

**Off-Shore Wind
Commercial Position Paper
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As proposed in the New York State Clean Energy Standard the newly formed Office of Renewable Energy Siting is improperly investigating a plan for the siting of 9,000 MW of off-shore wind generation. Based on actual data as provided from the US Department of Energy published reports, this plan is fatally flawed as exemplified by the following commercial and operational aspects:

1. Western New York currently has an over capacity of energy including a large component of renewable generation. This high level of off-shore wind generation would financially harm the current and future energy market in the Western New York region.
2. Based on data provided in the February 2021 US Department of Energy Cost of New Generating Technologies Report, off-shore wind generation is the highest cost renewable generation option with a total capital cost of \$5,486/KW.
3. Also, based on data provided in the February 2021 US Department of Energy Levelized Costs of New Generation Report, the actual resultant production cost of off-shore wind generation is forecasted at \$120.52/MWH. This represents a six (6) fold increase from the current \$20/MWH cost of electricity in the Western New York region. These above market costs will have to be born by the Western New York taxpayers and electric ratepayers. Additionally, the environmental impact of off-shore wind has not been fully addressed. The direct costs to mitigate these environmental impacts will certainly add to the off-shore wind development costs.

4. New York State has an abundance of untapped hydro-electric generation capability which can be developed at 50% of the off-shore wind development cost. The hydro-electric generation would provide clean source of dispatchable, grid friendly renewable power. Additionally, the capacity factor of hydro-electric generation is 78%, which is 3 times the 26% capacity factor of off-shore wind generation. The result of which is for every 1 megawatt of hydro-electric generation 3 megawatts of off-shore wind would have to be built and maintained.

Recognizing that the New York State economy is energy based and is directly impacted by electricity costs, the financial impact of a six (6) fold increase in the cost of a major component of the State's electricity mix will negatively impact the entire New York State economy. The Office of Renewable Energy Siting should review each of the regulated power company's (National Grid & Avangrid) Integrated Resource Plans (IRP) to determine the need and economic benefits the addition of these resources will bring the rate payers. An IRP provides a detailed plan by the utility to meet forecasted energy demand using both supply and demand side resources to ensure reliable cost-effective service to the rate payers.