August 17, 2010

Superintendent John Donahue  
Superintendent Pamela Underhill  
United States Department of the Interior  
National Park Service  
Delaware Water Gap National Recreation Area  
Bushkill, PA 18324

Dear Superintendents Donahue and Underhill,

Attached you will find a report released this month by M.J. Bradley & Associates LLC entitled “Ensuring a Clean, Modern Electric Generating Fleet while Maintaining Electric System Reliability” (the report, the study). This report was prepared on behalf of a power industry trade group called the Clean Energy Group, of which Public Service Enterprise Group, the parent company of Public Service Electric and Gas (PSE&G), is a member. The goal of the study was to determine if enough excess generation capacity as well as demand response and efficiency measures are available across the United States to take polluting generation plants off-line, either permanently or until retrofitted to updated EPA standards. The companies assert that meeting the new EPA standards will be possible without compromising grid reliability due to various mechanisms including load management programs, excess reserve margins well above NERC standards, and the ability to add new generating capacity quickly, including renewable energy sources.

The data in this report raises serious doubt about the claims made by PSE&G for the purported need for the expansion of the Susquehanna-Roseland transmission line. Comments and solutions offered in the report relating to grid reliability apply with equal force to energy transmission and must be explored as part of the Environmental Impact Statement (EIS). Several non-transmission alternatives are discussed as credible solutions to ensuring grid reliability. The report underscores that grid reliability relies on three components all of which should be studied as separate alternatives to the proposed project: generation capacity and availability, consumption levels and patterns, and transmission capacity and use (4).
Importantly, the study also provides data on decreasing peak energy demand across NERC Electric Reliability Regions, states that all Regions are well above the NERC target reserve margin of 15%, and that load management programs have successfully decreased demand and can be implemented efficiently and economically. These findings highlight the obsolescence of the data used to justify this project before the NJ Board of Public Utilities and the Pennsylvania Utilities Commission and the archaic technology behind this infrastructure project PPL and PSEG are proposing to construct on our public lands, causing devastating impairments of park resources. As you know, the purpose of an Environmental Impact Statement is to present and compare all alternatives and their impacts to cultivate better decision making, and this cannot be achieved until non-transmission alternatives are included in the current study.

When discussing the conversion to the new EPA standards the power companies attribute the ability to remove polluting plants from the grid without compromising reliability to “existing power system capacity well in excess of minimum reserve levels, relatively modest projections of load growth over the next several years, a large amount of proposed generating resources throughout the country, and the availability of load management practices “ (7). It must be noted that no reference to transmission upgrades is made. This statement demonstrates not only that excess energy above NERC standards is available to the grid, but that these companies, including PSE&G, are willing to explore and implement sustainable, environmentally-friendly energy policy and practices that will not be outmoded in five years resulting in a waste of ratepayers’ dollars. Therefore this Environmental Impact Statement must seriously study the generation capacity and availability and load management programs of the PJM region and if the current or expanded generation fleet and load management programs can meet the decreasing demand of New Jersey, as this report found is possible.

Because the power companies propose to expand the Susquehanna-Roseland line to address alleged reliability violations that may or may not occur over the next twelve years during periods of peak energy demand (i.e., the three or four hottest days in the summer during 3:00PM to 6:00PM), the possibility of implementing load management programs and energy efficiency measures to satisfy that peak demand must be studied as an alternative in this Environmental Impact Statement. The report states, “the industry has recognized that decreasing load requirement can be more efficient and economical than increasing supply by dispatching generation” (emphasis added, 14). This same logic can be applied in determining if there are less costly and more environmentally friendly methods of satisfying peak demand other than simply increasing transmission capacity. The “industry has recognized” that implementing load management programs is a more practical way to address grid reliability so why are PSE&G and PPL pushing for such an archaic energy project, leaving the ratepayers to foot the bill? The answer, of course, is that PSE&G and PPL stand to reap substantial profits by increasing their capacity to transmit more cheap and dirty coal-fired energy. Load management and energy efficiency measures, on the other hand, tend to decrease power companies’ revenue, in part because such measures result in lower demand for electricity. Thus, it is not surprising that PSE&G and PPL are aggressively fighting to assure regulators and the public that the expansion of the Susquehanna-Roseland line is still needed even though electricity demand has fallen significantly since the project was first proposed.
In addition to evaluating the no action alternative in light of falling energy demand, NPS should also consider as an alternative whether demand response programs can sufficiently reduce peak energy demand to render the proposed expansion project unnecessary. The report discusses the four types of demand response programs utilized by the industry. The region in which this line would be built currently only employs two types: contractually interruptible and direct control load management. An alternative in the EIS should look at expanding the demand response programs in New Jersey and the PJM region to include critical peak-pricing with control and load as a capacity resource to determine what impact that would have on the need for the upgraded transmission line.

The EIS should also include the most recent data on demand response programs in the PJM region. The report notes the growing popularity of such programs and their impact on peak demand stating, “In the most recent PJM capacity auction, DR offers increased 32 percent over last year and over 9,000 MW cleared, which represents about six percent of total available capacity resources. DR is expected to reduce the peak electricity use this summer in PJM by 8,525 MW, the equivalent output of ten large power plants” (15). The implementation of such programs does not require investment in infrastructure and reduces use of fossil fuel power sources, decreasing air pollution and carbon emissions. Using this latest data NPS must evaluate such programs, which are a cleaner, safer, more reliable alternative to expanded transmission.

Increased local, preferably renewable, generation should be the top priority, not transmission expansion, if infrastructure projects were to be pursued to address these alleged NERC reliability violations. In the report the companies emphasize they can add capacity in response to reliability issues quite deftly, noting that in nine years 270 GW of natural gas-fired generation capacity was added, “the equivalent of more than 80 percent of the entire existing U.S. coal fleet” (10). NPS must study if the development of local generation capacity in New Jersey can obviate the need for this. Expanding local generation produces less air pollution than coal-fired electricity importation, creates jobs in the community consuming the electricity, is more reliable than expanding transmission highways through national parks because local generation is not prone to regional grid issues and contingencies, and would be quicker to implement. Local generation must be studied under the context of a homeland security issue due to the factors described above as well. The East Coast’s power system must not be solely dependent on the importation of energy from western generation centers in case of terrorist attacks or malfunctions of the grid that could cut off that power supply completely.

The best alternative to the proposed expansion of the Susquehanna-Roseland transmission line is investment in local, renewable generation capacity. The report describes how the power industry is capable of undertaking this revolution of the regional power system. Renewable energy infrastructure is successfully being installed across the country. The report states, “In 2009 alone, the U.S. wind industry broke all previous records by installing nearly 10,000 MW of new generating capacity, enough to serve over 2.4 million homes”(12). And continues, “Solar installations are poised to grow about 50 percent annually in the next three years” (12). New Jersey ranks number two in the nation in solar energy capacity and demand for solar installations continues to grow.
New Jersey Governor Chris Christie has stated his commitment to off-shore wind energy and his desire to make New Jersey a leader in that sector of renewable energy as well. Just last month the New Jersey Legislature passed the Offshore Wind Economic Development Act offering $100 million in tax credits to companies who manufacture wind turbine components in New Jersey and creating an incentive program to attract wind farm construction off New Jersey’s Coast.

An alternative to this project must explore what impact expanded renewable energy generation in New Jersey would have on the need for this transmission line. How reliable would New Jersey’s power system be if $1.5 billion (the estimated cost of the transmission line) was invested in local renewable energy infrastructure?

PJM serves the NERC Electric Reliability Region Reliability First Corporation (RFC) where, according to the report, a 24.3% reserve margin is expected in 2013 (9). The reserve margin indicates resource adequacy and measures generating capacity against peak demand. The 24.3% margin reported in RFC is well over the 15% reserve margin standard required by NERC. This translates to 17.1 GW of cushion capacity! The expanded Susquehanna-Roseland line will have capacity for about 6423 MW. The reserve capacity is over two and a half times the capacity of the line! This figure shows that the PJM region has an excess of energy above NERC standards and adequate resources to meet demand and ensure grid reliability without the expansion of transmission capacity.

The report goes on to emphasize that the RFC region’s power system, of which New Jersey and Pennsylvania are a part, has retired 6,000 MW between 2004 and 2007 (oddly the same amount the proposed line is expected to import into New Jersey) and that an additional 3,000 MW will be retired over the next two years yet still has a reserve excess margin exceeding the NERC standard (9).

Further, the report credits reserve margins exceeding target levels to “reduced demand attributable to the economic recession and increasingly robust load management programs” (8). The report clearly states that demand response and energy efficiency measures are lowering demand and therefore increasing the energy available to the grid in reserve margins, so why can’t these tools work to address the reliability violations supposedly pointing to the need for the Susquehanna-Roseland transmission line? If some of the estimated $1.5 billion that is being spent on the new transmission line was used to bolster load management programs would this project still be needed? The answer to this question must be explored an alternative.

Another “capacity cushion” is identified in the report: “NERC projects ‘significant reductions in projected long-term energy use in North America’... While total demand is still projected to increase in most regions, it will do so at a slower pace and from a lower starting point” (9). This again reinforces the fact that the information and data presented before the NJ Board of Public Utilities and the Pennsylvania Utilities Commission was obsolete because it was based on demand projections from 2006 and 2007, before the impacts of the increased use of demand response and efficiency measures were fully realized. The report goes on to note peak demand load is also dropping. According to
the report, “summer peak demand has decreased over 10GW per year for two consecutive
years” (9). This project is purportedly needed to address summer peak demand yet the
industry states the load during this time frame is declining.

The project must be updated to reflect these new trends in energy usage. NERC itself has
stated that with the success of demand response and energy efficiency programs energy
demand patterns have altered dramatically and the proposed expansion of the
Susquehanna-Roseland transmission line must be examined in that context. Attached you
will find a database from the United States Energy Information Administration, clearly
showing a decrease in New Jersey Electric Sales over the last three years. Demand
dropped 25% from July 2008 to July 2009 (“New Jersey Electric Sales” attachment).

The NPS must request the most recent RTEP data and sensitivity analyses using the
reduced load projections, because a similar request in the case of the Potomac-
Appalachian Transmission Highline (PATH) proved that the line was not needed by the
date PJM had originally predicted. The Virginia State Corporation Commission
requested that PJM conduct updated analyses and the results showed the line could be
pushed back until 2014 due to a reduction in the number of NERC reliability violations,
presumably resulting from decreased demand. A letter to Maryland Public Service
Commission from the attorney for the two power companies scheduled to construct the
lines asking for a suspension of the proceedings before that body is attached. Last week
The News Journal based in Delaware ran an article describing how “PJM
Interconnection, the regional power grid manager, is reassessing the need for power lines
to move more current north along the Atlantic Coast, given the general dip in power
usage” (emphasis added, see attached article “MAPP: Mid-Atlantic Power Pathway will be delayed”). When using these reduced demand projections, the need for the Mid-
Atlantic Power Pathway (MAPP) was lessened to the point the line’s in service date will
be pushed back one-to-two years. Similarly here, a thorough analysis of the most recent
energy demand data will reveal that the proposed expansion of the Susquehanna-
Roseland line is entirely unnecessary due in part to the burgeoning success of load
management and energy efficiency measures.

Given the success of load management programs, the data contained in the report, and the
delay in construction of other transmission lines in the PJM region due to reduction in
reliability violations as a result of non-transmission solutions the Environmental Impact
Statement must explore non-transmission alternatives using the most recent data.

Thank you for considering these comments.

Sincerely,

Kate Millsaps
Campaign and Grassroots Coordinator