December 18, 2008

Ms. Terry Pilawski, Chief
Bureau of Watershed Regulation
NJDEP Division of Watershed Management
P.O. Box 418
401 E. State St.
Trenton, NJ 08625

RE: Highlands Applicability Determination (HAD) application for PSE&G’s proposed Susquehanna-Roseland expansion project

Dear Ms. Pilawski:

Thank you for your consideration of the attached comments regarding the Application for Highlands Applicability and Water Quality Management Plan Consistency Determination for PSE&G’s proposed Susquehanna-Roseland 500KV Transmission Line. The Highlands Applicability Determination (HAD) application was initially published in the New Jersey Department of Environmental Protection (NJDEP) Bulletin on 11/5/2008 and was republished with additional information on 11/19/2008.

Approach to Developing Comments:

As required in the Highlands Water Protection and Planning Act [Highlands Act], “The regional master plan shall include, but need not necessarily be limited to:” “(4) A coordination and consistency component which details the ways in which local, State, and federal programs and policies may best be coordinated to promote the goals, purposes, policies, and provisions of the regional master plan, and which details how land, water, and structures managed by governmental or nongovernmental entities in the public interest within the Highlands Region may be integrated into the regional master plan.” (P.L. 2004, c. 120, Section 11).

To fulfill the requirements set forth in the Highlands Act, the Highlands Water Protection and Planning Council [Highlands Council] adopted a Regional Master Plan [RMP] on July 17, 2008. Specifically relating to the interagency coordination requirements of Section 11(4), the RMP includes the following two Policies:

**Objective 7F1f:** Activities authorized under exemptions #9 and #11, which require a finding that the activity is consistent with the goals and purposes of the Highlands Act, shall be based upon a finding that the proposed activities are consistent with Highlands Act, the RMP, any rules or regulations adopted by the NJDEP pursuant to the Highlands Act, or any amendments to a master plan, development regulations, or other regulations adopted by a local government unit specifically to conform them with the RMP.

**Objective 7F1h:** Ensure that Highlands Act exemption determinations are limited to the activities specifically authorized under the Act. While the construction activities of a single family dwelling may be authorized under an exemption, water conservation requirements, septic maintenance requirements, or any other activities related to the use of that dwelling are not exempt.
The New Jersey Highlands Coalition supports the approach set forth in Objectives 7F1f and 7F1h, which require that applicants who file for an exemption from the Highlands Act are responsible for ensuring that their proposal will not adversely impact specific resources in the Region. Objective 7F1f further refines this approach, requiring any decision of an exemption for applicants who apply for exemption #9 and #11 be contingent on the review of the project for consistency with the Highlands Act, the RMP, and all other adopted rules and regulations by the New Jersey Department of Environmental Protection (NJDEP).

Therefore, the most prudent approach to commenting on the consistency of PSE&G’s proposed Susquehanna-Roseland 500KV Transmission Line to the goals and purposes of the Highlands Act is to follow the interagency coordination approach set forth in the RMP Objective 7F1f. Therefore, we have commented on the project’s consistency with the goals and purposes in Section 10 of the Highlands Act, the NJDEP Highlands Rules (N.J.A.C. 7:38) and the Highlands RMP. Appendix 1 provides a consistency determination with the goals and purposes of the Highlands Act. Appendix 2 relates to consistency with the NJDEP Highlands Rules. The comments in Appendix 3 provide a consistency determination of the proposed project against the Goals, Policies and Objectives set forth by the RMP as approved July 17, 2008 and with implementation direction provided in Executive Order 114, signed on September 5, 2008.

Incompleteness:

The HAD application, as published in the NJDEP Bulletin on 11/19/08, is incomplete. At all of the public workshops to date, representatives from PSE&G have told the public that the engineering and site design of the project is only 20-30% complete. PSE&G asserts that PJM is requiring them to maintain a timeframe which does not allow for PSE&G to design the necessary project elements quickly enough. This includes a full engineering plan of stormwater controls, avoidance and minimization policies, wetland mitigation, mitigation for access road impacts, a site design for the Jefferson Switching Station, specific pole design choices, and actual locations of access roads (locations that will not be subject to change, which is not the case in this application). It is not stated what the project timeline will be and if access roads will be fully restored after the 6 month period of time, which is the common definition of a temporary disturbance. Without these details it is not prudent for the Department to issue this application an exemption. It its current form, the Department cannot even determine what PSE&G has applied to do, since much of this HAD application represents speculation that is subject to change – in some cases, wholesale change -- as engineering and design elements are finalized.

At the PSE&G public workshop on 12/9/2008, Roger Trudeau, Lead Real Estate Representative for PSE&G, informed Mark Zakutansky of our staff, that the access roads, as mapped in the HAD application are tentative and are subject to change based on feasibility and land-owner willingness to provide access. He informed him that the roads have not been walked. He also informed him that the roads would be wide enough for two tracker trailers to pass each other. The width of the access roads was not included in the HAD application. It was assumed that they would be a single lane. The HAD application is misleading about the extent of impacts that will be caused by access roads. This lack of detail is of great concern. The Department should not issue an exemption for PSE&G’s Susquehanna-Roseland line, because access road locations are still subject to change.

At the same public workshop on 12/9/2008, Mark Zakutansky was informed by Linda Engelhardt, PSE&G Project Manager – ROW & Siting, that the entire project, especially the
Jefferson Switching Station was still in the “concept phase.” She informed him that PSE&G had not yet determined whether the Jefferson Switching Station would be an open air station or a gas insulated station. Ms. Engelhardt informed him that the two designs have very different footprints and will have different environmental impacts on the Jefferson Switching Station site. Within the HAD application, PSE&G claims that the Jefferson Switching Station will require 7.7 acres of impervious surface and 20.4 acres of disturbance. The HAD application does not distinguish which facility type would be built. It must therefore be assumed that PSE&G does not have the necessary design elements completed for the project, and therefore the environmental impacts are uncertain. The proposed Jefferson Switching Station is within a 300 foot Highlands Open Water Buffer to a wetland area; it is steeply sloped; it is composed entirely of critical wildlife habitat; sited entirely on prime groundwater recharge area; and it is made up entirely of forested lands within a Forest Resource Area, within a continuously forested tract, serving a wildlife corridor; etc. It is not prudent for the Department to issue a decision on the HAD application, until PSE&G can provide specifics about the environmental impacts of the Jefferson Switching Station and provide clear mitigation proposals.

Also at the 12/9/2008 public workshop, the public was allowed to view potential tower designs. During this discussion, the public was informed that tower designs had not been chosen, and that they would only be determined after soil borings and “constructability” was determined. PSE&G had 3 tower designs available for the public to view: a monopole, a lattice tower, and a double monopole. The double monopole design allows one tower to carry the 500kv line and another tower to carry a 230kv line next to each other. The HAD application does not include the double-monopole design, therefore rendering the entire HAD incomplete or simply preventing PSE&G from using this double-monopole design during construction. We do not understand why PSE&G would show the public a project design element that was not included in the HAD application. It is our understanding that the project must remain absolutely consistent with the details of the HAD application. Any deviation from the specifics of the HAD application during construction would nullify any approvals granted by the Department. We do not believe that PSE&G has properly and accurately informed the DEP of the scale, nature and specifics of the proposed Susquehanna-Roseland line and therefore should not be issued an exemption.

The HAD application is not complete. The project does not have mitigation measures proposed for unavoidable impacts, does not have stormwater controls designed, and has not demonstrated that Best Management Practices will be used to minimize impacts where they are unavoidable. The project is greatly inconsistent with the existing statutory framework of N.J.A.C. 7:38, which require these elements be provided and available for public comment before a Department approval can be granted. In its current state, the HAD application is incomplete, as reflected by PSE&G’s own engineers explaining to the public that the project is only 20-30% through the design phase.

Conclusion:

The Application for Highlands Applicability and Water Quality Management Plan Consistency Determination for the Susquehanna-Roseland 500 KV Transmission Line should be denied. The installation of new towers along the Right-Of-Way, the creation of new access roads to reach the Right-Of-Way during construction and the permanent disturbance and
construction of the Jefferson Switching Station are inconsistent with the goals and purposes of the Highlands Act, the NJDEP Highlands Rules and the Highlands Regional Master Plan.

The Highlands Water Protection and Planning Act is landmark legislation which sets forth the protection of numerous resources throughout the Highlands Region. Protecting, enhancing and restoring these resources is paramount in ensuring a sustainable drinking water supply for 5.4 million New Jersey residents. While the Highlands Act provides relief from some of its stringent resource protection requirements for qualifying projects, the specific requirements of Exemption #11, for which PSE&G has applied, have not been met. This project is inconsistent with the mandatory resource protection elements set forth by the Legislature in 2004 and implemented in both the NJDEP Highlands Rules and Highlands Regional Master Plan.

Approval of this project and the proposed Jefferson Switching Station would set a precedent undermining the future implementation of this critically important statute, potentially threatening the public health and safety of the 5.4 million New Jersey residents who rely on the Highlands Act to ensure that their drinking water resources remain clean and plentiful forever.

Sincerely,

Julia M. Somers, Executive Director

Burnham Park Association, Lynn Siebert
Eco Action Initiatives of Warren County, Laura Oltman
Longwood Lake Cabin Owners Association, Kenneth Rosenfeld
New York-New Jersey Trail Conference, Brenda Holzinger, NJ Regional Coordinator
South Branch Watershed Association, Bill Kibler, Executive Director
Upper Rockaway River Watershed Association, Connie Stroh, President
Appendix 1

Consistency with the Goals and Purposes of the Highlands Act (Section 10(a)-10(c)):

The proposed project is inconsistent with all applicable goals set forth in Section 10 a-c.

Section 10 of the Highlands Act:

10. (New section) a. The goal of the regional master plan with respect to the entire Highlands Region shall be to protect and enhance the significant values of the resources thereof in a manner which is consistent with the purposes and provisions of this act.
b. The goals of the regional master plan with respect to the preservation area shall be to:
(1) protect, restore, and enhance the quality and quantity of surface and ground waters therein;

Inconsistent: The proposed Jefferson Switching Station will require 20.4 acres of new disturbance and 7.7 acres of new impervious surfaces within the required 300 foot Highlands open water buffers. Additionally, many miles of new access roads present considerable drainage concerns.

(2) preserve extensive and, to the maximum extent possible, contiguous areas of land in its natural state, thereby ensuring the continuation of a Highlands environment which contains the unique and significant natural, scenic, and other resources representative of the Highlands Region;

Inconsistent: The proposed project will require new disturbance within the Preservation Area on lands surrounded on three sides by existing open space. Access roads will cross and impact recreational trails, including the Highlands Trail and Farny State Park Trail network. Towers between 179 feet and 193 feet in height will present new and significant scenic resource impacts.

(3) protect the natural, scenic, and other resources of the Highlands Region, including but not limited to contiguous forests, wetlands, vegetated stream corridors, steep slopes, and critical habitat for fauna and flora;

Inconsistent: The applicant acknowledges that there will be impacts to natural, scenic and other resources of the Highlands Region. Additionally, the applicant acknowledges that there will be a permanent loss of forested lands within the Forest Resource Area at the proposed Jefferson Switching Station site, part of a currently contiguous forest. The applicant acknowledges impacts to wetlands and the 300 foot wetland buffers. The applicant also acknowledges impacts to vegetated stream buffers and critical habitat. The applicant states that these impacts are unavoidable and does not demonstrate that no alternative is feasible. Steep slopes have been identified on the Jefferson Switching Station site. The project is inconsistent with this goal. The project will permanently degrade
habitat for at least three federally listed species: the Bog turtle, Indiana bat, and dwarf wedgemussel as well as at least two federally listed plant species: the swamp pink and small-whorled pogonia.

(4) preserve farmland and historic sites and other historic resources;

**Inconsistent:** Although there will be no impacts to farmland within the Highlands Region, the applicant does acknowledge that there will be considerable impacts to historic resources. Stating that impacts are unavoidable does not make the project consistent with the goals and purposes of the Highlands Act.

(5) preserve outdoor recreation opportunities, including hunting and fishing, on publicly owned land;

**Inconsistent:** The project proposes numerous access roads across publicly owned lands within the Rockaway River Wildlife Management Area, Mahlon Dickerson Reservation and numerous other parks and recreational sites. Access roads will also cross the Highlands Trail, the Farny State Park trail network and heavily used trails at Pyramid Mountain. During construction, there will be considerable impacts to recreation opportunities within the Highlands Region.

(6) promote conservation of water resources;

**Inconsistent:** There is proposed disturbance to wetlands, Highlands open water buffers and Prime Ground Water Recharge Areas throughout the project area, specifically at the Jefferson Switching Station. These impacts will have water quality and quantity impacts.

(7) promote brownfield remediation and redevelopment;
(8) promote compatible agricultural, horticultural, recreational, and cultural uses and opportunities within the framework of protecting the Highlands environment; and
(9) prohibit or limit to the maximum extent possible construction or development which is incompatible with preservation of this unique area.

**Comment:** The proposed project is incompatible with preservation of this unique area. Most notably, the project site in many locations is mapped as the Special Environmental Zone, designated by the Highlands Council as the only “no build” areas within the Highlands Region.

c. The goals of the regional master plan with respect to the planning area shall be to:
(1) protect, restore, and enhance the quality and quantity of surface and ground waters therein;

**Inconsistent:** Portions of the project are in the Planning Area. The applicant has not demonstrated with mitigation plans and stormwater plans that water control and drainage measures on access roads will be implemented.
(2) preserve to the maximum extent possible any environmentally sensitive lands and other lands needed for recreation and conservation purposes;

**Inconsistent:** Recreation and environmentally sensitive lands in the Planning Area will be impacted by Access Routes #44b, #44 and #45. Access Route #45 is located within the mandatory 300 foot Highlands open water buffer in the Planning Area.

(3) protect and maintain the essential character of the Highlands environment;

**Inconsistent:** Environmental, scenic, recreational and historic resource impacts of the proposed project are inconsistent with the essential character of the Highlands environment.

(4) preserve farmland and historic sites and other historic resources;

**Inconsistent:** The applicant acknowledges that there will be impacts to historic resources. The HAD application does not distinguish between resources in the Preservation and Planning Areas.

(5) promote the continuation and expansion of agricultural, horticultural, recreational, and cultural uses and opportunities; and

(6) preserve outdoor recreation opportunities, including hunting and fishing, on publicly owned land;

**Inconsistent:** The portion of the project which runs through the Planning Area crosses the Picatinny Arsenal. Within the Picatinny Arsenal, recreational lands, including a golf course and the Lake Denmark Recreation Area will be impacted. The Lake Denmark Recreation Area is a summer picnic facility located where Access Route #45 is proposed. Other recreational facilities located at the Picatinny Arsenal may also be impacted, such as: the Frog Falls Waterpark, the Picatinny Arsenal’s Rod and Gun Club’s facility and lands, and the Arsenal’s miles of recreation trails. The applicant does not acknowledge the extent of recreational opportunities on the Picatinny Arsenal site for military personnel and the potential impacts to these resources. ([http://www.pica.army.mil/NEWMWR/](http://www.pica.army.mil/NEWMWR/))

(7) promote conservation of water resources;

**Inconsistent:** The applicant has not provided mitigation plans and stormwater plans that illustrate how water control and drainage measures on access roads will be implemented.

(8) promote brownfield remediation and redevelopment;

(9) encourage, consistent with the State Development and Redevelopment Plan and smart growth strategies and principles, appropriate patterns of compatible residential, commercial, and industrial development, redevelopment, and economic growth, in or adjacent to areas already utilized for such purposes, and discourage piecemeal, scattered,
and inappropriate development, in order to accommodate local and regional growth and economic development in an orderly way while protecting the Highlands environment from the individual and cumulative adverse impacts thereof; and

(10) promote a sound, balanced transportation system that is consistent with smart growth strategies and principles and which preserves mobility in the Highlands Region.
Appendix 2

Consistency with NJDEP Highlands Rules (N.J.A.C. 7:38):

The Susquehanna-Roseland 500 KV Transmission line and Jefferson Switching Station HAD application is inconsistent with the NJDEP Highlands Rules (N.J.A.C. 7:38). Additionally, the applicant has failed to address many of the resource-specific requirements of the rules, further demonstrating inconsistency with the goals and purposes of the Highlands Act.

The applicant does not provide a consistency review of the proposed project against the NJDEP Highlands Rules (N.J.A.C. 7:38). Consistency with the NJDEP rules is required as provided for in Objectives 7F1f and 7F1h in the Highlands RMP as part of interagency coordination, specifically applying to exemptions #9 and #11. The New Jersey Highlands Coalition notes numerous inconsistencies with N.J.A.C. 7:38 in the comments below.

The proposed Susquehanna-Roseland Transmission line and Jefferson Switching Station qualify as a Major Highlands Development (7:38-1.4). The Jefferson Switching Station would require 20.4 acres of new disturbance and 7.7 acres of new impervious surface within the Preservation Area of the Highlands. Therefore, to be consistent with the NJDEP Highlands Rules, the project must meet all of the applicable requirements of 7:38, specifically Subchapter 3: Preservation Area Standards and Subchapter 5: Rare, Threatened and Endangered Species Habitat Evaluations.

The project is inconsistent with sections of 7:38-3.5 through 7:38-3.10 and 7:38-3.12:

- **7:38-3.5, Impervious Surfaces**, does not allow for the construction of impervious surfaces on a site that will cover more than three percent of the land area within that lot. The proposed 7.7 acres of impervious surfaces on the Jefferson Switching Station lot is inconsistent with this requirement.
- **7:38-3.6, Open Waters**, protects and prevents new disturbances within 300 feet of Highlands Open Waters. The proposed Jefferson Switching Station will require new disturbances within the 300 foot Highlands open water buffer. The applicant claims that there are “Unavoidable impacts to surface waters, including all Highlands open waters and regulated riparian areas,…”. The applicant does not claim nor demonstrate that there is “no feasible alternative” for these impacts and the proposed disturbance of the Jefferson Switching Station is not a linear development.
- **7:38-3.7, Flood hazard areas**, protects lands designated in any flood plain from the impacts of a Major Highlands Development. The applicant states that a Flood Hazard Area Permit will be required for the project as provided for in the Flood Hazard Area Control Act Rules (N.J.A.C. 7:13). Therefore, there are flood hazard area concerns with the project. Within the HAD application, the applicant has not demonstrated consistency with the requirements of 7:38-3.7. There are mapped Flood Prone Areas on the Jefferson Switching Station site.
- **7:38-3.8, Steep Slopes**, protects lands mapped as steep slopes from the impacts of a Major Highlands Development. The applicant does not demonstrate consistency with the requirements of avoidance to certain steep slope areas. Within the HAD application,
it is stated, “slopes greater than 20 percent…will be avoided to the extent possible”. The language provided in the HAD application demonstrates that the applicant is not currently aware of the full extent of disturbance that may be caused to steep slopes. The applicant recognizes that there will be impacts to steep slopes; therefore the project is inconsistent with 7:38-3.8. The Jefferson Switching Station site also has mapped steep slopes on site that will be permanently impacted.

- **7:38-3.9, Upland Forested Areas**, requires the submission of information pertaining to extent and quality of forest resources on a site potentially impacted by a proposed Major Highlands Development. The applicant has not submitted the required information of 7:38-3.9. The impacts to Forested lands within a Forest Resource Area of the Preservation Area, by the proposed 20.4 acres of disturbance and 7.7 acres of new impervious surface at the Jefferson Switching Station site are inconsistent with 7:38-3.9. Access road clear-cutting is also inconsistent with 7:38-3.9.

- **7:38-3.10, Historic and archaeological resources**, set requirements to protect Historic and archaeological resources. The applicant states within the HAD application that there are unavoidable impacts to Historic and archaeological resources. Recognizing that there will be impacts and not providing mitigation plans and avoidance strategies is inconsistent with the requirements of 7:38-3.10.

- **7:38-3.12, Unique or irreplaceable land types and existing scenic resources**, sets forth protection standards for scenic resources and community character. The applicant again acknowledges that the project will have unavoidable impacts to the scenic integrity of the Region. New towers will range between 179 to 193 feet, roughly 100 feet above the existing towers. The applicant does claim that scenic resource impacts are unavoidable, but fails to propose alternatives and /or mitigation plans.

**The project is inconsistent with 7:38 Subchapter 5: Rare, Threatened and Endangered Species Habitat Evaluations:**

- Clear requirements are set forth in 7:38-5.4 (Submittal requirements for Habitat Evaluations). The applicant has not submitted the required materials to be found consistent with the requirements of 7:38-5.
- There are documented Rare, threatened and endangered species on site. Since the applicant has not provided the required studies, it is difficult for a layman to ascertain what species are present along the ROW and the Jefferson Switching Station Site. Therefore it must be assumed that there is suitable habitat and the presence of the species provided in the HAD application in Table 2: Listed Species within the Highlands Preservation Area, unless the applicant demonstrates otherwise in accordance with 7:38-5.4.
- The project will impact the following Natural Heritage Priority Sites: Green Pond Mountain, Lake Denmark, Millbrook Gap, Muckshaw Ponds, Site 564, Splitrock Reservoir Site, and the Valhalla Hemlock Glen.
- The project will permanently degrade habitat for at least three federally listed species: the Bog turtle, Indiana bat, and dwarf wedgemussel as well as at least two federally listed plant species: the swamp pink and small-whorled pogonia.
Appendix 3

Consistency with Highlands Regional Master Plan (RMP):

Within the Application for Highlands Applicability and Water Quality Management Plan Consistency Determination, the applicant refers to selective goals, policies and objectives from the Highlands Regional Master. Consistency to the goals and purposes of the Highlands Act, and therefore subsequently the Highlands Regional Master Plan, requires consistency to all of the goals, policies and objectives which are relevant to the project, not simply a select few. The analysis conducted by the applicant in relation to a few select goals, policies and objectives is incomplete and only further demonstrates the inconsistencies of this project (i.e. recognition of inconsistency to scenic resource standards, open water buffers, and forest resources). The applicant states on numerous occasions that impacts are unavoidable. The policies in the RMP require consistency with resource protection standards, not simply statements that the standards cannot be achieved.

The consistency analysis conducted by the New Jersey Highlands Coalition notes numerous and considerable inconsistencies with the Regional Master Plan. To protect the resources of the Highlands Region, especially the clean and plentiful drinking water supplies for over 5.4 million New Jersey residents, it is paramount that all relevant goals, policies and objectives of the Highlands RMP are applied to the proposed project in determining whether it qualifies for Highlands Exemption #11, requiring consistency with the goals and purposes of the Highlands Act.

As required in the Highlands Act, pertaining to interagency coordination, consistency with the goals and purposes of the Highlands Act is defined by the following Highlands RMP Objective:

*Objective 7F1f:* Activities authorized under exemptions #9 and #11, which require a finding that the activity is consistent with the goals and purposes of the Highlands Act, shall be based upon a finding that the proposed activities are consistent with Highlands Act, the RMP, any rules or regulations adopted by the NJDEP pursuant to the Highlands Act, or any amendments to a master plan, development regulations, or other regulations adopted by a local government unit specifically to conform them with the RMP.

Part 1: Natural Resources

Subpart A: Forest Resources

*Policy 1A2: To limit human development in the Forest Resource Area in the Preservation Area in order to protect and enhance forest resources, forest ecosystem integrity, Critical Habitat, and the quantity and quality of water resources.*

*Inconsistent:* The proposed project meets the definition of a “Major Highlands Development”, as defined in the Highlands Act, and will have a significant negative impact on forest resources in the Preservation Area, forest system integrity, Critical Habitat and the quantity and quality of water resources.
The proposed Jefferson Switching Station will require the additional disturbance of 20.4 acres entirely within the mapped Forest Resource Area and Preservation Area of the Highlands. The Jefferson Switching Station will also require 7.7 acres of proposed additional impervious surfaces. Therefore, the project meets the definition of a Major Highlands Development because it results in the ultimate disturbance of one acre or more of land and will result in an increase in impervious surfaces of more than one-quarter of an acre.

The project will negatively impact forest resources through the destruction of forested lands for temporary access roads and the Jefferson Switching Station, totaling 25.9 acres of disturbance. The entire Jefferson Switching Station site is within the Forest Resource Area of the Highlands within the Preservation Area. The location of the proposed additional disturbance and impervious surfaces for the Jefferson Switching Station is currently mapped by the Highlands Council as Forest within a Forest Resource Area.

Forest system integrity will be impacted because the project proposes numerous access roads which will fragment forest resources within the mapped Forest Resource Area of the Highlands Preservation Area. The Jefferson Switching Station will also permanently fragment wildlife habitat because the site is surrounded on 3 sides by existing open space and preserved lands. Although the applicant claims that the disturbance will occur adjacent to the existing ROW, and will therefore not fragment forests and damage forest system integrity, the site is still surrounded on three other sides by existing open space and forested lands within the Forest Resource Area.

The entire Jefferson Switching Station site is mapped as Critical Wildlife Habitat by the Highlands Council, therefore the project will directly impact Critical Habitat. There are numerous other concerns for protected species that may be impacted in other locations, either along the existing ROW or through the proposed access roads. The project will fragment forested lands that serve as habitat for many protected species. Lands adjacent to and within the footprint of the disturbance of the Jefferson Switching Station are also mapped in the Highlands Regional Master Plan as a Wildlife Corridor by the Highlands Council.

The quality and quantity of water resources will be negatively impacted by the project. The footprint of the proposed Jefferson Switching Station is located within a mapped Prime Groundwater Recharge Area, requiring an approach of avoiding impacts to this resource first and foremost. The applicant has not demonstrated that avoidance cannot be achieved, nor have they demonstrated that they designed the Jefferson Switching Station to minimize impacts to Prime Groundwater Recharge Areas. The project is inconsistent with the mitigation requirements for non-avoidable impacts to Prime Groundwater Recharge Areas.

The proposed footprint of the Jefferson Switching Station is within a mapped Moderate Riparian Integrity Corridor and located on Hydric Soils. Hydric soils are soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions. This allows the soils to act like wetlands in their function. The protection of hydric soils is directly associated with the protection of the quality and quantity of water resources.
resources. Mapped wetlands are also present on the proposed Jefferson Switching Station site. The proposed project will add significant disturbance and new impervious surface within the 300 foot Highlands Open Water Protection Area to these mapped wetland areas, which serve as a necessary buffer to protect water quality and quantity. PSE&G states in the HAD application that impacts to wetland areas on site are unavoidable. This is inconsistent with the goals and purposes of the Highlands Act and Highlands Regional Master Plan.

Figure 1: Jefferson Switching Station - Open Space and Water Related Resources

- Open Space is shown in orange to the south, east, south-east and north-west of the site and as green to the north and west.
- Prime Groundwater Recharge Areas are shown in solid purple.
- Moderate Riparian Corridor Integrity is mapped with cross hatching.
- Hydric Soils are shown in dark purple.
Objective 1A2c: To prohibit through local development review and Highlands Project Review the deforestation of lands within the Forest Resource Area of the Preservation Area for human development except where authorized as an exemption by the Highlands Act, or is an agricultural or horticultural development as defined at N.J.S.A. 13:20-31 and meets the requirement of that provision of the Highlands Act, or if qualifying as a major Highlands Development, the project must, at a minimum, be in conformance with the New Jersey Department of Environmental Protection (NJDEP) Preservation Area Rules at N.J.A.C. 7:38-3.9.

Inconsistent: The proposed project will require the deforestation of lands for the construction of access roads as well as the permanent deforestation of currently forested lands within the Forest Resource Area of the Preservation Area. The proposed project meets the definition of a “Major Highlands Development”, as defined in the Highlands Act, and is not consistent with the NJDEP Preservation Area Rules at N.J.A.C. 7:38-3.9.
The proposed project is inconsistent with N.J.A.C. 7:38-3.9, Upland Forest Areas. The proposed Jefferson Switching Station is located on Severely and Moderately Constrained Slopes (Figure 3) and is not a linear development. The footprint will also require disturbance of mapped Steep Slope Protection Areas. Therefore, the project shall not be approved as provided for in 7:38-3.9(e), which prevents disturbance on slopes greater than 10 percent. The proposed Jefferson Switching Station does not meet the requirements of 7:38-3.9(f) and the applicant has not provided the required mitigation under 7:38-3.9(g). A detailed mitigation plan is required in 7:38-3.9 and the applicant has not provided that plan, therefore it cannot be assumed that any mitigation will meet the requirements set forth.

The proposed Jefferson Switching Station will add 7.7 acres of new impervious surface in the Preservation Area as well as 20.4 acres of proposed additional disturbance. The applicant has not met the requirements of N.J.A.C. 7:38 and has not provided for the necessary mitigation of the proposed impacts.

Figure 3: Jefferson Switching Station – Mapped Steep Slopes

- Severely Constrained Slopes are shown in blue.
- Moderately Constrained Slopes are shown in orange.
- Potential or Limited Constrained Slopes are shown in green.
- Steep Slope Protection Areas are shown in red.

Objective 1A2e: To require through local development review and Highlands Project Review that projects qualifying as major Highlands Developments, affecting or potentially
affecting forests outside the Forest Resource Area in the Preservation Area, comply with the NJDEP Preservation Area Rules at N.J.A.C. 7:38-3.9. All projects in the Preservation Area that are not major Highlands Developments shall comply with Policies 1A1 and 1A2.

**Inconsistent:** Access roads will be impacting forested lands outside of the Forest Resource Area in the Preservation Area. The applicant has not demonstrated consistency with N.J.A.C. 7:38-3.9. Access roads will be built on Steep Slope Protection Areas and will require clear cutting and new disturbance to forested lands. Mitigation for impacts related to access road construction, consistent with N.J.A.C 7:38-3.9(g), have not been identified by the applicant. Although the applicant mentions on page IV-5 of the Highlands Applicability Determination Application that they will provide mitigation for the permanent loss of 20.4 acres of forested lands in the Forest Resource Area, without a detailed plan as required in N.J.A.C. 7:38-3.9(g), the current proposal in inconsistent with the mitigation requirement.

**Policy 1A5:** To prohibit through local development review and Highlands Project Review forest clear-cutting within the Forest Resource Area except in accordance with a Forest Management Plan approved by the State Forester.

**Inconsistent:** For both the Jefferson Switching Station and the proposed access roads, the applicant has not provided documentation that the project is consistent with a Forest Management Plan approved by the State Forester. The additional disturbance of 25.9 acres of forested lands is defined as clear-cutting and the project is therefore inconsistent with Policy 1A5.

**Policy 1B7:** To prohibit clear-cutting of forest lands except pursuant to an approved Forest Management Plan approved by the State Forester.

**Inconsistent:** The applicant has not provided evidence that the proposed clear-cutting of 20.4 acres of new disturbance of Forest within a Forest Resource Area for the Jefferson Switching Station will be conducted pursuant to an approved Forest Management Plan approved by the State Forester. Therefore, the application is inconsistent with this Policy.

**Objective 1C1a:** Maintain forest cover to the maximum extent possible in the Highlands Region in the natural as well as the built environment.

**Inconsistent:** The proposed Jefferson Switching Station and the disturbance necessary to construct access roads for the project is inconsistent with Objective 1C1a.

**Subpart B: Highlands Open Waters and Riparian Areas**

**Policy 1D4:** Highlands Open Waters shall include a protection buffer of 300 feet from the edge of the discernable bank of Highlands Open Waters features, or from the centerline where no discernable bank exists. With respect to wetlands and other Highlands Open Waters features (e.g., seeps, springs, etc.), the feature shall include a protection buffer of 300 feet from the delineated Letter of Interpretation (LOI) line issued by the NJDEP for wetlands, or from a field
delineated boundary for other features. In areas where existing development or land uses within the protection buffers have reduced or impaired the functional values of the buffers, the Council will seek opportunities to restore the buffer and its functions. Any proposed disturbance shall, through local development review and Highlands Project Review, comply with Highlands Open Waters buffer standards. The protection buffer width for Category 2 streams in the Planning Area may be modified through a Stream Corridor Protection/Restoration Plan, as specified in Objective 1D4i. In approved Redevelopment Areas, the Council may, at its discretion, modify the required buffer, upon a showing of no alternatives, no impact to the functional value of the buffer, and provision of alternative approaches to enhancing or protecting Highlands Open Waters and resources of the buffer area.

Inconsistent: The proposed project is inconsistent with the resource protection elements set forth in this policy relating to open water and riparian areas.

PSE&G states unequivocally that, “due to the need to provide construction access to each individual tower and the existing location of the 230 kV transmission towers, impacts to regulated areas are unavoidable.” The proposed project is inconsistent with the above policy because the applicant has no intention to employ Best Management Practices to avoid impacts to wetlands and streams. The applicant does mention that impacts to wetlands will be mitigated, but does not provide any mitigation details. Furthermore, avoiding and/or mitigating impacts to these features is not sufficient to meet the goals and purposes of the Highlands Act. All Highlands Open Waters in the Preservation Area have a 300 foot open water buffer. The applicant will be constructing access roads through the 300 foot buffer to open waters throughout the region, without providing a mitigation plan. These crossings are mostly through undisturbed areas.

Wetlands will also be impacted through the construction of access roads and the Jefferson Switching Station. There are mapped wetlands along and adjacent to the existing ROW. There also mapped wetlands on the proposed Jefferson Switching Station Site. Figure 2 illustrates where those features are located and also shows that the proposed footprint and construction disturbance for the Jefferson Switching Station will permanently destroy a Highlands Open Water Protection Area, which is the 300 foot buffer around streams, open waters and wetland areas. The destruction of necessary buffers and the proposed new disturbance of wetlands and riparian areas are not consistent with the goals and purposes of the Highlands Act.

“Any proposed disturbance shall, through local development review and Highlands Project Review, comply with Highlands Open Waters buffer standards.” (Policy 1D4a) The applicant states in the HAD application that the project cannot comply with this requirement, therefore the project is inconsistent with the goals and purposes of the Highlands Act.

Objective 1D4b: Preservation Area buffers for Highlands Open Waters shall comply with the Highlands Preservation Area rules at N.J.A.C. 7:38, which provide that all major Highlands developments are prohibited within Highlands Open Waters and its adjacent 300 foot buffer in the Preservation Area except for linear development, which may be permitted provided that there
is no feasible alternative for the linear development outside Highlands Open Waters or its buffer. Structures or other land improvements existing within Highlands Open Waters buffer in the Preservation Area on August 10, 2004 may remain, provided that the area of disturbance is not increased other than through a HPAA. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered “land improvements,” “development,” “land disturbances,” or “land uses.”

**Inconsistent:** The proposed project is inconsistent with the resource protection elements set forth in this policy relating to open water and riparian areas. Examples of inconsistencies are provided in the narrative on Policy 1D4 in relation to open waters. The project is inconsistent with N.J.A.C. 7:38 at a minimum for the reasons provided for in the narrative for Objective 1A2c.

**Objective 1D4:** Require that proposed development within all Highlands Open Waters buffers (Preservation and Planning Areas) conforms through local development review and Highlands Project Review with the buffer requirements of N.J.A.C. 7:8 (Stormwater Management Rules), N.J.A.C 7:13 (Flood Hazard Area Rules), and N.J.A.C. 7:7 (Freshwater Wetland Rules), and with any applicable requirements of a Regional Stormwater Plan adopted pursuant to N.J.A.C. 7:8 (Stormwater Management Rules).

**Inconsistent:** Although the applicant has stated that the proposed disturbance of 20.4 acres of forested lands in the Forest Resource Area of the Preservation and 7.7 acres of new impervious surface for the Jefferson Switching Station will be consistent with N.J.A.C. 7:8, the applicant has not filed a Stormwater Management Plan; therefore, the current proposal is inconsistent.

**Objective 1D4h:** Key functional values that Highlands Open Waters buffers provide or contribute to include but are not limited to habitat, stormwater and flood water retention and filtration, water quality protection, temperature moderation, aquatic ecosystem integrity and channel integrity. The mitigation requirement of no net loss of functional value shall ensure improvements to one or more function and that there shall be no net loss of any function in the mitigation design. For the Highlands Open Waters buffer functional value assessment, require that the applicant demonstrate improvement or no net loss of functions as follows:

1. **Habitat** – No net loss of in stream food sources and no net loss of terrestrial and aquatic habitat functional value due to a shift to a less valuable overall vegetative condition in the protection buffer based on the following continuum from highest to lowest: forest or wetland, scrub/shrub, pasture or meadow, agriculture, maintained lawn, unpaved impervious surface, and other structures;
2. **Water Quality** – A degradation of this functional value will occur if, as a result of the proposed land conversions, pollutant loads increase to the Highlands Open Waters;
3. **Temperature Moderation** – A loss in temperature moderation functional value will occur if changes to the existing vegetation result in reduced shading of the Highlands Open Waters or stormwater that discharges to Highlands Open Waters. Further, a loss in temperature moderation functional value may occur with the heating of stormwater by new structures and other impervious surface. Mitigation approaches include removing or relocating
impervious surfaces away from the Highlands Open Water or ensuring that stormwater temperature is reduced through shading or other techniques; and

4. Channel Integrity – A loss of channel integrity functional value will occur if the project will result in: the loss of bank stabilizing vegetation; the placement of infrastructure that can be feasibly located outside the stream corridor; an increase in the peak rate of stream flow generated, or in localized scour potential, that will increase stream bank and stream bed erosion; or the removal or burial of aquatic habitat in any substantial part of a stream bed or for threatened or endangered species.

Inconsistent: The applicant has not demonstrated that the proposed impacts to Highlands Open Water buffers will be appropriately mitigated, according to the criteria listed in this Objective. For example, the increase in impervious surface of the Jefferson Switching Station footprint may impact stream Temperature Moderation. It is the responsibility of the applicant to demonstrate that any potential impacts can and will be mitigated.

Policy 1D5: Protect the integrity of the Riparian Areas through the application of RMP standards during local development review and Highlands Project Review.

Inconsistent: The applicant has not demonstrated that the integrity of Riparian Areas will be maintained or enhanced by the proposed project. Maps provided by the applicant in the HAD application show access roads crossing riparian areas and riparian areas within the footprint of the proposed Jefferson Switching Station. The integrity of Riparian Areas cannot be maintained through temporary and permanent destruction of these critical environmental features.

Objective 1D5b: Limit disturbance of existing natural vegetation or increases in impervious area within High and Moderate Integrity Riparian Areas in any Land Use Capability Zone to the minimum alteration feasible in areas beyond Highlands Open Waters buffer requirements; protect the water quality of adjacent Highlands Open Waters; and maintain or restore habitat value of the Riparian Area.

Inconsistent: The proposed Jefferson Switching Station is located within a Moderate Integrity Riparian Area. An increase of 20.4 acres of disturbance and 7.7 acres of impervious surface is therefore inconsistent with this Objective. The proposed disturbance will not protect the water quality of the adjacent Highlands Open Waters. The applicant has not demonstrated that Best Management Practices will be used during construction and that mitigation can maintain or restore habitat value of the Riparian Area, therefore the proposed new disturbance and impervious surface of Jefferson Switching Station is inconsistent with this Objective.

Objective 1D5e: Implement Low Impact Development Best Management Practices for any development activity proposed within a Riparian Area, which minimize both alterations of natural vegetation and increases in impervious areas, in compliance with Policies 6N3 and 6N4 and provide for mitigation through restoration of impaired Riparian Areas in the same HUC14 subwatershed.
**Inconsistent:** The applicant has not stated that Low Impact Development Best Management Practices will be utilized to minimize impacts within a Riparian Area. The applicant has also not demonstrated that they attempted to minimize alterations to natural vegetation and increases in impervious areas. The applicant has not provided mitigation plans to offset potential impacts to Riparian Areas. Therefore the proposed access roads and the proposed additional disturbance of 20.4 acres for the Jefferson Switching Station is inconsistent with Objective 1D5e.

**Objective 1D5f:** Require that development within Riparian Areas conforms through local development review and Highlands Project Review to any applicable requirements of a Regional Stormwater Plan adopted pursuant to N.J.A.C. 7:8 (Stormwater Management Rules).

**Inconsistent:** The applicant has stated, but not demonstrated that the proposed Jefferson Switching Station will be consistent with N.J.A.C. 7:8. Until a Stormwater Management Plan is filed and found to be consistent with N.J.A.C. 7:8, the current proposal is inconsistent with Objective 1D5f.

**Objective 1D5g:** Require identification and implementation of opportunities where the restoration and enhancement of previously impaired Riparian Areas are feasible and appropriate as mitigation to any allowable modification to Riparian Area requirements.

**Inconsistent:** The applicant has not provided an identification of opportunities where mitigation can offset impacts to Riparian Areas; therefore the project is inconsistent with Objective 1D5g.

**Subpart C: Steep Slopes**

**Policy 1E7:** To require through local development review and Highlands Project Review that applications for development involving parcels of land with slopes of 10% or greater include identification of forested lands, areas which are highly susceptible to erosion, depth to bedrock, and Soil Capability Classes.

**Inconsistent:** The applicant has not provided maps identifying areas which are highly susceptible to erosion, depth to bedrock, and Soil Capability Classes, therefore the application is inconsistent with Policy 1E7. The applicant has provided maps with the following resource data layers: Highlands Preservation Area; Slopes Between 10 and 15% within Riparian Area, Slopes Between 15 and 20% on Undeveloped Land; Slopes Greater than 20% on Undeveloped Land; Forest Area within the Forest Resource Area, Critical Habitat; Conservation Priority Area; Prime Groundwater Recharge Area; Lake Management Area; Source Water Protection Area; Riparian Area; and Open Water Protection Area.

**Policy 1E8:** To prohibit through local development review and Highlands Project Review land disturbance within areas which are Severely Constrained Slopes and Moderately Constrained...
Slopes, except for linear development in both the Preservation and Planning Areas that meets the requirements of N.J.A.C. 7:38-3.8(c)1-4.

**Inconsistent:** The application is inconsistent with Policy 1E8. The proposed Jefferson Switching Station footprint is located within a Steep Slope Protection Area with Severely and Moderately Constrained Slopes on site (see Figure 3). Additionally, many of the proposed access roads are designed to be built on steep slopes, as identified by the applicant in the maps provided in the HAD application. Proposed disturbances to steep slope areas for access roads are inconsistent with N.J.A.C. 7:38-3.8(c)1-4 (see below).

**N.J.A.C. 7:38-3.8(c)1-4:**

(c) Linear development as defined at N.J.A.C. 7:38-1.4 shall be permitted on a slope with a grade of 20 percent or greater provided that there is no feasible alternative for the linear development outside the steep slope. In order to demonstrate “no feasible alternative for linear development,” the applicant shall demonstrate that there is no other location, design and/or configuration for the proposed linear development that would reduce or eliminate the disturbance to a slope with a grade of 20 percent or greater. The additional limitations at (c)1 and 2 below apply for proposed linear development that would provide access to an otherwise developable lot.

1. The proposed linear development is the only point of access for roadways or utilities to an otherwise developable site;
2. Shared driveways are used to the maximum extent possible to access multiple lots, especially in areas containing steep slopes, Highlands open water or Highlands open water buffers;
3. For a driveway, the applicant shall, in addition, demonstrate that:
   i. The applicant has made a good faith effort to transfer development rights for the lot pursuant to N.J.S.A. 13:20-13, and has not obtained a commitment from the Highlands Council or a receiving zone municipality to purchase said development rights;
   ii. The lot has been offered for sale at an amount no greater than the specific fair market value to all property owners within 200 feet of the lot, and to the land conservancies, environmental organizations, the Highlands Council and all other government agencies on a list provided by the Department, at an amount determined in compliance with N.J.S.A. 13:8C-26j or N.J.S.A. 13:8C-38j, as applicable by letter sent by certified mail, return receipt requested, with a copy to the Highlands Council, using the form provided by the Department, disclosing the location on the lot of all Highlands resource areas as defined in N.J.A.C. 7:38-1.4 and stating that an application to develop the lot has been filed and enclosing a copy of a fair market value appraisal, performed by a State-licensed appraiser based on the minimum beneficial economically viable use of the property allowable under local law; and
   iii. No reasonable offer for the lot has been received; and
   iv. Documentation for (c)4i through iii above shall include:
      (1) A copy of each letter that the applicant sent under this paragraph;
(2) A copy of all responses received. Each response shall be submitted to the Department within 15 days after the applicant's receipt of the response;
(3) A list of the names and addresses of all owners of real property within 200 feet of the lot, as certified by the municipality, including owners of easements as shown on the tax duplicate;
(4) Receipts indicating the letters were sent by certified mail;
(5) For submittal to all property owners within 200 feet, a copy of the fair market value appraisal required under (c)4ii above; and
(6) A copy of a written response or a resolution from the Highlands Council demonstrating that it has considered and rejected the offer.

4. An alternative shall not be excluded from consideration under this provision merely because it includes or requires an area not owned by the applicant which could reasonably be obtained, utilized, expanded, or managed in order to fulfill the basic purpose of the proposed linear development and

5. After consideration of the information required in (c)1 through 4 above, the Department shall not issue an HPAA under this section if an applicant has refused a fair market value offer to purchase the property for which the driveway linear development is sought, or if the Department finds that there is an alternative to the proposed linear development.

Inconsistent: The proposed access roads are inconsistent with the requirements of N.J.A.C. 7:38-3.8(c)1-4, therefore the department should not issue an HPAA as provided for in 7:38-3.8(c)5. The applicant notes numerous instances where access roads will cross steep slopes but states that since access will be somewhat temporary in nature that the project remains consistent with the goals and purposes of the Highlands Act. N.J.A.C. 7:38-3.8(c)1-4, the Highlands Act and the Highlands Regional Master Plan do not state that temporary disturbances to steep slope areas are acceptable. Therefore the applicant’s claim that the project is consistent with the goals and purposes of the Highlands Act regarding steep slope protections is invalid.

The applicant has not demonstrated that there are no feasible alternatives to locating access roads on steep slopes. An alternatives analysis has not been provided. Illustrated on the provided maps within the HAD application, the applicant notes the following disturbances to steep slope areas: 1.2 acres of undeveloped land with slopes greater than 20 percent, 8.1 acres of undeveloped land has slopes between 15 and 20 percent, and 25.4 acres of riparian areas with slopes between 10 and 15 percent. The maps provided illustrate where access roads will impact steep slope areas. The applicant has failed to provide alternative locations for these access roads although alternatives appear to be possible upon reviewing the maps provided.

The applicant has not demonstrated that the proposed linear development access roads are the only point of access for roadways or utilities to an otherwise developable site (N.J.A.C. 7:38-3.8(c)2). There are numerous road crossing and existing locations where access to the ROW is currently available without the construction of new access roads. The applicant must demonstrate that existing points of access are not feasible locations to access specific sites along the ROW. They have failed to provide this analysis.
The applicant has not demonstrated that they are minimizing impacts to steep slopes, Highlands Open Water and Riparian Areas through the use of shared driveways to access the ROW as required in N.J.A.C. 7:38-3.8(c)2.

**Policy 1E9:** To require through local development review and Highlands Project Review the use of Low Impact Best Development Practices for any land disturbance or human development within areas which are Constrained or Limited Constrained Slopes, or that involves an approved disturbance of a Severely Constrained or Moderately Constrained Slope.

**Inconsistent:** The applicant has not stated or provided documentation that Low Impact Best Development Practices will be utilized for the land disturbances for both access roads which impact steep slopes and the Jefferson Switching Station which will require the permanent disturbance of Severely and Moderately Constrained Steep Slopes within a Steep Slope Protection Area.

**Subpart D: Critical Habitat**

**Policy 1F2:** To prohibit through Plan Conformance, local development review and Highlands Project Review the direct impact of new human development or expansion or increased intensity of existing development within Critical Habitat.

**Inconsistent:** The proposed access roads and Jefferson Switching Station are located on mapped Critical Wildlife Habitat by the Highlands Council, therefore the project is inconsistent with Policy 1F2. The applicant refers to numerous communications with the NJFWS regarding bog turtles, the Indiana Bat and migratory bird species impacts within the HAD application. The applicant conducted a series of field studies to determine if the habitat listed for these species was suitable and if the species were present on site. Without providing the site specific studies conducted by the applicant, listing the qualifications of the professionals who conducted the studies, it must be concluded that these studies are not adequate in determining that the sites listed are not suitable habitat for these protected species.

Additionally, the applicant states, “PSE&G will minimize the potential for harm to migratory birds, including large raptors.” Policy 1F2 states that impacts to Critical Habitat shall be prohibited, not minimized, therefore the project is inconsistent with this Policy.

**Policy 1F4:** To promote the restoration and enhancement of impaired lands in Critical Habitat.

**Inconsistent:** The applicant states that impacts will be minimized, but does not provide for a detailed mitigation plan for any potential impacts, therefore the project is inconsistent with the requirements of Policy 1F4, to promote restoration and enhancement of impaired lands in Critical Habitat.

**Objective 1F5b:** Establish performance standards such that all development shall employ Low Impact Development Best Management Practices to, in this order: 1) avoid the disturbance of Critical Habitat, 2) minimize impacts to Critical Habitat, and 3) mitigate all adverse
modification to Critical Habitat so that there is no net loss of habitat value. Habitat value is
determined by quantity (e.g., acreage), quality (e.g., core forest vs. edge forest), type (e.g., scrub-
shrub), and function (e.g., winter hibernacula for timber rattlesnakes). The mitigation
requirement of no net loss of habitat value shall ensure that all four elements are accounted for
and included in the mitigation design. Mitigation must meet the habitat and life-cycle
requirements of the specific impacted species.

**Inconsistent:** The applicant has not taken the approach of avoidance, minimization and
mitigation as set forth in Objective 1F5b. Alternatives to the Jefferson Switching Station and
access roads have not been provided and minimization alternatives have not been provided.
The applicant has not demonstrated that mitigation will occur and that any mitigation will
meet the requirements of the “no net loss” standard set forth in this policy. Therefore, the
application is inconsistent with Objective 1F5b.

**Objective 1F6a:** Prohibit direct impacts from new development or expansion or increased
intensity of existing development that will jeopardize the continued existence of, or result in the
likelihood of the destruction or adverse modification of Critical Habitat, except as permitted
through the issuance of a waiver under Policy 7G1 or 7G2.

**Inconsistent:** The applicant has not provided documented evidence that the proposed project
will not impact species present on site (i.e. Bog Turtle, Indiana Bat, Golden Winged
Warblers, Bald Eagles, etc.). The applicant refers to a series of conducted site studies, but
does not provide copies or specific reference to these studies that can be independently
verified. Therefore, these site visits are inadequate in demonstrating that critical species will
not be impacted by this project. The applicant has failed to address impacts to other species
such as the Bald Eagle and Golden Winged Warbler, which have been previously confirmed
along existing Rights-Of-Way in the Highlands Region and along the shores of Splitrock
Reservoir.

**Objective 1F6b:** Prohibit indirect impacts from activity that is off-site, adjacent to, or within
Critical Habitat that will jeopardize the continued existence of, or result in the likelihood of the
destruction or adverse modification of Critical Habitat, except as permitted through the issuance
of a waiver under Policy 7G1 or 7G2.

**Inconsistent:** Run-off and storm water from the Jefferson Switching Station will directly
impact Critical Habitat surrounding the site, both within the adjacent wetland features, and
the two mapped Wildlife Corridor through and adjacent to the proposed site footprint. The
applicant has failed to demonstrate that the proposed additional 7.7 acres of impervious
surfaces within an Open Water Protection Area and Critical Wildlife Habitat Area will not
impact nearby Critical Habitat. The applicant also notes that potential harm to migratory bird
species will be minimized. It must be assumed that even minimized impacts may jeopardize
the continued existence of these species unless proven otherwise by the applicant and
confirmed by the NJDEP, the Highlands Council and the NJFWS.
Objective 1F6f: A Critical Wildlife Habitat area or Significant Natural Area delineation may be modified if an applicant can demonstrate, to the satisfaction of the Highlands Council in coordination with the NJDEP’s Endangered and Nongame Species Program or Natural Heritage Program, that:

- The nature of the site is such that it does not provide habitat for species of concern;
- The species of concern are not present on the site during any critical part of their life cycle, do not depend upon the site for food, shelter or breeding, and the habitat on the site is either unsuitable or not critical to species’ recovery in the Region; or
- Existing land uses present a human, natural or development barrier to the use of the site by species of concern.

Requirements for demonstrating the above criteria shall be included in the Critical Habitat Conservation and Management Plan.

Inconsistent: The applicant has not referred their site specific studies of Critical Habitat to the Highlands Council in coordination with the NJDEP’s Endangered and Nongame Species Program or Natural Heritage Program. Existing delineations of Critical Wildlife Habitat, including the entire Jefferson Switching Station, shall be applicable. Therefore, Policy 1F2 and subsequent Critical Habitat Policies and Objectives apply to this project.

Policy 1F7: To require through local development review and Highlands Project Review that projects qualifying as major Highlands Developments, affecting or potentially affecting Critical Habitat in the Preservation Area, comply with the NJDEP Preservation Area Rules at N.J.A.C. 7:38-3.11 and with the minimum standards and criteria outlined in the Critical Habitat Conservation and Management Plan. All projects in the Preservation Area that are not major Highlands Developments shall comply with Policies 1F1 through 1F6.

Inconsistent: Due to the proposed disturbance of 20.4 acres and 7.7 acres or new impervious surface within the Preservation Area for the Jefferson Switching Station, the proposal is considered a Major Highlands Development.

7:38-3.11 Rare, threatened or endangered plant and animal species

The Department shall not issue a HPAA unless it determines that the proposed activity will not jeopardize the continued existence of, or result in the likelihood of the destruction or adverse modification of habitat for, any rare, threatened or endangered species of animal or plant.

Inconsistent: The applicant has not provided adequate documentation and verifiable site studies that demonstrate consistency with 7:38-3.11.

Subpart E: Land Preservation and Stewardship

Policy 1H7: To identify and designate a Special Environmental Zone in the Preservation Area where development shall not occur in order to protect water resources and environmentally
sensitive lands and which shall be permanently preserved through use of a variety of tools including, but not limited to, fee simple acquisition, easement acquisition, transfer of development programs, and development regulations.

**Objective 1H7b:** Adopt and enforce development regulations which prohibit the development of those portions of a parcel of land which are located within a Special Environmental Zone.

**Objective 1H7c:** Require through Plan Conformance, local development review, Highlands Project Review, and the NJDEP review under N.J.A.C. 7:38 that development shall not occur within a Special Environmental Zone. In any Special Environmental Zone, any exemption identified through Policy 7F1 or waiver issued under the Highlands Act under Policy 7G1 or 7G2 shall be conditioned upon a determination that the State or local government unit has exhausted all means for the permanent preservation of these lands through use of preservation tools including, but not limited to, fee simple acquisition, easement acquisition, and TDR.

**Objective 1H7d:** Prepare and deliver documents to appropriate land preservation/acquisition agencies identifying parcels of land wholly or partially within a Special Environmental Zone.

**Inconsistent:** The following portions of the project are within the mapped Special Environmental Zone, where development shall not occur:
- Access Route #40 through the Rockaway River State Wildlife Management Area;
- Lands within the existing right-of-way West of Longwood Lake and East of Longwood Lake;
- Lands within the existing right-of-way just West of Splitrock Reservoir;
- Lands within the existing right-of-way in Kinnelon; and
- Access Route #51 in Kinnelon Borough

The project is inconsistent with Policy 1H7, which designates certain areas of the Highlands Region off limits to development as the most important lands to protect water resources and environmentally sensitive lands. PSE&G has not addressed impacts to the Special Environmental Zone in their HAD application and has therefore not met the requirements of Objective 1H7c. Before a waiver can be granted, which would allow for the disturbance of lands within a Special Environmental Zone, all means for fee simple or easement acquisition must be fully exhausted. The applicant has not pursued these options. Therefore, the project is inconsistent with Policy 1H7 and all subsequent Objectives.

**Subpart F: Carbonate Rock (Karst) Topography**

**Policy 1K2:** To identify and delineate through local development review and Highlands Project Review land areas that drain surface water into the Carbonate Rock Area, as changes in the quantity, quality, and rate of discharge of surface water runoff from upslope lands can impair ground water resources in the Carbonate Rock Area.

**Inconsistent:** The applicant has not met the requirements of Policy 1K2. Mapped Carbonate Rock Areas are present along the existing ROW in Byram Township and Jefferson
Township (see Figure 4). The applicant is required to identify these locations as well all adjacent lands that drain to Carbonate Rock Areas. Therefore, the project is inconsistent with Policy 1K2.

**Objective 1K4c:** Local development reviews and Highlands Project Reviews and requirements shall ensure that all potential hazards to public health and safety, structures and ground water quality, including but not limited to concentrated surface water flows that dissolve carbonate rock, are fully addressed and mitigated in the construction plans and subsequent approval process, with the maximum emphasis on nonstructural measures, including, but not limited to, avoidance of modifications to the karst features.

**Inconsistent:** The applicant has not demonstrated that the proposed construction activity in the Carbonate Rock Areas along the ROW in Byram and Jefferson Township will not pose a threat to public health and safety. Construction impacts, such as heavy machinery and blasting, pose a significant threat to Karst features. Without recognition of these features by the applicant and a plan to avoid impacts to those features as well as impacts on lands draining to karst features, the project is inconsistent with Objective 1K4c.

**Objective 1K4e:** Highlands Project Reviews and requirements and local development reviews (where applicable) shall prohibit new land uses and facilities that constitute unacceptable risks of discharge due to karst topography where karst features have been identified, including but not limited to:
- Underground storage tanks;
- Solid waste landfills;
- Hazardous waste storage and disposal; and
- Hazardous materials storage and handling.

**Inconsistent:** It has not been demonstrated that the construction of access roads, blasting associated with tower construction and the use of heavy machinery along Carbonate Rock Areas is safe. Therefore, it must be assumed that constructed related impacts pose an unacceptable risk of discharge to Karst features. The applicant has not demonstrated that construction access roads and other construction related activities will not impact Karst features. Without adequate stormwater controls along the ROW and along access roads, a significant precipitation event, blasting accident on or adjacent to Karst topography, and/or a potential sink hole caused by heavy machinery could threaten water quality and quantity for local residents that rely on the underlying aquifers.
Subpart G: Lake Management

Policy 1M4: To establish and implement performance and development standards through local development review and Highlands Project Review for shoreline uses which achieve compatibility among shoreline activities and nearby neighborhoods.

Inconsistent: The proposed project will impact numerous Lake Management Areas, with the most considerable impacts along the shores of the lakes being where new towers will be most visible. The project is inconsistent with Policy 1M4, to protect neighborhoods and communities along lake shorelines.

Lake Management Areas along the ROW:
- Lake Mohawk: Sparta and Byram Township
- Lake Hopatcong: Jefferson Township
- Longwood Lake: Jefferson Township
- Lake Denmark: Rockaway Township
- Splitrock Reservoir: Rockaway Township

Lake Management Areas Impacted by Proposed Access Roads:
- Lake Denmark: Rockaway Township
  Access Route #46
Part 2: Water Resources and Water Utilities

Subpart B: Protection of Water Resources Quantity

**Policy 2D3:** To protect, enhance, and restore the quantity and quality of Prime Ground Water Recharge Areas.

**Inconsistent:** The proposed Jefferson Switching Station disturbance is entirely within a mapped Prime Groundwater Recharge Area. The addition of 20.4 acres of disturbance and 7.7 acres of impervious surfaces does not meet the requirements of Policy 2D3.

**Policy 2D4:** To apply standards through Plan Conformance, local development review and Highlands Project Review to protect, restore and enhance the functionality and the water resource value of Prime Ground Water Recharge Areas by restricting development and uses of land within a Prime Ground Water Recharge Area that reduce natural ground water recharge volumes or may directly or indirectly contribute to or result in water quality degradation.

**Objective 2D4a:** Development shall not occur in Prime Ground Water Recharge Areas unless necessary to avoid Critical Habitat, Highlands Open Waters Buffers and Moderately and Severely Constrained Steep Slopes.

**Inconsistent:** The applicant has not demonstrated that the disturbances proposed at the Jefferson Switching Station site are necessary to avoid Critical Habitat, Highlands Open Water Buffers and Steep Slopes. Furthermore, the Jefferson Switching Station will permanently disturb Prime Groundwater Recharge Areas (PGWRA), Critical Habitat, Highlands Open Water Buffers and Steep Slopes.

**Objective 2D4b:** Any development activity approved to occur in a Prime Ground Water Recharge Area shall provide an equivalent of 125% of pre-construction recharge volumes for the affected Prime Ground Water Recharge Area of the site within the following areas, in order of priority: (1) the same development site where feasible; (2) the same HUC14 subwatershed, or (3) an interrelated HUC14 subwatershed as approved by the Highlands Council where no feasible option exists in the same HUC14 subwatershed. This requirement shall apply to all portions of the Prime Ground Water Recharge Area where the recharge is disrupted through impervious surfaces, routing of stormwater runoff and recharge from natural flow paths, and other similar changes.
**Inconsistent:** The applicant has not provided mitigation plans to recharge the required 125% of the pre-construction recharge volumes for the affected Prime Ground Water Recharge Areas. Since the applicant has not proposed to mitigate impacts to PGWRAs, the proposed project is inconsistent with Objective 2D4b.

**Objective 2D4c:** Require through Plan Conformance, local development review and Highlands Project Review that the disruption of Prime Ground Water Recharge Area shall be minimized through the implementation of Low Impact Development Best Management Practices meeting the requirements of Objective 2D3a.

**Inconsistent:** The applicant has not proposed to use Low Impact Development Best Management Practices during the construction of access roads and the Jefferson Switching Station to minimize impacts to PGWRA. Therefore the project is inconsistent with Objective 2D4c.

**Objective 2D4d:** Require through Plan Conformance, local development review and Highlands Project Review that the disruption of Prime Ground Water Recharge Area, after conformance with Objectives 2D4a, 2D4b and 2D4c is achieved, shall be limited to no greater than 15% of the Prime Ground Water Recharge Area on the site and shall be preferentially be sited on that portion of the Prime Ground Water Recharge Area that has the lowest ground water recharge rates and the lowest potential for aquifer recharge.

**Inconsistent:** The proposed project will impact greater than 15% of the PGWRAs on the Jefferson Switching Station site. The applicant has also not conducted an analysis of the actual recharge potential of access roads and the Jefferson Switching Station. It is therefore reasonable to conclude that the site plans are not designed to only impact the PGWRAs with the lowest actual ground water recharge rates.

**Objective 2D4g:** Require conformance with applicable components of regional stormwater management plans, where applicable, as a mandatory requirement for any site plan application.

**Comment:** The applicant has not yet filed a stormwater management plan for the Jefferson Switching Station site, therefore no approval can be granted for the project as it is currently engineered. The potential stormwater impacts from the switching station and miles of access roads will be significant.

**Objective 2D4h:** Achieve a net improvement in ground water recharge volume and maintenance of water quality as required through compliance with and implementation of any related provisions of an adopted regional stormwater plan.

**Inconsistent:** The applicant has not yet filed a stormwater management plan. Since the applicant has not mentioned that ground water recharge mitigation will occur in conjunction with the proposed disturbances, it is reasonable to conclude that the project will not meet the requirements of Objective 2D4h.
**Objective 2D4i:** Achieve a net improvement in ground water volume and maintenance of water quality through redevelopment, enhanced infiltration, pretreatment or other means where feasible.

**Inconsistent:** The applicant has not planned any mitigation for proposed impacts to prime groundwater recharge areas; therefore the project is inconsistent with Objective 2D4i.

**Subpart C: Water Quality**

**Policy 2G1:** To evaluate locations and densities of development which are sustainable in conjunction with the use of best management practices applicable to these various water resource needs and support the protection and management of critical lands for water quality purposes.

**Policy 2G2:** To reduce or avoid water quality impacts using requirements for water quality protection measures for new land uses through local development review and Highlands Project Review.

**Inconsistent:** The proposed access roads and most significantly, the proposed site of the Jefferson Switching Station are inconsistent with Policy 2G1 and 2G2. Disturbance and new impervious surfaces within a 300’ Highlands Open Water Buffer within the Preservation Area of the Highlands will negatively impact critical lands for water quality purposes.

**Policy 2G5:** To adopt and implement stormwater management controls through Plan Conformance, local development review and Highlands Project Review.

**Objective 2G5a:** Require recharge of clean stormwater rather than contaminated stormwater wherever feasible to meet stormwater management requirements, and to pretreat contaminated stormwater wherever its recharge is required.

**Objective 2G5b:** Require Low Impact Development and other Best Management Practices standards for stormwater management to minimize the discharge of stormwater-entrained pollutants to ground and surface waters.

**Inconsistent:** The applicant has not demonstrated that they will be recharging clean stormwater from the Jefferson Switching Station, which will add 20.4 acres of new disturbance and 7.7 acres of new impervious coverage. Stormwater control and mitigation plans were not included in the HAD application.

**Policy 2G7:** To promote the implementation of Low Impact Development Best Management Practices to protect the quality of ground and surface water quality.
**Inconsistent:** The project does not plan to employ Low Impact Development Best Management Practices to protect the quality of ground and surface water quality, therefore the project is inconsistent with Policy 2G7.

**Policy 2H2:** To develop and implement, through Plan Conformance, local development review and Highlands Project Review, resource protection measures to protect and enhance ground water and water supply resources within Wellhead Protection Areas consistent with the source water assessments for each water supply source.

**Objective 2H2a:** Prohibit land uses that have a significant potential to result in the discharge of pathogens (including, but not limited to, septic systems and engineered stormwater infiltration from surfaces with significant potential for contact with pathogenic contaminants) to ground water or to the land surface within a designated Tier 1 Wellhead Protection Area, such that they may degrade or contribute to the degradation of ground water quality. Require that the construction of sewer lines within Tier 1 of a Wellhead Protection Area prevent seepage of untreated sewage into ground water.

**Objective 2H2b:** Prohibit land uses that have a significant potential to result in the discharge of persistent organic or toxic chemicals sources (including but not limited to existing discharges of industrial or other non-sanitary wastewater effluent) to ground water or to the land surface within a designated Tier 2 Wellhead Protection Area, such that they may degrade or contribute to the degradation of ground water quality.

**Objective 2H2c:** Require that land uses that have a significant potential to result in major discharges of persistent organic or toxic pollutants to ground water or to the land surface (including but not limited to non-sanitary wastewater effluent and any major sources of potential discharges such as spills and leaks), such that they may degrade ground water quality within a designated Tier 3 Wellhead Protection Area, shall incorporate ongoing management of toxic chemical sources and prohibition of unregulated discharges, so that the potential for ground water contamination is minimized and the opportunity for discharge discovery and control is maximized.

**Inconsistent:** The proposed project is inconsistent with Policy 2H2 and the subsequent objectives because the existing right-of-way is located within a Tier 1, Tier 2 and Tier 3 Wellhead Protection Areas within Sparta and Byram Townships. Without specific construction plans it cannot be determined that the construction related impacts of heavy machinery and blasting will not adversely affect these Wellhead Protection Areas.

**Objective 2H5c:** Ensure that development activities and existing land use activities implement best management practices to protect the quality of ground water within Wellhead Protection Areas.

**Inconsistent:** The applicant does not intend to utilize Best Management Practices during construction of the project through Byram and Sparta Townships Wellhead Protection Areas, therefore the project is inconsistent with Objective 2H5c.
Part 4: Historic, Cultural, Archaeological and Scenic Resources

Historic, Cultural and Archaeological Resources

**Policy 4A4:** To require that the impact of proposed human development on the historic and cultural resources of the Highlands Region be addressed during local development review and Highlands Project Review and approval.

**Objective 4A4a:** All applications for site plan or subdivision approval shall include identification of any cultural, historic, or archaeological resources in the Highlands Region which are listed on the Highlands Historic and Cultural Resource Inventory and may be affected by the proposed development.

**Inconsistent:** The proposed project includes access routes that will impact two distinct historic resources in the Region. The project is therefore inconsistent with Policy 4A4 and subsequent objective 4A4a.

- Mapped Archaeological Grid on the east side of Lake Denmark that will be impacted by Access Route #46 and Access Route #48.
- Historic resources at Splitrock Reservoir will be impacted by Access Route #49.

Scenic Resources

**Policy 4B5:** To require that the impact of proposed human development on the scenic resources of the Highlands Region be addressed during local development review and Highlands Project Review and approval.

**Inconsistent:** The applicant has failed to address scenic resource impacts in the HAD application, therefore the project is inconsistent with Policy 4B5.

**Objective 4B5a:** All development applications shall include identification of any scenic resources in the Highlands Region that are listed on the Highlands Scenic Resources Inventory and may be affected by the proposed development.

**Inconsistent:** The applicant has failed to identify scenic resources that may be impacted along by this project; therefore it is inconsistent with Objective 4B5a.

**Objective 4B5b:** All development which affects identified scenic resources shall comply with minimum standards for the preservation of the affected resources.

**Inconsistent:** The applicant has made no attempt to provide or comply with any set of standards regarding the impact this project would have on scenic resources in the Region.