

Delawareans have tasted the bitter fruit of overpriced electricity in the futile attempt to subsidize so-called “green” jobs. Adoption of the Bloom Energy feed-in tariff promised 900 jobs by September 30, 2016, but delivered only 227 hires, for an expenditure of \$130 million dollars, paid only by Delmarva Power ratepayers. This translates into a cost of \$470,000 per job, based on a levelized cost of **\$227.00 per megawatt hour**.

The high cost for each job was a predictable outcome based on the 2009 “Study of the Effect on Employment of Public Aid to Renewable Energy Sources, conducted by researchers at the Univerisda Rey Juan Carlos, in Spain.

“The study calculates that since 2000, Spain spent **571,131 Euros** to create each green job, including subsidies of more than **1 million Euros per wind industry job**” and lost **2.2 jobs for each so-called green jobs created**, as manufacturers fled the high cost of Spanish electricity.

Little has changed since 2009; in fact, the U.S. Energy Information Administration (EIA) discontinued cost estimates for offshore wind in 2014. Possibly, because the levelized cost of **\$204.10 per megawatt hour**, for offshore wind turbines entering service in 2019 was excessively expensive.

By comparison, a new advanced combined cycle natural gas plant per the EIA, offers a levelized cost of **\$53.80 per megawatt hour** for generators that enter service by 2022. Rather, then spend additional money to balance the intermittency of wind, which can never serve as baseload generation, it is wiser to spend scarce resources on reliable generation with far lower transmission costs.

The EIA informs the capacity factor for offshore wind may average as high as **41% of nameplate capacity**, but studies from ERCOT, which is an amalgam of land based and offshore wind, illustrates wind provides only **5% of nameplate capacity on some peak demand days**. Atlantic Coast wind will be as bad or worse - when needed the most.

By contrast, a new **combined cycle gas turbine’s capacity factor is 87%** and not dependent on unreliable weather forecasts. This means each new natural gas generator **adds to grid capacity**, whereas wind only temporarily **displaces** reliable

generation, in the form of coal, nuclear, and natural gas, and adds little to grid capacity.

The guaranteed real manufacturing job losses due to subsidized green jobs, and the high cost of electricity, relegates big wind to the scrap heap of historically bad ideas.