



**State of New Jersey**  
 Highlands Water Protection and Planning Council  
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**HIGHLANDS RMP CONSISTENCY DETERMINATION**

<b>PROJECT INFORMATION</b>		
<b>Project Name:</b> PSE&G Susquehanna-Roseland 500-kv Transmission Line		<b>Date:</b> January 15, 2010
<b>Name of Applicant:</b> PSE&G (Public Service Electric & Gas)		
<b>Areawide WQMP:</b> No	<b>WMP:</b> No	
<b>Municipality:</b> Boonton Township, Byram, Hopatcong, Jefferson, Kinnelon, Montville, Parsippany-Troy Hills, Rockaway Township, and Sparta	<b>County:</b> Sussex and Morris Counties	
<b>Exempt project?</b> Subject of this review	<b>Project specific amendment?</b> No	<b>WMP review?</b> No
<b>NJDEP Activity #:</b> CSD080079		<b>HCAA#:</b> No - HAD Application for Exemption #11
<b>Lot and Block, if applicable:</b> Numerous		
<b>Sewer Service Area/WWTP Facility:</b> N/A		
<b>Sewer Service Area/WWTP Facility:</b> New <input type="checkbox"/> Existing <input type="checkbox"/> <i>If existing provide the following:</i>		
<b>Proposed Change in Service Area or Wastewater Flow?:</b> No		
<b>NJPDES #:</b> N/A		<b>Permit Discharge (MGD):</b>
<b>Type of Discharge:</b> GW <input type="checkbox"/> SW <input type="checkbox"/>		<b>Total Proposed Service Area (acres):</b>
<b>Total Existing Service Area (acres):</b> N/A		
<p><b>Description of Project:</b> PSE&amp;G proposes to construct a new 500-kv transmission line between the Susquehanna switching station near Berwick, Pennsylvania and PSE&amp;G's existing East Hanover/Roseland switching station in the Borough of Roseland, Essex County, New Jersey. Portions of the transmission line are located within the New Jersey Highlands Region (26 miles), in both the Preservation (17 miles) and Planning Areas (9 miles). This project review supports decision making by both the Highlands Council (for the Planning Area) and NJDEP (for the Preservation Area) regarding whether this application meets the standard of eligibility for Exemption #11 of the Highlands Act ("the ... upgrade of public utility lines, rights of way, or systems, by a public utility...), which mandates that a Highlands Act exemption is only to be granted "provided that the activity is consistent with the goals and purposes of" the Highlands Act. The standard of review for the Highlands Council is in two parts: 1) whether the project itself is consistent with the Highlands Act, the Regional Master Plan (RMP) and NJDEP's Preservation Area rules at N.J.A.C. 7:38 (in accordance with the RMP at Objective 7F1f); and 2) whether proposals to avoid, minimize and mitigate each inconsistency, based either on detailed site-specific information, where available, or on commitments within the application, are sufficient for a finding that the threshold has been met for an exemption.</p> <p>The applicant had originally submitted a Highlands Applicability Determination (HAD) for Exemption #11 on September 5, 2008 to the NJDEP and copied the Highlands Council. Since that original submittal, and based upon the findings of the Highlands Council staff draft Consistency Determination, further input from the Highlands Council staff, NJDEP, the public and other agencies, the applicant has revised the proposed project (submitted on May 19, 2009) to reduce the environmental impacts. The Highlands Council is addressing this revised proposal as an amended submittal and solicited further public input in accordance with the established protocols for Consistency Determination review due to the significant changes subsequent to the close of public comments on the original application. Specifically, the revised project:</p> <ul style="list-style-type: none"> <li>• Relocates the proposed switching station from Jefferson Township to the Borough of Hopatcong, significantly reducing the permanent impacts from this upgrade;</li> <li>• Provides for use of existing roads for access to the maximum extent possible; and</li> <li>• Incorporates a framework for a Comprehensive Mitigation Plan in response to project impacts to Highlands</li> </ul>		

and other resources as part of the proposed project.

The proposed project, as amended, entails four primary construction elements (briefly described in more detail below): 1) modification of the existing 230-kv transmission line to a double circuit 500-kv/230-kv transmission line; 2) temporary and permanent construction of access roads; 3) construction of a new switching station in Hopatcong Borough, Sussex County; and 4) removal of existing 230-kv transmission line and structures:

- **Modification of Existing 230-kv Transmission Line** – Modification of the existing 230-kv transmission line would consist of the construction of approximately 75 new 500-kv plus 230-kv dual function transmission towers, ranging in height from 150 to 195 feet, within the existing 150-foot wide right of way (ROW). Foundation dimensions would vary from four to 12 feet in diameter and up to 40 feet deep in unconsolidated sediments. The spans between the proposed towers would range from approximately 700 feet to 2,700 feet.
- **Construction Access Roads** – In addition to the construction of access roads located within the existing ROW, construction of permanent and temporary access roads located outside of the existing ROW are proposed. The access roads would need to accommodate construction equipment capable of conducting boring excavations, trucks to deliver concrete necessary for each foundation, and cranes capable of erecting the 150- to 195-foot towers. The applicant notes that, in many locations, these construction access roads are proposed to be within existing cleared dirt paths, existing logging roads, existing gravel roads, extended residential driveways, or through existing cleared fields. Many of these existing access points now wind through the forest, across boulder fields and over fallen tree trunks, and transcend up slopes and down gradients. The applicant notes that the levels of improvements to each of these access points would vary based on the existing conditions in the field, but states that it would be rare that an entirely new construction access point would be required that would involve clearing a new road through an existing forest.
- **Construction of Hopatcong Switching Station** – The proposed facility would be a gas insulated switchgear station located in Hopatcong Borough. The applicant changed the location of the proposed switching station since its previous application, from the site in Jefferson Township to the proposed site in Hopatcong Borough. This change substantially reduced the amount of forest clearing in the Preservation Area for the switching station from 20.9 acres to 7.1 acres (corrected from previous draft). Further, the use of gas insulated switchgear reduces the footprint of the switching station.
- **Removal of Existing 230-kv Transmission line and Structures** – The proposed action also includes the removal of the existing 230-kv transmission line and structures.

In addition to the construction elements discussed above, the amended proposed project integrates a **Comprehensive Mitigation Plan (CMP)**. The applicant commits that the CMP will be prepared consistent with the Highlands Regional Master Plan (RMP) using the approach of avoid, minimize and mitigate. It will provide an approach and process for identifying the specific resource issues, the means to avoid and minimize the specific impact, and ultimately the ability to define ways that would help mitigate unavoidable environmental impacts. With respect to mitigation, the proposed approach is nested in a planning approach where individual plans would be interwoven to meet multiple resource objectives. The combined effect of these plans is intended to effectively deal with the proposed project as a whole unit. As proposed by the applicant, the CMP will contain the following components:

- **Transmission ROW Vegetation Management Plan** – This plan focuses on changing some of the overall management practices of the existing right of way to enable the habitats to adapt through directed succession. This will improve their function as habitat for various species of wildlife, including invertebrates. The New Jersey Pinelands Commission developed a similar ecologically based ROW maintenance plan in cooperation with Rutgers University, PSE&G and other entities, including the New Jersey Endangered and Nongame Species Program (ENSP). The link to that program is: <http://www.state.nj.us/pinelands/science/major/index.html>.
- **Avian Management Protection Plan** – This plan focuses on the specific strategies and elements as recommended within several technical documents for reducing bird mortalities from transmission lines.
- **Critical Habitat/Endangered Species Mitigation Plan** – Based upon field surveys and other available information, this plan documents the potential impacts to various threatened or endangered species and

recommends various construction methods and timing restrictions to preclude or minimize these impacts to the extent practicable.

- **Wetlands and Transition Areas Mitigation Plan** – This plan provides the mechanism for restoring the functions and values of wetlands impacts associated with the proposed project, and in response to the regulatory requirements of NJDEP.
- **Stream and Riparian Zone Restoration Plan** – This plan provides the mechanism for restoring the functions and values of stream and riparian zone impacts associated with the proposed project, and in response to the regulatory requirements of NJDEP.
- **Stormwater Erosion Control Plan** – This plan provides the mechanism for protecting water quality from runoff associated with the proposed project during construction and for restoring stable soil profiles and for the protection of steep slopes. This plan is also in response to the regulatory requirements of the county soil conservation district.
- **Historic and Archaeological Resources Plan** – This plan provides the analysis and recommendations to reduce and minimize the impacts of the proposed project on these resources and to ensure continued economic activity in the form of agri-tourism, eco-tourism and heritage tourism in support of the Highlands Act.
- **Green Acres Plan** – Several properties are encumbered by easements and will require diversions under the NJDEP Green Acres Program Rules (N.J.A.C. 7:36). This plan recommends the strategies to alleviate the impacts of these diversions through land acquisition, conservation, and stewardship activities that will enhance the Highlands Region.
- **Forest Management Plan** – This plan is directed at improving forest habitats on parcels acquired to compensate for Green Acres impacts, as well as minimizing the initial impacts and restoring forest resources primarily associated with the construction of access roads, which account for an identifiable impact from the Project.
- **Contribution to the Highlands Council** – As part of the overall plan, the applicant proposes to make a contribution to the Highlands Council to protect and enhance the existing character of the Highlands Region, ensuring continued economic activity in the form of agri-tourism, eco-tourism and heritage tourism in support of the Highlands Act. Based on current land values, PSE&G estimates that the proposed contribution would support the acquisition of over 2,500 acres of lands within the Highlands Region.

The applicant has indicated that because the proposed project continues to be refined with respect to proposed access roads, tower locations and other elements, the various actual mitigation plans listed in the CMP have not yet been prepared. Instead, the CMP provides a framework that will serve as the guiding principles for these plans as they are prepared. The applicant indicates that the CMP will be developed and implemented in coordination with the Highlands Council, NJDEP (Divisions of Land Use Regulation, Watershed Management, Fish and Game, Parks and Forestry, NJ Natural Lands Trust, New Jersey Historic Preservation Office, and the Green Acres Program), the Board of Public Utilities, the various county soil conservation districts, and the US Fish and Wildlife Service. To ensure completion of the individual plans, the applicant will post a performance bond, with the dollar amount to be determined. Commitment to development and implementation of the CMP would be a condition of the Highlands Act Exemption #11.

The applicant has indicated that in order to implement the CMP, it plans to enter into an agreement with the Highlands Council that will provide, among other things: a) process for submission and review of specific mitigation plans as they are prepared, and before commencement of construction; b) process for posting of a surety bond or other financial instrument in an amount to be agreed upon with staff to secure implementation of the CMP; c) a schedule for payments in two installments of the monetary portion of the mitigation and for the use of these funds for property acquisition and preservation and not for staff salaries or other expenses; and d) such other terms as may be necessary to implement the CMP.

The BPU is currently reviewing the project under their applicable laws and regulations. It is understood that the project relies on, and implementation of this CMP is contingent upon, the BPU's determination of need and

allowance to proceed on the project. Effectuation of the CMP would not occur without BPU approval to commence the project. It is also important to note that the CMP is above and beyond the requirement that will be imposed by NJDEP in the permitting phase of the project.

**PRESERVATION AND PLANNING AREAS AND LAND USE CAPABILITY ZONES**

**Project Area located in which Highlands Act Area?** (Check all that apply):

**Preservation Area**  **Planning Area**

**Project Area within which Land Use Capability Zone or Sub-Zone?** (check all that apply):

Protection Zone  Conservation Zone  Existing Community Zone   
 Conservation – Environmentally Constrained Sub-Zone  Existing Community – Environmentally Constrained Sub-Zone   
 Lake Community Sub-Zone  Wildlife Management Sub-Zone

The review below is organized according to Regional Master Plan Goals, Policies, and Objectives for each resource and smart growth category: C stands for Consistent, I for Inconsistent, and N/A means the goal, policy, or objective is not applicable. Project specific reviews are based on the application of these Policies and Objectives to the project site, and do not require the adoption of municipal ordinances. Documents reviewed for this analysis include all appropriate documents submitted to the NJDEP, Highlands Council GIS data and technical reports, and documents related to the State Planning Commission Plan Endorsement process where applicable.

**PART 1 NATURAL RESOURCES**

**SUBPART A FOREST RESOURCES**

**Project Area within Forest Resource Area?** Yes

**If yes to above, is there Encroachment into a Forest within Forest Resource Area?** Yes

**Forest Integrity Value:** High  Medium  Low

**Regional Master Plan Goals, Policies, and Objectives:**

	<b>C</b>	<b>I</b>	<b>N/A</b>
<b>Policy 1A2:</b> 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 1A2c:</b> 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 NJDEP Preservation Area Rules at N.J.A.C. 7:38-3.9.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 1A2d:</b> To prohibit through Plan Conformance, local development review and Highlands Project Review the expansion or creation of public water supply systems or public wastewater collection and treatment systems or community-based on-site wastewater facilities into forested areas of the Forest Resource Area within the Planning Area except as provided for in Policy 2J4 with Objectives 2J4a through 2J4d, and Policy 2K3 with Objectives 2K3a through 2K3e, and within the Preservation Area except as provided for in Policy 2I1 and Objectives 2I1a and 2I1b.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 1A2e:</b> 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Policy 1A5:</b> 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Policy 1B2:</b> To limit through local development review and Highlands Project Review human development of forests to low impact residential development in the Protection Zone and the Conservation Zone in the Planning Area.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 1B3:</b> To limit through local development review and Highlands Project Review deforestation in the Forest Resource Area and forested lands within High Integrity Forest Subwatersheds within the Existing Community Zone to maximum extent practicable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 1B3a:</b> Implementation through Plan Conformance of regulations, which limit the clearing of trees in conjunction with human development to circumstances where the clearing will not diminish the integrity of forest resources.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Policy 1B5:</b> To ensure that forest resources are protected on a site specific basis during local development review and Highlands Project Review.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 1B5a:</b> Applications for local development review and Highlands Project Review require identification of any forest area on and adjacent to a site in accordance with the Highlands Council's Method for Identifying Upland Forest Areas in the Highlands Region.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Policy 1B7:</b> To prohibit clear-cutting of forest lands except pursuant to an approved Forest Management Plan approved by the State Forester.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<p><b>Policy 1C1:</b> To require that conforming municipalities and counties address the protection of forested portions of Forest Resource Areas and High Integrity Forest Subwatersheds in their master plans and development regulations.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>Policy 1C3:</b> To require that conforming municipalities adopt a tree clearing ordinance consistent with an approved community forestry plan under the New Jersey Forest Service Community Forestry Program as part of the municipal master plan and local development regulations.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>Comments:</b> The applicant is currently authorized and required to conduct vegetative clearing within the existing ROW, which includes the removal of trees and tall growing saplings and shrubs, to ensure that the ROW is maintained in a cleared condition pursuant to the Board of Public Utility requirements. Thus, the applicant notes that the majority of vegetative communities located within the existing ROW are not forested, which is consistent with the Highlands Council GIS forest data layer. However, a portion of the site proposed for the Hopatcong Switching Station and areas of the proposed temporary and permanent access roads are forested and occur within a Forest Resource Area in both the Preservation and Planning Areas. In its amended application, the applicant indicated that the proposed project continues to be refined to reduce the overall environmental impacts with respect to proposed access roads, tower locations, and the Hopatcong Switching Station. The applicant has conservatively estimated that approximately 20 acres of forested areas would be affected by the proposed permanent and temporary access roads, and that approximately 7.1 acres (corrected from previous draft) would be permanently removed by the construction of the proposed Hopatcong Switching Station.</p> <p>The applicant notes that proposed access roads would be constructed to avoid mature trees to the maximum extent practical. Further, the applicant notes that many existing trails and paths now measure at least twelve (12) feet wide and may only require the removal of select trees, the movement of obstructions like significant boulders and fallen trees, and the cutting back of existing limbs. The applicant states that these access roads would be designed and sited along forest edges or within disturbed portions of forested lands, to the maximum extent practical. The applicant states that in many areas the forest canopy of adjacent trees extends across these existing access roads. As such, the applicant states that it is anticipated that the proposed 16-foot wide access roads would not result in significant new fragmentation of Highlands forest resources.</p> <p>The applicant states that a Forest Management Plan would be developed by a state licensed forester with Highlands Council staff input that would provide compensation for those forest resources that are temporarily and permanently affected. The plan would be designed to enhance the functional values of the forest habitat under the control of the applicant outside of the ROW. The plan would identify the specific forest habitat to be affected and would be designed to demonstrate that there is no net loss of forest habitat and function. The applicant states that preservation and forest restoration activities would be conducted on the remainder of the Hopatcong Switching Station property and/or other ROW properties. These areas of forest preservation and restoration would constitute a Highlands forest restoration/education pilot site, which would be approximately 100 to 200 acres, depending upon the final negotiations with existing landowners.</p> <p>The applicant has stated its goal of avoidance, minimization (e.g., avoiding mature trees, using existing trails and paths, and moving the location of the switching station, etc.), and mitigation of unavoidable loss or forest (creation of a 100- to 200-acre Highlands Forest restoration/education pilot site for approximately 27 acres of impact (corrected from previous draft), which constitutes an approximately 5:1 mitigation to impact ratio). With the consideration that development of the forest management plan will be coordinated with the various resource agencies and that the applicant will post a performance bond to ensure no net loss of forest habitat and function, the proposed project, as amended, is found to be made consistent with nearly all of the RMP goals, policies, and objectives and NJDEP Preservation Area rules related to forest protection, sufficient to be considered consistent with the goals and purposes of the Highlands Act regarding this resource.</p>			

<b>SUBPART B HIGHLANDS OPEN WATERS AND RIPARIAN AREAS</b>			
<b>Project Area includes Highlands Open Waters Buffer?</b> Yes			
<b>Highlands Open Waters Affected:</b> Streams <input checked="" type="checkbox"/> Lakes & Ponds <input checked="" type="checkbox"/> Wetlands <input checked="" type="checkbox"/>			
<b>Highlands Open Waters in Preservation Area:</b> Yes			
<b>Watershed Value</b> (Check one): High <input checked="" type="checkbox"/> Medium <input checked="" type="checkbox"/> Low <input checked="" type="checkbox"/>			
<b>Area includes Riparian Area?</b> Yes <i>If No, disregard remainder of Riparian Area checklist.</i>			
<b>Specific Riparian Area Features</b> (Check all that apply.): Flood Prone Areas <input checked="" type="checkbox"/> Lakes & Ponds <input checked="" type="checkbox"/> Riparian Soils <input checked="" type="checkbox"/> Wetlands <input checked="" type="checkbox"/> Wildlife Corridor <input checked="" type="checkbox"/> Streams <input checked="" type="checkbox"/>			
<b>Riparian Integrity Value</b> (Check one per HUC14): High <input checked="" type="checkbox"/> Medium <input checked="" type="checkbox"/> Low <input checked="" type="checkbox"/> HUC14: Multiple High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/> HUC14: High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/> HUC14:			
<b>Regional Master Plan Goals, Policies, and Objectives:</b>	<b>C</b>	<b>I</b>	<b>N/A</b>
<b>Policy 1D4:</b> Highlands Open Waters shall include a protection buffer of 300 feet from the edge of the discernable bank of the Highlands Open Waters feature, 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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Objective 1D4a:</b> Require that all applications for approval through local development review and Highlands Project Review include the identification and mapping of Highlands Open Waters.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 1D4b:</b> 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."	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 1D4c:</b> 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).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 1D4d:</b> Structures or other land improvements existing within a Highlands Open Waters buffer of the Planning Area on August 10, 2004 may remain, provided that the area of disturbance shall not be increased unless approved through local development review or Highlands Project Review in compliance with RMP policies and objectives. 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."	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 1D4e:</b> In the Protection and Conservation Zones of the Planning Area, proposed disturbances of Highlands Open Waters buffers shall only occur in previously disturbed areas, unless a waiver is granted by the Highlands Council under Policy 7G2. 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." Such proposed disturbances must demonstrate full utilization of the following performance standards in the listed order, to demonstrate the necessity of an encroachment into Highlands Open Waters buffers: 1) avoid the disturbance of Highlands Open Waters buffers; 2) minimize impacts to Highlands Open Waters buffers; and 3) mitigate all adverse impacts to Highlands Open Waters buffers so that there is no net loss of the functional value of the buffer, in compliance with Objective 1D4h. Minimization and mitigation opportunities shall be considered only upon a clear and convincing demonstration by the applicant that the protection buffer cannot be avoided and in no case shall the remaining buffer be reduced to less than 150 feet from the edge of Highlands Open Waters, unless a waiver is granted by the Highlands Council under Policy 7G2 and the proposed disturbance complies with Objective 1D4c.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Objective 1D4f:</b> In the Existing Community Zone of the Planning Area, proposed disturbances of Highlands Open Waters buffers shall only occur in previously disturbed areas, unless a waiver is granted by the Highlands Council under Policy 7G2 and the proposed disturbance complies with Objective 1D4c. 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." Such disturbances shall employ performance standards such that all proposed disturbances of Highlands Open Waters buffers shall employ Low Impact Development Best Management Practices to mitigate all adverse modification to Highlands Open Waters buffers so that there is no net loss of the functional value of the buffer, in compliance with	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Objective 1D4h.			
<p><b>Objective 1D4i:</b> Develop through Plan Conformance and implement stream corridor or subwatershed-based Stream Corridor Protection/Restoration Plans which shall include Steps 1, 2, and 3, and may include Steps 4 and 5:</p> <p>1. Identify areas where existing development, land disturbances, or land uses are within Highlands Open Waters buffers have removed or substantially impaired natural vegetation communities, and have significantly reduced or impaired the functional values of Highlands Open Waters buffers. 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”;</p> <p>2. Identify and require opportunities for restoration of areas identified in Step 1 as part of mitigation requirements under a Highlands Act waiver or Objectives 1D4e and 1D4f, and public or nongovernmental restoration/stabilization projects;</p> <p>3. Identify the extent of stream corridor features that are critical to supporting the functions of a healthy Highlands Open Waters buffer and that extend beyond the buffers required by Objectives 1D4b and 1D4c. The 300 foot buffer in these areas may be expanded to be most protective of these features which may include, but are not limited to, Critical Habitat, pollutant source areas identified through scientific techniques, and steep slopes;</p> <p>4. Where Highlands Open Waters buffers include areas identified in Step 1, regarding Category 2 surface waters in the Planning Area only, the Stream Corridor Protection/Restoration Plan may identify where, based on scientific analysis of site-specific conditions (e.g., topography, vegetation cover type, habitat, soil type, upstream land uses and pollution inputs, width of floodplain, rate and volume of run-off), a buffer of less than the full 300 feet (but including the undisturbed buffer area at a minimum) is sufficient to maintain or improve the protection of Highlands Open Waters and Riparian Areas. The plan must identify alternative buffers that provide functional buffer values at least equivalent to existing conditions and are no less than 150 feet or no less than the extent allowed in State or municipal regulation (including Objectives 1D4b and 1D4c), whichever is greater. Further, the plan shall include a functional value assessment to ensure that there is no net loss in the overall functional value of the subwatershed’s stream buffers. Buffers established through this process shall be determined based on site conditions rather than fixed distances, reflecting findings of the scientific analysis, and shall be used in the site design and development review process regarding determinations of restoration, continued use, or increased use of the disturbed buffer area. Buffer averaging for the purpose of accommodating development proposals is deemed not to meet the requirements of this provision; and</p> <p>5. Where a proposed Highlands Redevelopment Area would not meet, in full, Objectives 1D4b through 1D4h but affects an undisturbed buffer area determined to not be necessary for the protection of the functional values for Highlands Open Waters buffer (as determined through scientific analysis of site-specific conditions), modification of the undisturbed buffer may be allowed to no less than the extent allowed in State or municipal regulation. However the Council shall first determine that there is no alternative to the proposed reduction of the buffer, and require a showing of no impact to the functional values of the buffer and provision of alternative approaches to enhancing or protecting the Highlands Open Waters and resources of the buffer area. Restoration or enhancement of buffer functional values shall be provided on-site or within the same stream reach to achieve a net improvement of existing buffer functional values.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>Objective 1D4j:</b> The Highlands Council may require on a case-by-case basis, through Highlands Project Review, an expansion of the 300 foot buffer to protect the habitat of a water or wetlands-dependant rare, threatened or endangered species, to the minimum expansion necessary to achieve protection of that species.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>Policy 1D5:</b> Protect the integrity of the Riparian Areas through the application of RMP standards during local development review and Highlands Project Review.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>Objective 1D5a:</b> Require that all applications for approval through local development review and Highlands Project Review include the identification and mapping of Highlands Riparian Areas, including those identified by the Highlands Council and by site-specific analysis.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>Objective 1D5b:</b> 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.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>Objective 1D5c:</b> Prohibit modifications to Riparian Areas in the Protection Zone except where a waiver is approved by the NJDEP or the Highlands Council under Policy 7G1 or 7G2.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>Objective 1D5d:</b> Restrict modifications to Riparian Areas in the Existing Community Zone, other than those addressed by Objective 1D5b, that would alter or be detrimental to the water quality and habitat value of a Riparian Area.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>Objective 1D5e:</b> 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 area, in compliance with Policies 6N3 and 6N4 and provide for mitigation through restoration of impaired Riparian Areas in the same HUC14 subwatershed.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>Objective 1D5f:</b> 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).</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>Objective 1D5g:</b> 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.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>Comments:</b> Highlands Open Waters and Riparian Areas are located extensively throughout the site proposed for the Hopatcong Switching Station (Preservation Area), the areas of the proposed access roads, and throughout the ROW in both the Preservation and Planning Areas. The proposed project constitutes a linear development under Objective 1D4b.</p>			
<p>The applicant identified delineated wetlands and state open waters on submitted wetland plans (though it is not clear</p>			

that all Highlands Open Waters are identified on those plans, which must be addressed in detailed project plans through the permitting process). The applicant notes that it will utilize the information from the wetland delineation to assist in developing permit documents, including demonstrating the avoidance and minimization of impacts to wetlands, transition areas and riparian areas, including Highlands Open Water buffers.

The applicant notes 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 applicant does states that the design and placement of tower locations, temporary on- and off-ROW access roads, and the Hopatcong Switching Station layout would be conducted in accordance with the Section 404(b)(1) guidelines of the federal Clean Water Act and the state Freshwater Wetlands Protection Act. It is stated that the applicant will obtain all necessary permits and approvals. Further, the applicant states that impacts to freshwater wetlands, wetland transition areas and riparian areas will be mitigated in accordance with N.J.A.C. 7:7A and N.J.A.C. 7:13.

As an integral part of the CMP, the applicant indicates that it would design and implement both a Stream and Riparian Habitat Restoration Plan and a Wetlands and Wetlands Transition Areas Mitigation Plan. With respect to the Stream and Riparian Habitat Restoration Plan, in addition to any regulatory requirements for on-site mitigation, the applicant notes that mitigation of damaged riparian areas and stream channels off-site, especially along the same streams that traverse the ROW, would achieve greater increase in environmental value than land preservation. The plan would include both pre-construction and post-construction mitigation activities. Of particular note, the post-construction mitigation activities would include the following elements:

- The plan would consider restoring off ROW stream corridors that are not vegetated or dominated by herbaceous vegetation that could be planted with native trees and shrubs to restore woody riparian zone;
- The plan would consider purchasing of stream-side land outside of the ROW and placing land in conservation easement;
- The plan would entail monitoring of streams subsequent to construction activities to determine success of protection and restoration activities; and
- Other required elements to be discussed with the NJDEP at the time of permit submission.

With respect to wetlands and wetlands transition areas, that specific plan would also include both pre-construction and post-construction mitigation activities. Of particular note, the post-construction mitigation activities would include the following elements:

- Creation of new wetlands along the ROW and at off site locations.
- Along the ROW combine wetlands restoration with the restoration of riparian habitat crossing the ROW. This would involve the creation of scrub/shrub wetlands parallel to streams;
- Creation of wetlands at 2:1 for permanent impacts;
- Purchase of wetland credits from a wetlands mitigation bank at similar ratios;
- Purchase and donation of wetland habitat containing T&E species habitat;
- Other required elements to be discussed with the NJDEP at the time of permit submission.

The applicant has stated its goal of avoidance, minimization and mitigation of unavoidable impacts of Highlands Open Waters and Riparian Areas. With the consideration that development and implementation of the Stream and Riparian Habitat Restoration Plan and the Wetlands and Wetlands Transition Areas Mitigation Plan will be coordinated with the various resource agencies and that the applicant will post a performance bond to ensure no net loss of Highlands Open Waters and Riparian Areas functional value, the proposed project, as amended, is found to be made consistent with nearly all of the RMP goals, policies, and objectives and NJDEP Preservation Area rules related to Highlands Open Waters and Riparian Areas, sufficient to be considered consistent with the goals and purposes of the Highlands Act regarding this resource. The project is found to be inconsistent with Objective 1D5a, as the applicant makes no mention of the required identification and mapping of Highlands Riparian Areas, including those identified by the Highlands Council and by site-specific analysis, though that element could be added to the Stream and Riparian Habitat Restoration Plan to be consistent with the RMP.

<b>SUBPART C STEEP SLOPES</b>			
<b>Project Area includes: Steep Slopes &gt;20% in Any Areas (severely constrained)?</b> Yes			
<b>Steep Slopes &gt;15% in Forested Areas (moderately constrained)?</b> Yes			
<b>Steep Slopes &gt;10% in Riparian Area in Undeveloped Lands (severely constrained)?</b> Yes			
<b>Regional Master Plan Goals, Policies, and Objectives:</b>	<b>C</b>	<b>I</b>	<b>N/A</b>
<b>Policy 1E6:</b> To require through local development review and Highlands Project Review that applications for development include topographic information identifying the location of any Steep Slope Protection Areas located on the parcel proposed for development.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Policy 1E7:</b> 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Policy 1E8:</b> 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Policy 1E9:</b> 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Policy 1E10:</b> To require that conforming municipalities and counties implement the steep slope protection provisions of Policies 1E2 through 1E9 through master plans and development regulations.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>Comments:</b> All elements of the proposed construction activities (transmission line modification, access roads and switching station) would require disturbance of areas that are Severely Constrained Slopes and Moderately Constrained Slopes in both the Preservation and Planning Areas, due to the linear nature of this project. The applicant states that it continues to evaluate potentially eliminating several long access roads that would have involved significant steep slope and wetlands impacts through the use of a helicopter for such work. Further, as an integral part of the CMP, the applicant states that it would develop and implement a Stormwater, Soil Erosion, and Sediment Control Plan to include the ROW and Hopatcong Switching Station Site and access roads. This will include locations for the placement of silt fence, construction staging, gravel tracking pads and other requirements of the applicable county soil conservation districts. It is noted that the plan would also include Low Impact Design Best Management Practices.</p> <p>The applicant states that a plan would be developed to avoid areas with steep slopes to the maximum extent possible. For new access roads in steep slope areas, erosion control matting would be used to prevent soil loss. Fencing would be placed along the access roads to limit unnecessary access during construction activities. At the completion of the project, the disturbed slope areas would have slope profile reestablished and replanted with grass and shrubs to stabilize the soils. Of particular note, the Stormwater, Soil Erosion, and Sediment Control Plan would include the following specific elements:</p> <ul style="list-style-type: none"> <li>• Erosion control in any riparian area or steep slope would go well beyond standard silt fencing, such as multi-barrier approaches. Silt fencing itself would use advanced techniques and strong materials to avoid undercutting, toppling or splitting of the fence. This would be especially true where down-gradient threatened and endangered species habitat may be affected.</li> <li>• When impacts to steep slopes are unavoidable, emphasis would be placed on disruption of the least sloped areas over the more steeply sloped areas.</li> <li>• The length of traverse across steep slopes would be minimized while controlling erosion/disruption potential (i.e., having a short traverse down a severe steep slope may be more disruptive than a longer traverse that avoids the steep slope).</li> <li>• Vegetation removal would be strictly limited on either side of access roads in steep slope areas.</li> <li>• Diffusion of stormwater flow in sloped areas would be emphasized using measures appropriate to rural areas, such as slope intercepts and off-flow points, swales, etc.</li> </ul> <p>The applicant has stated its goal of avoidance, minimization, and mitigation of unavoidable impacts of steep slopes. With the consideration of: 1) potential use of helicopters in steep slope areas; 2) the development and implementation of the Stormwater, Soil Erosion, and Sediment Control Plan, which will be coordinated with the various resource</p>			

agencies; and 3) the applicant will post a performance bond to ensure that the slope profile will be reestablished and replanted to pre-construction conditions, the proposed project, as amended, is found to be made consistent with the RMP goals, policies, and objectives sufficiently consistent with NJDEP Preservation Area rules related to steep slopes, and as a result, consistent with the goals and purposes of the Highlands Act regarding this resource.

**SUBPART D CRITICAL HABITAT**

<b>Project Area includes:</b>		
<b>Critical Wildlife Habitat?</b> Yes	<b>Significant Natural Area(s)?</b> Yes	<b>Vernal Pool(s) +1,000 ft?</b> Yes

<b>Species of Concern</b>	There are numerous rare, threatened and endangered wildlife and plant species potentially occurring throughout the project area.
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<b>Regional Master Plan Goals, Policies, and Objectives:</b>	<b>C</b>	<b>I</b>	<b>N/A</b>
<b>Policy 1F2:</b> 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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Policy 1F5:</b> To establish a Habitat Conservation and Management Program, including minimum performance standards and criteria for the protection, enhancement, and restoration of lands within Critical Habitat.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Policy 1F6:</b> To require that applications for any local development review and Highlands Project Review for Critical Habitat be subject to minimum standards and criteria outlined in the Habitat Conservation and Management Plan.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 1F6a:</b> 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 1F6b:</b> 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 1F6c:</b> Waiver applications under Policy 7G2 for local development in a municipality with a Council-approved Critical Habitat Conservation and Management Plan shall be subject to the minimum standards and criteria for waiver provisions as set forth in the plan, to the maximum extent practicable.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 1F6d:</b> Waiver applications under Policy 7G2 for development in a municipality without a Council-approved Critical Habitat Conservation and Management Plan shall be subject to the Low Impact Development Best Management Practices required in Objective 1F5b.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 1F6e:</b> A vernal pools protection buffer may be reduced only if an applicant can demonstrate, to the satisfaction of the Highlands Council in coordination with the NJDEP's Endangered and Nongame Species Program, that the reduction is the minimum feasible and that: <ul style="list-style-type: none"> <li>In an undisturbed wetland, documented and field-determined vernal pool-breeding wildlife require a smaller protective buffer, as documented in scientific literature; or</li> <li>Existing land uses present a significant, insurmountable and permanent barrier to the migration or viability of vernal pool-breeding wildlife that is infeasible to mitigate.</li> </ul> Requirements for demonstrating the above criteria shall be included in the Critical Habitat Conservation and Management Plan.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 1F6f:</b> 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: <ul style="list-style-type: none"> <li>The nature of the site is such that it does not provide habitat for species of concern;</li> <li>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</li> <li>Existing land uses present a human, natural or development barrier to the use of the site by species of concern.</li> </ul> Requirements for demonstrating the above criteria shall be included in the Critical Habitat Conservation and Management Plan.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 1F7:</b> 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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Comments:** The entire site of the proposed Hopatcong Switching Station, the access roads and the majority of the ROW in both the Preservation and Planning Area are mapped as Critical Habitat. The ROW traverses two Significant Natural Areas (one in Montville Township and one in Rockaway Township) and four vernal pools. The proposed impacts to Critical Habitat are inconsistent with Policies 1F2 and 1F7. However, the applicant is proposing extensive mitigation actions for all project impacts to avoid, minimize and mitigate Critical Habitat disturbance thus resulting in no net loss of habitat, as consistent with the mitigation requirements under Objectives 1F5b and 1F5c. A net result of no net loss of habitat via conformance with a Critical Habitat Plan is consistent with Policies 1F5 and 1F6. As an integral part of the CMP, the applicant indicates that it would design and implement a Critical

Habitat/Endangered Species Management Plan. The focus of the plan would be to achieve no net loss of habitat value and to maximize habitat value through improvement of habitat on existing preserved lands, as outlined in Policy 1F4. The applicant indicates that extensive research by wildlife biologists is currently underway. The applicant also notes that on-going and continued coordination with the Natural Heritage Program and the Endangered and Non-game species (ENSP) program biologists within NJDEP, and the US Fish and Wildlife Service (USFWS) is underway and is essential throughout the planning, design and construction of the proposed project in order to reduce impacts to sensitive species including rare, threatened or endangered species (plants and animals). The applicant notes that implementation of this plan at construction sites will include provisions that qualified experts in both wildlife and plant biology will be at each construction site.

In the CMP, the applicant provides a detailed list of the general requirements of the Critical Habitat/Endangered Species Management Plan that would be implemented in consultation with the Highlands Council, NJDEP ENSP and the USFWS. This information will be incorporated into the plan that considers the requirements necessary to maintain the viability of these animal and plant species populations. The Critical Habitat/Endangered Species Management Plan in the CMP also provides species-specific mitigation targets. Further, it notes construction-related mitigation for vernal pools as well as post-construction mitigation efforts including the creation of vernal habitat at the completion of the project.

The applicant indicates that another integral element of the CMP is the Transmission ROW Vegetation Management Plan. The purpose of this plan would be to support multiple environmental and economic objectives for the existing transmission ROW through the Region. The applicant lists numerous components of this plan in the CMP; some of the key and significant components include the following:

- Identification of unique habitats within the ROW on a span-by-span basis, which would form the foundation for the site-specific management plan.
- Incorporate recommendations based on site specific knowledge of site conditions in the field, as appropriate such as timing restrictions for critical habitats, hand removal of vegetation where appropriate, planting where appropriate, etc.
- Planting sections of the ROW with warm season grass species and wildflowers that can be sustained through a regular mowing maintenance program over a five-year cycle.
- Invasive species such as multi-flora rose and autumn olive will be removed through mechanical or other means
- The plan would also consider creating habitat for threatened and endangered species through modifications of existing habitat conditions for species such as the bog turtle and the golden-winged warbler.

In coordination with the Transmission ROW Vegetation Management Plan, the applicant states that it would also create an Avian Management Protection Plan. The two plans would work together. The Transmission ROW Management Plan would deal with the specific habitat components that would be suitable to enhance bird and other species populations within the ROW. The Avian Management Plan would evaluate the bird species composition in the project area and ways to reduce and minimize the direct impacts from the design of the proposed project. A key element of the Avian Management Protection would be development and implementation of an Avian Protection Plan, prepared in accordance with guidelines issued by the US Fish and Wildlife Service (April 2005). The CMP lists the elements that such a plan would feature. Further, the applicant will be required to design the proposed project in accordance with the *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006*.

The CMP lists the specific avian groups that would be evaluated under the Avian Protection Plan. These include Waterfowl and Wading Birds, Neo-tropical Migrants (including various conservation and management plans that exist for neo-tropical migrants including Partners in Flight, North American Land-Bird Conservation Plan), and Birds of Prey.

The applicant has stated its goal to achieve no net loss of Critical Wildlife Habitat value. Further, the applicant states that it is seeking to maximize habitat value through improvement of habitat on existing preserved lands. With the consideration that development and implementation of the Critical Habitat/Endangered Species Management Plan, the Transmission ROW Way Vegetation Management Plan, and the Avian Management Protection Plan will be coordinated with the various resource agencies and that the applicant will post a performance bond to ensure no net loss of Critical Habitat value, the proposed mitigation enhances the project goals such that the project, as amended, is

found to be made consistent with the RMP goals, policies, and objectives, sufficiently consistent with NJDEP Preservation Area rules related to Highlands Critical Habitat, and as a result, consistent with the goals and purposes of the Highlands Act regarding this resource.

**SUBPART E LAND PRESERVATION AND STEWARDSHIP**

**Project Area within Conservation Priority Area?** Yes **If yes, percentage?** 90% of ROW (in Pres Area)

**Project Area within Special Environmental Zone?** Yes **If yes, identify properties (B/L):** (see Comments)

**Project Area includes preserved land?** Yes **If yes, identify properties (B/L):** (see Comments)

**Regional Master Plan Goals, Policies, and Objectives:**

	<b>C</b>	<b>I</b>	<b>N/A</b>
<b>Policy 1H7:</b> 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 rights programs, and development regulations.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Objective 1H7b:</b> 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 1H7c:</b> Require through Plan Conformance, local development review, Highlands Project Review, and 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 transfer of development rights.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Policy 1I3:</b> To require conforming municipalities and counties to require conservation or land stewardship easements, enforceable by the Highlands Council and at least one of the following: the appropriate municipality, the County Agriculture Development Board, the SADC, Green Acres, or a non-profit land trust organized pursuant to § 501 (c)(3) of the federal tax code and engaged in the protection of land for the purpose of providing long-term stewardship of important resources as a condition of development approval for lands within parcels proposed for development that are identified for preservation on a proposed site plan or subdivision plot.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Comments:** The existing ROW traverses six parcels identified as part of the Special Environmental Zone in the Preservation Area. Three of these parcels are located in Jefferson Township (Block 338 Lot 2 – 212 acres; Block 339 Lot 2 – 260 acres; and Block 336 Lot 42 – 75 acres). One parcel, Block 31001 Lot 10, is located in Rockaway Township and encompasses 34 acres. One parcel, Block 300 Lot 3, is located in Kinnelon Borough and encompasses 33 acres. One parcel, Block 337, Lot 9, is located in Byram Township and encompasses 79 acres. In addition, including the parcels within the Special Environmental Zone, there are eighteen parcels considered high priority by the Highlands Council for preservation/acquisition. These eighteen parcels within the Conservation Priority Area contain more than 50% Moderate or High Conservation Priority Area and are each greater than 20 acres. One parcel is located in Boonton Township, two in Jefferson Township, one in Kinnelon Borough, one in Montville Township, seven in Rockaway Township, three in Byram Township, one in Hopatcong Borough, and two in Sparta Township. The sites of the proposed access roads and the Hopatcong Switching Station contain lands that are within the Conservation Priority Area. Much of the existing ROW in both the Preservation and Planning Area traverses parcels identified as Preserved Open Space.

Through communication with the NJDEP Green Acres Program, the applicant indicates that portions of the proposed project will require diversions of public preserved lands, in accordance with the NJDEP Green Acres Program Rules (N.J.A.C. 7:36). The applicant states that the extent of these diversions will depend on the specific easements for the existing right-of-ways that were granted. The applicant indicates that diversions will occur on lands now owned by the NJDEP and two parcels owned by the Morris County Park Commission, but no diversions will occur on municipal open space lands. Areas under NJDEP Green Acres jurisdiction for new temporary access roads will also require an approval from Green Acres. However, the applicant states that since the access roads will be in place for less than two years, the Green Acres Program indicated that they will treat these areas differently than a permanent diversion. The applicant notes that a mitigation plan for the Green Acres diversions will be prepared during the application review process, which will be submitted this year. The applicant anticipates that the Green Acres Program and the Highlands Council will coordinate the level of mitigation required to meet the existing NJDEP Green Acres Rules (N.J.A.C. 7:36).

Though inconsistent with Policy 1H7 and Objective 1H7c, as the proposed project represents development in a Special Environmental Zone, the linear nature of the project and the existing ROW make this incursion necessary.

The applicant proposes to make a monetary contribution to a fund to be established by the Highlands Council. This new fund will be established specifically for the purposes of acquiring critical lands, supporting preservation, conservation and stewardship activities, supporting agri-, eco- and heritage tourism, and generally enhancing the Highlands Region. The applicant's contribution would be provided to the Highlands Council as a component of the overall comprehensive mitigation plan strategy for the proposed project.

The applicant contends that this contribution is consistent with the goals and purposes of the Highlands Act since the Highlands Act supports the acquisition of exceptional natural resource lands, contiguous forest lands, wetlands, pristine watersheds, and critical habitat for fauna and flora. The Highlands Act also promotes the preservation of historic sites that provide recreational opportunities, including opportunities to advance eco-tourism, agri-tourism and heritage tourism. Consistent with the Legislative intent of the Highlands Act and as determined by the Highlands Council, this funding may be used for the preservation and stewardship of both open space and farmland, historic resources, or by the Highlands Development Credit Bank. Based on current land values, the applicant estimated that the proposed contribution could support the acquisition and stewardship of over 2,500 acres of lands within the Highlands Region. Based on this contribution; which would facilitate the acquisition of critical lands and support conservation and stewardship activities; the proposed project does include strategies to alleviate the impacts of the necessary diversions through encumbered land. Although the project is inconsistent with Special Environmental Zone policies due to the linear nature of the project and the existing ROW, the proposed contribution and mitigation enhances the project goals such that the project, as amended, is consistent with the goals and purposes of the Highlands Act regarding this resource.

**SUBPART F CARBONATE ROCK (KARST) TOPOGRAPHY**

**Project Area within or contributing to Carbonate Rock Area? Yes**

<b>Regional Master Plan Goals, Policies, and Objectives:</b>	<b>C</b>	<b>I</b>	<b>N/A</b>
<b>Policy 1K2:</b> 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Policy 1K4:</b> To ensure through Plan Conformance that municipalities in, or within subwatersheds draining directly to, the Carbonate Rock Area protect public health and safety and the quality of ground waters from inappropriate land uses and pollutant discharges.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 1K4b:</b> Applications for site plan or subdivision approval will include a multi-phased geotechnical site investigation (e.g., test borings, test pits) to locate any potential karst features and potential hazards to public health and safety, structures and ground water quality.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 1K4c:</b> 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 1K4d:</b> Public works projects, including but not limited to water supply, sewerage, stormwater and transportation facilities, shall be constructed and maintained such that the potential for damage from karst features and the contamination of ground water are avoided.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 1K4e:</b> 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Comments:** Portions of the project area within the Preservation Area are located within areas mapped as Carbonate Rock Areas. The applicant states that geotechnical site investigations, including test borings, would be conducted at each proposed tower location to determine underlying bedrock and to identify potential constraints. The applicant also indicates that the proposed project would be designed and constructed such that the potential for damage to karst features and the contamination of ground water would be avoided. As an integral part of the CMP, the applicant states that it would develop and implement a Stormwater, Soil Erosion, and Sediment Control Plan and that a key element of that plan is the described geotechnical boring program. The plan would provide drainage control features around towers within karst formations.

With consideration of: 1) the development and implementation of a geotechnical boring program as an element of the Stormwater, Soil Erosion, and Sediment Control Plan, which will be coordinated with the various resource agencies; and 2) the applicant will post a performance bond to ensure that the karst features and ground water are protected,

the proposed project, as amended, is consistent with the goals, policies, and objectives related to Carbonate Rock topography, and the goals and purposes of the Highlands Act regarding this resource.

**SUBPART G LAKE MANAGEMENT**

**Project Area within Lake Management Area?** Yes *If No, disregard remainder of Lake Management checklist.*

**If yes, which Tier:** Shoreland Protection Tier Yes      Water Quality Management Tier Yes  
 Scenic Resources Tier Yes      Lake Watershed Tier Yes

**Project Area within Lake Community Sub-Zone?** Yes

**If yes, which Tier:** Shoreland Protection Tier Yes      Water Quality Management Tier Yes  
 Scenic Resources Tier Yes      Lake Watershed Tier Yes

**Regional Master Plan Goals, Policies, and Objectives:**

	<b>C</b>	<b>I</b>	<b>N/A</b>
<b>Policy 1L2:</b> To establish tiers of lake management appropriate to management strategies that help protect lake water quality and community value from the impacts of present and future development.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 1L2a:</b> Lake management programs shall use the following management tiers around all Highlands Region lakes of greater than ten acres in size: <ul style="list-style-type: none"> <li>• A Shoreland Protection Tier consisting of an area measured 300 foot or the first property line perpendicular from the shoreline of the lake;</li> <li>• A Water Quality Management Tier consisting of an area measured 1,000 foot perpendicular from the shoreline of the lake, including the shoreland protection tier;</li> <li>• A Scenic Resources Tier consisting of an area measured 300 to 1,000 foot perpendicular from the shoreline of the lake, scaled based upon the view distance from the opposite shoreline, and determined through the size and layout of the lake, with wider portions of lakes having longer view distances; and</li> <li>• A Lake Watershed Tier consisting of the entire land area draining to the lake, through the evaluation of drainage areas using LiDAR topographic analyses or other topographic data where LiDAR data are not available.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 1L3:</b> To establish unique standards (as compared to lakes within the Protection and Conservation Zones) for the Lake Community Sub-Zone within the Existing Community Zone within 1,000 feet of lakes, particularly with respect to the Shoreline Protection Tier, to prevent degradation of water quality, harm to lake ecosystems, and promote aesthetic values within the Existing Community Zone.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 1L4:</b> To establish and implement management strategies to help protect lake water quality and ecosystem values from the impacts of present and future development for all lakes.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 1L4a:</b> Implementation of standards through Plan Conformance regarding lake ecosystem and water quality in the Shoreland Protection Tier to address direct and proximate impacts upon the lake, including but not limited to shoreline modification and development (including limits to the hardscaping of shorelines using bulkheads, rip-rap and walls), docks, piers, boathouses, dredging, vegetation removal, and increased impervious cover. Pollutant discharges shall also be addressed, including the potential for contamination from septic systems, cesspools and other wastewater management systems within the tier that are failing or are inadequately designed and constructed. As such systems fail, landowners should be required to provide upgraded treatment (whether on-site or through public or community systems) to minimize pollutant movement to the lake. Standards for the Lake Community Sub-Zone and for the Protection and Conservation Zones may be distinct to the extent necessary to recognize the existence of significant development within the Lake Community Sub-Zone.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 1L4b:</b> Implementation of standards through Plan Conformance regarding land use compatibility and water quality in the Water Quality Management Tier, to prevent or minimize continuous pollutant sources that can contribute pollutants overland or through ground water to the lake from greater distances than the Shoreland Protection Tier.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 1L4c:</b> Implementation of standards through Plan Conformance regarding the protection of visual and scenic resources in the Scenic Resources Tier, including but not limited to requirements for vegetative screening of buildings, building height limitations, and limits on tree and understory removal for reasons other than public health and safety or as the minimum necessary to make reasonable use of the designated building envelope for the parcel proposed for development. Standards for the Lake Community Sub-Zone and for the Protection and Conservation Zones may be distinct to the extent necessary to recognize the existence of significant development within the Lake Community Sub-Zone.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 1L5:</b> To require that conforming municipalities adopt and implement for all lakes the standards applicable to the Shoreland Protection and Water Quality Management Tiers; the standards applicable to the scenic resources tier shall be adopted and implemented for all public lakes (i.e., with shorelines that are not entirely privately-held and managed through a lake association), and for privately-held lakes to the extent feasible under law, recognizing the existence of previously approved lake community development plans.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 1L5a:</b> Shoreland Protection and Water Quality Management Tier requirements shall apply to all new development, regardless of lake ownership.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 1L5b:</b> Scenic Resource Tier requirements shall apply to all lakes with public access and to lakes with no public access that are not entirely managed by a single homeowner or lake community association. For lakes that are privately-held and managed by a single homeowner or lake community association, the scenic resource tier requirements shall be voluntary.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 1L6:</b> To require that conforming municipalities develop and adopt lake restoration plans, with sufficient input from lake community residents and landowners, for each of the municipality's developed lakes that has been identified as water quality impaired, to include watershed delineation, description of point and nonpoint sources of pollution in the watershed, lake monitoring schedules, existing and proposed in-lake management techniques, and recommended watershed best management practices. TMDLs adopted by the NJDEP to address known pollution problems may be used as lake restoration plans. For lakes	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

that are privately-held and managed by a single homeowners or lake community association, the municipality may require that the association share in or assume the costs of developing such plans.			
<b>Policy 1M4:</b> 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Comments:** Portions of the existing ROW in the both the Preservation and Planning Areas traverses Lake Management Areas and the Lake Community Sub-Zone. As an integral part of the CMP, the applicant states that it would develop and implement a Stormwater, Soil Erosion, and Sediment Control Plan and that a key element of that plan is to protect water resources around existing lakes. The applicant notes that a secondary benefit to relocating the switching station to Hopatcong from Jefferson would be the elimination of approximately thirteen towers, many of which would have been required around Lake Wenonah. Other aspects of the Lake Management Area goals, policies and objectives are addressed under other sections of this review.

With consideration of: 1) the development and implementation of a Stormwater, Soil Erosion, and Sediment Control Plan, which will be coordinated with the various resource agencies; and 2) the applicant will post a performance bond to ensure that the water resources are protected, the proposed project, as amended, is consistent with the RMP goals, policies, and objectives related to water quality and shoreline protection for Highlands lakes, and the goals and purposes of the Highlands Act regarding this resource.

**PART 2 WATER RESOURCES AND WATER UTILITIES**

**SUBPART A WATER RESOURCES AVAILABILITY**

<u>Source HUC14(s):</u>	<u>Net Availability (MGD):</u>	<u>HUC14 Constraint - Current Deficit Area (Y/N):</u>	<u>HUC14 Constraint - Existing Constrained Area (Y/N):</u>	<u>Conditional Availability (MGD):</u>
N/A	N/A			
1.		N/A	N/A	N/A
2.				

**Regional Master Plan Goals, Policies, and Objectives:**

	<b>C</b>	<b>I</b>	<b>N/A</b>
<b>Policy 2B4:</b> To strictly limit consumptive and depletive water uses to the water availability in each HUC14 subwatershed and to establish priorities for water uses that implement the policies and objectives of the RMP.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2B4a:</b> Give highest priority for the use of non-agricultural Net Water Availability or Conditional Water Availability within Protection Zone and Conservation Zone subwatersheds, through a Water Use and Conservation Plan developed under Objective 2B8c, local development review, and Highlands Project review: 1. To address a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for Net Water Availability; 2. To serve a designated Highlands Redevelopment Area; 3. To serve a cluster development that complies with Objective 2J4b; and 4. To serve affordable housing projects where at least 10% of the units are affordable.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2B4b:</b> The highest priority for use of Net Water Availability or Conditional Water Availability within Existing Community Zone subwatersheds, through a Water Use and Conservation Plan developed under Objective 2B8c, local development review and Highlands Project review to serve documented threats to public health and safety from contaminated water supplies, designated TDR Receiving Zones, infill development, designated Highlands Redevelopment Area, affordable housing projects where at least 10% of the units are affordable, or new areas for development that meet all other requirements of the RMP.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2B4c:</b> Establish and implement mandatory stormwater reuse for recreational and other non-agricultural irrigation, as well as other non-potable water purposes to minimize both the volume of stormwater discharges and water withdrawals for these purposes.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2B4d:</b> The highest priority for agricultural water uses in the Conservation Zone shall be those Preservation Area uses that promote agricultural and horticultural uses and opportunities that are compatible with protection of the Highlands environment, and those Planning Area uses that promote the continuation and expansion of agricultural, horticultural, recreational, and cultural uses and opportunities. Compatible agricultural and horticultural uses shall minimize consumptive water uses through efficiency measures.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 2B5:</b> To require, through Plan Conformance (including through a Water Use and Conservation Plan developed under Objective 2B8c), local development review, and Highlands Project Review, the use of water conservation, recycling and reuse methods (where appropriate) and devices for any redevelopment or development activity, including renovations to existing residential, institutional, commercial or industrial buildings, to minimize consumptive water use tailored to meet the resource protection and other goals for each Zone and considering subwatershed-specific conditions and Net Water Availability status.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 2B6:</b> To require through Plan Conformance (including through a Water Use and Conservation Plan developed under Objective 2B8c), local development review, Highlands Project Review, and interagency coordination that proposed public water supply and wastewater service areas, new or increased water allocations and bulk water purchases will not directly or indirectly cause or contribute to a Net Water Availability deficit, and where feasible will help mitigate any existing deficit.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2B6a:</b> Areawide Water Quality Management Plans, Wastewater Management Plans or their amendments shall ensure that the proposed service area will not directly or indirectly cause or contribute to a Net Water Availability deficit, and shall be in conformance with any Water Use and Conservation Plan developed under Objective 2B8c.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<b>Objective 2B6b:</b> NJDEP Water Allocation decisions and Highlands Project Reviews shall ensure that any new or increased water allocation permits within the Highlands Region are in conformance with the policies and objectives of the RMP and do not result in significant reductions in safe yields for any water supply facility with an existing water allocation permit and the NJDEP-approved safe yield.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 2B7:</b> To ensure through Plan Conformance (including through a Water Use and Conservation Plan developed under Objective 2B8c), local development review, and Highlands Project Review that the use of Net Water Availability and Conditional Water Availability within each subwatershed supports development patterns that are in conformance with RMP policies and objectives.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 2B8:</b> To require through Plan Conformance, local development review, and Highlands Project Review the efficient and effective use of water availability, the planning for future water needs, the reduction and elimination of water deficits, and the mitigation of new consumptive or depletive use in any Current Deficit Areas or subwatersheds that could become deficit areas based on projected development and water uses, to ensure sustainable water supply, water resource and ecological values in conformance with RMP policies and objectives.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2B8a:</b> Prevent net increases in consumptive or depletive water uses in Current Water Deficit Areas to prevent exacerbation of and help reduce or eliminate the deficit to ensure sustainable water supply, water resource and ecological values, emphasizing techniques including, but not limited to water reuse, recycling and conservation.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2B8b:</b> Proposed new consumptive or depletive water uses within a Current Deficit Area shall only occur under the auspices of a Water Use and Conservation Management Plan approved under Objective 2B8c or through mitigation of the proposed consumptive or depletive use within the same HUC14 subwatershed through: a permanent reduction of existing consumptive and depletive water uses; ground water recharge in excess of the requirements of N.J.A.C. 7:8 (Stormwater Management Rules); or other permanent means. Where a Water Use and Conservation Management Plan has not been approved: 1. Each project shall achieve mitigation ranging from 125% to 200%, based on the severity of the Current Deficit and the amount of consumptive or depletive water use proposed; 2. Total consumptive and depletive water uses from any single project and all projects combined are not to exceed the Conditional Water Availability of Objectives 2B3a or 2B3b for any HUC14 subwatershed; 3. Mitigation shall be successfully completed prior to initiation of the water use, except as required by #4, below. Mitigation may be phased in keeping with project development; 4. For water uses where the combination of proposed consumptive and depletive water uses and current subwatershed deficit is high, according to a schedule established by the Highlands Council, off-site mitigation shall be successfully completed prior to any on-site construction. On-site mitigation shall be successfully completed prior to initiation of the water use but may be implemented concurrent with on-site construction. Mitigation may be phased in keeping with the level of consumptive or depletive water uses; and Mitigation plans for a project shall include: specific objectives for each mitigation component; monitoring and reporting requirements; methods by which shortfalls in meeting the mitigation objectives shall be addressed through additional action; and be guaranteed through performance bonds.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2B8c:</b> Water Use and Conservation Management Plans shall be required through municipal Plan Conformance for all subwatersheds to meet the policies and objectives of Goal 2B, to ensure efficient use of water through water conservation and Low Impact Development Best Management Practices, and to avoid the creation of new deficits in Net Water Availability. Where developed for Current Deficit Areas, the plans shall include provisions to reduce or eliminate deficits in Net Water Availability, or to ensure continued stream flows to downstream Current Deficit Areas from Existing Constrained Areas, to the maximum extent practicable within each HUC14 subwatershed. Water Use and Conservation Management Plans shall demonstrate through a detailed implementation plan and schedule how and when the current deficit will be resolved in a subwatershed prior to approval for new water uses in the subwatersheds with the most severe deficits (i.e., in excess of 0.25 million gallons per day), and the plan shall be implemented prior to initiation of new water uses.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2B8d:</b> All water users within a Current Deficit Area shall seek funding and opportunities to meet the intent of Objective 2B4b.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2B8e:</b> Allow water resource transfers between or from Highlands subwatersheds only when there is no other viable alternative and where such transfers would demonstrably not result in impairment of resources in any subwatershed. Potential effects on upstream and downstream subwatersheds should be included in any such evaluation.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Comments:</b> N/A. The proposed project would not result in the expansion or creation of a public water supply system, public wastewater collection and treatment system or a community on-site treatment facility. In addition, the proposed project would not result in the generation of wastewater nor require a permanent water source.			

**SUBPART B PROTECTION OF WATER RESOURCES QUANTITY**

<b>Project Area includes Prime Ground Water Recharge Area? Yes</b>			
<b>Regional Master Plan Goals, Policies, and Objectives:</b>	<b>C</b>	<b>I</b>	<b>N/A</b>
<b>Policy 2D3:</b> To protect, enhance, and restore the quantity and quality of Prime Ground Water Recharge Areas.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 2D3c:</b> Implement master plans and development review ordinances through Plan Conformance that protect Prime Ground Water Recharge Areas and minimize the potential for disruption of recharge in such areas by development.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2D3g:</b> Require through Plan Conformance and local health ordinances, that existing land uses that have a significant potential to result in major discharges of 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 Prime Ground Water Recharge 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	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

discharge discovery and control is maximized.			
<b>Policy 2D4:</b> 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2D4a:</b> 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 2D4b:</b> 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 2D4c:</b> 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 2D4d:</b> 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 2D4e:</b> Prohibit through Plan Conformance, local development review and Highlands Project Review the expansion or creation of public water supply systems or public wastewater collection and treatment systems or community-based on-site wastewater facilities into a Prime Ground Water Recharge Area within the Protection or Conservation Zone within the Planning Area except as provided for in Policy 2J4 with Objectives 2J4a through 2J4d, and Policy 2K3 with Objectives 2K3a through 2K3e, and within the Preservation Area except as provided for in Policy 2I1 and Objectives 2I1a and 2I1b.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2D4f:</b> Prohibit through Plan Conformance, local development review and Highlands Project Review new land uses, including those identified through Objective 2D3d, that have a significant potential to result in the discharge of persistent organic 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 Prime Ground Water Recharge Area, such that they may degrade or contribute to the degradation of ground water quality.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 2D4g:</b> Require conformance with applicable components of regional stormwater management plans, where applicable, as a mandatory requirement for any site plan application.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 2D4h:</b> 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 2D4i:</b> Achieve a net improvement in ground water volume and maintenance of water quality through redevelopment, enhanced infiltration, pretreatment or other means where feasible.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments:</b> A portion of the proposed Hopatcong Switching Station site, the access roads, and the ROW (in the Preservation and Planning Areas) are mapped as Prime Ground Water Recharge Area. As an integral part of the CMP, the applicant states that it would develop and implement a Stormwater, Soil Erosion, and Sediment Control Plan and that a key element of that plan is ground water protection. The applicant indicates that the Hopatcong Substation Site will be designed to achieve 125% of the preconstruction ground water recharge. With respect to the ROW, the applicant indicates that it would construct bio-swales on the ROW to slow down the flow of water and increase stormwater infiltration. With consideration of: 1) the proposal that the Hopatcong Substation Site will be designed to achieve 125% of the preconstruction ground water recharge, and this will be reviewed and verified by the various regulatory agencies; 2) the development and implementation of a plan to protect ground water as an element of the Stormwater, Soil Erosion, and Sediment Control Plan, which will be coordinated with the various resource agencies; and 3) the applicant will post a performance bond to ensure that ground water quality is protected, the proposed project, as amended, is found to be made consistent with the RMP goals, policies, and objectives, sufficiently consistent with NJDEP Preservation Area rules related to water resources quantity, and as a result, consistent with the goals and purposes of the Highlands Act regarding this resource.			

<b>SUBPART C WATER QUALITY</b>			
<b>Project Area within Wellhead Protection Area?</b> Yes			
<b>If yes to above, check all that apply:</b> Tier 1 <input checked="" type="checkbox"/> Tier 2 <input checked="" type="checkbox"/> Tier 3 <input checked="" type="checkbox"/>			
<b>Name of Nearest Waterway(s) (1,000 feet of Project Area):</b> The ROW traverses numerous streams. Lubbers Run traverse the site of the proposed Hopatcong Switching Station.			
<b>SWQS Classification:</b> numerous waterways. The streams that traverse the switching station are classified as C2; FW2-TM			
<b>Description of Impairments, or TMDL:</b>			
<b>Regional Master Plan Goals, Policies, and Objectives:</b>	<b>C</b>	<b>I</b>	<b>N/A</b>
<b>Policy 2G2:</b> 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Policy 2G3:</b> To adopt and implement water quality protections through Plan Conformance, local development review and Highlands Project Review.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 2G3a:</b> Prohibit land uses that would increase pollutant loadings to waters for which TMDLs have been adopted by the NJDEP unless in compliance with the relevant TMDL.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2G3b:</b> Ensure that new land uses draining to a stream designated as impaired but lacking a TMDL (i.e., Sublist 5) avoid increased pollutant loadings for the parameter or parameters for which a TMDL is required.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 2G3c:</b> Water Quality Management Plans, Wastewater Management Plans or amendments shall demonstrate that the proposed service area will not directly or indirectly support development that would be in violation of an adopted TMDL.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 2G5:</b> To adopt and implement stormwater management controls through Plan Conformance, local development review and Highlands Project Review.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 2G5a:</b> 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 2G5b:</b> 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 2G5c:</b> Implement agricultural best management practices for water conservation, water reuse, nutrient and pesticide application, animal waste management, environmental restoration, pollution assessment and prevention, and irrigation efficiency in farm operations for the protection of ground and surface water quality.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2G6c:</b> Require conforming municipal and county master plans and development regulations to incorporate relevant TMDLs, additional water quality protection measures and wellhead protection for public water supply wells and nitrate standards as development standards.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 2H2:</b> 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 2H2a:</b> 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 Well Head Protection Area prevent seepage of untreated sewage into ground water.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2H2b:</b> 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2H2c:</b> 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2H4a:</b> Require site specific and municipal stormwater management plans to address wellhead protection requirements.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Policy 2H5:</b> To require that conforming municipalities revise master plans and development regulations to address wellhead protection requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2H5b:</b> Restrict development activities that pose threats to the water quality of public water supply wells.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2H5c:</b> Ensure that development activities and existing land use activities implement best management practices to protect the quality of ground water within Wellhead Protection Areas.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 2H5d:</b> Amend Areawide Water Quality Management Plans or Wastewater Management Plans for conforming municipalities and counties to ensure that any activity associated with the proposed service area will not adversely affect a Wellhead Protection Area.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Comments:** Portions of the project area, in the Preservation Area (not including the Hopatcong Switching Station), are located within areas mapped as Wellhead Protection Areas (Tiers 1, 2 and 3, with 2, 5 and 12 year times of travel to the well, respectively). The applicant does indicate that the proposed project would not result in the intentional discharge of pathogens, or persistent organic or toxic chemicals either during or after construction consistent with the goals of the RMP.

The applicant indicates that pursuant to NJDEP Stormwater Management Rules, a stormwater analysis will be undertaken in accordance with the procedures outlined in the New Jersey Stormwater Best Management Practices Manual. The applicant also indicates that a Stormwater, Soil Erosion, and Sediment Control Plan will be prepared for the proposed project in accordance with the latest version of the Morris, Warren and Sussex County Soil Conservation District requirements. The applicant indicates that the Stormwater, Soil Erosion, and Sediment Control Plan will include Low Impact Design Best Management Practices. The applicant concludes that the proposed project would not generate pollutants, and through compliance with existing Stormwater Management Rules and Soil Erosion and Sediment Control requirements, would not result in short or long term impacts to water quality and quantity. The applicant states that two elements of the Stormwater, Soil Erosion, and Sediment Control Plan include a Stormwater Pollution Prevention Plan and a Construction Pollution Prevention Plan for the Hopatcong Switching Station Site. Further, the use of gas insulated switchgear at the Hopatcong Switching Station advances the concept of low impact design as it reduces the footprint of the switching station.

With consideration of: 1) the development and implementation of a Stormwater, Soil Erosion, and Sediment Control Plan (which includes a Stormwater Pollution Prevention Plan and a Construction Pollution Prevention Plan for the Hopatcong Switching Station Site), which will be coordinated with the various resource agencies; and 2) the applicant will post a performance bond to ensure that water quality is adequately protected, the proposed project, as amended, is found to be made consistent with the RMP goals, policies, and objectives, sufficiently consistent with NJDEP Preservation Area rules related to water quality, and as a result, consistent with the goals and purposes of the Highlands Act regarding this resource.

**SUBPART D SUSTAINABLE DEVELOPMENT AND WATER RESOURCES**

**WATER UTILITY**

**Potable Water Supply?** NA      **Domestic?** NA

**Source Water HUC(s):** NA

**Public Community Water System?** NA      **If PCWS, Name of Facility:**

**PCWS ID No:**      **Total Projected Water Demand of Project (MGD):**

<b>Regional Master Plan Goals, Policies, and Objectives:</b>	<b>C</b>	<b>I</b>	<b>N/A</b>
<b>Policy 2I1:</b> To prohibit the expansion or creation of public water supply systems, public wastewater collection and treatment systems and community on-site treatment facilities in the Preservation Area unless approved through a Highlands Applicability Determination (HAD) or a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2I1b:</b> The expansion or creation of public water supply systems, public wastewater collection and treatment systems and community on-site treatment facilities in the Preservation Area as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 2J2:</b> To ensure, through Plan Conformance and Highlands Project Review, that Highlands Public Community Water Systems conform with Policy 2B6.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2J2a:</b> Limit future water system demand and reduce existing demand where feasible by water systems that are dependent on Current Deficit Areas or Existing Constrained Areas as a source of water.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2J2b:</b> Limit future water system demands to levels that will not create a Current Deficit Area where one does not currently exist.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 2J3:</b> To identify, through Plan Conformance, the RMP Water Resources Science Agenda and other means, areas of the Highlands Region with existing or imminent threats to public health and safety from contaminated domestic and other on-site water supplies that are of sufficient scale to potentially justify the extension or creation of a public water supply.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 2J4:</b> To minimize, through Plan Conformance, local development review and Highlands Project Review, the creation or extension of public water supply systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area, and to allow for the creation or extension of public water supply systems where appropriate within the Existing Community Zone.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2J4a:</b> Prohibit new, expanded or extended public water systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<p>the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The extension or creation of systems shall follow the requirements in Objective 2J4b (parts 2 and 3). The applicable purposes are:</p> <ol style="list-style-type: none"> <li>1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for allocation of existing system capacity;</li> <li>2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or</li> <li>3. To serve a cluster development that meets all requirements of Objective 2J4b.</li> </ol>			
<p><b>Objective 2J4b:</b> Clustered development served by public water supply within the Protection Zone, the Conservation Zone, and the Environmentally-Constrained Sub-zones of the Planning Area shall be approved only if the following conditions are met:</p> <ol style="list-style-type: none"> <li>1. The development impacts are otherwise consistent with the requirements of the RMP, including provisions for mandatory clustering in Agricultural Resource Areas pursuant to Policy 3A5;</li> <li>2. Extension of an existing public water system will occur only where the cluster development is within or immediately adjacent to an Existing Area Served with available capacity;</li> <li>3. Creation of a new public water system will occur only where such development is not within or immediately adjacent to an Existing Area Served with available capacity;</li> <li>4. The clustered development preserves at least 80% of the cluster project area in perpetuity for environmental protection or agricultural purposes. To the maximum extent feasible the developed portion (i.e., not including wetlands, Highlands Open Waters buffers, and recreational lands) occupies no more than 10% of the cluster project area if served by a public or community on-site wastewater system; and</li> <li>5. Where the preserved land in the cluster project area is dedicated to agricultural purposes, the cluster development ordinance and an Agriculture Retention/Farmland Preservation Plan supports continued agricultural viability of the agricultural land and requires the implementation of best management practices, including development and implementation of a Farm Conservation Plan that addresses the protection of water and soil resources prepared by the USDA Natural Resources Conservation Service (NRCS), Technical Service Provider (TSP), appropriate agent or NJDA staff, and approved by the local Soil Conservation District (SCD).</li> </ol>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>Objective 2J4c:</b> Allow the expansion or creation of public water systems within the Existing Community Zone of the Planning Area, other than the Environmentally-Constrained Sub-zone, to serve lands which are appropriate for designated TDR Receiving Zones, infill or redevelopment, to meet needs and protection requirements equivalent to Objective 2J4a within the Existing Community Zone, or to serve new areas for development that meet all other requirements of the RMP. TDR Receiving Zones, affordable housing projects (where the affordable units exceed 10% of the total units), infill and redevelopment shall have higher priority for capacity than expansion of public water service areas within this Zone.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>Objective 2J4d:</b> All development within the Highlands Region, in areas that are not served by public water systems, shall be at a density that can be supported by on-site wells. Where cluster development in the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area will be served by on-site wells, and the undeveloped land is preserved for agricultural purposes in perpetuity, the cluster development in combination with the Agriculture Retention/Farmland Preservation Plan required by Objective 2J4b shall provide for best management practices that protect the on-site wells from contamination resulting from agricultural practices and shall include provisions to minimize or reduce net pollutant loadings from the total cluster project area including the preserved agricultural lands.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>Policy 2J5:</b> To prohibit, through local development review and Highlands Project Review, new or increased water resource transfers between subwatersheds unless it is demonstrated that no other option exists to meet public health, safety and welfare objectives and where such transfers do not result in impairment of resources in the subwatershed from which water is proposed to be transferred.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>Policy 2J7:</b> To require water resource management for all development in the Highlands Region, through local development review and Highlands Project Review.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>Objective 2J7a:</b> Require the maximum feasible water conservation and recycling for any redevelopment or development activity, including renovations to existing single family residences and commercial/industrial buildings.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>Objective 2J7b:</b> Require consideration of and the cost-effective use of recycled or re-used water rather than potable public water for non-potable purposes such as fountains, and nonessential uses such as golf courses, certain recreational, commercial, or agricultural uses.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>Objective 2J7c:</b> Require that new residential development served by public community water systems, be except where also served by septic systems, at a minimum density of 1/2 acre per dwelling unit for the developed part of the site (e.g., not including wetlands, Highlands Open Waters buffers, recreational space), to ensure cost-effective utility service.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>Objective 2J7d:</b> Require that new non-residential development served by public water systems, except where also served by septic systems, be designed to target a floor area ratio (FAR) of 0.84 for the developed part of the site (e.g., not including wetlands, Highlands Open Waters buffers, recreational lands) to the maximum extent feasible, as a means to maximize parking and employment efficiency and compact development.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>Comments:</b> N/A. The proposed project would not result in the expansion or creation of a public water supply system, public wastewater collection and treatment system or a community on-site treatment facility. In addition, the proposed project would not result in the generation of wastewater nor require a permanent water source.</p>			

<b>WASTEWATER UTILITY</b>						
<b>NJPDES Permit Number:</b> NA		<b>Projected Flow of Project (GPD):</b> NA				
<b>HDSF Facility?</b> NA		<b>HDSF Available Capacity (MGD):</b> NA				
<b>Subject to Allocation Agreement?</b> NA		<b>Capacity Allocated from HDSF (MGD):</b> NA				
<b>Extent of HDSF Service Area Included in WMP:</b> Full <input type="checkbox"/> Partial <input type="checkbox"/> NA						
<b>Wastewater Treatment Facility:</b> NA						
<b>Service Area:</b>		<b>Wastewater Discharge Flow (MGD):</b>				
<b>NJPDES-DGW:</b>	Existing <input type="checkbox"/> Proposed <input type="checkbox"/>	Existing:	Increase:			
<b>NJPDES-DSW:</b>	Existing <input type="checkbox"/> Proposed <input type="checkbox"/>	Existing:	Increase:			
<b>Regional Master Plan Goals, Policies, and Objectives:</b>				<b>C</b>	<b>I</b>	<b>N/A</b>
<b>Policy 2I1:</b> To prohibit the expansion or creation of public water supply systems, public wastewater collection and treatment systems and community on-site treatment facilities in the Preservation Area unless approved through a Highlands Applicability Determination (HAD) or a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1.				<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2I1a:</b> Designated sewer service areas in the Preservation Area shall be restricted to the Existing Area Served as of August 10, 2004, except to serve development that is approved through a HAD or a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1.				<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2I1b:</b> The expansion or creation of public water supply systems, public wastewater collection and treatment systems and community on-site treatment facilities in the Preservation Area as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.				<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 2K2:</b> To base projected demand for current needs, appropriate economic revitalization and opportunities for designated TDR Receiving Zones within Existing Areas Served on existing maximum three month demands plus an estimate of redevelopment needs based on either Highlands Council regional analyses or more detailed local analyses, to assess whether there is adequate treatment capacity to encourage redevelopment.				<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 2K3:</b> To provide adequate, appropriate, efficient and cost-effective wastewater management to all development in the Highlands Region, through Plan Conformance, local development review and Highlands Project Review.				<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2K3b:</b> Existing wastewater collection and treatments systems which are non-compliant with state water quality standards for wastewater treatment and effluent discharge shall be prohibited from collecting and treating additional wastewater until the treatment systems are fully compliant with State permit requirements.				<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2K3c:</b> Prohibit new, expanded or extended public wastewater collection and treatment systems and community on-site treatment facilities within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.				<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2K3d:</b> Clustered development served by a public wastewater collection and treatment system or community on-site treatment facility within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area shall be approved only if the following conditions are met: 1. The development impacts are otherwise consistent with the requirements of the RMP, including provisions for mandatory clustering in Agricultural Resource Areas; 2. Extension of an existing public wastewater collection and treatment system will occur only where the cluster development is within or immediately adjacent to an Existing Area Served with available capacity; 3. Creation of a community on-site treatment facility will occur only where such development is not within or immediately adjacent to an Existing Area Served with available capacity, where the proposed system is designed, permitted, and constructed at a capacity limited to the needs of the clustered development, and where the system does not create the potential for future expansion into areas that are not the subject of cluster developments immediately adjacent to the initial cluster served; 4. The cluster development preserves at least 80% of the cluster project area in perpetuity for environmental protection or agriculture purposes. To the maximum extent feasible the developed portion of the project area (e.g., not including wetlands, Highlands Open Waters buffers, and recreational lands) occupies no more than 10% of the cluster project area if served by a public or community on-site wastewater system; and				<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5. Where the preserved land in the cluster project area is dedicated to agricultural purposes, the cluster development ordinance and an Agriculture Retention/Farmland Preservation Plan supports continued agricultural viability of the agricultural land and requires the implementation of best management practices, including development and implementation of a Farm Conservation Plan that addresses the protection of water and soil resources prepared by the USDA Natural Resources Conservation Service (NRCS), Technical Service Provider (TSP), appropriate agent or NJDA staff, and approved by the local Soil Conservation District (SCD).			
<b>Objective 2K3e:</b> Allow the expansion or creation of wastewater collection systems within the Existing Community Zone of the Planning Area, other than the Environmentally-Constrained Sub-zone, to serve lands which are appropriate for designated TDR Receiving Zones, infill or redevelopment, to meet needs and protection requirements equivalent to those provided at Objective 2K3c within the Existing Community Zone, or to serve new areas for development that meet all other requirements of the RMP. The highest priority for allocation of excess or additional wastewater treatment capacity is to areas where there are clusters of failed septic systems that are located within or adjacent to Existing Areas Served. TDR Receiving Areas, where designated, affordable housing projects (where the affordable units exceed 10% of the total units), infill and redevelopment shall have higher priority for capacity than other developments requiring expansion of sewer service areas.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2K3f:</b> All development within the Highlands Region, in areas which are not served by public wastewater collection and treatment system or community on-site treatment facility, shall be at a density that can be supported by septic systems under Goal 2L. Where cluster development in the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-Zones of the Planning Area shall be served by on-site wells, and the undeveloped land is preserved for agricultural purposes in perpetuity, the cluster development and the Agriculture Retention/Farmland Preservation Plan required by Objective 2K3d in combination shall include provisions for best management practices that protect the on-site wells from contamination resulting from agricultural practices and shall include provisions to minimize or reduce net pollutant loadings from the total cluster project area including the preserved agricultural lands.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 2K4:</b> To ensure the efficiency and cost-effectiveness of public wastewater collection and treatment systems, through Plan Conformance, local development review and Highlands Project Review.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2K4a:</b> Require that new residential development served by public wastewater collection and treatment systems be at a minimum density of 1/2 acre per dwelling unit for the developed part of the site (e.g., not including wetlands, Highlands Open Waters buffers, and recreational space) to ensure cost-effective utility service.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2K4b:</b> Require that new non-residential development served by public wastewater collection and treatment systems be designed to target a floor area ratio (FAR) of 0.84 for the developed part of the site (e.g., not including wetlands, Highlands Open Waters buffers, recreational space) to the maximum extent feasible, as a means to maximize parking and employment efficiency and compact development.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2K4c:</b> Require the use of recycled or re-used water wherever possible including aesthetic purposes and non-potable purposes such as fountains, golf courses, and other recreational, commercial or agricultural uses.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Comments:</b> N/A. The proposed project would not result in the expansion or creation of a public water supply system, public wastewater collection and treatment system or a community on-site treatment facility. In addition, the proposed project would not result in the generation of wastewater nor require a permanent water source.			
<b>SEPTIC SYSTEM YIELD</b>			
<b>Proposed Nitrate Target(s) (mg/l):</b> NA		<b>Annual Recharge Rate Used:</b> Drought <input type="checkbox"/> Average <input type="checkbox"/>	
	<u>Protection Zone</u>	<u>Conservation Zone</u>	<u>Existing Community Zone</u>
<b>Municipal Septic System Density (acre/unit)</b>			
<b>HC Septic System Density (acre/unit)</b>			
<b>Municipal Septic System Yield (units)</b>			
<b>HC Septic System Yield (units)</b>			
<b>Regional Master Plan Goals, Policies, and Objectives:</b>			<b>C</b>
			<b>I</b>
			<b>N/A</b>
<b>Policy 2L2:</b> To use the median background nitrate concentrations in ground water in the Highlands Region as a basis for establishing on-site wastewater treatment densities through Plan Conformance, local development review, and Highlands Project Review.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2L2a:</b> Use the median concentrations of nitrate in ground water for Planning Area HUC14 subwatersheds where the Protection Zone is predominant as the nitrate target for new development reliant on septic systems within the Protection Zone. The median is 0.72 mg/L.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2L2b:</b> Use the median concentrations of nitrate in ground water for Planning Area HUC14 subwatersheds where the Conservation Zone is predominant as the nitrate target for new development reliant on septic systems within the Conservation Zone. The median is 1.87 mg/L.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2L2c:</b> Use the NJDEP Highlands Preservation Area rules and nitrate thresholds for the Preservation Area.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2L2d:</b> Use a nitrate target of 2 mg/L for the Existing Community Zone within Planning Area, on a project-by-project basis, where new development will rely on septic systems.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2L2e:</b> New residential development using septic systems where clustering or conservation design techniques are employed shall have a gross density (for all parcels involved in the development proposal) based on the nitrate dilution target appropriate for the Land Use Capability Zone, but with the density for the developed portion of the site based on a nitrate dilution target not to exceed 10 mg/L or any more stringent requirement as required by N.J.A.C. 7:15.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<b>Objective 2L2f:</b> Carrying capacity shall be documented through the Land Use Capability Septic System Yield Map as the number of allowable septic systems per Conservation and Protection Zone for each HUC14 subwatershed, taking into account the nitrate target, the HUC14 subwatershed drought ground water recharge, and the acreage that is privately owned, undeveloped or underdeveloped, and not preserved.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 2L2g:</b> New residential development utilizing septic systems shall be designed in a manner that ensures that the untreated well water meets the State drinking water quality standards and that minimizes the risk of well contamination due to the flow of septic system plumes within or between developed lots, addressing general ground water flow patterns, major fracture systems and other appropriate geological, geophysical and hydrogeological issues.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Comments:</b> NA. Septic System Yields are not applicable.			
<b>PART 3 AGRICULTURAL RESOURCES</b>			
<b>Area within Agricultural Resource Area?</b> No If yes, percentage? %	<b>Area within Agricultural Priority Area?</b> No If yes, percentage? %		
<b>Project Area includes preserved farmland?</b> No <b>If yes, identify properties (B/L):</b>			
<b>Affects Farm Unit &gt;250 acres?</b> No	<b>Includes Important Farmland Soils?</b> Yes		
<b>Agricultural Uses?</b> Yes			
<b>Regional Master Plan Goals, Policies, and Objectives:</b>	<b>C</b>	<b>I</b>	<b>N/A</b>
<b>Policy 3A5:</b> Where it is not feasible to preserve agricultural lands within the ARA by such methods as fee simple acquisition, easement acquisition, or a TDR Program, require mandatory clustering through Municipal Plan Conformance, local development review and Highlands Project Review for residential development in an ARA. Cluster development within the Planning Area that incorporates public or community on-site wastewater utilities shall meet the requirements of Policy 2J4 with Objectives 2J4a through 2J4d, and Policy 2K3 with Objectives 2K3a through 2K3e, and within the Preservation Area shall meet the requirements of Policy 2I1 and Objectives 2I1a and 2I1b, and where reliant on septic systems shall meet the requirements of Objective 6I1a.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 3A5a:</b> Implement regulations requiring that cluster or conservation design development proposed within an Agricultural Resource Area support the preservation of farmland, avoid conflicts with agriculture, maintain and enhance the sustainability and continued viability of the agricultural industry, protect Important Farmland Soils, and meet resource management and protection requirements of the RMP.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 3A5b:</b> Implement regulations requiring that all cluster or conservation design development proposed in an Agricultural Resource Area be buffered appropriately with existing natural resources, such as hedgerows or trees, or with new buffers to avoid conflicts between non-agricultural development and agricultural activities, and to protect existing agricultural uses and sensitive environmental resources.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 3A5c:</b> Implement regulations requiring that all land preserved in perpetuity for environmental protection or agricultural purposes as a result of clustering be subject to a conservation easement enforceable by the Highlands Council and at least one of the following: the appropriate municipality, for agricultural purposes the County Agriculture Development Board or the SADC and for environmental purposes Green Acres or a qualified land trust non-profit organization.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 3A5d:</b> Where the preserved land in the cluster project area is dedicated to agricultural purposes support continued agricultural viability of the agricultural land, encourage that the original or new farmstead remain attached to the preserved land wherever feasible, and require the implementation of best management practices through the cluster development ordinance and an Agriculture Retention/Farmland Preservation Plan, including development and implementation of a Farm Conservation Plan that addresses the protection of water and soil resources prepared by the USDA NRCS, Technical Service Provider (TSP), appropriate agent or NJDA staff, and approved by the local Soil Conservation District (SCD).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 3A6:</b> To permit through local development review and Highlands Project Review limited development, including family and farm labor housing in Agricultural Resource Areas which are necessary to support the viability of the agricultural operation, in coordination with the NJDA and the SADC, and subject to compliance with the resource management and protection requirements of the RMP.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 3A6a:</b> Implement regulations allowing for construction of ancillary structures and family and farm labor housing that is necessary to support the viability of the agricultural operation, upon a demonstration that the proposed development is consistent with the resource management and protection requirements of the RMP.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 3C1:</b> To prohibit through Plan Conformance, local development review and Highlands Project Review the development of additional water and wastewater infrastructure in a Agricultural Resource Area (ARA) within the Conservation and Protection Zones of the Planning Area, unless they meet the requirements of Policy 2J4 with Objectives 2J4a through 2J4d, and Policy 2K3 with Objectives 2K3a through 2K3e, and will maximize the preservation of agricultural lands within the ARA.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 3D2:</b> To require any agricultural or horticultural development in the Preservation Area and the Planning Area which involves new agricultural impervious cover, since enactment of the Highlands Act, to the total land area of a Farm Management Unit (either individually or cumulatively) of greater than 3% but less than 9%, to develop and implement a Farm Conservation Plan prepared by the USDA NRCS, TSP, appropriate agent, or NJDA staff, and approved by the local SCD.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 3D3:</b> To require any agricultural or horticultural development in the Preservation Area and the Planning Area which involves new agricultural impervious cover, since enactment of the Highlands Act, to the total land area of a Farm Management Unit (either individually or cumulatively) of 9% or greater to develop and implement a Resource Management System Plan prepared by the USDA NRCS, TSP, appropriate agent, or NJDA staff, and approved by the local SCD.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<b>Policy 3D6:</b> To identify subwatersheds with elevated nitrate levels and develop and implement management plans to enhance water quality in these subwatersheds while maintaining and enhancing agricultural viability.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 3E3:</b> To require conforming municipalities and counties, with farmland preservation programs or a significant agricultural land base, to incorporate Right to Farm provisions, in accordance with N.J.S.A. 4:1C-1 et seq. and N.J.A.C. 2:76-2, in their master plans and development regulations.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 3E4:</b> To address agricultural or horticultural development and agricultural or horticultural use through Plan Conformance in accordance with the Right to Farm Act, N.J.S.A. 4:1C-1, and in coordination with the NJDA, the SADC, and the County Agriculture Development Boards (CADB).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Comments:</b> While the existing ROW traverses small pockets of Important Farmland Soils and Agricultural Uses, the proposed project is found to be consistent with Agricultural Resources policies and objectives, and the goals and purposes of the Highlands Act regarding this resource.			
<b>PART 4 HISTORIC, CULTURAL, ARCHAEOLOGICAL, AND SCENIC RESOURCES</b>			
<b>Presence of Resources: Yes</b>	<b>Highlands Historic District Polygons Presence</b>		
<b>Highlands Historic Properties Polygons Presence</b>	<b>Highlands Historic Property Points Presence</b>		
<b>Archaeological Grids Presence</b>	<b>Highlands Scenic Resource Inventory Presence</b>		
<b>Description of Resources:</b> Numerous historic, archaeological and scenic resources are located within the impact area of the project. (See comments below)			
<b>Regional Master Plan Goals, Policies, and Objectives:</b>	<b>C</b>	<b>I</b>	<b>N/A</b>
<b>Policy 4A3:</b> To ensure through local development review, where a municipality has adopted an historic preservation ordinance under Policy 4C2, that human development does not adversely affect the character or value of resources which are listed on the Highlands Historic and Cultural Resource Inventory to the maximum extent practicable.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 4A3a:</b> All development and redevelopment applications shall include submission of a report identifying potential historic, cultural and/or archaeological resources on the subject property or immediately adjacent properties.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Policy 4A4:</b> 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 4A4a:</b> 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 4A4b:</b> Where a municipality has adopted an historic preservation ordinance under Policy 4C2, all development which affects identified cultural, historic sites/districts, or archaeological resources shall comply with minimum standards for the preservation of the affected resources.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 4B3:</b> To ensure that human development does not adversely affect the character or value of resources which are listed on the Highlands Scenic Resources Inventory.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Policy 4B5:</b> 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 4B5a:</b> 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 4B5b:</b> All development which affects identified scenic resources shall comply with minimum standards for the preservation of the affected resources.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Objective 4B5c:</b> Any proposed action that requires federal permits, involves federal grants, or involves other federal actions that may impact the resource values of the Musconetcong National Scenic and Recreational River and the Lower Delaware National Scenic and Recreational River, pursuant to section 10(a) of the National Wild and Scenic Rivers Act, shall require review by the National Park Service, National Wild and Scenic Rivers Program.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Comments:</b> The following historic resources, as identified in the Historic and Cultural Resource Inventory, are located either within, adjacent to, or within one mile of the right-of-way:			
<ul style="list-style-type: none"> <li>• Split Rock Furnace, Rockaway Twp</li> <li>• Talmadge House, Jefferson Twp (also Talmadge Archeological and Historical Complex)</li> <li>• Decker-Kincaid Homestead, Boonton Twp</li> <li>• Van Duyne – Jacobus House, Montville Twp</li> <li>• Parsonage of the Montville Reformed Dutch Church (Cornelius Doremus House) , Montville Twp</li> <li>• Davenport – Demarest House, Montville Twp</li> <li>• Davenport Family Cemetery, Montville Twp</li> <li>• Martin Van Duyne House, Montville Twp</li> <li>• Former Canal House, Montville Twp</li> </ul>			

- Henry Doremus House, Montville Twp
- Brandt Jacobus House, Montville Twp
- David Jacobus House, Montville Twp
- G. B. Jacobus House, Montville Twp
- Vreeland House, Montville Twp
- H. Jacobus House, Montville Twp
- James Van Duyne Farmhouse, Montville Twp
- Van Ness Coal Yard, Montville Twp
- John H. Vreeland Outkitchen, Montville Twp (referred to in SHPO decision as “John H. Vreeland/Cook House”)
- Morris Canal Bridge 98-A site, Montville Twp
- Deck’s Grist Mill, Montville Twp
- Plane Tender’s House, Montville Twp
- Morris Canal Plane 8 East, Montville Twp
- Morris Canal Plane 9 East, Montville Twp
- Farmer’s Hotel, Montville Twp
- Montville Schoolhouse No. 10, Montville Twp
- Johannes Parlaman, Montville Twp
- Miller – Kingsland House, Boonton Twp
- Upper Longwood Forge Historic District, Jefferson Twp
- Archaeological 1 Square Mile Grids – Jefferson Twp (7 grids), Rockaway Twp (1 grid), Montville Twp (2 grids)

With respect to scenic resources, the potentially affected resources, as initially identified in the Highlands Council’s baseline Scenic Resource Inventory and located within seven miles of the project area, are listed below (*the majority of these resources are located within three and a half miles of the project area*):

- Allamuchy Mountain State Park
- Berkshire Valley Wildlife Management Area
- Farny State Park (with adjacent Split Rock Reservoir)
- Great Piece Meadows
- Hopatcong State Park
- Jefferson Sparta Preserve
- Lubbers Run Preserve
- McCarthy Preserve
- Norvin Green State Forest
- Rockaway River Wildlife Management Area
- Sparta Mountain Wildlife Management Area
- Troy Meadows Nature Reserve
- Weldon Brook Wildlife Management Area
- Whittingham Wildlife Management Area
- Wildcat Ridge Wildlife Management Area
- Berkshire Valley Golf Course
- Mahlon Dickerson Reservation
- Minnisink County Park
- Mount Hope Historical Park
- Old Troy Park
- Pyramid Mountain Natural Historic Area

- Silas Condict Park
- Apshawa Preserve

The available literature references visual effects within distances ranging from 3 to 10 miles away from a given structure. The most relevant analysis indicates that 7 miles is the edge of the area within which the view of a tower would be visible. A study completed on behalf of the Vermont Public Service Department, "Wind Energy and Vermont's Scenic Landscape," considers the impact of wind turbine towers on the landscape. The towers range in height from 135 to 250 feet.

The applicant acknowledges the existence of the above-named historic and archaeological resource impacts, recognizing that potential impacts to these resources may result in a detrimental influence on eco-tourism, agri-tourism and heritage tourism activities in the Highlands Region. Identified above is the list of scenic resources that may be affected by the proposed project. The applicant has submitted a list of lands in Table 1: Contribution To The Highlands Council (Appendix D), which includes all of these lands. To mitigate these potential impacts, the applicant has proposed a contribution of funds to be dedicated for the acquisition and stewardship of properties to be added to the inventory of public resource lands. To the extent the funds will result in public acquisition of resource lands that would support eco-tourism, agri-tourism, and heritage tourism, the impact on these activities may be ameliorated. The acquisition of such lands would provide additional and substantial recreational opportunities, including opportunities to advance eco-tourism, agri-tourism and heritage tourism. Based on current land values, the applicant estimated that the proposed contribution could support the acquisition and stewardship of an estimated over 2,500 acres of lands within the Highlands Region. (See the Land Preservation and Stewardship section of this Consistency Determination). Funds may also be used for non-acquisition activities that advance eco-tourism, agri-tourism and heritage tourism in the affected areas.

Additionally, as part of the CMP, the applicant proposes to prepare a Historic and Archaeological Resources Plan. The applicant indicates that this Plan is required by the State Historic Preservation Office (SHPO) and will be reviewed within the context of the Freshwater Wetlands Permits that are submitted to the NJDEP, Division of Land Use Regulation. The applicant states that details of the preliminary findings have been submitted to the SHPO and are being evaluated to identify where more detailed sampling and analysis of the impacts from the proposed project are required. The applicant shall submit copies of all research and findings relative to historic resources to the Highlands Council for the purposes of review and consultation with SHPO. With consideration of: 1) the development and implementation of a Historic and Archaeological Resources Plan; and 2) the contribution to mitigate the impacts on historic, cultural, archaeological and scenic resources, the proposed project, as amended, is sufficient to be found consistent with the goals and purposes of the Highlands Act regarding this resource.

**PART 5 TRANSPORTATION**

**Project supports local transportation/transit infrastructure?** NA

<b>Regional Master Plan Goals, Policies, and Objectives:</b>	<b>C</b>	<b>I</b>	<b>N/A</b>
<b>Policy 5B2:</b> To require through Plan Conformance and Highlands Project Review an evaluation of potential growth inducing effects such as substantial new land use, new residents, or new employment that could occur as a result of road improvements for increased motorized vehicle traffic capacity.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 5B3:</b> To prohibit through Plan Conformance and Highlands Project Review road improvements in the Highlands Region in areas for which a Growth Inducing Study demonstrates that proposed improvements do not support the RMP resource protection and smart growth policies and are likely to be growth-inducing for lands with limited or no capacity to support human development without an adverse impact on the Highlands ecosystem.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 5C3:</b> To limit road improvements through local development review and Highlands Project Review where roads are constrained by topography, forested lands or the community character of land uses fronting on the road.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Comments:** NA. Transportation issues are not applicable.

<b>PART 6 FUTURE LAND USE</b>			
<b>SUBPART A LAND USE CAPABILITY ZONES</b>			
<b>Project Area within which Land Use Capability Zone or Sub-Zone?</b> (check all that apply): Protection Zone <input checked="" type="checkbox"/> Conservation Zone <input type="checkbox"/> Existing Community Zone <input checked="" type="checkbox"/> Conservation – Environmentally Constrained Sub-Zone <input type="checkbox"/> Existing Community – Environmentally Constrained Sub-Zone <input checked="" type="checkbox"/> Lake Community Sub-Zone <input checked="" type="checkbox"/> Wildlife Management Sub-Zone <input checked="" type="checkbox"/>			
<b>Regional Master Plan Goals, Policies, and Objectives:</b>	<b>C</b>	<b>I</b>	<b>N/A</b>
<b>Policy 6C1:</b> To limit new human development in the Protection Zone to redevelopment, exempt activities, and environmentally-compatible low density new land uses, in accordance with RMP resource protection needs and water quality and quantity capacity constraints and to ensure that the impacts of development using exemptions under the Highlands Act (see Policy 7F1) are considered in regional protection measures.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 6C1a:</b> Centers in the Protection Zone, potentially including clustered development, shall be at densities appropriate to the Zone, the community character, the State Development and Redevelopment Plan, and the use of septic systems or community wastewater systems.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 6C2:</b> To ensure through Plan Conformance, local development review and Highlands Project Review that any future development or redevelopment which does occur in a Protection Zone is subject to standards and criteria which protect the land and water resources of the Protection Zone from any potential adverse impact to the maximum extent possible.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 6D3:</b> To limit through Plan Conformance, local development review and Highlands Project Review the use and development of lands within the Conservation Zone to agriculture use and development, including ancillary and support uses, redevelopment of existing developed areas, and environmentally-compatible low density land uses that are to the maximum extent possible achieved in compact development patterns, to be designed and developed in a manner which is compatible with the long term use of adjacent land for agricultural purposes.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 6D3b:</b> Centers in the Conservation Zone, potentially including clustered development, shall be at densities appropriate to the Zone, the community character, the State Development and Redevelopment Plan, and the use of septic systems or community wastewater systems.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 6F3:</b> To ensure that development activities within the Existing Community Zone are subject to standards and criteria which ensure that development and redevelopment incorporate smart growth principles and do not adversely affect natural resources.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 6F4:</b> To ensure that development and redevelopment within the Existing Community Zone are served by adequate public facilities including water supply, wastewater treatment, transportation, educational and community facilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 6F5:</b> To ensure that development and redevelopment in the Existing Community Zone are compatible with existing community character.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 6F6a:</b> Center based development initiatives shall be planned within the Existing Community Zone at densities appropriate to the Zone, the community character, the State Development and Redevelopment Plan. Densities of five dwelling units and above are encouraged, and are required in areas designated as voluntary TDR Receiving Zones where TDR benefits are sought under the Highlands Act.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>Comments:</b> Much of the proposed switching station, some of the proposed access roads and much of the ROW are located within the Protection Zone (Preservation and Planning Areas). Policy 6C1 states “to limit new human development in the Protection Zone to redevelopment, <i>exempt activities</i> [emphasis added], and environmentally-compatible low density new land uses...” The purpose of this review is to determine if the proposed project is consistent with the goals of the Act in order to be eligible for Exemption #11. The second part of Policy 6C1 states “...to ensure that the impacts of development using exemptions under the Highlands Act (see Policy 7F1) are considered in regional protection measures.”</p> <p>The amended proposed project integrates a Comprehensive Mitigation Plan (CMP). The CMP will be prepared consistent with the Highlands Regional Master Plan (RMP) using the approach of avoid, minimize and mitigate and providing a mechanism, in the form of a plan, for identifying the specific resource issues, the means to avoid and minimize the specific impact, and ultimately the ability to define ways that would help mitigate unavoidable environmental impacts. With the development and implementation of the CMP, in coordination with the various regulatory agencies and in consideration of the performance bonds the applicant will post to ensure completion of the individual mitigation plans (coupled with the monetary contribution to acquire critical lands), renders the proposed project consistent with the goals and purposes of the Act.</p>			

<b>SUBPART C REGIONAL GUIDANCE FOR DEVELOPMENT AND REDEVELOPMENT</b>			
<b>Regional Master Plan Goals, Policies, and Objectives: (it is important to note the policy regarding discretionary growth - Policy 6H7 Provisions and standards relating to regional growth activities which increase the intensity of development shall be discretionary for conforming municipalities and counties):</b>	<b>C</b>	<b>I</b>	<b>N/A</b>
<b>Policy 6H1:</b> To protect, restore, or enhance sensitive environmental resources of the Highlands Region, including but not limited to Forests, Critical Habitat, Highlands Open Waters and their buffers, Riparian Areas, Steep Slopes, Prime Ground Water Recharge Areas, Wellhead Protection Areas, and Agricultural Resource Areas.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 6H1b:</b> Prevent the extension or creation of water and wastewater utility services in the Protection Zone, Conservation Zone and Environmentally Constrained Sub-Zones of the Planning Area, unless they meet the requirements of Policy 2J4 with Objectives 2J4a through 2J4d, and Policy 2K3 with Objectives 2K3a through 2K3e, and will maximize the protection of agricultural and environmentally sensitive resources.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 6H1d:</b> Cluster and conservation design development plans and regulations shall consider existing community character, incorporate smart growth design principles, and require Low Impact Development including but not limited to: locating development adjacent to existing infrastructure such as water, wastewater, transportation, and public facilities to limit the degree of new impervious surface, and permitting smaller residential lots in order to incorporate community open space and existing natural resources into the design.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 6H3:</b> To require conforming municipalities to include site development programs, such as clustering and lot averaging, to protect natural and agriculture resources.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 6H6:</b> To integrate public parks and green spaces into development and redevelopment projects and ensure restoration of impaired natural resources to the extent required by law, at a minimum, and where feasible to a greater extent to maximize long term value of the project.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 6H7:</b> Provisions and standards relating to regional growth activities which increase the intensity of development shall be discretionary for conforming municipalities and counties.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 6H8:</b> Regional growth, where accepted through local planning and regulations, should identify opportunities to maximize land use intensity while protecting natural features and community character.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 6H8a:</b> Development and redevelopment initiatives shall encourage the use of Highlands Development Credits as a means to enhance the existing or adjacent community while protecting local and regional natural resources.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 6H8b:</b> Preparation and implementation of standards ensuring that development protects environmentally sensitive resources in all Land Use Capability Zones and Sub-Zones.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 6H9:</b> To incorporate smart growth principles and green building design and technology in development and redevelopment initiatives.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Comments:</b> The proposed project, as amended, is being designed such that its implementation will be protective of Forests, Critical Habitat, Highlands Open Waters and their buffers, Riparian Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Wellhead Protection Areas.			
<b>SUBPART D REDEVELOPMENT</b>			
<b>Locally Designated Redevelopment Area? No If yes, name of site(s):</b>			
<b>Highlands Designated Redevelopment Area? No If yes, name of site(s):</b>			
<b>Highlands Contaminated Site Inventory Tier 1 or Tier 2 Site(s)? No If yes, name of site(s):</b>			
<b>Regional Master Plan Goals, Policies, and Objectives:</b>	<b>C</b>	<b>I</b>	<b>N/A</b>
<b>Policy 6J1:</b> To encourage Preservation Area redevelopment of sites with 70% or greater impervious surfaces or a brownfield in areas designated by the Highlands Council as Highlands Redevelopment Areas in accordance with N.J.A.C 7:38-6.6 and 6.7.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 6J2:</b> To encourage redevelopment in the Existing Community Zone in the Planning Area of brownfields, grayfields, and other previously developed areas that have adequate water, wastewater, transportation capacity, and are appropriate for increased land use intensity or conversion to greenfields, as approved through Plan Conformance or the Highlands Redevelopment Area Designation process.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 6J3:</b> To encourage redevelopment in the Conservation and Protection Zones in the Planning Area of brownfields and grayfields that have adequate water, wastewater, transportation capacity, and are appropriate for increased land use intensity or conversion to greenfields, as approved through Plan Conformance or the Highlands Redevelopment Area Designation process.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 6L1:</b> To require that conforming municipalities identify any development, redevelopment, and brownfield opportunities in the local land use plan element of their master plans, as appropriate.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 6L2:</b> To require that conforming municipalities amend development regulations and zoning to enable project implementation of local redevelopment initiatives that are identified under Policy 6L1 and locally endorsed through Plan Conformance.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 6L2a:</b> Municipal review of local redevelopment projects consistent with RMP smart growth and Low Impact Development policies and objectives.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Comments:</b> N/A. Redevelopment issues are not applicable.			

<b>SUBPART E SMART GROWTH</b>			
<b>Is the municipality involved in the State Planning Commission Plan Endorsement (PE) process?</b> No			
<b>If yes, status of PE process:</b>			
<b>Does the project area include a State Planning Commission designated or expired center?</b> No			
<b>If yes, center expiration date:</b> 00/00/0000			
<b>Regional Master Plan Goals, Policies, and Objectives:</b>	<b>C</b>	<b>I</b>	<b>N/A</b>
<b>Policy 6N2:</b> To require municipalities and counties to adopt stormwater management Low Impact Development standards to preserve or mimic the natural hydrologic features and characteristics of the land.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 6N2a:</b> Implementation of on-site stormwater management features that maintain, restore and enhance the pre-existing natural drainage patterns of the site.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 6N2b:</b> Limitations on the amount of impervious cover allowed on a site as a means to protect and increase stormwater infiltration and reduce stormwater runoff.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 6N2c:</b> Minimum requirements for site-specific hydrologic studies during local development review and Highlands Project Review which identify the velocity, volume and pattern of water flow into, through, and off of the parcel proposed for development.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 6N2d:</b> Minimum requirements that stormwater management systems employ a “design with nature” approach.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 6N2e:</b> Minimum requirements for use of grass channels, dry swales, wet swales, infiltration basins, bio-swales and water gardens, green roofs, and other low impact approaches to attenuate and control stormwater and provide multiple environmental benefits.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Policy 6N3:</b> To require through Plan Conformance that municipalities and counties adopt Low Impact Development practices to minimize land disturbance during construction activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 6N4:</b> To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 6N5:</b> To require through Plan Conformance that municipalities and counties incorporate programs for community and neighborhood design that support a variety of housing options, mixed uses, redevelopment, adaptive re-use of historic sites and structures, and infill development in their master plans and development regulations.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>Comments:</b> The applicant indicates that pursuant to NJDEP Stormwater Management Rules, a stormwater analysis will be undertaken in accordance with the procedures outlined in the New Jersey Stormwater Best Management Practices Manual. The applicant also indicates that a Stormwater, Soil Erosion, and Sediment Control Plan will be prepared for the proposed project in accordance with the latest version of the Morris, Warren and Sussex County Soil Conservation District requirements. The applicant indicates that the Stormwater, Soil Erosion, and Sediment Control Plan will include Low Impact Design Best Management Practices. The applicant concludes that the proposed project would not generate pollutants, and through compliance with Stormwater Management Rules and Soil Erosion and Sediment Control requirements, would not result in short or long term impacts to water quality and quantity. The applicant states that two elements of the Stormwater, Soil Erosion, and Sediment Control Plan include a Stormwater Pollution Prevention Plan and a Construction Pollution Prevention Plan for the Hopatcong Switching Station Site. Further, the use of gas insulated switchgear at the Hopatcong Switching Station advances the concept of low impact design as it reduces the footprint of the switching station.</p> <p>With consideration of: 1) the development and implementation of a Stormwater, Soil Erosion, and Sediment Control Plan (which includes a Stormwater Pollution Prevention Plan and a Construction Pollution Prevention Plan for the Hopatcong Switching Station Site, and Low Impact Design Best Management Practices), which will be coordinated with the various resource agencies; and 2) the applicant will post a performance bond to ensure that stormwater quality will be adequately treated; and 3) the ROW management plan will improve the ecological benefits of the ROW in keeping with a “design with nature” approach, the proposed project, as amended, is found to be made consistent with the goals, policies, and objectives related to smart growth, and the goals and purposes of the Highlands Act regarding this resource.</p>			

<b>SUBPART F HOUSING AND COMMUNITY FACILITIES</b>			
<b>Does the project area include an affordable housing site? No</b> <b>3<sup>rd</sup> Round Status: NA</b>			
<b>Regional Master Plan Goals, Policies, and Objectives:</b>	<b>C</b>	<b>I</b>	<b>N/A</b>
<b>Policy 607:</b> To require that conforming municipalities implement both the resource protection requirements of the RMP along with the New Jersey Supreme Court's doctrine, in its Mount Laurel decisions, that every municipality in a "growth area" has a constitutional obligation to provide through its land use regulations, sound land use, and long range planning, a realistic opportunity for a fair share of its region's present and prospective needs for housing for low and moderate income families.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 608:</b> To require that conforming municipalities update and adopt a housing element, fair share plan, and implementing ordinance(s) to reflect current conditions and resource protection requirements of the RMP.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 608a:</b> Conforming municipalities, through housing plans, will evaluate and provide for alternate mechanisms to address affordable housing obligations where RMP resource protection standards restrict the ability of planned but not built sites to be developed for affordable housing.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Comments:</b> The applicant will provide a Non-Residential Development Fee Certification/Exemption form to verify the exempt status of the project.			
<b>PART 7 LANDOWNER EQUITY</b>			
<b>Is the project exempt from the Highlands Act? To Be Determined</b>			
<b>Does the project support the use of Highlands Development Credits? No</b>			
<b>Regional Master Plan Goals, Policies, and Objectives:</b>	<b>C</b>	<b>I</b>	<b>N/A</b>
<b>Objective 7F1c:</b> Preservation Area exemptions issued by the NJDEP in accordance with N.J.A.C. 7:38, shall be required, where appropriate, prior to consideration of a local development review or a Highlands Project Review. Guidance shall specify the exceptions where a review may proceed absent an exemption determination from the NJDEP.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 7F1d:</b> Planning Area exemptions, issued by the Highlands Council, shall be required, where appropriate, prior to consideration of a local development review or a Highlands Project Review. Guidance shall specify the exceptions where a review may proceed absent such an exemption determination. Applications for exemptions submitted to the Highlands Council shall be based upon the application requirements exemptions codified in N.J.A.C. 7:38.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Objective 7F1f:</b> 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Policy 7G1:</b> For the Preservation Area, coordinate with NJDEP during Highlands permit review for any major Highlands development including the review of waivers on a case-by-case basis: 1) if determined to be necessary in order to protect public health and safety; 2) for redevelopment in certain previously developed areas as identified by the Highlands Council, or 3) in order to avoid the taking of property without just compensation.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 7G2:</b> For both the Preservation Area and the Planning Area, a waiver may be issued by the Highlands Council on a case-by-case basis from the requirements of the RMP 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: 1) if determined to be necessary in order to protect public health and safety; 2) for redevelopment in certain previously developed areas as identified by the Highlands Council, or 3) in order to avoid the taking of property without just compensation. Any waiver issued shall be conditioned upon a determination that the proposed development meets the requirements prescribed for a finding as listed in Section 36.a of the Highlands Act to the maximum extent possible.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 7G3:</b> For both the Preservation Area and the Planning Area during local development review, any variance or exception issued shall be conditioned upon a written determination, specifically included in an approving resolution, that the proposed development meets the requirements prescribed for a finding as listed in Section 36.a of the Highlands Act to the maximum extent possible.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Comments:</b> Objective 7F1c is under consideration by NJDEP for the Preservation Area and Objective 7F1d is under consideration by the Highlands Council for the Planning Area. Both are the subject of this review.			
<b>PART 8 SUSTAINABLE ECONOMIC DEVELOPMENT</b>			
<b>Regional Master Plan Goals, Policies, and Objectives:</b>	<b>C</b>	<b>I</b>	<b>N/A</b>
<b>Policy 8A1:</b> To maintain and expand the existing job and economic base by promoting appropriate, sustainable, and environmentally compatible economic development throughout the Highlands Region.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Policy 8A2:</b> To preserve the high quality of life in the Highlands Region through economic planning of the RMP.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 8A3:</b> To identify and pursue state and federal programs that offer financial and/or technical assistance for sustainable economic development in the Highlands Region.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 8A5:</b> To advocate for appropriate public investment in the Highlands Region through the strategic location of public facilities and institutions that will spur sustainable and appropriate economic activity.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Objective 8A6a:</b> Coordinate with municipalities and counties as local and regional strategies are developed to improve the tax base and to create jobs and economic opportunities consistent with the policies and objectives of the RMP.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 8C1:</b> To promote recreation and tourism based economic initiatives, which derive economic benefit from sustainable use of the natural resources of the Highlands Region.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Comments:** It is anticipated that the proposed project would generate a significant number of temporary construction-related jobs. These construction jobs would likely benefit local businesses as construction workers would need food, lodging, fuel and other similar services. Some portion of the construction jobs will be New Jersey based. Thus, the proposed project would be consistent with Policy 8A1.

The proposed project is intended to promote enhanced energy supply and improved reliability of electrical service for northern New Jersey in compliance with mandates from the PJM Interconnection, LLC, which would be consistent with Policy 8A5. However, the Highlands Council will defer to the Board of Public Utilities determination of the need for this project.

The monetary contribution that the applicant proposes to the Highlands Council for the purpose of the acquisition and stewardship of critical lands (as discussed in the Land Preservation and Stewardship section of this Consistency Determination), would support the acquisition of natural lands and sites of historic significance that provide additional and substantial recreational opportunities, plus non-acquisition activities in the affected areas that would advance opportunities for eco-tourism, agri-tourism and heritage tourism. Based on current land values, the applicant estimates that the proposed contribution could support the acquisition and stewardship of over 2,500 acres of lands within the Highlands Region. Thus, the project, as amended, would be consistent with Policy 8C1, and the goals and purposes of the Highlands Act regarding this issue.

**PART 9 AIR QUALITY**

<b>Regional Master Plan Goals, Policies, and Objectives:</b>	<b>C</b>	<b>I</b>	<b>N/A</b>
<b>Policy 9A1:</b> To encourage capital facility development and redevelopment that leads to attainment of the National Ambient Air Quality Standards (NAAQS).	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Policy 9A2:</b> To support continued, consistent and thorough air quality monitoring and assessment programs as a means of evaluating and managing major air toxic point sources that affect the Region.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 9A3:</b> To encourage land use development and redevelopment practices that promote center-based growth and mixed-use development and offer alternative modes of transportation as a means to reduce automobile dependency, vehicle miles traveled, vehicle trip length, and duration, for the reduction of local and regional air pollutants and of carbon dioxide emissions linked to global warming.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 9A4:</b> To encourage and support state and federal air quality monitoring for the Highlands Region and regulatory action to reduce levels of air pollutants including but not limited to: ozone, carbon dioxide, sulfur compounds, volatile organic compounds, methane, and fine particulate matter pollutants in the Highlands Region.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 9A5:</b> To encourage energy efficient design and green building practices in support of regional resource protection and smart growth planning policies.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Policy 9A6:</b> To support State and federal initiatives that will reduce air pollution emanating from power plants, incinerators and landfills within and affecting the Highlands Region and particularly in Warren County due to out-of-State power plant air pollution.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Comments:** The applicant has not provided specific information regarding the proposed project's contribution to the attainment of the National Ambient Air Quality Standards (NAAQS), which is inconsistent with Policy 9A1. However, the applicant states that it and its affiliates have been leaders in developing programs that support energy efficiency and renewable energy contributing to key goals of the Energy Management Plan (EMP) of the State of New Jersey. The applicant notes that its existing and continued programs and initiatives will contribute to achieving and maintaining compliance with the NAAQS. Further, the applicant notes that compliance by all entities (itself included) with key legislative and regulatory initiatives by the US Environmental Protection Agency (USEPA) will contribute to achieving the NAAQS. The USEPA tightened its ozone NAAQS in 2007. Two precursors of ozone are nitrogen oxides (NOx) and sulfur dioxide (SO2). Power plants in states with non-attainment areas for these tighter ozone standards will be targeted for state-mandated NOx and SO2 retrofits, if they are not already so controlled. The applicant states that these and other initiatives will provide significant contributions to the reduction of power plant emissions related to the NAAQS.

The applicant states that the line was designed to support the goals of the state's EMP. The applicant notes that the line upgrade will primarily stay within the existing ROW, avoiding the need for any major clearing of trees or disruption of forested lands. In addition, the applicant notes that it responded to concerns over the footprint of the proposed switching station in Jefferson by moving the station to a site in Hopatcong and redesigning it using gas insulated switchgear equipment to reduce its overall size. It is noted that those changes will reduce the overall impact of the switching station to forested areas by 68%. Further, the applicant notes that it has also designed the line to minimize noise and losses of electricity. The line's bundles were selected to provide low levels of audible noise to meet New Jersey regulations. These bundles are substantially larger for each phase, which will limit both temperature and current per wire. The applicant states that this design will substantially reduce electricity losses by 55 percent for

the 230 kV lines and 35 percent for the 500kV lines, compared to earlier industry standards.

The applicant has not addressed possible secondary impacts due to potentially increased emissions associated specifically with the proposed project, which is inconsistent with Policy 9A6. However, the applicant notes that in addition to programs that it has undertaken to reduce emissions, it has been a leader in New Jersey and nationally in supporting legislative and regulatory programs to reduce major power plant emissions. The applicant notes that specifically, it was a primary supporter of the 1990 Amendments to the Clean Air Act; the primary mechanism to implement programs reducing both SO<sub>2</sub> and NO<sub>x</sub>. The Acid Rain Program, a cap-and-trade regimen authorized under the Clean Air Act, has resulted in significant reductions in both these pollutants. Similarly, the applicant notes that as a result of actions taken under the leadership of the Northeastern states, particularly New Jersey, the federal government implemented regulations requiring power plants in the eastern half of the U.S. to reduce NO<sub>x</sub> emissions. That program, according to the applicant, reduced NO<sub>x</sub> emissions by 60 percent. The BPU has recently issued an order to PSE&G to address issues related to air quality. In addition any approval of an exemption for this project would be conditioned upon approval by the BPU which may impose additional requirements to ensure that the air quality goals and purposes of the Highlands Act are met. The Highlands Council will rely upon the BPU's determination regarding this issue.

### CONCLUSION

In the evaluation of Exemption #11 under the Highlands Act, the activity must be "consistent with the goals and purposes of the act." The Highlands Council assesses the latter requirement against the Highlands Act, the RMP, and NJDEP's Preservation Area rules at N.J.A.C. 7:38 to determine whether the nature of any inconsistencies are sufficient to find that the project is not consistent with the goals and purposes of the Highlands Act and therefore should not be exempt. Non-exempt projects, to the extent that they are inconsistent with the Highlands Act, the RMP or the Preservation Area rules, must either address those inconsistencies or apply to the Highlands Council (for the Planning Area) or NJDEP (for the Preservation Area) for waivers that address the inconsistencies.

In evaluating the proposed PSE&G Susquehanna-Roseland 500-kv Transmission Line project, as amended, the Highlands Council staff analyzed, as a whole project, the required construction elements as well as the integrated Comprehensive Mitigation Plan. As described by the applicant, the Comprehensive Mitigation Plan will be prepared consistent with the Highlands Regional Master Plan to use the approach of *avoid, minimize and mitigate*. It provides an approach and process for identifying the specific resource issues, the means to avoid and minimize the specific impact, and ultimately, the ability to define ways that would help to mitigate unavoidable environmental impacts. With respect to mitigation, the proposed approach is nested in a planning approach where ten individual mitigation/management plans (Vegetation Management, Avian Management Protection, Critical Habitat/Endangered Species, Wetlands and Transition Area Mitigation, Stream and Riparian Zone Restoration, Stormwater Erosion Control, Historical and Archaeological Resources, Green Acres, Forest Management, and contribution to the Highlands Council) would be interwoven to meet multiple resource objectives. The combined effect of these plans would effectively deal with the proposed project as a whole unit.

With respect to the contribution to the Highlands Council, the applicant proposes to make a monetary contribution to a fund to be established by the Highlands Council. This will create a new fund established specifically for the purposes of acquiring critical lands, supporting preservation, conservation and stewardship activities, advance opportunities for eco-tourism, agri-tourism and heritage tourism, and generally enhancing the Highlands Region. The applicant's contribution would be provided to the Highlands Council as a component of the overall comprehensive mitigation plan strategy for the proposed project. The Highlands Act supports the acquisition of exceptional natural resources lands, contiguous forest lands, wetlands, pristine watersheds, and critical habitat for fauna and flora, as well as sites of historic significance that provide additional and substantial recreational opportunities, including opportunities to advance eco-tourism, agri-tourism and heritage tourism. This funding may be used, as determined by the Highlands Council, for the acquisition and stewardship of lands, preservation of farmland, or by the Highlands Development Credit Bank, which is consistent with the Legislative intent of the Highlands Act. Based on current land values, the applicant estimated that the proposed contribution could support the acquisition and stewardship of over 2,500 acres of lands within the Highlands Region.

For the reasons set forth throughout this Consistency Determination, the project as proposed is consistent with many

of the RMP goals, policies and objectives but remains inconsistent in various areas. However the Comprehensive Mitigation Plan addresses those inconsistencies in nearly all cases. The linear nature of the project, and the necessity of using the existing ROW for the new line, results in unavoidable inconsistencies, but the Comprehensive Mitigation Plan would mitigate those inconsistencies sufficiently that the proposed project, as amended and viewed as a whole (with minimization of environmental impacts and the development of the Comprehensive Mitigation Plan), is found to be made consistent with the goals and purposes of the Act.