February 25, 2020



Francis C. Steitz

New Jersey Department of Environmental Protection

Division of Air Quality

P.O. Box 420

Trenton, NJ, 08625

Re: NJ PACT – Reducing Carbon Emissions in New Jersey

Dear Mr. Steitz, New Jersey Department of Environmental Protection and the Division of Air Quality,

Thank you for providing Competitive Power Ventures, Inc. ("CPV") with the opportunity to provide input for today's stakeholder meeting regarding New Jersey's Protecting Against Climate Threats ("PACT") initiative and the reduction of carbon emissions in the state. Addressing this substantial issue can best be achieved through meaningful collaboration between public and private entities. CPV, therefore, commends the New Jersey Department of Environmental Protection ("NJ DEP") for seeking the input of companies like CPV who are invested in New Jersey and share the State's commitment to achieving carbon emissions reductions while maintaining a reliable electric grid. CPV is a strong proponent of competitive markets due to their success in driving investment, spurring innovation, maintaining reliability, lowering electric rates and reducing emissions from the energy sector. CPV is confident that the competitive constructs in place can be further leveraged to help New Jersey meet its environmental goals and looks forward to working with the state to tackle these important issues.

CPV is a leading independent power producer headquartered in Silver Spring, MD that develops, owns and operates clean electrical generation facilities throughout the United States and has a significant footprint within New Jersey and the mid-Atlantic region. Since 2009, CPV has developed and/or brought online more than 5.6 GW of clean power projects, including 760 MW of renewables, in furtherance of our goal to modernize the country's energy infrastructure while providing safe, reliable and environmentally responsible electricity to consumers. Within New Jersey, CPV owns and operates the CPV Woodbridge Energy Center ("CPV WEC"), a 725 MW highly efficient combined-cycle electric generating facility located in Woodbridge Township that can generate enough electricity to power over 700,000 homes and businesses.

CPV WEC was notably built within the NJ DEP designated Keasbey Woodbridge Brownfield Development Area and development of the project included the remediation of 28 acres of contaminated land that was previously home to a chemical manufacturing plant and had remained dormant since the 1980's<sup>1</sup>. Following \$842 million of private investment and 30 months of construction by over 600 skilled construction workers, CPV WEC began operating in 2016 and has since helped the region avoid an estimated 6 million tons of carbon emissions, through the displacement of older, less efficient generating facilities<sup>2</sup>. CPV WEC's contribution to carbon emissions reduction highlights the role that it and similar facilities can play in meeting the overarching environmental goal of reducing carbon emissions using any and all methods available rather than deploying or retaining specific technologies. This concept is central to the CLEAN Future Act recently introduced by the U.S. House Energy and Commerce Committee which would establish a Clean Energy Standard requiring clean generation sources to have a carbon generating intensity below 0.82 metric tons per MW-hour produced given their ability to reduce carbon by displacing higher emitting resources. CPV WEC has an emissions rate 57% below the threshold at which the CLEAN Future Act deems a resource to be clean and thus has a significantly higher potential for avoided carbon emissions.

CPV WEC's avoided carbon emissions result from its highly efficient design which utilizes a combined-cycle configuration that allows the facility to capture and recycle waste heat to power an additional steam turbine in order produce the greatest amount of power while consuming the lowest amount of fuel possible. CPV WEC's flexible operating characteristics and ability to rapidly increase and decrease output will increasingly be needed by PJM to reliably integrate intermittent resources such as wind and solar onto the system. Since CPV WEC came online in January 2016, generation from wind and solar resources in New Jersey has increased over 56% according to the most recently published data from the Energy Information Administration<sup>3</sup>. Having flexible resources like CPV WEC allows these intermittent resources to seamlessly integrate onto the system in a manner that other inflexible facilities simply are unable to accommodate due to their limited operating characteristics.

<sup>&</sup>lt;sup>1</sup> Brownfields Success Story: Bringing Clean Energy to an Abandoned Waterfront – Page 2 <a href="https://www.epa.gov/sites/production/files/2016-08/documents/epa\_oblr\_successstory\_woodbridge\_v5\_508release.pdf">https://www.epa.gov/sites/production/files/2016-08/documents/epa\_oblr\_successstory\_woodbridge\_v5\_508release.pdf</a>

<sup>&</sup>lt;sup>2</sup> Avoided carbon emissions are estimated by comparing the low emission rates of CPV WEC to the emissions rates of the generating facilities that are being displaced, as published by PJM Interconnection

<sup>&</sup>lt;sup>3</sup> https://www.eia.gov/electricity/data/state/

Notably, CPV WEC was developed and financed entirely by private capital. The facility is a merchant generator, which means there is no ratepayer-backed long-term contract or state-sponsored subsidies in place and the project, therefore, relies solely on market-based revenues from sales into the PJM Interconnection ("PJM"). Within the PJM market construct, generators are naturally incentivized to maximize efficiency in order to lower fuel costs and in turn increase profitability. This incentive to compete has resulted in measurable benefits for consumers in terms of reliability, lower electric rates and reduced emissions. Since 2005, PJM has maintained a reliable electric system while wholesale electricity prices have decreased by 40% and overall emissions have been reduced by 30%<sup>4</sup>.

While competitive markets naturally incentivize the energy sector to maximize efficiency and in turn reduce emissions, they also can be enhanced to address negative externalities and facilitate public policy goals by pricing them into the market. To that end, CPV applauds New Jersey for taking the positive step of rejoining the Regional Greenhouse Gas Initiative ("RGGI"). By requiring generators to pay compliance costs for their carbon emissions, generators are further incentivized to compete with one another to reduce their carbon emissions. Despite having a relatively clean generation fleet compared to the rest of the country and putting a modest price on carbon, RGGI states have seen more than a 35% reduction in carbon emissions since the program launched in 2009. The program's success is a testament to the power of incorporating the price of negative externalities into the wholesale markets and the economic dispatch of electric generators.

CPV believes that expanding RGGI and/or pricing carbon emissions into PJM's dispatch of electric generators will help states like New Jersey further reduce carbon emissions by the amounts necessary to achieve their environmental goals. CPV, therefore, sponsored a Problem Statement and Issue Charge that initiated a stakeholder proceeding at PJM to studying the potential for expanded carbon pricing. CPV encourages New Jersey to engage in and support this effort to leverage competitive markets to cost-effectively achieve public policy goals without picking winners and losers in a manner that can discount the measurable carbon reduction potential of all technology types and have the unintended consequence of stifling innovation. Markets have a proven track record of achieving the functions they

https://www.pim.com/-/media/about-pim/newsroom/annual-reports/2018-annual-report.ashx?la=en

<sup>&</sup>lt;sup>4</sup> 2018 PJM Annual Report – Page 16

are designed for, whether it be maintaining reliability, lowering electric rates or transitioning to more efficient generation sources. Now is not the time to abandon markets, it is the time to embrace them and harness their power to drive competition to efficiently achieve public policy goals.

Through its public policy initiatives New Jersey has made clear its desire to transition to a 100% clean electric system by 2050. By putting a price on carbon, New Jersey will ensure that during this transition, the conventional resources that will still be required to help maintain reliability and provide the flexibility necessary to integrate intermittent resources are as efficient and low emitting as possible. As evidenced by CPV WEC, conventional resources have an enormous potential to impactfully reduce carbon emissions and will need to be an important part of a well-designed transition to the energy system of the future. CPV is therefore encouraged by New Jersey Senate President Steve Sweeney's recent remarks in a press release "emphasizing the role of natural gas in meeting the state's energy needs and making the transition to clean fuels" as well as the draft climate bill put forth by U.S. House Democrats that outlines the extensive role that low carbon-emitting generators such as CPV WEC will play in achieving carbon emission reductions . The issues being considered by the NJ PACT initiative can only be truly addressed through this type of pragmatic approach that inspires collaboration among all stakeholders to develop practical and achievable solutions.

As this process continues, please do not hesitate to contact CPV with any questions related to the development of conventional and renewable generation, the value of competitive markets or the energy industry in general. CPV looks forward to partnering with the NJ DEP and the State of New Jersey to help the state modernize its energy system while maintaining reliability in a safe and environmentally responsible manner.

Sincerely,

Tom Rumsey, SVP of External and Regulatory Affairs

<sup>&</sup>lt;sup>5</sup> http://senatorsweeney.com/press/sweeney-emphasizes-role-natural-gas-meeting-states-energy-needs/

<sup>&</sup>lt;sup>6</sup>https://energycommerce.house.gov/sites/democrats.energycommerce.house.gov/files/documents/0128%20CLEAN%20Future %20Discussion%20Draft.pdf