Richard Reilly, Section Chief  
State of New Jersey Department of Environmental Protection  
Division of Land Use Regulation  
P.O. Box 439  
Trenton NJ 08625-0439  

February 16, 2010  

Re: FLOOD HAZARD AREA VERIFICATION AND INDIVIDUAL PERMIT APPLICATION BY PUBLIC SERVICE ELECTRIC AND GAS COMPANY  

Dear Mr. Reilly,  

Public Service Electric and Gas Company (PSEG) has recently submitted an application for a Flood Hazard Area Individual Permit to the Division of Land Use Regulation. Although the applicant has provided volumes of information as to the activities they wish to undertake along their right of way (ROW) and minimization and mitigation techniques for various environmental impacts related to the upgrade and expansion of the Susquehanna-Roseland power line, this application continues to have significant adverse impacts to critical natural resources including flood plains and vegetative communities.

PSEG is asking for an exemption from the Stormwater Management Rules requirements for groundwater recharge, stormwater runoff quality, and stormwater runoff quantity pursuant to N.J.A.C. 7:8-5.2(d)2, claiming that existing conditions will be maintained to the maximum extent practicable and if not site restoration will be pursued after the project is completed to achieve this. This exemption should not be allowed as construction activities will have devastating effects on groundwater recharge capabilities and the quality and quantity of stormwater runoff. The applicant has said construction
activities may continue in areas for over six months. This will result in tremendous soil compaction due to the utilization of heavy equipment and major alterations to the channelization of stormwater flow in the landscape for that time period potentially leading to major sedimentation impacts. Both of these impacts will have a damaging effect on riparian areas. The applicant identifies strategies to combat these impacts but these are not enough. For soil compaction the applicant states that areas that experience these impacts “will be scarified, topsoiled, and seeded” following the construction activities (Engineering Report, 7). This plan is short-sighted and does not address the compaction in sub-layers that will prevent percolation of groundwater. The applicant does acknowledge erosion and sedimentation impacts will result from construction activities but again offers mitigation and minimization techniques that are lacking, mainly silt fencing and haybale barriers. This project will require excavation of tower foundations up to a depth of twenty feet. The applicant has not addressed the measures to be undertaken to stabilize the considerable volume of sediment on the construction site, duration or schedule of disturbance and methods of disposal of non-returned excavation material, other than to say this excavation material, along with fill material, will be placed “in such a manner as to contain sediment to fill areas” (Engineering Report, 8). The applicant has not assessed the impacts of and mitigation for the construction of new tower foundations using concrete fill upon groundwater recharge areas along the ROW. This impact needs to be addressed, as it will change existing conditions on the site resulting in permanent new impacts and should not be exempt from the Stormwater Management Rules. The scope of construction activities and time frame in which they will be conducted will have a dramatic impact on the existing conditions along the ROW and the applicant should not be granted this exemption.

PSEG is applying for a waiver from compliance with the Stormwater Management Rules for groundwater recharge and stormwater runoff quantity along the ROW access roads, claiming the roads are temporary, will be restored and that implementation of the rules may result in greater ecological impacts. This waiver should also be denied as impacts along access roads will be long-term or permanent despite their uses being of a temporary nature. Compaction of soil will occur here as well and, as stated above, the applicant has
not formulated an effective method to mitigate effects on groundwater percolation. The applicant and the Department must consider that what is claimed to be "temporary" impacts will affect the resources and the ecosystem services they provide for a significantly longer timeframe, as much as twenty or thirty years under some conditions, and the Stormwater Management Rules must be applied to these areas. Some of the proposed access roads are mere hiking trails, less than 5 feet wide, that will be expanded up to 16 feet wide for construction related activities. Such widening will impact forest connectivity and edge effects and their impacts must be addressed. Major flaws in the applicant's site selection for access roads, vegetation removal, and revegetation plans, which will be discussed in detail later, will increase the quantity of stormwater runoff and negatively impact riparian areas with increased sedimentation. PSEG states it should receive a waiver since "restoration of physical construction impacts will take place" but implementation of the Stormwater Rules will minimize these impacts (Engineering Report, 6). The applicant claims "blanket implementation" of the Stormwater Management Rules would create additional adverse impacts but fails to elaborate. However, under the Department's authority under N.J.A.C. 7:13-9.5(c), to establish conditions in the issuance of an individual permit, conditions should be established in the permit that Stormwater Management Rules will be observed and implemented along all access roads, except in circumstances than it can be shown will result in additional land disturbance and would cause adverse ecological impacts instead of granting an overreaching waiver from the Rules.

The Engineering Report provided by the applicant lists the nonstructural stormwater management strategies and best management practices that will be utilized on site to minimize and mitigate adverse environmental impacts related to construction. Contrary to the Report's assertions, the applicant sites towers in locations that will increase impervious surfaces in riparian and flood hazard areas, despite the applicant's claims that the taller towers required for the upgrade to a 500 kV line will need fewer towers and opportunities to locate new towers outside of environmentally sensitive areas. In consideration of the applicant's claim of increased flexibility in tower location provided by the increased tower height, towers should always be located in low impact areas,
avoiding areas that provide water quality benefits and areas that are susceptible to erosion except when it can be shown this cannot be avoided. Avoidance should not be deemed impossible if it requires the relocation of several towers in the line as long as those new locations are not in environmentally sensitive areas.

The third nonstructural stormwater management strategy is “to maximize the protection of natural drainage features and vegetation” (Engineering Report, 6). The conversion of hiking trails into construction access roads is contrary to this policy and the applicant should be required to use the ROW for access to subsequent construction sites in environmentally sensitive areas instead of constructing additional access roads. For example, the applicant proposes to construct at least nine access roads through Delaware Water Gap National Recreation Area, when the existing ROW could be utilized to reach all construction sites within the Park. Inappropriate access road location also violates nonstructural stormwater management strategy five that provides for a minimization of land disturbance. The applicant claims that “land disturbance for this project will only occur in areas where disturbance is necessary,” but these decisions seem to be based on convenience. Are hiking trails that will need to be cleared, graded and widened for access a better alternative to the existing ROW? Eliminating access roads that require devegetation will also satisfy the ninth nonstructural stormwater management strategy, providing preventative source controls by not creating new sources of erosion.

There are similar issues of achieving the project’s end while considering environmental protection presented in the Best Management Practices that will be used on site to reduce erosion. Again issues with access road locations arise as the applicant claims, “the area used for access to the construction location shall be minimized to the extent practicable” (Engineering Report, 8). This is not what is reflected in the mapping as proposed access roads on hiking trails are identified instead of using available access from already established roads and the ROW to reach tower locations. The applicant claims that marsh matting will not remain in place for more than 5 days along the access roads, yet proposes a mitigation plan for when it does (the applicant has previously stated that construction activities at some tower locations will exceed six months). The proposed mitigation is through the replanting of native vegetation. The applicant has not addressed
impacts caused by the break in the flow of stream or wetland drainage that will be caused by the mats. The applicant’s single sentence about revegetation of these areas fails to consider combating deer herbivory or invasive species encroachment that may render the proposed replanting mitigation useless.

The applicant also states that removal of vegetation along the access roads will be minimized, yet this will be impossible when widening a hiking trail to an extent that construction vehicle access will be permitted (see photo 46 and 47 provided in this application). Nowhere in the best management practices are the effects of widening the access roads discussed in relation to disrupting the contiguous forest or what effect the removal of tree cover will have on the soil. By allowing more sunlight, widening the access roads and the ROW, the soil’s moisture retention capacity will be decreased, therefore increasing the potential for erosion. The Engineering Report goes on to state that minimization efforts will include, “tree stumps will not be removed, encouraging the revegetation of the tree via sprouts”(8). This is not a substantial measure that will produce true minimization results. Only certain tree species have the necessary hormonal structure to redirect growth to sprouting from the stump when the apical meristem has been removed. The species that do produce via sprouting produce sprouts that will have jeopardized root systems compared to those propagated from seeds. The root system will initially all be focused one way based on nutrient flows from the root system of the cut down tree. The root system would tend to spread out over time, but might not be as likely to become sufficiently symmetrical as the root system of a seed grown tree, resulting in less stabilization and less likelihood of successful establishment, or if established will experience stunted growth attaining shrub size rather than full grown tree. Considering the number of tree stumps that will have to be removed along the ROW and access roads, the applicant must submit plans for how this will be addressed and how it will impact erosion and water quality. Chemical removal or use of a stump grinder or backhoe will result in impacts to riparian areas including soil compaction, contamination of soil if chemical means are used, increased soil erosion and in turn sedimentation. These environmental impacts must be addressed and minimized as part of this Flood Hazard Area permit application.
Part of access road mitigation presented as best management practices states that access roads will be replanted with native vegetation. This section does not include any practices that will be used to reduce deer browsing or invasive species infestation which will impair, or even pre-empt native species reestablishment. The likelihood of invasive species infestation along these access roads and the ROW is exacerbated by the construction project due to the importation of fill to the construction sites. Plans and actions to prevent infestation must be presented as part of this application.

The best management practices state that all temporarily disturbed areas will be returned to their pre-existing conditions. The impacts associated with this construction will be more than “temporary” even with mitigation and minimization measures. Vegetation removal at access road sites and around the Hopatcong substation will be mitigated through planting a “native seed mix” and only if they are wetlands or susceptible to erosion. The best management practices state, “In all other areas, the disturbed area will be restored to pre-existing contours and will be allowed to naturally revegetate” (Engineering Report, 8). If this is the case, succession can take over a decade to reestablish pre-construction vegetative communities and provide similar ecosystem services to those lost during construction. The Engineering Report states these areas will be left to succession to minimize invasive species introduction in re-seeding but as described above, transportation of fill along access roads and the ROW will promote invasive encroachment and replanting in these areas will be necessary to establish native plant communities. The applicant’s best management practices clearly state that replanting will not be used in all disturbed areas as mitigation which is ridiculous, “Revegetation with native species is required only when disturbances within the work area have resulted in destruction of vegetation and disturbance to the soil, which would preclude natural revegetation within one growing season” (Engineering Report, 8).

Arguably this qualifies the entire project for revegetation since pioneer invasive species will be the first to reestablish in these areas, yet according to the applicant’s logic, this will most likely preclude a majority of the project area from being replanted. This mitigation plan is deficient in many ways and needs to be modified to truly address soil
erosion and invasive infestation impacts in the project area before a permit can be
granted. This statement in the Engineering Report is also in direct violation of N.J.A.C.
7:13-11.19(e) which requires that in the removal of existing fill or existing structures no
vegetation be removed unless “all vegetation cleared, cut, or removed in the riparian zone
is replanted with indigenous, non-invasive species, except where the removed material is
to be replaced by a new structure”.

In the “Requirements for Regulated Activities in a Floodway” component of the
engineering report, the applicant states it will pursue a hardship waiver from compliance
with the Flood Hazard Rules because the towers will be located in flood hazard areas.
This waiver should be denied until an alternative analysis of tower location along the
ROW is provided that documents the tower locations selected by the applicant do in fact
yield the least impact to riparian and flood hazard areas. This alternatives analysis should
examine if the towers can be completely located outside of such environmentally
sensitive areas and if not will provide evidence that the best route has in fact been chosen
and that the current tower locations will indeed provide the least impact to resources on
the ROW. The applicant claims this will be difficult because moving a single tower may
result in “a chain reaction of structure tower movements” but this study may determine
that such a chain reaction might result in an alignment that reduces the overall impacts of
the line to areas for which the hardship waiver is being requested (Engineering Report,
10). This type of alternatives analysis is of critical importance before the hardship waiver
can even be considered by the Department. If such an alternatives analysis already exists
for impacts along the ROW it should be analyzed as a component of this application and
made available for public comment. However it seems the applicant’s scope of
alternatives have been limited to alternative regional alignments, placing the lines
underground, and using the existing structures for the upgrade. Looking at individual
tower location offers an opportunity to minimize local impacts.

The applicant cannot even determine the impacts to significant environmental areas due
to tower construction, stating in the application, “Floodplains and riparian zones are
proposed to be permanently impacted in ___ structure locations along the 45-mile route
where only reasonable and practicable alternatives were not available” (Section 2A: Project Description, 14). PSEG cannot determine how many towers will be located in these areas? The applicant should be able to determine the true impacts to resources and have set construction plans before submitting this application.

Based on the submitted application, PSEG has not met the Individual Permit conditions and therefore does not comply with 7:13. Pursuant to 7:13-9.5(b)4 the applicant has the “duty to minimize environmental impacts: The permittee shall take all reasonable steps to prevent, minimize or correct any adverse impact on the environment resulting from activities conducted pursuant to the permit, or from noncompliance with the permit”. These provided comments have at length demonstrated how the project as currently presented does not effectively minimize and mitigate adverse impacts generated by construction activities.

The above comments also demonstrate that this permit application has not met the statutory requirements at N.J.A.C. 7:13-11.1 The NJDEP shall issue an individual permit for a regulated activity only if it determines that the regulated activity is not likely to cause significant and adverse effects on the following:

a. Water quality;
b. Aquatic biota;
c. Water supply;
d. Flooding;
e. Drainage;
f. Channel stability;
g. Threatened and endangered species or their current or documented historic habitats;
h. Navigation;
i. Energy production;
j. Fishery resources.
A hardship waiver should not be granted to exempt this project from these provisions because this project involves a significant amount of activity outside of the applicant’s ROW that is being utilized for the convenience of the applicant, resulting in significant environmental impacts that it is the Department’s responsibility to protect with diligence.

The permit application should be denied. At the very least the Department should determine the application does not meet the requirements of chapter 7:13 and extend the review 30 days so that the applicant can provide information on why particular access roads were chosen and the mitigation and minimization techniques can be updated as called for under 7:13-9.3(e)2.

Finally, the New Jersey Highlands Coalition requests a Public Hearing on this application as provided under 7:13-9.3(l). This project is of great public interest as demonstrated by the number of intervening parties involved at the proceedings on this matter in front of the Board of Public Utilities. A grassroots movement, Stop the Lines, has formed to oppose this expansion project. This project also represents “a high potential for adverse impacts to flooding and/or the environment” due to its scope (45 miles) and its location. The project traverses a multitude of wetlands, riparian areas, and floodplains, the Delaware Water Gap National Recreation Area, the Preservation Area of the New Jersey Highlands, and four Natural Heritage Priority Sites. A public hearing on this application will serve the public interest and should be utilized to solicit comments on a project with such tremendous impacts.

Thank you for considering these comments.

Sincerely,

Julia Somers, Executive Director