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Hon. Kathleen H. Burgess
Secretary, New York State Public Service Commission
Three Empire State Plaza
Albany, NY 12223-1350

Email: secretary@dps.ny.gov

Re: Case 10-E-0501 CPV Valley, LLC

Dear Secretary Burgess,

I am a Ph.D. economist who has been analyzing regional economic impacts and developing economic models for over 35 years, and I am a concerned New York State resident, parent and grandparent. I have no financial interests in any energy business, and my comments on this subject are motivated solely by a personal conviction to do what is right for the general population and future generations.

Prior to deciding whether to approve or deny CPV Valley, LLC, a Certificate of Public Convenience and Necessity pursuant to Section 68 of the Public Service Law, Financing Pursuant to Section 69 and a Lightened Regulatory Regime, the Public Service Commission (PSC) must fully understand the economic pros and cons.

Both the Draft Environmental Impact Statement (DEIS) and the follow up Final Environmental Impact Statement (FEIS) are self-serving documents that do not tell the complete story of potential economic impacts.

Natural gas fired power plants contribute to the economic costs associated with climate change. While the oil & gas industry touts natural gas as a clean fuel, multiple independent and respected scientists have challenged this claim, especially as it relates to shale gas [1,2]. As my area of expertise is economics, I will not focus on the global warming impacts of natural gas fired power plants, except to point out that there are many economic costs associated with the global warming and pollution that would be caused by increased extraction and use of natural gas in power plants [3].

The current low price of natural gas is not here to stay and when the price increases significantly, ratepayers will be harmed as will gas fired power plants and communities that are home to such power plants. Supporters of natural gas often point to its current low price as an advantage. This is a

shortsighted view as the price of natural gas is likely to increase substantially due to both demand pressures and supply constraints. The ongoing efforts to convert large buildings to natural gas for heating and to increase the use of natural gas in transportation and certain manufacturing industries will put upward pressure on prices. This pressure is only increased by nationwide efforts to incentivize energy producers to use natural gas instead of coal or nuclear power generation.

Exporting LNG will exert further upward pressure on the price of natural gas, because of additional export demand and by participation in the global gas market with its attendant vastly higher gas prices.

The domestic supply of natural gas is exaggerated. Supporters of shale gas development and their hired consultants claim there is a 100-year or more supply of shale gas in the United States. I have written comments on various studies that make exaggerated claims of shale gas supply. One example is the study by IHS Global Insight [4,5]. I have also submitted comments to the Department of Energy (DOE) on a DOE-funded study that claims that domestic natural gas prices will not be impacted by exports [6,7]. I take issue with these studies. In these documents, I explain in detail why they are both biased and highly flawed. (Many of my papers can be found at www.catskillcitizens.org/barth and I will provide pdfs of my papers upon request.)

Well after my comments on these studies were written, two other authors independently published books on these subjects [8,9]. These works in particular support my conclusions that the supply of shale gas in the United States is highly exaggerated by industry shills and that the price of natural gas is likely to rise significantly.

Natural gas has a history of price volatility and its price is likely to increase substantially. Even the president of American Electric Power commented on the concern of volatility in the price of natural gas. He said that natural gas prices could spike if major environmental issues emerge with fracking, and that natural gas prices are vulnerable to volatile weather conditions. He also said they could increase as export facilities for LNG are constructed [10].

Declines in property values and property tax revenue are likely, contrary to the conclusion made by CPV Valley, LLC. The conclusions by CPV Valley, LLC are in sharp contrast to the conclusions of independent, unbiased research. The FEIS concluded, "The studies reviewed during the preparation of the DEIS indicate that the Facility would have no measureable impact on housing values." The DEIS covered this issue in Section 7.0, "Socioeconomics and Environmental Justice," as follows.

CPV Valley looked at several studies on the effect of power plants on property values. One visual impact study for the Spagnoli Road facility evaluated the property values around three power plants that had been

constructed (Island Park and Glen Head in Nassau County, and Port Jefferson in Suffolk County) (J.A. Cowen Associates, not dated). The study evaluated property values within 1/2 mile of a power plant, within 1/2 to 1 mile, and beyond one mile. The results of the study indicated that the three facilities had no impacts on property values Refer to Appendix 7-D). The study was accepted by the lead agency in support of the Spagnoli Road facility project, which previously was granted approval by the Siting Board under the New York State Article X process (Case 01-F-0761).

Another study looked at residential property values in two Massachusetts communities that were located near power plants (Creative Strategies and Communications, 2007) (Refer to Appendix 7-E). Based on surveys of the residents in the host communities and discussions with the town assessors and local real estate agents, the study found that the generation plants in the two towns have not posed a problem with the local community image or with home sales or prices.

A third study, "The Effects of Power Plants on Local Housing Values and Rents: Evidence from Restricted Census Microdata" by Lucas W. Davis, University of Michigan, Department of Economics, June 18, 2008, used hedonic pricing methodology to evaluate housing prices. The study concluded that there was a 3 percent to 5 percent impact on housing prices related to location to a power plant. Unlike the previous reports discussed above, the study utilized a hedonic pricing methodology, which uses census data based on self-reported housing values. The author did state in the report that "With any self-reported information one may be concerned about whether or not the households are able to answer accurately."

The first study referenced was done by the firm J.A. Cowen Associates, a firm that appears to regularly act as a consultant to power plants on the subject of property values. Power plant developers fund the firm's consulting work on this subject, so their work cannot be viewed as unbiased, independent analysis. Another more recent report that J.A. Cowen produced for the proposed Caithness Long Island Energy Center also concluded that there would be no impact on property values. (<http://www.brookhaven.org/portals/0/documents/planning/Caithness%20Long%20Island%20Energy%20Center/Appendix%20N%20-%20Real%20Property%20Valuation%20Report%20r.pdf>).

The second study was conducted by a firm called Creative Strategies and Communications. This firm's website (<http://www.creatstrat.com/background.html>) states,

CSC has designed and implemented strategies to win approvals for a number of projects including a large regional shopping mall, gas and coal fired power plants, recycling facilities, residential developments, a waterfront hotel and casino complex, and the Commonwealth's

largest privately constructed prison facility.

This description of their work clearly indicates a bias in favor of their industrial clients, and not an independent, unbiased approach to the estimation of community impacts.

And while the DEIS mentioned one piece of academic research, the academic conclusions were dismissed. In preparing responses to public comments, CPV Valley, LLC either did not conduct additional research or chose not to report additional relevant research. The same academician had conducted more recent research and stated the following in the abstract of the paper.

This paper uses restricted census microdata to examine housing values and rents for neighborhoods in the United States where power plants were opened during the 1990s. Compared to neighborhoods with similar housing and demographic characteristics, neighborhoods within two miles of plants experienced 3-7 percent decreases in housing values and rents with some evidence of larger decreases within one mile and for large capacity plants. In addition, there is evidence of taste-based sorting with neighborhoods near plants associated with modest but statistically significant decreases in mean household income, educational attainment, and the proportion of homes that is owner occupied [11].

The FEIS ignored this research and other reports, such as,

Bad neighbors can be a serious problem, according to the Appraisal Institute. An unkempt yard, proximity to a sex offender or having certain commercial facilities nearby, such as a power plant or funeral home, can reduce the value of surrounding homes by as much as 15% [12].

CPV Valley, LLC was self-serving in its selection of research that they chose to include in the environmental impact statement.

Payments in Lieu of Taxes (PILOTs) have been described as “deals that lead to lost property taxes” [13]. It is well known that PILOT agreements are sometimes to the detriment of the community as they often result in tax payments far below fair value. In the socioeconomic section of the final environmental impact statement, it is stated,

The Project will represent a significant new source of revenue for the Town via the Payment in Lieu of Taxes (PILOT) Agreement which is currently being negotiated with the Orange County Industrial Development Agency (IDA). The PILOT will be negotiated for a 20 year period.

And the draft environmental impact statement made it clear that “the Project will not move forward without a PILOT agreement.” CPV Valley, LLC clearly intends to externalize costs of its operation, costs that the community will have to pay. In light of the potential negative impacts that the CPV Valley Energy Center likely would have on the immediate community, a tax break for the plant would be inequitable.

Shale gas production results in negative economic impacts on state and local economies. A new natural gas power plant anywhere in New York State will itself increase the use of shale gas, the production of which results in negative economic impacts on state and local economies. I have been writing and lecturing on the economic impacts of shale gas development for five years, including a peer reviewed article on state and local impacts [14]. A few more of my papers on the economic impacts of shale gas development are listed in the references at the end of this comment [15- 23]. Again, these and more can be accessed at www.catskillcitizens.org/barth. I show in these documents how the economy will be negatively impacted by shale gas development and I reference numerous peer reviewed and independent studies. Most of the proponents of shale gas development speak only of positive economic effects, wholly ignoring the established and potential costs, including destruction of other, more labor intensive industries, public health effects and the boom-and-bust cycles associated with extractive industries.

The better alternative to natural gas will improve state and local economies. A far better alternative to natural gas is available through the use of wind, water and solar resources. The ongoing price of these fuels is zero, unlike the highly volatile price of natural gas. Capital expenditures should be devoted to the development of wind, water and sunlight as sources of energy instead of expensive power plants that burn dirty fossil fuels, including shale gas.

This better alternative would have a greater positive impact on job creation as well. Research indicates that more jobs are created by renewable technology than by fossil fuels. A study conducted at the Political Economy Research Institute, University of Massachusetts, Amherst, estimates the total number of jobs—direct, indirect, and induced—that would be created from spending \$1 million in a combination of six clean energy investment areas—three energy efficiency investment areas (building retrofits, public transportation and freight rail, and smart grid electrical transmission systems) and three renewable energy areas (solar power, wind power, and biomass fuels) is more than three times greater than a similar investment in the fossil fuel industry. The authors conclude, “this combination of clean-energy investments will generate about 16.7 jobs per \$1 million in spending.” They go on to say that equivalent spending in the fossil fuel industry will generate 5.3 jobs in total, and thus, “spending a given amount of money on a clean-energy investment agenda generates approximately 3.2 times the number of jobs within the United States as does spending the same amount of money within the fossil fuel sectors [24].”

Regarding the level of jobs created, the same authors conclude that, “relative to spending on fossil fuels, clean-energy investments create 2.6 times more jobs for people with college degrees or above, 3 times more jobs for people with some college, and 3.6 times more jobs for people with high school degrees or less [25].”

Research in Germany, arguably the country that leads the world in renewable energy development, shows that the expansion of renewable energy has a positive net effect on economic growth [26].

Jacobson *et al* provide a roadmap for New York State to transition to wind, water and solar sources of energy by 2030 [27]. This study shows that job creation with the wind, water and solar plan will result in far more jobs for New Yorkers than continuing with fossil fuels.

The immediate community would be harmed by the creation of the CPV Valley Energy Center. Community concerns about negative impacts are real and deserve consideration and comparison with the positive employment and tax revenue impacts that would result from greater development of renewable energy alternatives. And the reality is that a large increase in the price of natural gas would render the plant uncompetitive with other energy sources, leading to an unused or underused facility in the future, a further detriment to the community.

A carbon tax may not be in the cards in the near future, but concern about climate change is growing and one can imagine a carbon tax as a real possibility ten years down the road, still well within the useful life of a new power plant. A carbon tax imposed on a new gas plant would be just another nail in its coffin.

In the medium to long-term, the community will be better off by encouraging investment in renewables, not in natural gas conversion.

There should be no new gas fired power plants created in New York State in light of the fact that the State can and should immediately begin to implement a renewables-only power plan. Available land should be used for development of renewable energy sources.

Investors should be incentivized to invest in and make a profit on renewable energy development instead of wasting millions of dollars on a natural gas power plant that will be a high risk investment in light of both the likely increase in the price of natural gas and the probable harm to the local economy. The renewable energy alternative will have a positive impact on the economy.

Research at both MIT and the Aspen Environmental Group [28,29,30] indicates that the encouragement of shale gas development and the continued conversion of power plants to natural gas, combined with the conversion of major heating systems to natural gas, are likely to seriously delay significant investment in renewable forms of energy.

The PSC should not allow the CPV Valley Energy Center to be developed as proposed. The PSC should instead encourage plans that contribute to a statewide transition to renewable energy.

Respectfully Submitted,

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