind when no additional benefits are provided for the increased cost.

The PJM generator interconnection process clearly shows a large volume of renewable energy projects submitted and planned for implementation. These projects dwarf the minimal volume of Offshore Wind projects that Delaware consumers could possibly support. PJM's market is already delivering renewable energy project benefits beyond

any impact that a Delaware initiative could provide. No consumer benefit is being generated.

Specific responses to the three questions asked by the Task Force are presented below.

Question 1: What factors need to be considered for Delaware to respond when a company proposed to develop an offshore wind project?

DEUG Response:

Delaware has a limited number of factors that need to be considered when an offshore wind project is proposed.

The investor or company proposing a project submits their plans directly to the PJM Interconnection organization. PJM operates the bulk electrical system in the Mid-Atlantic Region and has a comprehensive and thorough process for evaluating/approving new electric generation projects.

In this process, the investor company holds all the risk associated with project installation and operation. Companies perform detailed economic analyses to confirm their effort is deemed financially viable. PJM defines all the requirements for the project and establishes the necessary actions for approval. End-use consumers are protected by the process and do not assume the financial risk or consequences of non-economical projects.

PJM's process for interconnecting new electric generation projects to the grid has worked exceptionally well. The amount of excess electric generation on the system is at a PJM all time high further insuring the system is reliable. New renewable generation projects (solar and wind) account for over 40% of new proposed generation projects. Flexible and lower cost gas-fired generation has displaced less environmentally friendly coal plants (27,352 MW retired for 2011 – 2020[1]) and lowered electric prices. All of these benefits have come without any direct consumer financial risk or a required investment from end use consumers.

Delaware will clearly have a critical supporting role as electric generation projects make their way through and out of the PJM evaluation process. Activities such as lease

[1] Monitoring Analytics, PJM 2017 Quarterly State of the Market Report, January through September, Table 12-5, Table 12-9.

reviews/approvals, electric system interconnections, regulatory approvals, etc. will need to be implemented to move projects through to implementation.

However, Delaware should not have a direct role to incentivize a project or issue implementation approval. Doing so would expose Delaware citizens and businesses to above market energy costs to subsidize the project.

Question 2: What factors need to be considered in a decision as to whether the State would solicit or purchase energy from an offshore wind project?

DEUG Response:

Delaware has two factors that should be considered regarding the procurement of energy from an offshore wind project. Is the power financially cheaper than the PJM energy price and can Renewable Energy Credits (RECs) be procured to meet State requirements at a cheaper price? If these conditions are not met, then there should be no procurement of offshore wind project energy.

The PJM market currently has 34,447 MW[2] of proposed renewable energy projects for construction and connection to the electric grid. Of this amount, 15,581 MW are on-shore wind projects and 18,866 MW are solar projects.

Investors have determined that these projects initially appear to be economically viable and able to sell power into the PJM market at present wholesale market prices (energy and capacity). End-use consumers will not be assessed a premium for the projects and financial risk stays with the generation owner. Delaware can not economically justify the significantly higher cost of off shore wind energy with the large base of proposed renewable energy projects being delivered by the PJM competitive market.

The large base of PJM market renewable energy projects will create a large influx of new RECs for sale. Expanded renewable energy generation will provide Delaware with a sufficient supply of RECs to meet the State's constantly increasing purchasing requirements in the Renewable Portfolio Standard (RPS) Program.

Other significant cost issues are on the horizon for Delaware citizens and businesses. The PJM market is pursuing detailed evaluations for Grid Resiliency and Capacity Market modifications. DEUG anticipates that market changes will occur in these areas soon. The impact will be increased costs for end-use consumers. In addition to these

[2] Monitoring Analytics, PJM 2017 Quarterly State of the Market Report, January through September, Table 12-2, Table 12-3, Table 12-4.

cost increase concerns, Delaware still faces the full cost impact of the Artificial Island transmission project. No approvals have been issued to change the cost allocation to Delaware despite the project solving a New Jersey nuclear complex reliability concern. Electric transmission costs are increasing 31% on 6/1/18 for Delaware consumers (approximately $1.50/mWh or 0.15 cents/kWh) and will remain higher. Delaware continues to fund the Regional Green House Gas (RGGI), Renewable Portfolio Standard (RPS) and Bloom Energy initiatives that are significant costs not incurred in other States (approximately $8.50/mWh or 0.8 cents/kWh). Adding another subsidy to fund an off-shore wind project will clearly hurt the competitive position of Delaware's large energy intensive consumers.

Question 3: What would Delaware need to do to position itself to become the location of part of the supply chain for offshore wind projects in the Mid-Atlantic?

DEUG Response:

Delaware would need to identify a part of the supply chain that could support offshore wind projects in other States.

The Delaware consumer base is not sufficient to support an offshore wind project larger than a 50 MW, 100 MW or 250 MW. Costs for this size project are likely to approach the significant cost level of the present Bloom Energy surcharge.

Earlier we showed that a total of 34,447 MW of renewable energy projects are in the PJM market interconnection queue. Of this total, 15,581 MW are wind projects. A Delaware offshore wind project of 50 to 250 MW is minor compared to progress in the larger PJM market. The Delaware initiative would not be sufficient to sustain offshore wind development as more lower cost onshore wind projects (and solar) move into the market over time.

Another argument to consider is the Maryland offshore wind project consultant confirming that their project actually increases CO_2 emissions. The environmental benefits are being called into question. Operation of additional onshore wind projects to the West of Delaware (the 15,581 MW total) may have a preferred environmental benefit than the far smaller offshore projects to the East of Delaware.

If the Delaware consumer base is too small to sustain offshore wind development then the State must look to other States to support supply chain initiatives. However, the consumer base in other States may face similar financial issues to support sustained development. For example, New Jersey consumers may face a new $4/mWh nuclear bailout surcharge soon. New Jersey is also discussing a return to the RGGI initiative.

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Can consumers assume these costs plus the premiums for offshore wind? New York State already approved a $3.30/mWh nuclear subsidy that consumers are funding. Energy intensive business jobs in New York, New Jersey and Delaware have not recovered from the losses following the 2009/2010 recession.

DEUG urges the Task Force to consider the true sustainability of offshore wind projects before recommending any significant participation in the supply chain process.

Finally, DEUG offers the attached one-page diagram on the PJM Interconnection market. We use this diagram to illustrate the relationship between the market and offshore wind projects. First, the "Present" is highlighted to show the 27,352 MW of coal generation that the competitive market has retired. This is an unprecedented shift to more environmentally friendly electric generation alternatives. Second, the "Future" is presented to show the massive 34,447 MW entry of renewable energy projects developed by the competitive market. Third, the impact of Delaware offshore wind is presented. Impacts on effective coal plant retirements and/or the renewable energy market are minimal compared to accomplishments of the market. The extreme cost to Delaware consumers is not warranted in relation to benefits coming from the existing PJM Market.

Thank you for the opportunity to submit our comments to the Offshore Wind Task Force report. We are available to discuss any of our comments in further detail.

Respectfully Submitted,

Michael K. Messer
President – Delaware Energy Users Group

DELAWARE OFFSHORE WIND PROJECT: PJM MARKET DELIVERS GREATER BENEFITS

Delaware Energy Users Group

THE PRESENT → THE FUTURE

27,352 MW

Actual Coal/Oil Plant Retirements In PJM Market 2011 - 2020

34,447 MW

New Renewable Generation Projects in PJM Interconnection Process
15,581 MW Wind
18,866 MW Solar
(40% of New Power Plants)

DELAWARE WIND

100 MW

Proposed Project for 2022 Operation

15 MW

Effective Coal Plant Retirement

DELAWARE CONSUMER COST:

$0

Source: Monitoring Analytics, PJM 2017 Quarterly State of the Market Report, January through September, Table 12-5, Table 12-9.

DELAWARE CONSUMER COST:

$0

Source: Monitoring Analytics, PJM 2017 Quarterly State of the Market Report, January through September, Table 12-2, Table 12-3, Table 12-4.

DELAWARE CONSUMER COST:

$1,300,000,000

Source: Nominal Costs from U.S. Wind OREC Price Bid Form, 6/25/17. No DE RPS Offset. Energy Sales and Capacity Sales Assumed to Offset Cost (11/1/17 values). PJM effective capacity of 30% For Project, yields 33 MW plant with 50% assumed to offset Coal Generation or 15 MW.