Tennessee Gas Pipeline, L.L.C.
a Kinder Morgan company

TENNESSEE GAS PIPELINE COMPANY, L.L.C.
NORTHEAST UPGRADE PROJECT

LWCF SECTION 6(f) CONVERSION PROPOSAL

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New Jersey Department of Environmental Protection

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June 2012

LWCF Section 6(f) Conversion Proposal

New Jersey Department of Environmental Protection
Tennessee Gas Pipeline Company, L.L.C.
Northeast Upgrade Project
Ringwood State Park
Block 1101, Lot 5, Borough of Ringwood, Passaic County, New Jersey
Block 1, Lot 1, Township of Mahwah, Bergen County, New Jersey

TABLE OF CONTENTS

Organization corresponds to the steps outlined in the LWCF Proposal Description and Environmental Screening Form

LWCF PROPOSAL DESCRIPTION AND ENVIRONMENTAL SCREENING FORM

Following this page is the Land and Water Conservation Fund (LWCF) Proposal Description (PD) for the conversion of Section 6(f) encumbered parcels located within (Block 1101, Lot 5, Borough of Ringwood and Block 1, Lot 1, Township of Mahwah) Ringwood State Park and Environmental Screening Forms (ESF) for the conversion and replacement areas. Supporting information and narratives are provided in subsequent sections.

Please note that there are portions of the coverage page and pages 11 and 12 of the PD/ESF form that require input from the New Jersey Department of Environmental Protection (NJDEP) Green Acres Program and/or the National Park Service (NPS). It is anticipated that, following review of this Conversion Proposal by the NJDEP and NPS, copies of the completed PD/ESF will be provided to the respective parties.

National Park Service
U.S. Department of the Interior

LWCF Proposal Description and Environmental Screening Form

The purpose of this Proposal Description and Environmental Screening Form (PD/ESF) is to provide descriptive and environmental information about a variety of Land and Water Conservation Fund (LWCF) state assistance proposals submitted for National Park Service (NPS) review and decision. The completed PD/ESF becomes part of the "federal administrative record" in accordance with the National Environmental Policy Act (NEPA) and its implementing regulations. The PD portion of the form captures administrative and descriptive details enabling the NPS to understand the proposal. The ESF portion is designed for States and/or project sponsors to use while the LWCF proposal is under development. Upon completion, the ESF will indicate the resources that could be impacted by the proposal enabling States and/or project sponsors to more accurately follow an appropriate pathway for NEPA analysis: 1) a recommendation for a Categorical Exclusion (CE), 2) production of an Environmental Assessment (EA), or 3) production of an Environmental Impact Statement (EIS). The ESF should also be used to document any previously conducted yet still viable environmental analysis if used for this federal proposal. The completed PD/ESF must be submitted as part of the State's LWCF proposal to NPS.

Except for the proposals listed below, the PD/ESF **must** be completed, including the appropriate NEPA document, signed by the State, and submitted with each new federal application for LWCF assistance and amendments for: scope changes that alter or add facilities and/or acres; conversions; public facility exceptions; sheltering outdoor facilities; and changing the original intended use of an area from that which was approved in an earlier LWCF agreement. Consult the LWCF Program Manual (www.nps.gov/lwcf) for detailed guidance for your type of proposal and on how to comply with NEPA.

For the following types of proposals only this Cover Page is required because these types of proposals are administrative in nature and are categorically excluded from further NEPA environmental analysis. NPS will complete the NEPA CE Form. Simply check the applicable box below, and complete and submit only this **Cover Page** to NPS along with the other items required for your type of proposal as instructed in the LWCF Program Manual.

- ☐ SCORP planning proposal
- ☐ Time extension with no change in project scope or with a reduction in project scope
- ☐ To delete work **and** no other work is added back into the project scope
- ☐ To change project cost with no change in project scope or with a reduction in project scope
- ☐ To make an administrative change that does not change project scope

Name of LWCF Proposal: Proposed Conversion of **Date Submitted to NPS:**
Block 1101, Lot 5 (Borough of Ringwood, Passaic County, New Jersey
Block 1, Lot 1 (Township of Mahwah, Bergen County, New Jersey

Prior LWCF Project Number(s) *List all prior LWCF project numbers and all park names associated with assisted site(s):*
Block 1101, Lot 5, Project Number 34-00304
Block 1, Lot 1, Project Number 34-00365

Local or State Project Sponsoring Agency *(recipient or sub-recipient in case of pass-through grants)***:**

New Jersey Department of Environmental Protection, Green Acres Program

Local or State Sponsor Contact:
Name/Title: Steven Jandoli

Office/Address: Green Acres Program
Mail Code 501-01, PO Box 420
Trenton, New Jersey 08625-0420

Phone/Fax: 609.984.0499 (p)
609.984.0609 (f)

Email: steve.jandoli@dep.state.nj.us

Using a separate sheet for narrative descriptions and explanations, address each item and question in the order it is presented, and identify each response with its item number such as Step 1-A1, A2; Step 3-B1; Step 6-A1, A29; etc.

Step 1. Type of LWCF Proposal

____ **New Project Application**

- ☐ **Acquisition** *Go to Step 2A*
- ☐ **Development** *Go to Step 2B*
- ☐ **Combination (Acquisition & Development)** *Go to Step 2C*

____ **Project Amendment**

- ☐ **Increase in scope or change in scope from original agreement.** *Complete Steps 3A, and 5 through 7.*
- ☒ **6(f) conversion proposal.** *Complete Steps 3B, and 5 through 7.*
- ☐ **Request for public facility in a Section 6(f) area.** *Complete Steps 3C, and 5 through 7.*

____ **Request for temporary non-conforming use in a Section 6(f) area.** *Complete Steps 4A, and 5 through 7.*

____ **Request for significant change in use/intent of original LWCF application.** *Complete Steps 4B, and 5 through 7.*

____ **Request to shelter existing/new facility within a Section 6(f) area regardless of funding source.** *Complete Steps 4C, and 5 through 7.*

Step 2. New Project Application (See LWCF Manual for guidance.)

A. For an Acquisition Project

1. Provide a brief narrative about the proposal that provides the reasons for the acquisition, the number of acres to be acquired with LWCF assistance, and a description of the property. Describe and quantify the types of existing resources and features on the site (for example, 50 acres wetland, 2,000 feet beachfront, 200 acres forest, scenic views, 100 acres riparian, vacant lot, special habitat, any unique or special features, recreation amenities, historic/cultural resources, hazardous materials/ contamination history, restrictions, institutional controls, easements, rights-of-way, above ground/underground utilities, including wires, towers, etc.).

2. How and when will the site be made open and accessible for public outdoor recreation use (signage, entries, parking, site improvements, allowable activities, etc.)?

3. Describe development plans for the proposal for the site(s) for public outdoor recreation use within the next three (3) years.

4. SLO must complete the State Appraisal/Waiver Valuation Review form in Step 7 certifying that the appraisal(s) has been reviewed and meets the "Uniform Appraisal Standards for Federal Land Acquisitions" or a waiver valuation was approved per 49 CFR 24.102(c)(2)(ii). State should retain copies of the appraisals and make them available if needed.

5. Address each item in "D" below.

B. For a Development Project

1. Describe the physical improvements and/or facilities that will be developed with federal LWCF assistance, including a site sketch depicting improvements, where and how the public will access the site, parking, etc. Indicate entrances on 6(f) map. Indicate to what extent the project involves new development, rehabilitation, and/or replacement of existing facilities.

2. When will the project be completed and open for public outdoor recreation use?

3. Address each item in "D" below.

C. For a Combination Project

1. For the acquisition part of the proposal:
   a. Provide a brief narrative about the proposal that provides the reasons for the acquisition, number of acres to be acquired with LWCF assistance, and describes the property. Describe and quantify the types of existing resources and features on the site (for example, 50 acres wetland, 2,000 feet beachfront, 200 acres forest, scenic views, 100 acres riparian, vacant lot, special habitat, any unique or special features, recreation amenities, historic/cultural resources, hazardous materials/ contamination history, restrictions, institutional controls, easements, rights-of-way, above ground/underground utilities, including wires, towers, etc.)

   b. How and when will the site be made open and accessible for public outdoor recreation use (signage, entries, parking, site improvements, allowable activities, etc.)?

   c. Describe development plans for the proposed for the site(s) for public outdoor recreation use within the next three (3) years.

   d. SLO must complete the State Appraisal/Waiver Valuation Review form in Step 7 certifying that the appraisal(s) has been reviewed and meets the "Uniform Appraisal Standards for Federal Land Acquisitions" or a waiver valuation was approved per 49 CFR 24.102(c)(2)(ii). State should retain copies of the appraisals and make them available if needed.

2. For the development part of the proposal:
   a. Describe the physical improvements and/or facilities that will be developed with federal LWCF assistance, including a site sketch depicting improvements, where and how the public will access the site, parking, etc. Indicate entrances on 6(f) map. Indicate to what extent the project involves new development, rehabilitation, and/or replacement of existing facilities.

   b. When will the project be completed and open for public outdoor recreation use?

3. Address each item in "D" below.

D. Additional items to address for a new application and amendments

1. Will this proposal create a **new** public park/recreation area **where none previously existed** and is not an addition to an existing public park/recreation area? Yes ____ (go to #3) No ____ (go to #2)

2. a. What is the name of the pre-existing public area that this new site will be added to?

   b. Is the pre-existing public park/recreation area already protected under Section 6(f)? Yes ___ No ___
   If no, will it now be included in the 6(f) boundary? Yes ___ No ___

3. What will be the name of this **new** public park/recreation area?

4. a. Who will hold title to the property assisted by LWCF? Who will manage and operate the site(s)?

   b. What is the sponsor's type of ownership and control of the property?
   ____ Fee simple ownership
   ____ Less than fee simple. Explain:
   ____ Lease. Describe lease terms including renewable clauses, # of years remaining on lease, etc. Who will lease area? Submit copy of lease with this PD/ESF. (See LWCF Manual for **program restrictions** for leases and further guidance.)

5. Describe the nature of any rights-of-way, easements, reversionary interests, etc. to the Section 6(f) park area? Indicate the location on 6(f) map. Do parties understand that a Section 6(f) conversion may occur if private or non-recreation activities occur on any pre-existing right-of-way, easement, leased area?

6. Are overhead utility lines present, and if so, explain how they will be treated per LWCF Manual.

7. As a result of this project, describe **new** types of outdoor recreation opportunities and capacities, and short and long term public benefits.

8. Explain any existing non-recreation and non-public uses that will continue on the site(s) and/or proposed for the future within the 6(f) boundary.

9. Describe the planning process that led to the development of this proposal. Your narrative should address:
   a. How was the interested and affected public notified and provided opportunity to be involved in planning for and developing your LWCF proposal? Who was involved and how were they able to review the **completed** proposal, including any state, local, federal agency professionals, subject matter experts, members of the public and Indian Tribes. Describe any public meetings held and/or formal public comment periods, including dates and length of time provided for the public to participate in the planning process and/or to provide comments on the completed proposal.

   b. What information was made available to the public for review and comment? Did the sponsor provide written responses addressing the comments? If so, include responses with this PD/ESF submission.

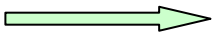
10. How does this proposal implement statewide outdoor recreation goals as presented in the Statewide Comprehensive Outdoor Recreation Plan (SCORP) (include references), and explain why this proposal was selected using the State's Open Project Selection Process (OPSP).

11. List all source(s) and amounts of financial match to the LWCF federal share of the project. The value of the match can consist of cash, donation, and in-kind contributions. The federal LWCF share and financial matches must result in a viable outdoor recreation area and not rely on other funding not mentioned here. Other federal resources may be used as a match if specifically authorized by law.

Source	Type of Match	Value
		$
		$
		$

12. Is this LWCF project scope part of a larger effort <u>not</u> reflected on the SF-424 *(Application for Federal Assistance)* and grant agreement? If so, briefly describe the larger effort, funding amount(s) and source(s). This will capture information about partnerships and how LWCF plays a role in leveraging funding for projects beyond the scope of this federal grant.

13. List all required federal, state, and local permits/approvals needed for the proposal and explain their purpose and status.

Proceed to Steps 5 through 7 

Step 3. Project Amendment (See LWCF Manual for guidance.)

A. Increase/Change in Project Scope

1. **For Acquisition Projects**: To acquire additional property that was not described in the original project proposal and NEPA documentation, follow Step 2A-Acquisition Project and 2D.

2. **For Development Projects:** To change the project scope for a development project that alters work from the original project scope by adding elements or enlarging facilities, follow Step 2B-Development Project and 2D.

3. **For Combination Projects**: Follow Step 2C as appropriate.

B. Section 6(f)(3) Conversion Proposal

Prior to developing your Section 6(f)(3) conversion proposal, you must consult the LWCF Manual and 36 CFR 59.3 for complete guidance on conversions. Local sponsors must consult early with the State LWCF manager when a conversion is under consideration or has been discovered. States must consult with their NPS-LWCF manager as early as possible in the conversion process for guidance and to sort out and discuss details of the conversion proposal to avoid mid-course corrections and unnecessary delays. **<u>A critical first step is for the State and NPS to agree on the size of the Section 6(f) park land impacted by any non-recreation, non-public use,</u>**

especially prior to any appraisal activity. Any previous LWCF project agreements and actions must be identified and understood to determine the actual Section 6(f) boundary.

The Section 6(f)(3) conversion proposal including the required NEPA environmental review documents (CE recommendation or an EA document) must focus on the loss of public outdoor recreation park land and recreational usefulness, and its replacement per 36 CFR 59, and **not** the activities precipitating the conversion or benefits thereof, such as the impacts of constructing a new school to relieve overcrowding or constructing a hotel/restaurant facility to stimulate the local economy. Rather, the environmental review must 1) focus on "resource impacts" as indicated on the ESF (Step 6), including the loss of public park land and recreation opportunities (ESF A-15), and 2) the impacts of creating new replacement park land and replacement recreation opportunities. A separate ESF must be generated for the converted park area and each replacement site. Section 6(f)(3) conversions always have more than minor impacts to outdoor recreation (ESF A-15) as a result of loss of parkland requiring an EA, except for "small" conversions as defined in the LWCF Manual Chapter 8.

For NPS review and decision, the following elements are required to be included in the State's completed conversion proposal to be submitted to NPS:

1. A letter of transmittal from the SLO recommending the proposal.

2. A detailed explanation of the sponsor's need to convert the Section 6(f) parkland including all efforts to consider other practical alternatives to this conversion, how they were evaluated, and the reasons they were not pursued.

3. An explanation of how the conversion is in accord with the State Comprehensive Outdoor Recreation Plan (SCORP).

4. Completed "State Appraisal/Waiver Valuation Review form in Step 7 for each of the converted and replacement parcels certifying that the appraisals meet the "Uniform Appraisal Standards for Federal Land Acquisitions." States must retain copies of the appraisals/waiver valuations and make them available for review upon request.

5. For the park land proposed for conversion, a detailed description including the following:
   a. Specific geographic location on a map, 9-digit zip code, and name of park or recreation area proposed for conversion.

   b. Description of the area proposed for the conversion including the acreage to be converted and any acreage remaining. For determining the size of the conversion, consider not only the physical footprint of the activity precipitating the conversion, but how the precipitating activity will impact the entire 6(f) park area. In many cases the size of the converted area is larger than the physical footprint. Include a description of the recreation resources, facilities, and recreation opportunities that will be impacted, displaced or lost by the proposed conversion. For proposals to partially convert a Section 6(f) park area, the remaining 6(f) park land must remain recreationally viable and not be impacted by the activities that are precipitating the conversion. If it is anticipated that the precipitating activities impact the remaining Section 6(f) area, the proposed area for the conversion should be expanded to encompass all impacted park land.

   c. Description of the community and population served by the park, including users of the park and uses.

   d. For partial conversions, a revised 6(f) map clearly indicating both the portion that is being converted and the portion remaining intact under Section 6(f).

6. For each proposed replacement site:
   a. Specific geographic location on a map, 9-digit zip code, and geographical relationship of converted and replacement sites. If site will be added to an existing public park/outdoor recreation area, indicate on map.

   b. Description of the site's physical characteristics and resource attributes with number and types of resources and features on the site, for example, 15 acres wetland, 2,000 feet beachfront, 50 acres forest, scenic views, 75 acres riparian, vacant lot, special habitat, any unique or special features, structures, recreation amenities, historic/cultural resources, hazardous materials/contamination history, restrictions, institutional controls, easements, rights-of-way, overhead/underground utilities including overhead wires, towers, etc.

c. Identification of the owner of the replacement site and its recent history of use/function up to the present.

d. Detailed explanation of how the proposed replacement site is of reasonably equivalent usefulness and location as the property being converted, including a description of the recreation needs that will be met by the new replacement parks, populations to be served, and new outdoor recreation resources, facilities, and opportunities to be provided.

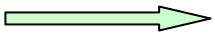
e. Identification of owner and manager of the new replacement park?

f. Name of the new replacement park. If the replacement park is added to an existing public park area, will the existing area be included within the 6(f) boundary? What is the name of the existing public park area?

g. Timeframe for completing the new outdoor recreation area(s) to replace the recreation opportunity lost per the terms of conversion approval and the date replacement park(s) will be open to the public.

h. New Section 6(f) map for the new replacement park.

7. NEPA environmental review, including NHPA Section 106 review, for both the converted and replacement sites in the same document to analyze how the converted park land and recreational usefulness will be replaced. Except for "small" conversions (see LWCF Manual Chapter 8), conversions usually require an EA.

Proceed to Steps 5 through 7 

C. Proposal for a Public Facility in a Section 6(f) Area

Prior to developing this proposal, you must consult the LWCF Manual for complete guidance. In summary, NPS must review and decide on requests to construct a public indoor and/or non-recreation facility within a Section 6(f) area. In certain cases NPS may approve the construction of public facilities within a Section 6(f) area where it can be shown that there will be a net gain in **outdoor recreation** benefits and enhancements for the entire park. In most cases, development of a non-recreation public facility within a Section 6(f) area constitutes a conversion. For NPS review, the State/sponsor must submit a proposal to NPS under a letter of transmittal from the SLO that:

1. Describes the purpose and all proposed uses of the public facility such as types of programming, recreation activities, and special events including intended users of the new facility and any agency, organization, or other party to occupy the facility. Describe the interior and exterior of the facility, such as office space, meeting rooms, food/beverage area, residential/lodging area, classrooms, gyms, etc. Explain how the facility will be compatible with the outdoor recreation area. Explain how the facility and associated uses will significantly support and enhance existing and planned outdoor recreation resources and uses of the site, and how outdoor recreation use will remain the primary function of the site. (The public's outdoor recreation use must continue to be greater than that expected for any indoor use, unless the site is a single facility, such as a swimming pool, which virtually occupies the entire site.)

2. Indicates the exact location of the proposed public facility and associated activities on the site's Section 6(f) map. Explain the design and location alternatives considered for the public facility and why they were not pursued.

3. Explains who will own and/or operate and maintain the facility? Attach any 3rd party leases and operation and management agreements. When will the facility be open to the public? Will the facility ever be used for private functions and closed to the public? Explain any user or other fees that will be instituted, including the fee structure.

4. Includes required documents as a result of a completed NEPA process (Steps 5 – 7).

Proceed to Steps 5 through 7 

Step 4. Proposals for Temporary Non-Conforming Use, Significant Change in Use, and Sheltering Facilities (See LWCF Manual for guidance.)

A. Proposal for Temporary Non-Conforming Use

Prior to developing this proposal, you must consult the LWCF Manual for complete guidance. NPS must review and decided on requests for temporary uses that do not meet the requirements of allowable activities within a Section 6(f) area. A temporary non-conforming use is limited to a period of six months (180 days) or less. Continued use beyond six-months will not be considered temporary, and may result in a Section 6(f)(3) conversion of use requiring the replacement of converted parkland. For NPS review, describe the temporary non-conforming use (activities other than public outdoor recreation) in detail including the following information:

1. A letter of transmittal from the SLO recommending the proposal.

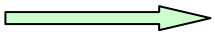
2. Describe in detail the proposed temporary non-conforming use and all associated activities, why it is needed, and alternative locations that were considered and why they were not pursued.

3. Explain length of time needed for the temporary non-conforming use and why.

4. Describe the size of the Section 6(f) area affected by the temporary non-conforming use activities and expected impacts to public outdoor recreation areas, facilities and opportunities. Explain efforts to keep the size of the area impacted to a minimum. Indicate the location of the non-conforming use on the site's 6(f) map.

5. Describe any anticipated temporary/permanent impacts to the Section 6(f) area and how the sponsor will mitigate them during and after the non-conforming use ceases.

6. Consult the LWCF Manual for additional requirements and guidelines before developing the proposal.

Proceed to Steps 5 through 7 

B. Proposal for Significant Change in Use

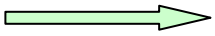
Prior to developing the proposal, you must consult the LWCF Manual for complete guidance. NPS approval must be obtained prior to any change from one eligible use to another when the proposed use would significantly contravene the original plans or intent for the area outlined in the original LWCF application for federal assistance. Consult with NPS for early determination on the need for a formal review. NPS approval is only required for proposals that will **significantly** change the use of a LWCF-assisted site (e.g., from passive to active recreation). The proposal must include and address the following items:

1. A letter of transmittal from the SLO recommending the proposal.

2. Description of the proposed changes and how they significantly contravene the original plans or intent of LWCF agreements.

3. Explanation of the need for change in use and how the change is consistent with local plans and the SCORP.

4. Consult the LWCF Manual for additional requirements and guidelines before developing the proposal.

Proceed to Steps 5 through 7 

C. Proposal for Sheltering Facilities

Prior to developing this proposal, you must consult the LWCF Manual for complete guidance. NPS must review and decide on all proposals to shelter an existing outdoor recreation facility or construct a new sheltered recreation facility within a Section 6(f) area regardless of funding source. The proposal must demonstrate that there is an increased benefit to public recreation opportunity. Describe the sheltering proposal in detail, including the following:

1. A letter of transmittal from the SLO recommending the proposal.

2. Describe the proposed sheltered facility, how it would operate, how the sheltered facility will include recreation uses that could typically occur outdoors, and how the primary purpose of the sheltered facility is recreation.

3. Explain how the sheltered facility would not substantially diminish the outdoor recreation values of the site including how the sheltered facility will be compatible and significantly supportive of the outdoor recreation resources present and/or planned.

4. Explain how the sheltered facility will benefit the total park's outdoor recreation use.

5. Describe efforts provided to the public to review the proposal to shelter the facility and has local support.

6. Document that the sheltered facility will be under the control and tenure of the public agency which sponsors and administers the original park area.

7. Consult the LWCF Manual for additional requirements and guidelines before developing the proposal.

Proceed to Steps 5 through 7

Step 5. Summary of Previous Environmental Review (including E.O. 12372 - Intergovernmental Review)

To avoid duplication of effort and unnecessary delays, describe any prior environmental review undertaken at any time and still viable for this proposal or related efforts that could be useful for understanding potential environmental impacts. Consider previous local, state, federal (e.g. HUD, EPA, USFWS, FHWA, DOT) and any other environmental reviews. At a minimum, address the following:

1. Date of environmental review(s), purpose for the environmental review(s) and for whom they were conducted.

2. Description of the proposed action and alternatives.

3. Who was involved in identifying resource impact issues and developing the proposal including the interested and affected public, government agencies, and Indian tribes.

4. Environmental resources analyzed and determination of impacts for proposed actions and alternatives.

5. Any mitigation measures to be part of the proposed action.

6. Intergovernmental Review Process (Executive Order 12372): Does the State have an Intergovernmental Review Process? Yes ___X__ No _____. If yes, has the LWCF Program been selected for review under the State Intergovernmental Review Process? Yes _____ No __X___. If yes, was this proposal reviewed by the appropriate State, metropolitan, regional and local agencies, and if so, attach any information and comments received about this proposal. If proposal was not reviewed, explain why not.

7. Public comment periods (how long, when in the process, who was invited to comment) and agency response.

8. Any formal decision and supporting reasons regarding degree of potential impacts to the human environment.

9. Was this proposed LWCF federal action and/or any other federal actions analyzed/reviewed in any of the previous environmental reviews? If so, what was analyzed and what impacts were identified? Provide specific environmental review document references.

Use resource impact information generated during previous environmental reviews described above and from recently conducted site inspections to complete the Environmental Screening Form (ESF) portion of this PD/ESF under Step 6. Your ESF responses should indicate your proposal's potential for impacting each resource as determined in the previous environmental review(s), and include a reference to where the analysis can be found in an earlier environmental review document. If the previous environmental review documents contain proposed actions to mitigate impacts, briefly summarize the mitigation for each resource as appropriate. The appropriate references for previous environmental review document(s) must be documented on the ESF, and the actual document(s) along with this PD/ESF must be included in the submission for NPS review.

Proceed to Steps 6 through 7

Step 6. Environmental Screening Form (ESF)

This portion of the PD/ESF is a working tool used to identify the level of environmental documentation which must accompany the proposal submission to the NPS. By completing the ESF, the project sponsor is providing support for its recommendation in Step 7 that the proposal either:

1. meets criteria to be categorically excluded (CE) from further NEPA review and no additional environmental documentation is necessary; or

2. requires further analysis through an environmental assessment (EA) or an environmental impact statement (EIS).

An ESF alone does not constitute adequate environmental documentation unless a CE is recommended. If an EA is required, the EA process and resulting documents must be included in the proposal submission to the NPS. If an EIS may be required, the State must request NPS guidance on how to proceed.

The scope of the required environmental analysis will vary according to the type of LWCF proposal. For example, the scope for a new LWCF project will differ from the scope for a conversion. Consult the LWCF Manual for guidance on defining the scope or extent of environmental analysis needed for your LWCF proposal. As early as possible in your planning process, consider how your proposal/project may have direct, indirect and cumulative impacts on the human environment for your type of LWCF action so planners have an opportunity to design alternatives to lessen impacts on resources, if appropriate. When used as a planning tool in this way, the ESF responses may change as the proposal is revised until it is ready for submission for federal review. Initiating or completing environmental analysis after a decision has been made is contrary to both the spirit and letter of the law of the NEPA.

The ESF should be completed with input from resource experts and in consultation with relevant local, state, tribal and federal governments, as applicable. The interested and affected public should be notified of the proposal and be invited to participate in scoping out the proposal (see LWCF Manual Chapter 4). At a minimum, a site inspection of the affected area must be conducted by individuals who are familiar with the type of affected resources, possess the ability to identify potential resource impacts, and to know when to seek additional data when needed.

At the time of proposal submission to NPS for federal review, the completed ESF must justify the NEPA pathway that was followed: CE recommendation, production of an EA, or production of an EIS. The resource topics and issues identified on the ESF for this proposal must be presented and analyzed in an attached EA/EIS. Consult the LWCF Manual for further guidance on LWCF and NEPA.

The ESF contains two parts that must be completed:

Part A. Environmental Resources **Part B. Mandatory Criteria**

Part A: For each environmental resource topic, choose an impact estimate level (none, negligible, minor, exceeds minor) that describes the degree of potential negative impact for each listed resource that may occur directly, indirectly and cumulatively as a result of federal approval of your proposal. For each impacted resource provide a brief explanation of how the resource might be affected, how the impact level was determined, and why the chosen impact level is appropriate. If an environmental review has already been conducted on your proposal and is still viable, include the citation including any planned mitigation for each applicable resource, and choose an impact level as mitigated. If the resource does not apply to your proposal, mark NA in the first column. Add any relevant resources (see A.24 on the ESF) if not included in the list.

Use a separate sheet to briefly clarify how each resource could be adversely impacted; any direct, indirect, and cumulative impacts that may occur; and any additional data that still needs to be determined. Also explain any planned mitigation already addressed in previous environmental reviews.

Part B: This is a list of mandatory impact criteria that preclude the use of categorical exclusions. If you answer "yes" or "maybe" for any of the mandatory criteria, you must develop an EA or EIS regardless of your answers in Part A. Explain all "yes" and "maybe" answers on a separate sheet.

For conversions, complete one ESF for each of the converted and replacement sites.
Conversion, Block 1101, Lot 5

A. ENVIRONMENTAL RESOURCES Indicate potential for adverse impacts. Use a separate sheet to clarify responses per instructions for Part A on page 9.	**Not Applicable-** Resource does not exist	**No/Negligible Impacts-** Exists but no or negligible impacts	**Minor Impacts**	**Impacts Exceed Minor** EA/EIS required	**More Data Needed to Determine Degree of Impact** EA/EIS required
1. Geological resources: soils, bedrock, slopes, streambeds, landforms, etc.		X			
2. Air quality		X			
3. Sound (noise impacts)		X			
4. Water quality/quantity		X			
5. Stream flow characteristics	X				
6. Marine/estuarine	X				
7. Floodplains/wetlands			X		
8. Land use/ownership patterns; property values; community livability		X			
9. Circulation, transportation		X			
10. Plant/animal/fish species of special concern and habitat; state/ federal listed or proposed for listing			X		
11. Unique ecosystems, such as biosphere reserves, World Heritage sites, old growth forests, etc.	X				
12. Unique or important wildlife/ wildlife habitat		X			
13. Unique or important fish/habitat	X				
14. Introduce or promote invasive species (plant or animal)		X			
15. Recreation resources, land, parks, open space, conservation areas, rec. trails, facilities, services, opportunities, public access, etc. *Most conversions exceed minor impacts. See Step 3.B*		X			
16. Accessibility for populations with disabilities	X				
17. Overall aesthetics, special characteristics/features		X			
18. Historical/cultural resources, including landscapes, ethnographic, archeological, structures, etc. Attach SHPO/THPO determination.		X			
19. Socioeconomics, including employment, occupation, income changes, tax base, infrastructure		X			
20. Minority and low-income populations	X				
21. Energy resources (geothermal, fossil fuels, etc.)			X		
22. Other agency or tribal land use plans or policies		X			
23. Land/structures with history of contamination/hazardous materials even if remediated		X			
24. Other important environmental resources to address.	X				

For conversions, complete one ESF for each of the converted and replacement sites.
Conversion, Block 1, Lot 1

A. ENVIRONMENTAL RESOURCES Indicate potential for adverse impacts. Use a separate sheet to clarify responses per instructions for Part A on page 9.	**Not Applicable-** Resource does not exist	**No/Negligible Impacts-** Exists but no or negligible impacts	**Minor Impacts**	**Impacts Exceed Minor** EA/EIS required	**More Data Needed to Determine Degree of Impact** EA/EIS required
1. Geological resources: soils, bedrock, slopes, streambeds, landforms, etc.		X			
2. Air quality		X			
3. Sound (noise impacts)		X			
4. Water quality/quantity			X		
5. Stream flow characteristics	X				
6. Marine/estuarine	X				
7. Floodplains/wetlands			X		
8. Land use/ownership patterns; property values; community livability			X		
9. Circulation, transportation		X			
10. Plant/animal/fish species of special concern and habitat; state/ federal listed or proposed for listing		X			
11. Unique ecosystems, such as biosphere reserves, World Heritage sites, old growth forests, etc.	X				
12. Unique or important wildlife/ wildlife habitat		X			
13. Unique or important fish/habitat	X				
14. Introduce or promote invasive species (plant or animal)		X			
15. Recreation resources, land, parks, open space, conservation areas, rec. trails, facilities, services, opportunities, public access, etc. *Most conversions exceed minor impacts. See Step 3.B*			X		
16. Accessibility for populations with disabilities		X			
17. Overall aesthetics, special characteristics/features		X			
18. Historical/cultural resources, including landscapes, ethnographic, archeological, structures, etc. Attach SHPO/THPO determination.		X			
19. Socioeconomics, including employment, occupation, income changes, tax base, infrastructure		X			
20. Minority and low-income populations	X				
21. Energy resources (geothermal, fossil fuels, etc.)		X			
22. Other agency or tribal land use plans or policies		X			
23. Land/structures with history of contamination/hazardous materials even if remediated	X				
24. Other important environmental resources to address.	X				

For conversions, complete one ESF for each of the converted and replacement sites.
Replacement, Block 20001, Lot 5

A. ENVIRONMENTAL RESOURCES Indicate potential for adverse impacts. Use a separate sheet to clarify responses per instructions for Part A on page 9.	**Not Applicable-** Resource does not exist	**No/Negligible Impacts-** Exists but no or negligible impacts	**Minor Impacts**	**Impacts Exceed Minor** EA/EIS required	**More Data Needed to Determine Degree of Impact** EA/EIS required
1. Geological resources: soils, bedrock, slopes, streambeds, landforms, etc.		X			
2. Air quality		X			
3. Sound (noise impacts)		X			
4. Water quality/quantity		X			
5. Stream flow characteristics		X			
6. Marine/estuarine	X				
7. Floodplains/wetlands		X			
8. Land use/ownership patterns; property values; community livability		X			
9. Circulation, transportation		X			
10. Plant/animal/fish species of special concern and habitat; state/ federal listed or proposed for listing		X			
11. Unique ecosystems, such as biosphere reserves, World Heritage sites, old growth forests, etc.		X			
12. Unique or important wildlife/ wildlife habitat		X			
13. Unique or important fish/habitat	X				
14. Introduce or promote invasive species (plant or animal)	X				
15. Recreation resources, land, parks, open space, conservation areas, rec. trails, facilities, services, opportunities, public access, etc. *Most conversions exceed minor impacts. See Step 3.B*		X			
16. Accessibility for populations with disabilities		X			
17. Overall aesthetics, special characteristics/features		X			
18. Historical/cultural resources, including landscapes, ethnographic, archeological, structures, etc. Attach SHPO/THPO determination.	X				
19. Socioeconomics, including employment, occupation, income changes, tax base, infrastructure	X				
20. Minority and low-income populations		X			
21. Energy resources (geothermal, fossil fuels, etc.)	X				
22. Other agency or tribal land use plans or policies	X				
23. Land/structures with history of contamination/hazardous materials even if remediated		X			
24. Other important environmental resources to address.		X			

B. MANDATORY CRITERIA **If your LWCF proposal is approved, would it…**	**Yes**	**No**	**To be determined**
1. Have significant impacts on public health or safety?		X	
2. Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation, or refuge lands, wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (E.O. 11990); floodplains (E.O 11988); and other ecologically significant or critical areas.		X	
3. Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA section 102(2)(E)]?		X	
4. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?		X	
5. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?		X	
6. Have a direct relationship to other actions with individually insignificant, but cumulatively significant, environmental effects?		X	
7. Have significant impacts on properties listed or eligible for listing on the National Register of Historic Places, as determined by either the bureau or office.(Attach SHPO/THPO Comments)		X	
8. Have significant impacts on species listed or proposed to be listed on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species.		X	
9. Violate a federal law, or a state, local, or tribal law or requirement imposed for the protection of the environment?		X	
10. Have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898)?		X	
11. Limit access to and ceremonial use of Indian sacred sites on federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007)?		X	
12. Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area, or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112)?		X	

B. MANDATORY CRITERIA **If your LWCF proposal is approved, would it…**	**Yes**	**No**	**To be determined**
1. Have significant impacts on public health or safety?		X	
2. Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation, or refuge lands, wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (E.O. 11990); floodplains (E.O 11988); and other ecologically significant or critical areas.		X	
3. Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA section 102(2)(E)]?		X	
4. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?		X	
5. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?		X	
6. Have a direct relationship to other actions with individually insignificant, but cumulatively significant, environmental effects?		X	
7. Have significant impacts on properties listed or eligible for listing on the National Register of Historic Places, as determined by either the bureau or office.(Attach SHPO/THPO Comments)		X	
8. Have significant impacts on species listed or proposed to be listed on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species.		X	
9. Violate a federal law, or a state, local, or tribal law or requirement imposed for the protection of the environment?		X	
10. Have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898)?		X	
11. Limit access to and ceremonial use of Indian sacred sites on federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007)?		X	
12. Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area, or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112)?		X	

B. MANDATORY CRITERIA **If your LWCF proposal is approved, would it…**	**Yes**	**No**	**To be determined**
1. Have significant impacts on public health or safety?		X	
2. Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation, or refuge lands, wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (E.O. 11990); floodplains (E.O 11988); and other ecologically significant or critical areas.		X	
3. Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA section 102(2)(E)]?		X	
4. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?		X	
5. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?		X	
6. Have a direct relationship to other actions with individually insignificant, but cumulatively significant, environmental effects?		X	
7. Have significant impacts on properties listed or eligible for listing on the National Register of Historic Places, as determined by either the bureau or office.(Attach SHPO/THPO Comments)		X	
8. Have significant impacts on species listed or proposed to be listed on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species.		X	
9. Violate a federal law, or a state, local, or tribal law or requirement imposed for the protection of the environment?		X	
10. Have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898)?		X	
11. Limit access to and ceremonial use of Indian sacred sites on federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007)?		X	
12. Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area, or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112)?		X	

Environmental Reviewers

The following individual(s) provided input in the completion of the environmental screening form. *List all reviewers including name, title, agency, field of expertise. Keep all environmental review records and data on this proposal in state compliance file for any future program review and/or audit. The ESF may be completed as part of a LWCF pre-award site inspection if conducted in time to contribute to the environmental review process for the proposal.*

1. Nicole Maslanich, Environmental Scientist, CH2MHill, Environmental Scientist for Energy Sector Projects

2. Deborah Haines, Environmental Scientist, CH2MHill, Environmental Scientist for Energy Sector Projects

3. Sarah Anderson, Environmental Planner, CH2MHill, Environmental Scientist for Energy Sector Projects

The following individuals conducted a site inspection to verify field conditions.

List name of inspector(s), title, agency, and date(s) of inspection.

1. Nicole Maslanich, Environmental Scientist, CH2MHill – June 21, 2012 field inspection conducted of replacement land.

2. Sarah Anderson, Environmental Planner, CH2MHill – June 21, 2012 field inspection conducted of replacement land.

3. Phil London, Wetlands Scientist, London Environmental -- wetland/waterbody delineations b/w 2010 & 2012

4. Adam Mann, Wildlife Zoologist, Environmental Solutions & Innovations (ESI) – T&E Surveys b/w 2010 & 2012

5. Ray Pasqueriello & Richard Petyk, Historical & Archaeological Investigators, Gray & Pape, Inc. – cultural surveys b/w 2010 & 2012

6. Rich Reaves & Josh Jamel, Botanists, CH2MHill – rare plant surveys b/w 2011 & 2012

State may require signature of
LWCF sub-recipient applicant here: _____Date_____

Step 7. Recommended NEPA Pathway and State Appraisal/Waiver Valuation

First, consult the attached list of "Categorical Exclusions (CEs) for Which a Record is Needed." If you find your action in the CE list **and** you have determined in Step 6A that impacts will be minor or less for each applicable environmental resource on the ESF **and** you answered "no" to all of the "Mandatory Criteria" questions in Step 6B, the proposal qualifies for a CE. Complete the following "State LWCF Environmental Recommendations" box indicating the CE recommendation.

If you find your action in the CE list **and** you have determined in Step 6A that impacts will be greater than minor or that more data is needed for any of the resources **and** you answered "no" to all of the "Mandatory Criteria" questions, your environmental review team may choose to do additional analysis to determine the context, duration, and intensity of the impacts of your project or may wish to revise the proposal to minimize impacts to meet the CE criteria. If impacts remain at the greater than minor level, the State/sponsor must prepare an EA for the proposal. Complete the following "State Environmental Recommendations" box indicating the need for an EA.

If you do not find your action in the CE list, regardless of your answers in Step 6, you must prepare an EA or EIS. Complete the following "State Environmental Recommendations" box indicating the need for an EA or EIS.

State NEPA Pathway Recommendation

☐ *I certify that a site inspection was conducted for each site involved in this proposal and to the best of my knowledge, the information provided in this LWCF Proposal Description and Environmental Screening Form (PD/ESF) is accurate based on available resource data. All resulting notes, reports and inspector signatures are stored in the state's NEPA file for this proposal and are available upon request. On the basis of the environmental impact information for this LWCF proposal as documented in this LWCF PD/ESF with which I am familiar, I recommend the following LWCF NEPA pathway:*

☐ This proposal qualifies for a Categorical Exclusion (CE).
- CE Item #:
- Explanation:

☐ This proposal requires an Environmental Assessment (EA) which is attached and has been produced by the State/sponsor in accordance with the LWCF Program Manual.

☐ This proposal may require an Environmental Impact Statement (EIS). NPS guidance is requested per the LWCF Program Manual.

Reproduce this certificate as necessary. Complete for each LWCF appraisal or waiver valuation.

State Appraisal/Waiver Valuation Review

Property address: **Date of appraisal transmittal letter/waiver:**

Real property value: $ **Effective date of value:**

I certify that: ☐ *a State-certified Review Appraiser has reviewed the appraisal and has determined that it was prepared in conformity with the Uniform Appraisal Standards for Federal Land Acquisitions.*

OR

☐ *the State has reviewed and approved a waiver valuation for this property per 49 CFR 24.102(c)(2)(ii).*

SLO/ASLO Original Signature: _____ Date: _____
Typed Name, Title, Agency:

National Environmental Policy Act
National Park Service-Land and Water Conservation Fund State Assistance Program

Categorical Exclusions for Which a Record is Needed

Note: The following are the NEPA Categorical Exclusions approved for use with all NPS programs. Only the unshaded categories apply to LWCF proposals. Before selecting a categorical exclusion (CE), complete the PD/ESF for the LWCF proposal to support the CE selection.

A. Actions related to general administration

(1) Changes or amendments to an approved action when such changes would cause no environmental impact. *LWCF actions that are covered include amendments for:*

- *time extensions with no change in project scope or with a reduction in project scope;*
- *deleting work and no other work is added back into the project scope;*
- *changing project cost with no change in project scope or with a reduction in project scope;*
- *making administrative changes that do not affect project scope.*

(2) Minor boundary changes that are accomplished through existing statutory authorities and that result in no change in land use.

(3) Re-issuance/renewal of permits, rights-of-way, or easements not involving new environmental impacts provided that the impacts of the original actions were evaluated in an environmental document.

(4) Conversion of existing permits to rights-of-way, when such conversions neither continue nor potentially initiate adverse environmental conditions, provided that the impacts of the original actions were evaluated in an environmental document.

(5) Issuances, extensions, renewals, re-issuances, or minor modifications of concession contracts or permits that do not entail new construction or any potential for new environmental impact as a result of concession operations.

(6) Incidental business permits (formerly called commercial use licenses) involving no construction or potential for new environmental impact.

(7) Leasing of historic properties in accordance with 36 CFR 18 and NPS-38.

(8) Modifications or revisions to existing regulations, or the promulgation of new regulations for NPS-administered areas, provided the modifications, revisions, or new regulations do not:

(a) increase public use to the extent of compromising the nature and character of the area or cause physical damage to it.

(b) introduce non-compatible uses that might compromise the nature and characteristics of the area or cause physical damage to it.

(c) conflict with adjacent ownerships or land uses.

(d) cause a nuisance to adjacent owners or occupants

(9) At the direction of the NPS responsible official, actions where NPS has concurrence or co-approval with another bureau and the action is a CE for that bureau, and where NPS agrees that there is no potential for environmental impact.

(10) Routine transfers of jurisdiction between the NPS and the District of Columbia accomplished through existing statutory authority, where no change of use in the land is anticipated upon transfer.

B. Plans, studies, and reports

(1) Changes or amendments to an approved plan, when such changes have no potential for environmental impact.

(2) Cultural resources maintenance guides, collection management plans, and historic furnishings reports.

(3) Interpretive plans (interpretive prospectuses, audio-visual plans, museum exhibit plans, wayside exhibit plans).

(4) Plans, including priorities, justifications, and strategies, for non-manipulative research, monitoring, inventorying, and information-gathering.

(5) Agreements between NPS offices for plans and studies.

(6) Authorization, funding, or approval for the preparation of statewide comprehensive outdoor recreation plans (SCORPs).

(7) Adoption or approval of academic or research surveys, studies, reports, and similar documents that do not contain and will not result in NPS recommendations.

(8) Land protection plans that propose changes to existing land or visitor use when the changes have no potential for environmental impact.

C. Actions related to development

(1) Land acquisition within established park boundaries, if future anticipated uses would have no potential for environmental impact.

(2) Land exchanges that will not lead to anticipated changes in the use of land and that have no potential for environmental impact. *For LWCF, some small conversions may meet this criterion. See the LWCF Manual Chapter 8 for further guidance.*

(3) Routine maintenance and repairs to non-historic structures, facilities, utilities, grounds, and trails.

(4) Routine maintenance and repairs to cultural resource sites, structures, utilities, and grounds if the action falls under an approved Historic Structures Preservation Guide or Cyclic Maintenance Guide or if the action would not adversely affect the cultural resource.

(5) Installation of *LWCF eligible* signs, displays, and kiosks.

(6) Installation of navigation aids.

(7) Experimental testing of short duration (no more than one season) of mass transit systems, and changes in operation of existing systems, that have no potential for environmental impact.

(8) Replacement in kind of minor structures and facilities with little or no change in location, capacity, or appearance--for example, comfort stations, pit toilets, fences, kiosks, signs and campfire circles.

(9) Repair, resurfacing, striping, installation of traffic control devices, and repair/replacement of guardrails, culverts, signs, and other minor existing features on existing roads when no potential for environmental impact exists.

(10) Changes in sanitary facilities operation resulting in no new environmental effects.

(11) Installation of wells, comfort stations, and pit or vault toilets in areas of existing use and in developed areas.

(12) Minor trail relocation or development of compatible trail networks on logging roads or other established routes.

(13) Upgrading or adding new overhead utility facilities on existing poles, or on replacement poles that do not change existing pole line configurations.

(14) Issuance of rights-of-way for overhead utility lines to an individual building or well from an existing line where installation will not result in visual intrusion and will involve no clearance of vegetation other than for placement of poles.

(15) Issuance of rights-of-way for minor overhead utility lines not involving placement of poles or towers and not involving vegetation management or visual intrusion in an area administered by NPS.

(16) Installation of underground utilities in areas showing clear evidence of recent human disturbance or areas within an existing road prism or within an existing overhead utility right-of-way.

(17) Minor landscaping in areas showing clear evidence of recent human disturbance.

(18) Installation of fencing enclosures, exclosures, or boundary fencing posing no effect on wildlife migrations.

D. Actions related to visitor use

(1) Minor changes in amounts or types of visitor use for the purpose of ensuring visitor safety or resource protection in accordance with existing regulations.

(2) Minor changes in programs and regulations pertaining to visitor activities.

(3) Issuance of permits for demonstrations, gatherings, ceremonies, concerts, arts and crafts shows, and so forth, entailing only short-term or readily remediable environmental disturbance.

(4) Designation of trailside camping zones with minimal or no improvements.

E. Actions related to resource management and protection

(1) Archeological surveys and permits involving only surface collection or small-scale test excavations.

(2) Restoration of non-controversial (based on internal scoping requirements in section 2.6) native species into suitable habitats within their historic range.

(3) Removal of individual members of a non-threatened/endangered species or populations of pests and exotic plants that pose an imminent danger to visitors or an immediate threat to park resources.

(4) Removal of non-historic materials and structures in order to restore natural conditions when the removal has no potential for environmental impacts, including impacts to cultural landscapes or archeological resources.

(5) Development of standards for, and identification, nomination, certification, and determination of, eligibility of properties for listing in the National Register of Historic Places, the National Historic Landmark and National Natural Landmark Programs, and biosphere reserves.

(6) Non-destructive data collection, inventory (including field, aerial, and satellite surveying and mapping), study, research, and monitoring activities (this is also a Departmental CE).

(7) Designation if environmental study areas and research natural areas, including those closed temporarily or permanently to the public, unless the potential for environmental (including socioeconomic) impact exists.

F. Actions related to grant programs

(1) Proposed actions essentially the same as those listed in paragraphs A-E above *not shaded in gray*.

(2) Grants for acquisition to areas that will continue in the same use or lower density use with no additional disturbance to the natural setting or type of use.

(3) Grants for replacement or renovation of facilities at their same location without altering the kind and amount of recreational, historical, or cultural resources of the area or the integrity of the existing setting.

(4) Grants for construction of facilities on lands acquired under a previous NPS or other federal grant, provided that the development is in accord with plans submitted with the acquisition grant, and that environmental documents have been completed on the impacts of the proposal funded by the original grant.

(5) Grants for the construction of new facilities within an existing park or recreation area, provided that the facilities will not:

(a) conflict with adjacent ownerships or land use, or cause a nuisance to adjacent owners or occupants, such as would happen if use were extended beyond daylight hours.

(b) introduce motorized recreation vehicles, including off-road vehicles, personal water craft, and snowmobiles.

(c) introduce active recreation pursuits into a passive recreation area.

(d) increase public use or introduce non-compatible uses to the extent of compromising the nature and character of the property or causing physical damage to it.

(e) add or alter access to the park from the surrounding area.

(6) Grants for the restoration, rehabilitation, stabilization, preservation, and reconstruction (or the authorization thereof) of properties listed on or eligible for listing on the National Register of Historic Places, at their same location, and provided that such actions:

(a) will not alter the integrity of the property or its setting

(b) will not increase public use of the area to the extent of compromising the nature and character o the property.

LAND AND WATER CONSERVATION FUND SECTION 6(f) CONVERSION PROPOSAL

STEP 3. PROJECT AMENDMENT

I. Overview of the NEUP Project

Tennessee Gas Pipeline Company, L.L.C. ("Tennessee or "TGP") has been authorized by the Federal Energy Regulatory Commission ("FERC") to construct and operate certain pipeline and compressor facilities in northeastern Pennsylvania and northwestern New Jersey in order to expand the natural gas delivery capacity to the northeast region of the United States. This project is known as the Northeast Upgrade ("NEUP" or the "Project"). The relevant portion of the alignment places the NEUP within or adjacent to the right-of-way ("ROW"), to the extent practicable, feasible, and legally permitted, that is associated with Tennessee's existing 300 Line that has been in service since the mid-1950s.

Pursuant to the provisions of the Natural Gas Act, 15 U.S.C. §717 et seq., Tennessee applied to the FERC for authority to construct and operate the Project. As part of the application process, the FERC staff prepared an Environmental Assessment ("EA"), issued on November 21, 2011, which assessed the environmental effects of the construction and operation of the Project in accordance with the requirements of the National Environmental Policy Act ("NEPA"). While the FERC was the lead agency in preparing the EA, the United States Fish and Wildlife Service ("USFWS") and the United States Army Corps of Engineers ("USACOE") participated as cooperating agencies, lending their expertise to the review of resources potentially affected by the Project over which these agencies have jurisdiction. See FERC Docket No. CP11-161-000.

The FERC prepared an EA, rather than an Environmental Impact Statement, based on its conclusion that the "approval of the proposed project, with appropriate mitigating measures, would not constitute a major federal action significantly affecting the quality of the human environment." On May 29, 2012, the FERC issued a Certificate of Public Convenience and Necessity ("Certificate" or "FERC Certificate"), which authorizes Tennessee to construct, install, modify, operate and maintain the Project, 139 FERC ¶ 61,161 (2012). The FERC Certificate, is attached hereto, and will be referred to as Attachment A.

In addition to the FERC Certificate obtained pursuant to the Natural Gas Act, Tennessee also needed to secure land rights from the State of New Jersey for the portion of the FERC-approved alignment crosses lands owned by the State of New Jersey. On June 7, 2012, NJDEP and the New Jersey State House Commission approved a 25-year lease of approximately 20 acres of State-owned lands that is needed to construct the NEUP. As compensation for this lease, Tennessee is providing significant compensation, including cash compensation, replacement lands, and mitigation to the State of New Jersey. Details of the compensation and mitigation are provided in Step 5-5 below. A copy of the State House Commission Summary Sheet is attached hereto, and will be referred to as Attachment B.

II. Overview of the Project Amendment (Conversion)

The proposed alignment of the NEUP will traverse two parcels of State-owned land within Ringwood State Park that are encumbered by Section 6(f) of the Land and Water Conservation Fund ("LWCF") Act (hereinafter referred to as the "Section 6(f) lands").[1] The size of the conversion on Block 1101, Lot 5 in the Borough of Ringwood, Passaic County, New Jersey, is 0.34 percent of the total Section 6(f) parcel; the size of the conversion on Block 1, Lot 1 in the Township of Mahwah, Bergen County, New Jersey is 0.67 percent of the total Section 6(f) parcel. As part of the construction of the NEUP, Tennessee will also be using an existing access road, Bear Swamp Road, a portion of which crosses a parcel that is encumbered by Section 6(f) of the LWCF Act.[2]

During the summer of 2011, Tennessee provided information to the New Jersey Department of Environmental Protection ("NJDEP") Green Acres Program about whether the use of these parcels would constitute a "conversion" under the LWCF Act. NJDEP reviewed this information, and provided it to the National Park Service ("NPS"), the entity with authority to determine conversions of LWCF lands. Representatives from NJDEP and Tennessee met with NPS on February 7, 2012, and had a subsequent conference call to discuss whether Tennessee's crossing of these parcels would constitute a conversion. On April 23, 2012, NPS determined that construction of the pipeline likely necessitates a conversion of the two parcels. The NPS concluded that the conversion would apply to both the new leased area for the pipeline ROW and the temporary workspace needed during construction, and has further concluded that Tennessee's use of Bear Swamp Road in the Borough of Ringwood (as described below) would not constitute a conversion.

Details on the proposed conversion properties are provided in this Conversion Proposal.

III. NPS' and NJDEP's Determination on Access Roads

As stated above, Tennessee will be using Bear Swamp Road, a pre-existing road, to access Tennessee's Mahwah Meter Station. This road (also known as L5 AR 80) parallels Bear Swamp Creek up to Bear Swamp Lake, and is located in Ramapo Mountain State Forest in the Township of Mahwah, Bergen County, New Jersey. A portion of the Bear Swamp Road crosses a parcel identified as Block 1, Lots 67, 68 and 69, in the Township of Mahwah, Bergen County, New Jersey, that is encumbered by Section 6(f) of the LWCF Act. Tennessee has been using Bear Swamp Road to maintain its existing pipeline and the Mahwah Meter Station and intends to use the road during the Project for transporting workers in light duty vehicles to and from the construction site. The width of the road will not be expanded, no trees will be removed or side-cut, and no heavy duty vehicles will travel this road. Tennessee will use the road as designed (with any modifications accomplished entirely within the existing road bed), and will not interfere with the public's recreational use of this road nor the public's access to Bear Swamp Lake. NJDEP addressed Tennessee's use of Bear Swamp Road in its Report on the Proposed

[1] A parcel that is encumbered by Section 6(f) means that it is located within a Section 6(f) boundary.

[2] For the reasons set forth below, NPS and NJDEP have determined that Tennessee's pre-existing, conforming use of Bear Swamp Road does not constitute a conversion.

Conveyance of Lands to Tennessee by NJDEP (prepared in accordance with N.J.S.A. 13:1D-52, a.k.a. Ogden Rooney Report (page 9)), in the State House Commission Approval Summary Sheet for the diversion of local park lands in Ramapo Mountain Reservation (page 9), and in its Response to Public Comments document (page 20), and concurred with Tennessee's proposed conforming use of this road. The Response to Public Comments can be found on NJDEP's Green Acres website at www.state.nj.us/dep/greenacres/neup.html.

Tennessee has also identified another access road, which is an unnamed access road known as L5 AR 50. This road is located within the Section 6(f) boundary on Block 1101, Lot 5 in the Borough of Ringwood, Passaic County, New Jersey. Tennessee has been using this road since the 1950s to access the existing pipeline for maintenance, and will continue to use this road for access to the Project construction corridor. This pre-existing access road will not be enlarged or widened, no trees will be removed or side-cut, and no recreational facilities will be impacted. The road will be used as designed, although some gravel may be placed within the existing road bed. Continued use of this road prevents interference by Tennessee with the adjacent Thunder Mountain Trap and Skeet Shooting Range, which is a private recreational shooting range located within Block 1101, Lot 5.[3] NJDEP has reviewed the longstanding, pre-existing use of this access road, and has determined that its use (like the pre-existing, conforming use of Bear Swamp Road) should not be considered a conversion under the LWCF Act.

In light of Tennessee's conforming, pre-existing use of Bear Swamp Road and the unnamed access road on Block 1101, Lot 5, the use of these two access roads will not be a part of this Conversion Proposal.

IV. Timing of Conversion Request

It is recommended that NPS complete its review and make a determination concerning this Conversion Proposal by no later than October 1, 2012. The reason for this request is that Tennessee must begin construction of the NEUP so that it is able to meet the Project in-service date of November 1, 2013.[4] In order to meet this deadline, Tennessee must factor in the tree clearing restrictions established by the federal Migratory Bird Treaty Act, 16 U.S.C. §703 et seq., ("MBTA") and the federal Indiana Bat regulations See the Endangered Species Act, 16 U.S.C. §1531 et seq. Under the MBTA, seasonal vegetative clearing in New Jersey may occur only between August 1 and March 14. Under the Indiana Bat regulations, tree clearing is allowed only between October 1 and March 30. In practical terms, the federally approved window for tree clearing for the Northeast Upgrade Project is between *October 1 and March 14*.

[3] The Thunder Mountain Trap and Skeet Shooting Range is a privately owned shooting range located on lands owned by the State of New Jersey (Block 1101, Lot 5) within the Section 6(f) boundary. The State of New Jersey acquired this land subject to a 1962 lease with Skeet One Corporation's predecessor that allowed for the development, maintenance and operation of a public skeet and trap shooting range.

[4] Ordering Paragraph (C) of the Certificate requires Tennessee to construct and make available for service the Project facilities within one year of the date of the Certificate, or May 29, 2013. However, the requested in-service date for the Project is November 1, 2013, to correspond to the requested in-service date of the Project's shippers. Therefore, on June 28, 2012, Tennessee filed a request for clarification of the Certificate requesting that the Commission clarify that, notwithstanding Ordering Paragraph (C) of the Certificate, Tennessee has until November 1, 2013 to place the Project facilities in-service.

See, EA, Sections 2.3.2.3 and 2.3.2.4. Moreover, the FERC imposed a condition in the FERC Certificate, which requires Tennessee to receive and file with the FERC all applicable authorizations required under federal law prior to commencing construction of the Project. The NPS approval is therefore needed in order for Tennessee to receive a Notice to Proceed from the FERC and become authorized to begin construction. See Attachment A, Environmental Condition No. 8 (Appendix B to Certificate).

STEP 3B. SECTION 6(f)(3) CONVERSION PROPOSAL

Step 3B-1, State Liaison Officer Recommendation.

It is expected that, following the review and approval of this Conversion Proposal by the NJDEP Green Acres Program, the State Liaison Office ("SLO") will provide Tennessee copies of the letter of transmittal to the NPS recommending the approval of the proposal.

Step 3B-2, Need for Conversion of Section 6(f) Parkland, Practical Alternatives to Conversion, How They Were Evaluated, and Reasons Why They Were Not Pursued.

a. Description of Proposed Conversion Areas.

As stated above, Tennessee is seeking to convert portions of two (2) parcels owned in fee by the NJDEP that are encumbered by Section 6(f) of the LWCF Act. Specifically, the areas subject to this conversion application are portions of:

- Block 1101, Lot 5 in the Borough of Ringwood, Passaic County, New Jersey; and
- Block 1, Lot 1 in the Township of Mahwah, Bergen County, New Jersey.

Both parcels are located within Ringwood State Park located in Passaic and Bergen Counties. See "Conversion Parcels, Block 1101, Lot 5, Block 1, Lot 1, prepared by SGC Engineering, LLC, dated June 2012," which is attached hereto and referred to as Figure 1.

The area of conversion on Block 1101, Lot 5 is a total of 1.22 acres (0.248 acres for the new leased area and 0.972 acres of temporary workspace). The proposed conversion is depicted on a map entitled, "Conversion Parcel Detail, Block 1101, Lot 5, Project # 146293, prepared by SGC Engineering, LLC, dated June 2012," which is attached hereto and referred to as Figure 3. Access Road L5-AR-50 is shown on Figure 3, however, for the reasons provided above, the use of this road does not constitute a conversion.

The area of conversion on Block 1, Lot 1 is a total of 4.971 acres (1.236 acres for the new leased area and 3.735 acres of temporary workspace). The proposed conversion is depicted on a map entitled, "Conversion Parcel Detail, Block 1, Lot 1, Project # 146293, prepared by SGC Engineering, LLC, dated June 12, 2012," which is attached hereto and referred to as Figure 4.

For purposes of this Conversion Proposal, the area proposed for conversion will be referred to as "conversion area" or "area of conversion."

b. Project Description, Purpose and Need.

On March 31, 2011, pursuant to provisions of the Natural Gas Act, Tennessee applied to the FERC for authority to construct and operate the NEUP Project. On May 29, 2012, the FERC issued the Certificate. This Certificate authorizes Tennessee to construct, install, modify, operate and maintain certain pipeline and compression facilities in northern Pennsylvania and northwestern New Jersey. When completed and placed into service, NEUP will increase natural gas delivery capacity on Tennessee's existing 300 Line System by 636,000 dekatherms (Dth) per day.

Specifically, NEUP consists of five separate natural gas pipeline loops totaling approximately 40.3 miles of 30-inch diameter pipeline, with approximately 21.9 miles in Pennsylvania and 18.5 miles in New Jersey. NEUP also includes modifications at three existing compressor stations in

Pennsylvania, at a compressor station in Wantage Township, Sussex County, and at a meter station in Mahwah Township, Bergen County.

In New Jersey, NEUP consists of a 10.9-mile portion of new pipeline loop in Montague and Wantage Townships, Sussex County (known as "Loop 323")[5] and a 7.60-mile new pipeline loop in West Milford Township and Ringwood Borough, Passaic County, and Mahwah Township, Bergen County (known as "Loop 325"). The Section 6(f) lands that are the subject of this Conversion Proposal are located entirely along Loop 325, which is within Ringwood State Park. See Figure 1.

The pipeline loops will be installed, to the extent practicable, feasible, and consistent with federal law, parallel to and at an offset of approximately 25 feet from the existing 24-inch diameter natural gas pipeline (known as the 300 Line) that has been in existence since the mid-1950s. Approximately 84 percent of the FERC-approved alignment is within or parallel to the existing ROW. This alignment minimizes adverse environmental impacts on landowners and is consistent with the FERC's and the NJDEP's policy to construct linear infrastructure projects within or adjacent to an existing ROW to the maximum extent practicable and allowed by law.

Tennessee has signed binding precedent agreements with two shippers, Chesapeake Energy Marketing, Inc. and Statoil Natural Gas LLC, for all of the additional transportation capacity to be created from the Project. Based on the benefits to be provided to the Project shippers, the lack of adverse effects on existing customers and other pipelines and their captive customers, and the minimal adverse effects on landowners or communities along the route, the FERC concluded, consistent with its Certificate Policy Statement,[6] that the NEUP is required by the public convenience and necessity. See Attachment A, P 17.

c. Alternatives Analysis.

As part of the process for applying for a FERC Certificate, Tennessee undertook an extensive needs and alternative routing analysis for the NEUP. The goal of that analysis was to determine whether the NEUP was, in fact, needed, and if so, whether the route proposed by Tennessee minimized impacts to the environment and to landowners to the greatest extent possible.

As required by the FERC regulations implementing the NEPA at 18 C.F.R. §380.12(l), Tennessee included Resource Report 10 (Alternatives) as part of the Environmental Report for the Project submitted with its FERC Certificate application. See TGP. 2011j. The FERC also considered alternatives in the EA, as did NJDEP when it evaluated whether to approve the 25-

[5] Loop 323 includes approximately 6.33 miles in Pennsylvania. For purposes of this conversion application, references to Loop 323 include the New Jersey portion of the loop only.

[6] The Certificate Policy Statement provides guidance for evaluating proposals to certificate new construction. The Certificate Policy Statement explains that, in deciding to authorize the construction of major new pipeline facilities, the FERC balances the public benefits against the potential adverse consequences. Only when the benefits outweigh the adverse effects on economic interests will the Commission proceed to complete the environmental analysis where other interests are considered. See *Certification of New Interstate Natural Gas Pipeline Facilities*, 88 FERC ¶61,227 (1999), *clarified* 90 FERC ¶61,128 (2000), *further clarified* 92 FERC ¶61,094 (2000).

year lease of State-owned lands to Tennessee. An Alternatives Analysis was included in the State House Commission Summary Sheet that was submitted to the New Jersey State House Commission, a copy of which is attached hereto as Attachment B.

In both Resource Report 10 and in the State House Commission Summary Sheet, the following alternatives were evaluated:

- The No-Action Alternative, including the effect of energy conservation or energy alternatives to the Project;

- System alternatives, such as pipeline looping options only, new compression options, modifications to existing compression, and combinations of compression and pipeline looping options, and the rationale for rejecting each system alternative; and

- Route alternatives, including major and minor route alternatives designed to minimize environmental and land use impacts, permanent easement acquisition,[7] and overall Project costs.

The route certificated by the FERC and approved by the NJDEP and the New Jersey State House Commission, will impact the two parcels of land identified above, which are encumbered by Section 6(f) of the LWCF Act.

1. No-Action Alternative

The FERC evaluated the "No-Action" alternative, which would involve not constructing the Project and completely avoiding all temporary and permanent impacts associated with the construction. However, by not building the Project, Tennessee would be unable to provide the necessary natural gas transportation service that is required to meet the needs of the market, as evidenced by the two shippers who signed binding precedent agreements for all of the transportation capacity to be created by the Project. If the Project is not built, it is likely that other natural gas companies would be required to increase their capacity by building new facilities to meet the demand for additional capacity in the northeastern part of the United States. Any additional construction would likely create new environmental impacts, thus transferring impacts from this Project to other projects and locations.

The FERC also evaluated energy conservation and alternative forms of energy, such as wind, solar, geothermal coal, oil, nuclear, and fuel cells. While Tennessee strongly encourages energy conservation, there remains a need at the present time for the additional natural gas capacity that will be created by the NEUP (see the U.S. Energy Information Administration's Annual Energy Outlook 2010 at *www.eia.gov/oiaf/archive/aeo10/pdf/0383(2010).pdf*). Currently, alternative forms of energy, including wind, solar and geothermal, are not able to meet the projected demand for energy in the northeast region.

[7] Although the analysis in this section and Tennessee's Resource Report 10 refer to a "permanent easement" area, as discussed above, the NJDEP proposed and approved a 25-year lease (not a permanent easement) for the NEUP as it crosses State lands. The New Jersey State House Commission also approved the 25-year lease.

In the EA, the FERC determined that the "No-Action" alternative and a postponed action alternative were not reasonable since no action or postponed action would not accomplish the Project's objectives, and would likely result in the construction of other facilities that may not provide a significant environmental advantage over the Project. EA, Section 3.1.

2. System Alternatives

The FERC analyzed different configurations of pipeline and compression facilities within its transmission system, as well as efficiency improvements, to determine whether there were technical and feasible alternatives that would allow Tennessee to meet the Project's objectives, as set forth in the two binding precedent agreements, without constructing the Project. Tennessee also considered efficiency improvements, looping only, a combination of looping and compression, additional compression only at existing or new compressor stations, and no looping at all within the Delaware Water Gap National Recreation Area.

In the EA, the FERC evaluated whether other existing pipeline systems that currently transport natural gas through Pennsylvania into New Jersey could satisfy the objectives of the Project. The FERC concluded that these interstate pipelines (including Tennessee's pipeline) are already fully subscribed during the peak heating season.

Based on the information provided in Resource Report 10 and the FERC's own research and analysis, the FERC concluded that the approximately 40 miles of additional pipeline looping (consisting of five separate pipeline loops), coupled with the addition of horsepower at two existing compressor stations (Station 321 in West Clifford, Pennsylvania and Station 323 in Lackawaxen, Pennsylvania) and modifications at two other compressor stations and one meter station would allow it to meet the objectives of the Project, which is to provide up to 636,000 dekatherms per day of incremental transportation capacity to the two shippers from receipt points to the specified delivery point in Mahwah, New Jersey. By using a combination of looping and compression on its transmission system, Tennessee will be able to avoid the looping-only option, which would have caused significantly greater environmental impacts, more ground disturbance, an increased number of affected landowners, and greater costs associated with the construction of 42 miles of additional pipeline looping that would have been required to meet Project demand. EA, Section 3.2.

3. Route Alternatives.

In Resource Report 10, Tennessee included an analysis of both major and minor route alternatives to its proposed route for the pipeline loops. The analysis was based on environmental and land use impacts, as well as permanent easement acquisitions and overall Project costs. In evaluating the routing options for the NEUP, Tennessee determined that, since there is an existing 300 Line pipeline in northwestern New Jersey, the new pipeline loops should be collocated within or adjacent to the existing pipeline ROW, to the maximum extent practicable, feasible, and legally permitted. The use of collocation is favored by the FERC and encouraged by the NJDEP, which has expressed a strong policy preference that expansion of lateral infrastructure projects should remain in or adjacent to existing rights of way, if such rights

of way exist. Such an approach generally minimizes environmental impacts in previously undisturbed areas and reduces public disturbance and construction costs. EA, Section 3.3.

In reviewing the proposed pipeline alignment and whether Tennessee can avoid the impacted Section 6(f) encumbered lands within Loop 325, Tennessee evaluated the following:

- **Block 1101, Lot 5, Borough of Ringwood, Passaic County.**

The southern Section 6(f) boundary on Block 1101, Lot 5 coincides with the northern edge of Tennessee's existing 300 Line pipeline ROW. A portion of Loop 325 will be constructed across Block 1101, Lot 5, north of and within the Section 6(f) boundary for approximately 695 feet. See Figure 3.

Tennessee evaluated whether it could avoid Block 1101, Lot 5 altogether by completing a crossover of the pipeline to the south side of the ROW, which is outside of the Section 6(f) boundary. In fact, the proposed pipeline was originally designed to be constructed entirely on the south side of the existing 300 Line pipeline (and thereby avoid the Section 6(f) boundary), however, the crossover to the north side of the existing 300 Line pipeline ROW was developed in order to avoid impacting a treatment plant and wells on the west side of Morris Road, and to reduce wetland impacts on L5 W010 and L5 W011. If the pipeline were to be constructed entirely to the south of the existing ROW and avoid the Section 6(f) boundary, there would be a net increase in wetlands and other impacts. Tennessee's redesign of the pipeline, by way of the proposed crossover, minimizes the amount of lands needed to be converted and reduces the environmental impacts to the maximum extent practicable.

Tennessee also evaluated whether it could avoid the Section 6(f) boundary by constructing a portion of Loop 325 to the north into New York State, and then connecting to the existing Mahwah Meter Station in Bergen County, which is the terminus of the Tennessee pipeline system. See Figure 1. This alternative alignment would require a much longer pipeline, and would create significant environmental impacts to similar resources in New York State. The FERC concluded in the EA that this was not an environmentally preferable alternative when compared to the proposed route which is collocated almost entirely within or adjacent to Tennessee's existing ROW. EA, Section 3.3.4.

- **Block 1, Lot 1, Township of Mahwah, Bergen County.**

Proposed Loop 325 also crosses through the southwestern quadrant of Block 1, Lot 1. See Figure 1. This parcel was acquired with the assistance of the LWCF, therefore, the entire parcel is encumbered by Section 6(f) of the LWCF Act. The existing 300 Line pipeline passes through this parcel and the proposed expansion of Loop 325 will also pass through this parcel.

As described above, the segment of Tennessee's existing pipeline system that would be expanded by Loop 325 connects to the existing Mahwah Meter Station in Bergen County. In order to avoid the Section 6(f) encumbered land on Block 1, Lot 1 and be able to connect to the Mahwah Meter Station, Tennessee would have to re-route this section of Loop 325 north into New York State and then return south to connect to the Mahwah Meter Station in New Jersey.

This alternative alignment would require a much longer pipeline, and would create significant environmental impacts to similar resources in New York State. The FERC concluded in the EA that this was not an environmentally preferable alternative when compared to the proposed route which is collocated almost entirely within or adjacent to Tennessee's existing ROW. EA, Section 3.3.4.

Tennessee also evaluated whether the pipeline could be re-routed to the south and east to avoid the Section 6(f) lands and then reconnect with the existing 300 Line pipeline. If the pipeline were re-routed in this manner, Loop 325 would still have to traverse through the Highlands Region, specifically the Preservation Area. The FERC received public comments requesting that the Preservation Area should be completely avoided. The FERC determined in the EA that a "route alternative for Loop 325 that would entirely avoid the Highlands Region is not feasible." In looking at alternatives that would avoid the Highlands Region altogether (especially the proposed alignment north through New York), the EA concluded that the proposed route, which is collocated within or adjacent to Tennessee's existing ROW, is the preferred alternative. EA, Section 3.3.4.

Step 3B-3, Conversion is in Accordance with State Comprehensive Outdoor Recreation Plan (SCORP).

The New Jersey State Comprehensive Outdoor Recreation Plan ("SCORP") is a plan prepared by the NJDEP's Green Acres Program to provide guidance to State and local governments and conservation organizations involved in open space preservation and public recreational opportunities. The SCORP is prepared every five years in order to maintain New Jersey's eligibility to receive funding from the LWCF, a program administered by the NPS. The SCORP, which was last prepared in 2008, is a status report and guide for open space and recreation planning.

In pertinent part, the goals of the SCORP are to:

1. Preserve a sufficient amount of open space for current and future public recreational use and for the conservation of natural resources important to protecting New Jersey's bio-diversity and the quality of life in New Jersey.

2. To implement open space and recreation planning policies and projects that are consistent with the New Jersey State Development and Redevelopment Plan ("State Plan").

The proposed conversion of the two parcels (Block 1101, Lot 5 and Block 1, Lot 1) is consistent with these goals. On Block 1101, Lot 5, the area to be converted for the new lease area is 0.248 acres and the area to be converted for temporary workspace is 0.972 acres. On Block 1, Lot 1, 1.236 acres will be converted for the new lease area, and 3.735 acres will be temporarily converted as temporary workspace. The total acreage to be converted (for both the new lease area and for temporary workspace) is 6.19 acres.

As replacement land for the proposed conversion, Tennessee has identified and is moving forward with the purchase of, and with the intent of deeding to the State, a 6.19-acre portion of a larger parcel of land known as the "Ilac Property," or part/of Block 20001, Lot 5 on the tax map of Rockaway Township, New Jersey. The Ilac Property is directly adjacent to the Wildcat Ridge Wildlife Management Area ("Wildcat Ridge WMA") and will be added to this WMA. If the NPS approves this Conversion Proposal, there will be no loss of open space available for recreational and conservation uses. The replacement property is of a sufficient size and possesses natural resources (described in Step 6 below) that are aimed at protecting bio-diversity and quality of life, which are essential elements of the SCORP.

In addition, the Public Recreation and Open Space Lands section of the State Plan references the SCORP, and expresses the importance of preserving open space in New Jersey.[8] One of the criteria for consideration in open space funding categories is the identification and preservation of bio-diversity. As described in Step 6 below, the Ilac Property contains significant features

[8] In 1998, the Governor's Council on New Jersey Outdoors issued a report recommending the preservation of one million acres of open space in addition to the area already preserved within the next ten years. See New Jersey State Development and Redevelopment Plan, Environment and Health, pp. 58-59.

supporting bio-diversity and should be considered replacement land that supports and enhances the State Plan.

Step 3B-4, State Appraisal/Waiver Valuation Review.

Attached to this application is the State Appraisal/Waiver Valuation Review form that will certify that a State-certified Review Appraiser has reviewed the appraisals for the two conversion parcels and replacement parcel (which has been submitted under separate cover), and has determined that it was prepared in conformity with the Uniform Appraisal Standards for Federal Land Acquisitions.

Step 3B-5, Description of Conversion Areas.

Step 3B-5a. Specific Geographic Description On a Map, 9-Digit Zip Code, Name of Park or Recreation Area Proposed for Conversion.

1. Conversion Area: Block 1101, Lot 5.

A portion of Block 1101, Lot 5 is proposed for conversion from approximately Milepost (MP) 4.47 to MP 4.60. This parcel is located within Ringwood State Park in the Borough of Ringwood in Passaic County, New Jersey, zip code 07456 (TGP 2011b). This parcel is not assigned a nine-digit zip code as required by Step 3-B5a; therefore, only the five-digit zip code is provided. See Figure 1. The June 13, 1978 Land and Water Conservation Fund Project Agreement and Section 6(f) boundary map are attached hereto as Attachment C.

2. Conversion Area: Block 1, Lot 1.

A portion of Block 1, Lot 1 is proposed for conversion from approximately MP 6.32 to MP 7.01. This parcel is also located within Ringwood State Park in the Borough of Mahwah in Bergen County, New Jersey, zip code 07430 (TGP 2011b). This parcel is not assigned a nine-digit zip code as required by Step 3-B5a; therefore, only the five-digit zip code is provided. Please refer to Figure 1, which depicts the geographic location of the parkland proposed for conversion. The September 22, 1994 Land and Water Conservation Fund Project Agreement and Section 6(f) boundary map are attached hereto as Attachment D.

Step 3B-5b. Description of Area Proposed for Conversion Including the Acreage to be Converted and Any Acreage Remaining. Include a Description of the Recreation Resources, Facilities and Recreation Opportunities that Will Be Impacted, Displaced or Lost by the Proposed Conversion.

1. Conversion Area: Block 1101, Lot 5.

The conversion area for this portion of the application (Block 1101, Lot 5) is an approximately 695-foot long section of the pipeline that is located near (next to) the Thunder Mountain Trap and Skeet Shooting Range, which is a privately owned shooting range located within the Section 6(f) boundary, but not within the conversion area. The proposed pipeline will be constructed adjacent to (north of) the existing ROW (TGP 2011b).

The size of the Section 6(f) encumbered land on Block 1101, Lot 5 is approximately 357.0 acres. See Figure 1. The total area of the conversion is 1.222 acres. Thus, the total acreage remaining on the Section 6(f) encumbered lands after the conversion would be 355.78 acres. The Shepherd Lake Bathhouse, which was funded by the LWCF, is not at all affected by the proposed conversion.

The area proposed for conversion is directly adjacent to forested wetlands. Dominant trees species within the conversion area are black cherry (*Prunus serotina*), grey birch (*Betula*

populifolia), quaking aspen (*Populus tremuloides*), various oak species (*Quercus spp*.) and red maple (*Acer rubrum*) (TGP 2.1.5, 2011a; TGP 3.2.1, 2011d). The conversion area is not bisected by any streams as reviewed through Google Earth (2012) and existing topographic maps (EA, Appendix A, A-14). A stream exists to the north east of the proposed conversion area, which contributes to forested wetland areas that are also adjacent to the north east of the parcel.

Recreational impacts caused by the conversion are expected to be de minimis. The Thunder Mountain Trap and Skeet Shooting Range will not be impacted during Project construction. The facility is expected to operate normally. Two existing State single track trails, Mountain Bike Loop Trail and Ringwood-Ramapo Trail, are located east of and outside the conversion area, but within the Section 6(f) boundary on Block 1101, Lot 5. The Project does not cross the Mountain Bike Loop Trail at any point either within or outside the Section 6(f) boundary. The Ringwood-Ramapo Trail is crossed by the Project, but such crossing occurs to the south of and outside the Section 6(f) boundary. These trails are addressed in the General Trails Crossing Plan, which is a plan designed to minimize impacts to recreational trails during construction of the NEUP.

Appropriate mitigation measures will be implemented to ensure that there are no residual impacts to the conversion area once the construction work is completed. The conversion on Block 1101, Lot 5 will create an expansion of the existing maintained ROW by approximately 0.249 acres of new leased area. Approximately 0.995 acres of temporary workspace will be used during construction. However, the temporary workspace will be restored following construction, and will be allowed to revegetate to preexisting conditions. The area of conversion on Block 1101, Lot 5 is shown on Figure 3.

2. Conversion Area: Block 1, Lot 1.

The conversion area for this portion of the application (Block 1, Lot 1) is an approximately 3,600-foot long section of the pipeline (EA, Appendix A, A-14).

The size of the Section 6(f) encumbered parcel on Block 1, Lot 1 is approximately 743.4 acres.[9] See Figure 1. The total area of the conversion is 4.971 acres. Thus, the total acreage remaining on the Section 6(f) encumbered lands after the conversion would be 738.429 acres.

Environmental resources existing on Block 1, Lot 1 are the Spruce Swamp, across which the existing pipeline runs. Based on a delineation done in accordance with the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (Federal Interagency Committee for Wetland Delineation 1989, as cited in the EA) and the Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: North Central and Northeast Region (USACE 2009, as cited in the EA), two wetland points (L5 W018 and L5 W27) are located within and adjacent to the conversion area. Both wetlands are considered exceptional resource value and are classified as PFO/PEM and PEM respectively. The conversion area is not bisected by any streams as reviewed through Google Earth (2012) and existing topographic maps (EA, Appendix A, A-14).

[9] The Section 6(f) boundary coincides with the Mahwah Township tax map boundary for Block 1, Lot 1.

The area in the vicinity of the proposed conversion consists of upland forest areas, which include shrubs and trees species. Common shrubs observed in the Project area include meadowsweet (*Spiraea alba var.latifolia*), highbush blueberry (*Vaccinium corymbosum*), Northern arrow-wood (*Viburnum dentatum*), common winterberry (*Ilex verticillata*), and silky dogwood (*Cornus amomum*). Dominant tree species include red oak (*Quercus rubra*), white oak (*Quercus alba*), scarlet oak (*Quercus coccinea*), chestnut oak (*Quercus prinus*), sugar maple (*Acer saccharum*), American beech (*Fagus grandifolia*), and sweet birch (*Betula lenta*). Coniferous species are represented mostly by eastern white pine (*Pinus strobus*) and eastern hemlock (*Tsuga canadensis*) and comprise less than 10 percent of the canopy species. (2011h, Section 2.1.5). Common herbaceous plants observed in the emergent wetlands encountered along the Project alignment include tussock sedge (*Carex stricta*), lurid sedge (*Carex lurida*), woolgrass (*Scirpus cyperinus*), soft rush (*Juncus effusus*), rough-stemmed goldenrod (*Solidago rugosa*), cat-tail (*Typha spp*.), marsh fern (*Thelypteris palustris*), and sensitive fern (*Onoclea sensibilis*).

During construction of the eastern portion of the Project on Loop 325, there will be a temporary interruption in the use of NJDEP's Halifax Trail, which crosses Block 1, Lot 1. To address the impacts to this trail affected by construction of the Project, Tennessee has submitted to the NJDEP a General Trails Crossing Plan, which is a plan designed to minimize impacts to and interference with trails. As provided in the trails crossing plan, Tennessee will provide alternative routes and will restore the trails impacted to pre-construction condition to the maximum extent possible. NJDEP provided comments on the General Trails Crossing Plan, and Tennessee is currently addressing them.

Appropriate mitigation measures will also be implemented to ensure that there are no residual impacts to the conversion area once the construction work is completed. The conversion on Block 1, Lot 1 will create an expansion of the existing maintained ROW by approximately 1.236 acres of new leased area. Approximately 3.735 acres of temporary workspace will be used during construction. However, the temporary workspace will be restored following construction, and will be allowed to revegetate to preexisting conditions. The area of conversion on Block 1, Lot 1 is shown on Figure 4.

Step 3B-5c. Description of Community and Population Served by the Park, Including Users of the Park and Uses.

As stated above, the parcels to be converted are located within Ringwood State Park. The community and population served by this State Park include all residents of New Jersey, however, the most likely users are from northern New Jersey, specifically Bergen, Essex, Hudson, Mercer, Monmouth, Morris, Middlesex, Passaic, Somerset, Sussex, Union and Warren counties. According to the NJDEP's Division of Parks and Forestry FY 2011 Park Attendance Report, 758,083 people visited Ringwood State Park. Nearly 72,000 people visited the Ringwood Manor Historic Site in FY 2011.

The primary uses of Ringwood State Park include hiking, walking, birding, fishing, hunting, swimming, boating, horseback riding, biking, and winter sports such as cross-country skiing, snowmobiling, ice fishing and sledding. These uses will remain, even after the conversion is completed.

Ringwood State Park is also the home to the New Jersey State Botanical Garden, Skylands Manor, the Shepherd Lake Recreational Area, and over 50 miles of hiking trails. LWCF funds were used to help develop the Shepherd Lake Bathhouse, which is located on Block 1101, Lot 5 (one of the parcels to be converted). However, the Bathhouse is not affected at all by the conversion on this parcel.

Step 3B-5d. For Partial Conversions, a Revised Section 6(f) Map Showing the Portion Being Converted and the Portion Remaining Intact under Section 6(f).

A map indicating the two parcels that are being converted and the portions remaining intact under Section 6(f) is provided in Figure 1.

Step 3B-6. Replacement Land Description.

Step 3B-6a. Specific Description on Map, 9-Digit Zip Code and Geographical Relationship of Converted and Replacement sites. (If site will be added to existing public park or recreational area, show on map.)

The proposed 6.19-acre replacement parcel (Block 20001, Lot 5) is located directly adjacent to the north-northwest of the Wildcat Ridge Wildlife Management Area in Rockaway Township, Morris County, New Jersey. The zip code for this parcel is 07885-1435. Access to Block 20001, Lot 5 is off of Snake Hill Road, which runs east-west from Green Pond Road. The replacement parcel in relationship to the two conversion parcels is depicted in a map entitled, "Overview Map, Conversion Parcels - Ringwood Borough, Passaic County and Mahwah Township, Bergen County and Replacement Parcel - Rockaway Township, Morris County, prepared by SGC Engineering, LLC, dated June 2012," is attached hereto as Figure 2.

The replacement parcel is intended to be added to the Wildcat Ridge WMA. The addition of the replacement parcel to this WMA is shown in a map entitled, "Rockaway Township, Morris County, prepared by NJDEP, dated June 11, 2012," which is attached hereto as Figure 5. The Wildcat Ridge WMA is a 3,745-acre parcel, which is known for its "wildlife with wings" feature. At its southern end, the Wildcat Ridge WMA is home to New Jersey's largest bat hibernaculum. The Wildcat Ridge WMA is also known as an official Hawk Migration Association of North America "hawkwatch" site and contains a Hawk Watch Overlook observation platform. Approximately 18,000 raptors have been seen during the Fall months, and 3,000 have been seen during the Spring months. The Wildcat Ridge WMA has three trails that form a 2.2 mile loop.

Step 3B-6b. Describe Site's Physical Characteristics and Resource Attributes with Number and Types of Resources.

Field reconnaissance of the replacement parcel was conducted on June 21, 2012 and revealed dominant canopy and understory habitat. Dominant canopy species observed were American beech (*Fagus grandifolia*), red maple (*Acer rubrum*), white oak (*Quercus alba*), red oak (*Quercus rubra*), and chestnut oak (*Quercus prinus*); and dominant understory species observed were poison ivy (*Toxicodendron radicans*), virginia creeper (*Parthenocissus quinquefolia*), lowbush blueberry (*Vaccinium angustifolium*), and various moss and fern species. The majority of the trees were noted to be healthy with relatively straight trunks and narrow, but full crowns. In addition to forested and understory habitats, the replacement parcel sloped upward towards the southwest and included rocky outcrops.

The NJDEP Natural Heritage Program (NHP) was consulted in regard to the presence of threatened and endangered species within the proposed replacement parcel in June 2012. The NHP identified numerous state threatened and state endangered species: barred owl (*Strix varia*), golden-winged warbler (*Vermivora chrysoptera*), northern goshawk (*Accipiter gentilis*), red-headed woodpecker (*Melanerpes erythrocephalus*), red-shouldered hawk (*Buteo lineatus*), bobcat (*Lynx rufus*), timber rattlesnake (*Crotalus horridus*), wood turtle (*Glyptemys insculpta*), Indiana bat (*Myotis sodalis*), and Robbin's pondweed (*Potamogeton robbinsii*) (Cartica 2012,

personal communication). The Indiana bat is also a federally listed endangered species. Several species of state special concern are also listed within the replacement parcel. These are blackburnian warbler (*Dendroica fusca*), black-throated green warbler (*Dendroica virens*), blue-headed vireo (*Vireo solitarius*), Canada warbler (*Wilsonia Canadensis*), cerulean warbler (*Dendroica cerulean*), Cooper's hawk (*Accipiter cooperii*), hooded warbler (*Wilsonia citrine*), veery (*Catharus fuscescens*), winter wren (*Troglodytes troglodytes*), wood thrush (*Hylocichla mustelina*), worm-eating warbler (*Helmitheros vermivorum*), arrowhead spiketail (*Cordulegaster obliqua*), brush-tipped (*Somatochlora walshii*), New England bluet (*Enallagma laterale*), ski-tailed emerald (*Somatochlora elongate*), spatterdock darner (*Rhionaeschna mutate*), Williamson's emerald (*Somatochlora williamsoni*), and northern copperhead (*Agkistrodon contortrix mokasen*) (Cartica 2012, personal communication). Field reconnaissance concentrated on identifying habitat and/or evidence of the above-listed species.

During site reconnaissance, a hawk was observed flying over the replacement site. The species could not be confirmed; however, the habitat present (closed canopy of tall trees with open sub-canopy and variable amounts of understory cover) appeared to be suitable for a number of raptor species (ESI 2011a). In addition, the NHP listed timber rattlesnakes and northern copperheads as being on the replacement site (Cartica 2012, personal communication). Per Environmental Solutions & Innovations, Inc.'s (ESI's) 2011 Timber Rattlesnake Hibernacula Survey report, timber rattlesnakes and northern copperheads are found in northern New Jersey in rocky, forested hillsides, similar to the habitat observed on the replacement parcel (2011b).

This NHP consultation also listed that potential vernal habitat was located on the replacement site (Cartica 2012, personal communication). The mapped potential vernal habitat was not directly observed during site reconnaissance due to seasonal constraints, as vernal pools are typically only full of water during the winter and spring months (USEPA 2012c). Vernal habitats are suitable as breeding grounds for a large variety of salamanders and frogs, some of them rare and endangered. Field observations noted a small isolated depression in the upland area adjacent to the replacement site, which was approximately 10-feet in diameter and contained decaying leaf litter; no amphibians or reptiles were observed in or near this depression. Potential vernal habitat may be present on the replacement site; however, a vernal pool survey conducted by a trained vernal pool surveyor would need to be performed to confirm or refute this habitat type's presence on the replacement site.

Based on existing mapping (Google Earth 2010) and field verification, no recreational amenities currently exist within the boundaries of the replacement parcel; however, a hiking trail running in the north-south direction is directly adjacent to the replacement parcel to the west. In addition, the Lake Ames Park is across Snake Hill Road to the north of the replacement parcel. The Lake Ames Park provides off-road parking along Snake Hill Road that may be utilized by visitors to the replacement site as no new roads, facilities, or points of access are proposed for the replacement parcel.

There are currently no improvements or structures on the replacement parcel, and based on NJDEP's (2012) i-MapNJ website, no known critical environmental and historic sites or resources are located on the property.

Based on desktop review (NJDEP 2012; USEPA 2012a) no known hazardous substances, waste, underground storage tanks or structures, or improperly sealed or abandoned wells were identified within the boundaries of the replacement parcel, nor were these features identified during the field survey. A large brush pile, which included household trash that had been dumped along the side of the road, was observed to the south of Snake Hill Road along the northwestern edge of the replacement parcel. No evidence of soil staining or odors was observed in that location. A formal site assessment has not been conducted for the replacement site.

Step 3B-6c. Identify Owner and Prior Use of Replacement Land.

The current owner of the proposed replacement parcel, as identified on the tax records for Block 2001, Lot 5 in Rockaway Township (also known as Green Pond Road, Wharton, New Jersey), is John R. Cali/Cali Futures LLC of Cranford, New Jersey. The property is in a vacant, undeveloped state.

Step 3B-6d. Explanation of How Replacement Land Is of "Reasonably Equivalent Usefulness and Location" as Parcels Being Converted.

Section 6(f)(3) of the LWCF Act ensures that once an area has been funded with LWCF assistance, this area is continually maintained in public recreation use unless NPS approves "substitution" property "of reasonably equivalent usefulness and location ..." 36 C.F.R 59.3(a). Equivalent usefulness and location are determined based on the following criteria:

(i) The property being proposed for substitution must be evaluated to determine if it will meet recreation needs which are at least like in magnitude and impact to the user community as the converted site.

(ii) The replacement property does not necessarily need to be directly adjacent to or close by the conversion site.

(iii) The acquisition of one parcel of land may be used in satisfaction of several approved conversions. [36 C.F.R. 59.3(b)(3).]

The proposed replacement parcel is a 6.19-acre parcel that is located adjacent to the Wildcat Ridge Wildlife Management Area, and is intended to become a part of this Wildlife Management Area if the acquisition by Tennessee is completed. As described above, the Wildcat Ridge WMA has significant environmental resources and 2.2 miles of hiking trails. Even though there will be no *permanent* recreational impacts to the State trail on Block 1, Lot 1, the user community will benefit from access to the additional trails on the Wildcat Ridge WMA. The proposed replacement parcel is also adjacent to the Lake Ames Park in Rockaway, New Jersey, which is a local park that provides additional opportunities for hiking.

The proposed replacement site is located approximately 18.5 miles from the conversion area at Block 1101, Lot 5 and 17.5 miles from the conversion area at Block 1, Lot 1. See Figure 2. While the replacement parcel is not within the same political jurisdiction as the conversion parcels, the LWCF regulations at 36 C.F.R. 59.3(b)(3)(ii) recognize the need for administrative

flexibility in determining whether a replacement parcel is acceptable. NJDEP has identified the replacement parcel as an acquisition priority, based in large measure on its high quality natural resources, including wooded uplands, streams and wooded wetlands. See Attachment B, p. 19. The environmental resources observed on the replacement parcel are equal to, if not greater than, those observed on the conversion properties.

In accordance with 36 C.F.R. §59.3(b)(3)(iii), Tennessee's intended acquisition of the Ilac Property may be used to satisfy the two conversion areas within Ringwood State Park. Tennessee intends to acquire a larger portion of the Ilac Property and transfer 6.19 acres to NJDEP, Division of Fish and Wildlife, for management pursuant to Section 6(f) of the LWCF Act, as an addition to the Wildcat Ridge WMA. By letter dated March 22, 2012, Jack W. Howard, State and Local Assistance Programs, NPS, approved NJDEP's request to acquire the Ilac Property, and to use this property to satisfy the LWCF's requirements at 36 C.F.R. §59.3. A copy of this letter is attached hereto as Exhibit E.

Step 3B-6e. Identification of Owner and Manager of New Replacement Park.

The proposed replacement parcel will be parkland owned and managed by the NJDEP, Division of Fish and Wildlife, in accordance with the provisions of Section 6(f) of the LWCF Act.

Step 3B-6f. Name of New Replacement Park; If Added to Existing Park, Will It Be Included in Section 6(f) Boundary?

Although the new replacement park is not contiguous with the remaining Section 6(f) encumbered parkland in Ringwood State Park, the proposed replacement park is contiguous with the existing Wildcat Ridge Wildlife Management Area located in Rockaway Township, Morris County, New Jersey. The new replacement park will be added to this 3,745-acre Wildlife Management Area, and will also be known as the Wildcat Ridge Wildlife Management Area.

In 2000, $1 million of LWCF monies were used by the NJDEP to acquire a 294-acre addition to the Wildcat Ridge Wildlife Management Area.

Step 3B-6g. Timeframe for Completing New Recreation Area.

Tennessee is presently negotiating with the current owner of the Ilac Property and intends on entering into an option agreement within the next several weeks of this Conversion Proposal. Once the Ilac Property is transferred to NJDEP, the Division of Fish and Wildlife will manage it as part of the Wildcat Ridge WMA in accordance with the provisions of Section 6(f) of the LWCF Act.

Step 3B-6h. Map to Show New Section 6(f) Park.

The new proposed replacement park is depicted in Figure 5. A map providing an overview of the conversion parcels in relationship to the new replacement park is found in Figure 2.

Step 3B-7. NEPA review, including National Historic Preservation Act (Section 106) Review for Converted Parcel and Replacement Parcel, to Analyze How Converted Parkland and Recreational Usefulness Will Be Replaced.

As described herein, in November 2011, an EA, which includes a National Historic Preservation Act Section 106 review, was prepared by the FERC, in cooperation with the USACOE and the USFWS. The EA covered the entire Project, including the two conversion parcels that are the subject of this Conversion Proposal. EA, Section 2.6.

In May 2010, Section 106 consultation was initiated with the New Jersey State Historic Preservation Office ("NJ SHPO"). The NJ SHPO requested submission of a Phase IA and Phase IB cultural resources identification survey reports, which were submitted in November 2010 and August 2011, respectively. Results of the Phase I survey reports warranted a Phase II investigation at six sites within Loop 325; the Draft Phase II archaeological survey report was submitted to the NJ SHPO in January 2012. Vincent Maresca, NJ SHPO, is in the process of finalizing his reviews. None of the six sites that are part of the Phase II archaeological survey are within the conversion areas on Block 1101, Lot 5 or Block 1, Lot 1. Moreover, none of the six sites is even located within the Section 6(f) boundary, although Site 28PA189 on Block 1101, Lot 5 is located approximately 0.25 miles east-southeast of the conversion area.

In addition, a Green Acres Pre-Application Environmental Assessment for Loop 325, which includes a review of cultural resources potentially affected by the Project, was prepared for the NJDEP and Bergen County and submitted in September 2011. Again, no cultural resources have been identified within the conversion areas.

An Environmental Assessment has been prepared for the proposed replacement parcel, which is attached hereto as Attachment F. The EA, which was based on field reconnaissance and various detailed desktop reviews was conducted to assess preliminarily the environmental resources on the replacement parcel. No resources on the replacement parcel will be impacted as this 6.19-acre polygon is being permanently preserved in accordance with Section 6(f) of the LWCF Act. For a discussion of how the recreational usefulness of the converted parkland will be replaced, please see Step 3B-6d.

STEP 5. SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW

Step 5-1. Date of Environmental Review(s), Purpose for the Environmental Review(s) and For Whom They Were Conducted.

As stated above, on March 31, 2011, Tennessee filed an application for a Certificate of Public Convenience and Necessity for the Project in Docket No. CP11-161-000 under the Natural Gas Act (15 U.S.C.A. §717f) and the certificate procedures of Part 157, Subpart F of the FERC's regulations (18 C.F.R. Part 157). As part of the Certificate application process, the FERC is required to assess the environmental impacts of a project in accordance with the requirements of NEPA at 42 U.S.C.A. §4321, NEPA's implementing regulations at 40 C.F.R. Parts 1500-1508, and the FERC's implementing regulations at 18 C.F.R. Part 380.

On November 21, 2011, the FERC, as the lead federal agency, completed a detailed EA of the Project. The EA assessed the potential environmental impacts of the Project, including geology and soils, water resources, fisheries and wetlands, vegetation and wildlife, land use, recreation and visual resources, socioeconomics, cultural resources, air quality and noise, reliability and safety, cumulative impacts and alternatives. The FERC determined that an EA was appropriate because it concluded that the NEUP would not constitute a major federal action significantly affecting the human environment.

While the FERC acted as the lead federal agency in preparing the EA, the USACOE and USFWS also participated in the preparation of the EA as federal cooperating agencies for those resources over which those agencies had jurisdiction or special expertise. In a letter dated June 15, 2012, the USFWS concurred that the proposed Project "is not likely to adversely affect federally listed or candidate species …" Accordingly, the USFWS concluded that, for the NEUP (Loops 323 in New Jersey and 325), no further consultation pursuant to the Endangered Species Act of 1973 is required. A copy of the June 15, 2012 letter is attached hereto as Attachment G.

NJDEP also provided extensive environmental reviews in connection with its role as a regulator evaluating Land Use Regulation Program permits and in its role as a property owner evaluating whether it should approve a proposed lease of its State-owned lands to Tennessee.

Step 5-2. Description of Proposed Action and Alternatives.

As described above, NEUP consists of five separate natural gas pipeline loops totaling approximately 40.3 miles of 30-inch diameter pipeline, with approximately 21.9 miles in Pennsylvania and 18.5 miles in New Jersey. NEUP also includes modifications at three existing compressor stations in Pennsylvania, at a compressor station in Wantage Township, Sussex County, and at a meter station in Mahwah Township, Bergen County.

In New Jersey, NEUP consists of a 10.9-mile portion of new pipeline loop in Montague and Wantage Townships, Sussex County (known as "Loop 323")[10] and a 7.60-mile new pipeline loop in West Milford Township and Ringwood Borough, Passaic County, and Mahwah Township,

[10] The proposed Loop 323 will include approximately 6.33 miles in Pennsylvania. For purposes of this Conversion Proposal, references to Loop 323 include the New Jersey portion of the loop only.

Bergen County (known as "Loop 325"). The Section 6(f) lands that are the subject of this conversion application will be crossed by Loop 325, specifically within Ringwood State Park. The alignment approved by the FERC places the pipeline looping segments within or adjacent to the ROW that is associated with Tennessee's existing 300 Line that has been in service since the mid-1950s. This alignment minimizes adverse environmental impacts on landowners and is consistent with the FERC's and the NJDEP's current policy to construct linear infrastructure projects within or adjacent to an existing ROW to the maximum extent practicable.

An Alternatives Analysis was done by the FERC as part of the EA required under NEPA. NJDEP also conducted an Alternatives Analysis in connection with its determination to approve a 25-year lease of State-owned lands with Tennessee for the NEUP Project. Relevant portions of those analyses are provided in Step 3B-2 above. In addition, Step 3B-2 provides information specific to the Section 6(f) lands and why there are no practicable alternatives to avoiding those parcels.

Step 5-3. Who Was Involved in Identifying Resource Impact Issues and Developing Proposal Including Interested and Affected Public, Governmental Agencies and Indian Tribes.

TGP sponsored and participated in informational open houses for the Project in September 2010 to explain the environmental review process to interested stakeholders throughout the Project area. On October 8, 2010, the FERC issued a *Notice of Intent to Prepare an Environmental Assessment for the Planned Northeast Upgrade Project, Request for Comments on Environmental Issue*, and *Notice of Public Scoping Meetings* ("NOI") in the pre-filing proceeding for the Project, Docket No. PF10-23-000. The NOI was published in the Federal Register and was sent to over 1,500 parties including Federal, state, and local officials; agency representatives; conservation organizations; local libraries and newspapers; Native American groups; and property owners affected by the proposed facilities.

FERC staff conducted public scoping meetings in the Project area to provide an opportunity for agencies and the general public to learn more about the Project and to participate in the environmental analysis by identifying issues to be addressed in the EA. Three scoping meetings were held, including one in Ringwood, New Jersey, on November 1, 2010. The transcripts of the public scoping meetings and all written scoping comments are part of the public record for the Project and are available for viewing on the FERC Internet website under Docket No. PF10-23-000 (http://www.ferc.gov).

During the FERC review process, TGP also conducted interagency scoping meetings either in person or via conference call with representatives of the NPS on September 14 and November 11, 2010; the NJDEP and New Jersey Highlands Water Protection and Planning Council (Highlands Council) on November 10, 2010; the USFWS on November 2, 2010; and the NJDEP, USACOE, and United States Environmental Protection Agency ("USEPA") on February 2, 2011. Additionally, TGP conducted a site visit of the Project route in conjunction with the open houses, public scoping meetings, and interagency meetings. On September 15, 2010, an aerial inspection of the Project was conducted.

During the development and permitting of the Project, TGP has been working with various stakeholders, including the New York/New Jersey Trails Conference, the Ramapough Lenape Nation, State of New Jersey officials and others, to develop proposals that will avoid, minimize and/or mitigate impacts to protected resources along the NEUP alignment. During the course of these consultations and discussions, Tennessee has prepared various reports aimed at avoiding and minimizing environmental impacts, and addressing the concerns of the various stakeholders. The following reports have been prepared:

- Project Environmental Report – Resource Report Numbers 1-13, submitted by TGP to the FERC as part of the FERC Certificate application for the Project in March 2011;
- Indiana Bat Summer Mist Net and Portal Surveys for Loop 323 and 325, prepared for TGP in March 2011;
- Rare Plant Survey Report 2010 for Sussex, Passaic, and Bergen Counties, New Jersey (Confidential), prepared for TGP in June 2011;
- Vernal Habitat Survey Report for Loop 323 and 325 (Privileged and Confidential), prepared for TGP in July 2011;
- Green Acres Pre-application EA for Loop 325 of the Project, prepared by TGP for Bergen County in September 2011;
- Indiana Bat Summer Mist Net Survey for Loop 323 and 325 Sussex, Passaic, and Bergen Counties, New Jersey, prepared for TGP in October 2011;
- Timber Rattlesnake (*Crotalus horridus*) Hibernacula/Emergence Presence/Absence Survey for Loop 323 and 325 (Confidential), prepared for TGP in October 2011;
- Red-Shouldered Hawk and Barred Owl Presence/Absence Surveys for Sussex, Passaic, and Bergen Counties, New Jersey (Confidential), prepared for TGP in October 2011;
- Freshwater Mussel Survey – Ringwood River, Loop 325 (Confidential), prepared for TGP in October 2011;
- Freshwater Mussel Habitat Assessment and Presence/Absence Survey for Loops 323 and 325 (Privileged and Confidential), prepared for TGP in November 2011;
- Freshwater Mussel Surveys - Holiday Lake, Monksville Reservoir, & McMormack Pond for Loop 323 and 325 (Privileged and Confidential), prepared for TGP in November 2011;
- Wood Turtle (*Glyptemys insculpta*) Habitat Assessment and Survey for Loop 323 and 325 (Privileged and Confidential). prepared for TGP in November 2011;
- Project EA, prepared by the FERC staff and issued in November 2011 (FERC Docket No. CP11-161-000); and

- Phase II Archaeological Evaluation for Sites 28PA189, 28PA191, 28PA194, 28PA195, 28BE214, and 28BE215, Located within Loop 325 (Contains Privileged Information), prepared for TGP in January 2012.

Step 5-4. Environmental resources analyzed and determination of impacts for proposed actions and alternatives.

Environmental resources, geographic boundaries, and site locations were surveyed by way of GPS as part of the various reports listed in Step 5-3 above. Impacts were then determined as part of the alternatives analysis discussed in Step 3B-2 above. The FERC, USACOE, USFWS and various agencies of the Commonwealth of Pennsylvania and the State of New Jersey have concurred with the findings of these environmental documents and reports, or are in the process of reviewing these documents and reports.

Step 5-5. Any mitigation measures to be part of the proposed action.

As described above, the Project involves the construction, installation, operation, and maintenance of certain pipeline and compression facilities, including five new 30-inch diameter natural gas pipeline loop segments. Two of the pipeline looping segments, referred to as Loop 323 and Loop 325, are located in New Jersey.[11] A portion of the route in New Jersey is located within the boundaries of certain properties that are owned by the State of New Jersey. The two parcels that are proposed for conversion, Block 1101, Lot 5 and Block 1, Lot 1, are within the State-owned Ringwood State Park.

For the lease of the State-owned lands, which was approved by the NJDEP Commissioner and the New Jersey State House Commission, Tennessee undertook a comprehensive analysis of ways to avoid and minimize the permanent and temporary impacts to State property, while ensuring that the Project could be safely constructed. As a result of this analysis, Tennessee developed a plan to reduce the permanent impacts of the Project by over 71 percent compared to the impacts proposed in its original FERC Certificate application. Specifically, Tennessee will minimize the impacts of the Project to State lands by implementing the following mitigation measures:

1. Tennessee will reduce the width of the new, permanently maintained area to be leased from the NJDEP from 25 feet to 15 feet. This will result in a reduction of 10.21 acres to be leased (or a reduction of 37% from the FERC Certificate application);

2. Tennessee will shift its temporary construction workspace by 10 feet, such that the construction footprint will overlap into the already maintained ROW that is leased by Tennessee for the existing 24-inch diameter pipeline. This shift will result in the avoidance of 10.75 acres of new disturbance to State lands (a 14% reduction from the FERC Certificate application);

[11] Loop 323 includes approximately 6.33 miles in Pennsylvania. For purposes of this Conversion Proposal, references to Loop 323 include the New Jersey portion of the loop only.

3. Tennessee will reduce its temporary workspace in riparian zones to 75 feet, compared to the typical 100-foot footprint that is used in other upland areas of the Project. Reducing the temporary workspace, where feasible, will reduce Project impacts by 3.0 acres (a 3% reduction from the FERC Certificate application);

4. Tennessee will generally reduce the width of any needed access roads to 20 feet from the 24 feet width originally proposed in its FERC Certificate application. Approximately 11 acres of upland forest and forested wetlands will not be impacted as a result of Tennessee's access road minimization plan;

5. Tennessee will give up its rights under the 2007 lease with NJDEP for 10 feet of existing permanently maintained lease area on the edge of the leased ROW (opposite from the proposed NEUP construction) that is associated with the existing 24-inch diameter pipeline. As a result, approximately 9.71 acres will be returned to the State and will no longer be maintained for pipeline operations; and

6. Tennessee will use the horizontal directional drilling method of construction (a specialized construction technique designed to minimize environmental impacts to sensitive resources) to cross the Monksville Reservoir and the Delaware River.

In addition to the minimization commitments described above, NJDEP and the New Jersey State House Commission has approved a 25-year lease with the following compensation and mitigation:

- Cash compensation (for leased area and temporary work space) = $5,194,723.81
- Replacement lands for leased area at 4:1 = 71.04 acres
- Replacement lands for temporary work space at 1:1 = 75.751 acres
- Replacement lands for areas to be blasted within temporary workspace at 3:1=2.00 acres
- Additional mitigation as required under New Jersey's Freshwater Wetlands Protection Act, Flood Hazard Control Act, No Net Loss Reforestation Act, and the Highlands Water Protection and Planning Act.

The total compensation and mitigation to be provided to the State of New Jersey for the 25-year NEUP lease exceeds $12.5 million. A table depicting the total compensation and mitigation package is contained within Table 4 in Attachment B.

Tennessee intends to satisfy its land replacement obligation for the 25-year lease by purchasing a portion of the Ilac Property, which has been identified by NJDEP's Green Acres Program as an acquisition priority. It is NJDEP's intention that a portion of the Ilac Property will also be used as replacement land for the two conversion parcels. NPS has approved NJDEP's request to use a portion of the Ilac Property in this manner.[12] See Step 3B-6d above.

[12] In a February 23, 2012 letter from NJDEP to Mr. Jack W. Howard, Manager, State and Local Assistance Programs, NPS, NJDEP sought a waiver of applicability to acquire 71.04 acres of the Ilac property to be used to fulfill the LWCF requirements for any future Section 6(f) conversions. In a letter dated March 22, 2012, Mr. Howard approved NJDEP's request. See Attachment E.

The proposed replacement parcel for the two conversion areas is 6.19 acres in size, and is part of Block 20001, Lot 5 on the tax map of Rockaway Township. This area, which is depicted in Figure 5, is adjacent to the Wildcat Ridge WMA and will be preserved under Section 6(f) of the LWCF Act.

Tennessee will also mitigate for the environmental impacts caused by the construction of Loop 325 through Ringwood State Park through the NJDEP Land Use Regulation Program ("LURP") permitting process. Specifically, construction of Loop 325 through Block 1101, Lot 5 will have no net loss on wetland resources, but will result in the permanent change of 0.15 acres of forested wetland to emergent wetland. As a result, mitigation is required and will be addressed in the freshwater wetlands permit application that is currently pending before the NJDEP. TGP will restore wetlands and transition areas temporarily impacted by the loop segments as required by NJDEP's freshwater wetlands regulations at N.J.A.C. 7:7A. Landscape plans have been developed by TGP to be used as a basis for restoring the temporary impacts and were submitted to LURP for review and approval (EA; TGP 2011c).

TGP will mitigate for the permanent loss of forest habitats through mitigation plans that have been submitted to LURP and the Green Acres Program. Construction will be expedited to the greatest extent possible to minimize impacts to wildlife (EA; TGP 2011c).

During construction, other mitigation procedures will also be taken using Best Management Practices to ensure that minimal impacts will occur. Equipment bridges, crane mats, silt fencing, and pads will be used to decrease erosion in work areas and along stream banks (EA; TGP 2011c).

Step 5-6. Intergovernmental review process: Does the State have an Intergovernmental Review Process (Executive Order 12372)? If yes, has the LWCF Program been selected for review under the State Intergovernmental Review Process? If yes, was this proposal reviewed by the appropriate State, metropolitan, regional and local agencies, and if so, attach any information and comments received about this proposal. If proposal was not reviewed, explain why not.

The State of New Jersey has an Intergovernmental Review Process (Executive Order 12372). This conversion proposal has been extensively reviewed by the NJDEP and the New Jersey State House Commission in conjunction with three proposals to divert local Green Acres-encumbered parkland and a lease of State-owned lands needed in order to construct the NEUP project. The commissioner of the NJDEP approved the proposed local diversions and the lease of State-owned lands, and on June 7, 2012, the members of the New Jersey State House Commission voted to approve these applications. The areas proposed for conversion are located within the State-owned lands approved for leasing by the NJDEP and the New Jersey State House Commission.

Step 5-7. Public Comment Periods (How Long, When in the Process, Who Was Invited to Comment) and Agency Response.

The Project has undergone significant public comment at both the federal and State levels. The public has had numerous opportunities and venues to present public comment about the Project, and as described in detail below, the agencies with jurisdiction over the Project held numerous public meetings and responded to the public's verbal and written public comments. The following is an overview of the public process related to the NEUP.

a. Federal Public Process.

At the federal level, Tennessee participated in the FERC's pre-filing process in Docket No. PF10-23-000. The FERC participated in four public open houses sponsored by Tennessee in the Project area in September 2010. In October 2010, the FERC issued a *Notice of Intent to Prepare an Environmental Assessment for the Planned Northeast Upgrade Project, Request for Comments on Environmental Issue, and Notice of Public Scoping Meetings ("NOI")*. The NOI was published in the Federal Register and was sent to over 1,500 parties including federal, state and local government officials; agency representatives; environmental and public interest organizations, local libraries and newspapers; Native American groups; and property owners affected by the proposed facilities.

The FERC then conducted three public scoping meetings to give agencies and the general public an opportunity to learn about the Project and to participate in the environmental analysis that would be addressed in the EA. The scoping meetings were held in Ringwood, New Jersey, and Milford and Wyalusing, Pennsylvania on November 1, 3 and 4, 2010, respectively. (The transcripts of the scoping meetings and the written scoping hearing comments are available at www.ferc.gov by entering Docket No. PF10-23-000).

Tennessee filed the Certificate application for the Project on March 31, 2011 in Docket No. CP11-161-000. The FERC issued a notice of the Certificate application on April 13, 2011, and provided interested parties with the opportunity to intervene in or comment on the Certificate application through May 4, 2011.

On July 27, 2011, the FERC requested comments from landowners and other stakeholders potentially affected by route alternatives for proposed Loop 323 in Montague Township, New Jersey. In response to the comments received, Tennessee revised its proposed alignment of Loop 323 to reduce impacts on a continuous forest block and the federally-endangered bog turtle.

The FERC issued the EA for the Project on November 21, 2011, and provided a 30-day comment period (through December 21, 2011) for the submission of comments on the EA.

In its Order Issuing Certificate and Approving Abandonment in Docket No. CP 11-161-000, dated May 29, 2012, the FERC responded to the written and verbal comments received during the public scoping process and certificate process from affected landowners, concerned citizens, government agencies, and other organizations. See Attachment B.

b. State Public Process.

For the lease of State-owned lands, NJDEP's Green Acres Program held three public hearings on August 17, 2011, August 18, 2011, and September 7, 2011 to provide the public with an opportunity to provide comments on the proposed lease to Tennessee of the lands in High Point State Park in Montague (Sussex County), Long Pond Ironworks State Park in Ringwood Borough and West Milford Township (Passaic County), and Ringwood State Park in Ringwood Borough (Passaic County) and Mahwah Township (Bergen County), and the proposed replacement land (e.g., the "Ilac Property") being offered by Tennessee. NJDEP posted the transcripts of these three hearings on the Green Acres' website on September 16, 2011 at www.state.nj.us/dep/greenacres/neup.html. NJDEP extended the public comment period to September 30, 2011 to allow the public an opportunity to review the transcripts prior to the close of the comment period. NJDEP prepared a detailed Response to Public Comments document that addressed the public comments received at the three public hearings, as well as the written comments that were submitted to NJDEP both before and after the public hearings.[13] A copy of the Response to Public Comments document is available for review at www.state.nj.us/dep/greenacres/neup.html.

For the proposed deforestation and reforestation of over one-half acre of State-lands on both Loops 323 and 325, the New Jersey No Net Lost Reforestation Act ("No Net Loss Act") is applicable. See N.J.S.A. 13:1L-14.1 et seq. As part of the requirements of the No Net Loss Act, NJDEP conducted two public forums, one on August 3, 2011 (for Loop 323) and one on August 4, 2011 (for Loop 325). These public forums gave Tennessee the opportunity to present its plans for deforestation and reforestation on the State-owned lands affected by the NEUP project. The transcripts of the public forums are posted on the Green Acres' website at www.state.nj.us/dep/greenacres/neup.html.

As mentioned in Step 5-6 above, the NEUP project also required the diversion of three Green Acres encumbered parcels (e.g., these parcels are encumbered by Green Acres' restrictions, but are not owned by the State of New Jersey). The focus of these hearings was on the local diversions, but the public may have discussed the lease of the State-owned lands at these hearings. In accordance with the Green Acres' regulations at N.J.A.C. 7:36-26.8, the following public hearings were conducted as part of the local diversion process:

1. Waterview Park, Borough of Ringwood (Owner: Passaic River Coalition): a Green Acres scoping hearing was held on July 25, 2011 and a Green Acres final hearing was held on January 26, 2012.

2. Borough Hall Park, Borough of Ringwood (Owner: Borough of Ringwood): a Green Acres scoping hearing was held on July 25, 2011 and a Green Acres final hearing was held on January 26, 2012.

[13] NJDEP stated in its Notice Extending the Public Comment Period (see www.nj.gov.dep/greenacres/neup.html) that it would consider all comments received, including those received after September 30, 2011, but that it would not include responses to these comments in the Response to Comments document.

3. Ramapo Mountain Reservation, Township of Mahwah (Owner: County of Bergen): a Green Acres scoping hearing was held on July 28, 2011 and a Green Acres final hearing was held on January 25, 2012. (Since the NEUP requires the conveyance of County-owned property, the Local Lands and Buildings Law at N.J.S.A. 40A:12-1 et seq. also applies. Among other things, the Local Lands and Buildings Act requires two public hearings. The Green Acres' final hearing on January 25, 2012 served as the first required public hearing; the second required public hearing under the Local Lands and Buildings Law occurred on February 9, 2012.)

Step 5-8. Any Formal Decision and Supporting Reasons Regarding Degree of Potential Impacts to the Human Environment.

Following the extensive public process described in Step 5-7 above and after reviewing the voluminous record, the FERC approved the Project in the Certificate issued on May 29, 2012. In its Order Issuing Certificate and Approving Abandonment, the FERC stated:

> In conclusion, we have reviewed the information and analysis contained in the record, including the EA, regarding the potential environmental effect of the project. Based on our consideration of this information, we agree with the conclusions presented in the EA and find that if constructed and operated in accordance with Tennessee's application, as supplemented, and the conditions imposed herein, *approval of this proposal would not constitute a major federal action significantly affecting the quality of the human environment.* [Emphasis added.] [See Attachment B at P 201.]

The FERC Certificate was conditioned on Tennessee's compliance with nineteen environmental conditions that are set forth in Appendix B of the Order. See Attachment A at pp. 77-83.

As described above, the NJDEP also thoroughly reviewed and approved the lease of the State-owned lands. The New Jersey State House Commission approved this application at its June 7, 2012 meeting, thereby authorizing the 25-year lease of the State lands. Specific concerns affecting the environment will be addressed in the various permit applications that are currently pending before NJDEP's LURP. Tennessee expects to receive land use permits that are aimed at protecting and/or minimizing impacts to the environment shortly.

The State House Commission approval is conditioned upon NJDEP issuing applicable land use permits for the Project (such as, freshwater wetlands and flood hazard area permits), as well as completion of the review of the Project by the NJ SHPO under Section 106 of the National Historic Preservation Act, as amended.

Step 5-9. Was this Proposed LWCF Federal Action and/or Other Federal Actions Analyzed/Reviewed in Any of the Previous Environmental Reviews? If so, What Was Analyzed and What Impacts Were Identified? Provide Specific Environmental Review Document References.

As stated above, the lands encumbered by Section 6(f) are located within Ringwood State Park and will be crossed by Loop 325. The FERC has reviewed the approximately 40-mile pipeline route alignment (which includes the impacted Section 6(f) parcels), and has thoroughly investigated the environmental impacts associated with the Project. The impacts that will result from the Project have been addressed in the EA and the FERC Certificate, including the nineteen environmental conditions included in the FERC Certificate.

STEP 6. ENVIRONMENTAL SCREENING FORM (ESF)

Part A – Environmental Resources (Conversion Area: Block 1101, Lot 5)

Step 6A-1 Geological Resources.

According to the Natural Resource Conservation Service (NRCS) Soil Data Mart and the NCSS Web Soil Survey, soils within the Project area are mapped as Rockaway Sandy Loam (RobCC), Rockaway Rock outcrop (RomC), Ridgebury loam (RkgBc), and Hibernia loam (HhmCc). These soils are found to be very to extremely stony and have a slight erosion potential (TGP 2011g, Section 7.1.2.5.1). Areas to be excavated during the Project's construction would cause short-term disturbance of subsurface materials by excavations and the installation of the pipeline. Top soils and subsoils would be segregated and soil horizons restored following construction.

Dewatering of the trench, bore pits and/or additional precautions may be necessary where groundwater is encountered during pipeline installation in this particular area. This impact will not extend beyond Project boundaries and will be temporary in nature. Installation of the pipeline may cause settlement of loose sand and soil materials but considering the past disturbance of constructing the initial pipeline, the Project is not expected to result in significant impacts to geological resources (TGP 2011g, Section 7.3.1).

Step 6A-2 Air Quality.

The total air emissions for Loop 325 construction are below de minimis. Impacts to air quality are temporary in nature and limited to emissions from construction equipment. These construction-related increases in particulate matter will be temporarily elevated, but mitigated using dust control measures such as watering activities, which will be implemented as necessary to minimize an increase in dust and particulate matter. As a result, an impact level of no/negligible was chosen for this environmental resource (TGP 2011i, Section 9.1.5).

Step 6A-3 Sound.

Passaic County adheres to the New Jersey Administrative Code 7:29 for noise control. This code states that continuous noise between 7 a.m. and 10 p.m. must remain below 65 dBA at any residential property line, and continuous noise between 10 p.m. and 7 a.m. must remain below 50 dBA at any residential property line. At community service facilities, continuous noise must remain below 65 dBA regardless of time of day. The code also places limits on sound pressure level at each octave band. Special instructions are given for impulsive noise (TGP 2011i, Table 9.2-1).

Noise sensitive receptors were identified within the immediate vicinity of the proposed conversion area. Ringwood Manor State Park, a noise sensitive receptor, surrounds the Loop 325 portion of the Project. The Project will result in temporary and short-term noise impacts due to the construction of the Loop 325 portion of the Project. Standard construction equipment and techniques will be used for this Project to ensure that no significant changes in noise levels

would take place. An impact level of no/negligible was chosen for this environmental resource (TGP 2011i, Section 9.2.5).

Step 6A-4 Water Quality/Quantity.

Two USEPA sole source aquifers ("SSA"s) underlie Loop 325; approximately 5.78 miles of Loop 325 overly the Highlands SSA and the remainder of the loop overlies the Ramapo SSA. The Highlands SSA underlies the conversion area on Block 1101, Lot 5.

The majority of groundwater in the area contains less than 500 milligrams per liter dissolved solids and ranges in temperature from ten to fifteen degrees Celsius. Water quality is considered to be very good beneath the conversion area. However, the aquifer system is susceptible to contamination from spills along existing transportation routes, on-site septic disposal, and stormwater runoff. Ringwood Borough withdraws 514,000 gallons per day from the Highlands SSA system. Recharge in this SSA is almost entirely from precipitation (TGP 2011c, Section 2.1.1.2.2).

A stormwater management plan incorporated into the design of the Project will provide water quality treatment, water quantity control, and groundwater recharge. Erosion and Sediment Control Plans for the Project will be implemented to ensure water quality is protected and no adverse impacts from sedimentation and erosion occur within the Project area. In addition, TGP will obtain a certification under Section 401 of the Clean Water Act; this certification is expected to be received in fall 2012 (EA).

No significant impacts will occur to water quality within the conversion area as part of the Loop 325 portion of the Project. Therefore, an impact level of no/negligible was chosen for this environmental resource (TGP 2011c, Section 2.2.7.5).

Step 6A-5 Stream Flow Characteristics.

Based on aerial imagery and topographic mapping, one stream (L5 S0006, Unnamed Tributary to Cupsaw Brook) is located within the Section 6(f) boundary on Block 1101, Lot 5. No stream flow characteristics would need to be altered due to the Loop 325 portion of the Project. Therefore, an assessment of impacts to this resource is considered not applicable (TGP 2011c, Table 2.2-10).

Step 6A-6 Marine/Estuarine.

One stream is located within the Section 6(f) boundary on Block 1101, Lot 5, however, it is not within a tidal reach. Therefore, an assessment of impacts to this resource is considered not applicable (EA).

Step 6A-7 Floodplains/Wetlands.

The Section 6(f) boundary on Block 1101, Lot 5 is located in Zone D (areas with possible but undetermined flood hazards). No flood hazard analysis has been conducted of the FEMA 100-

year floodplain. No impacts are anticipated to floodplains because of the nature of the Project (i.e., underground pipeline project – no aboveground structures).

Wetlands were identified and delineated for the Loop 325 portion of the Project in accordance with the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (Federal Interagency Committee for Wetland Delineation 1989, as cited in EA, Section 2.2.4.1) and the Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (USACE 2009, as cited in EA, Section 2.2.4.1). Based on the delineation, two wetlands areas affected by the Project are located within the conversion area. These wetlands are identified as L5 W011 and L5 W010. Both wetlands are classified as palustrine forested/scrub-shrub (PFO/PSS) wetlands. Both wetlands are exceptional value (EA, Appendices D and E).

Impacts to wetlands will be mitigated in accordance with applicable NJDEP regulations and permit conditions. A Freshwater Wetlands permit application for Loop 325 has been submitted to NJDEP and is currently under review. An impact level of minor was chosen for this environmental resource.

Step 6A-8 Land Use.

Review of the NJDEP Geographic Information System (GIS) data layers of State-Owned, Protected Open Space and Recreation Areas in New Jersey (NJDEP 1995, as cited in TGP 2011h, Section 8.3.1.1.2) and Highlands (NJDEP 2007, as cited in TGP 2011h, Section 8.3.1.1.2), as well as a detailed title review conducted by TGP, identified state public conservation lands in the vicinity of Loop 325 and the conversion area. Loop 325 crosses through Ringwood State Park, which encompasses the conversion area. The NJDEP Division of Parks and Forestry manages this 4,044-acre state park. Ringwood State Park offers a visitor's center, botanical garden, hiking, horseback riding, picnicking, swimming, hunting, a skeet range, and two historical manors. The park is used for hiking and fishing, primarily between April and September, with peak use in July and August. Loop 325 of the NEUP will cross the Ringwood-Ramapo Trail, within Block 1101, Lot 5, but the location of the crossing is not within the conversion area. Where the Ringwood-Ramapo Trail will cross the NEUP is to the south of and outside the Section 6(f) boundary. The Mountain Bike Loop Trail is also located within Section 6(f) boundary on Block 1101, Lot 5, but will not be crossed by the NEUP at any point either within or outside of the Section 6(f) boundary. As described in Step 5-5 above, TGP has been working closely with the NJDEP to avoid and minimize impacts to Ringwood State Park, and will perform appropriate mitigation for those impacts that cannot be avoided in accordance with NJDEP's LURP (TGP 2011h, Section 8.3.1.1.2).

The conversion on Block 1101, Lot 5 will be compensated for by the replacement park property described above. Therefore, since no adverse impacts to land use are anticipated as a result of the proposed conversion, an impact level of no/negligible was chosen for this environmental resource.

Step 6A-9 Circulation, Transportation.

Tennessee does not anticipate any transportation or circulation impacts to the 695-foot conversion area during the construction of Loop 325. Equipment and workers will be brought to the site along the existing ROW. An unnamed access road, L5-AR-50, is located east of the conversion area within the Section 6(f) boundary on Lot 1101, Lot 5, which Tennessee will continue to use to access the existing pipeline for maintenance and for access to the Project construction corridor. However, this road will not be enlarged or widened, no trees will be removed or side-cut, and no recreational facilities will be impacted. The road will be used as designed, although some gravel may be placed within the existing road bed. The use of this road prevents interference with the adjacent Thunder Mountain Trap and Skeet Shooting Range. The impact level for this environmental resource is no/negligible (EA, Section 2.5.4).

Step 6A-10 Threatened & Endangered Species.

In New Jersey, threatened and endangered species are protected under the New Jersey State Endangered and Non-game Species Conservation Act and the Endangered Plant Species List Act. Numerous surveys were conducted for threatened or endangered species along Loop 325 and within the conversion area. Consultation with the NJDEP Natural Heritage Program (NHP) was initiated in regard to the presence of threatened and endangered species within the proposed conversion area.

In August 2010 and continuing to June 2012, botanical surveys were conducted. Surveys for Sphagnum moss (*Sphagnum angustifolium* and *Sphagnum majus* ssp. *Norvegicum*) were implemented in appropriate habitats between Morris Road at Cupsaw Brook and Sloatsburg Road. None of the target rare species were encountered.

Timber rattlesnake and northern copperhead surveys were completed along Loop 325 in the summer of 2010. Areas of potential timber rattlesnake gestating habitat were identified, delineated, and Phase II gestation surveys were performed in summer 2010 for the timber rattlesnakes. No gestating rattlesnakes were documented within the proposed conversion area (EA, Section 2.3.3.5).

Wood turtle surveys were conducted in April through June 2011 and included visual searches in all areas of potential habitat including streams and stream banks, emergent and forested wetlands, and upland forest. It was confirmed that wood turtle habitat exists just west of the conversion area, at Cupsaw Brook (TGP 2012). As the wood turtle habitat is not located on the conversion area, no impacts to this habitat are anticipated.

TGP initiated habitat and presence/absence surveys for barred owl and red-shouldered hawk in 2011. No red-shouldered hawks or barred owls were observed within the conversion area. However, several barred owls were observed within the general vicinity of the conversion area and a red-shouldered hawk was observed along the western edge of the conversion area between April and May of 2011. The positive sightings for the barred owls were generally associated with mature interior of Ringwood State Park (TGP 2011l, Section 4.4.1 and 4.1.2).

Vernal pool surveys were also conducted in April 2011 and spring of 2012 to identify vernal habitat and survey for blue-spotted salamanders. Field surveys to identify potential vernal habitat were conducted between March and April 2011. No habitat was identified within or adjacent to the proposed conversion area. However, vernal habitat was identified within the general area of the proposed conversion area at MP 5.30. Spotted salamander (23 egg masses and numerous spermataphores), marbled salamander larva, wood frog (160 egg masses), adult red-spotted newt, and chorusing spring peeper were observed within the vernal pool (TGP 2011k, Table 4.0-1). To protect vernal pool habitat areas, TGP will implement the procedures detailed in its Erosion and Sediment Control Plans, including replacement of topsoil, installation of trench plugs, and strict restoration of all pre-construction grades and contours to maintain surface and groundwater hydrology to support seasonal pooling of surface water (EA, Section 2.3.3.5).

New Jersey lists three mussel species as state endangered, and five as state threatened. Field habitat assessments of all identified streams crossed by Loop 325 were evaluated for the potential for habitat of dwarf wedge mussel and other native unionoids. No endangered mussels were identified within the conversion area, and stream L5 S006 (Unnamed Tributary to Cupsaw Brook) lacked suitable habitat (TGP 2001m, Section 6.1.14).

Implementation of wetland restoration procedures will help reduce impacts to threatened and endangered species.

The USFWS reviewed Loops 323 (New Jersey portion) and 325 of the NEUP Project pursuant to the Endangered Species Act of 1973 ("ESA") to ensure the protection of federally listed endangered and threatened species. In a letter dated June 15, 2012, the USFWS concurred that the proposed Project "is not likely to adversely affect federally listed or candidate species …" Accordingly, the USFWS concluded that no further consultation pursuant to the ESA is required. See Attachment G. An assessment of impacts to this resource is, therefore, considered no/negligible (EA, Section 2.3.5).

Step 6A-11 Unique Ecosystems.

No unique ecosystems were identified within the proposed conversion area (EA, Section 2.3.2.2). Therefore, an assessment of impacts to this resource is considered not applicable.

Step 6A-12 Unique or Important Wildlife/Wildlife Habitat.

Loop 325 crosses the Ringwood State Park/Ringwood Manor, which is considered a significant wildlife habitat and wildlife managed land (TGP 2011d, Section 3.2.2).

Long-term impacts to wildlife habitat due to construction and operations of the Project will be limited to clearing of upland and wetland forest required for temporary workspace and new leased area. The wildlife populations that utilize the Project area will not be permanently adversely affected by the Project. While temporary impacts on food, cover, and water sources may occur, none of the species located within the Project area are specialized in such a way that

construction of the Project will inhibit the overall fitness or reproductive output of the populations as a whole (TGP 2011d, Section 3.2.3).

TGP will comply with the No Net Loss Reforestation Act (NJSA 13:1L-14 1 et seq.) to restore all areas of forested habitat impacted by the Project. Therefore, an impact level of no/negligible was chosen for this environmental resource.

Step 6A-13 Unique or Important Fish/Fish Habitat.

No unique or important fish or fish habitat was identified within the proposed conversion area. Therefore, this environmental resource is considered not applicable (EA).

Step 6A-14 Invasive Species.

TGP has prepared an Invasive Species Management Plan (ISMP) for the Project to control the spread of invasive plant species in areas disturbed by construction. Some measures include the removal of invasive species from the ROW in coordination with landowners and applicable Federal, state, and local regulatory agencies; the application of herbicides approved by state and Federal agencies; and monitoring for invasive species during the first five years after construction, with additional annual surveys conducted if required by the FERC, USACE or applicable state agencies. The reapplication of herbicides would be managed on an as-needed basis. The implementation of the ISMP will significantly reduce existing populations of invasive species while promoting the establishment of native plant populations. The impact level for this category is no/negligible (EA, Section 2.3.1.1).

Step 6A-15 Recreational Resources.

The proposed conversion area is located within the Ringwood State Park. Ringwood State Park offers a visitor's center, botanical garden, hiking, horseback riding, picnicking, swimming, hunting, a skeet range, and two historical manors. The park is used for hiking and fishing, primarily between April and September, with peak use in July and August. Loop 325 of the Project will cross the Ringwood-Ramapo Trail, within Block 1101, Lot 5, but the location of the crossing is not within the conversion area. Where the NEUP will cross the Ringwood-Ramapo Trail is to the south of and outside the Section 6(f) boundary. The Mountain Bike Loop Trail is also located within Section 6(f) boundary on Block 1101, Lot 5, but will not be crossed by the NEUP at any point either within or outside of the Section 6(f) boundary. The impact level for this environmental resource is no/negligible (TGP 2011h, Section 8.3.1.1.2).

Step 6A-16 Accessibility.

The proposed conversion will have no effect on the accessibility of populations with disabilities to Ringwood State Park. Therefore, this category is considered to be not applicable.

Step 6A-17 Aesthetics.

Construction for the Loop 325 portion of the Project would alter visual aesthetics by removing existing vegetation and disturbing soils. However, this impact would be temporary and minor in nature to the aesthetics of the surrounding land. The proposed conversion area is located within a forested area. The impact level for this environmental resource is no/negligible (TGP 2011h, Section 8.4.1).

Step 6A-18 Historic/Cultural Resources.

TGP initiated Section 106 consultations in May 2010 for the Loop 325 portion of the Project in accordance with the rules and guidelines issued by the NJ SHPO. The results of the Phase I archaeological survey reports warranted a Phase II archaeological investigation at six sites within Loop 325. However, the six sites evaluated during the Phase II investigation do not include the conversion area on Block 1101, Lot 5 because no cultural resources were identified within this area during the Phase I archaeological survey.

The Phase II archaeological survey report does include Site 28A189, which was identified approximately 0.25-mile to the east-southeast of the proposed conversion area on L5 AR 50 between MP 4.82 and MP 4.85 (Gray & Pape, Inc. 2012). However, this site is *not* within the conversion area or even within the Section 6(f) boundary. Accordingly, the impact level for this environmental resource is no/negligible an impact level of no/negligible.

The Draft Phase II archaeological survey report was submitted to the NJ SHPO in January 2012, and Vincent Maresca, NJ SHPO, is in the process of finalizing his review.

Step 6A-19 Socioeconomics.

Potential effects related to the number of construction workers that would work on Loop 325 portion of the Project could impact population, public services, and temporary housing during the construction season. Other effects associated with the Loop 325 portion of the Project include increased property tax revenue, increased job opportunities, and increased income associated with local construction employment. Impacts to this resource as a result of the proposed conversion have been determined to be negligible (TGP 2011f, Sections 5.2 and 5.8.2).

Step 6A-20 Minority and Low Income Populations.

The proposed conversion area is located within Ringwood State Park. The proposed conversion will not unjustly affect minority and low income populations. Therefore, an assessment of impacts to this resource is considered not applicable (TGP 2011f, Section 5.7).

Step 6A-21 Energy Resources.

The proposed conversion area consists of a portion of Loop 325, which is part of the larger NEUP Project. Alternative energy resources (e.g., geothermal, fossil fuels, etc.) were analyzed as part of the EA. While Tennessee supports energy conservation, there remains a need at the

present time for the additional natural gas capacity that will be created by the NEUP. Two shippers have executed binding precedent agreements for all of the transportation capacity to be created by the Project, demonstrating that the additional capacity will be immediately utilized (EA, Section 1.2). As there is a demonstrated need for additional natural gas transportation capacity, as found by the FERC in the May 29, 2012 FERC Certificate, there will be no adverse impact to energy resources in the Project area or in the proposed conversion area.

Step 6A-22 Other Agency Land Use Plans or Policies.

The proposed conversion area is located within the Highlands Area Preservation boundary and is subject to the Highlands Water Protection and Planning Act ("Highlands Act") of 2004. The main goals of the Highlands Act are to preserve open space and natural resources for public enjoyment and to protect drinking water resources. The converted area will be replaced by a portion of the Ilac Property, which is also located within the Highlands Preservation Area. Moreover, Tennessee will comply with a Comprehensive Mitigation Plan that was developed by the Highlands Council and Tennessee to provide mitigation for the Highlands resources affected by the NEUP. See Attachment B, Table 4. Based on the replacement land and the mitigation for Highlands resources, the impact level for this category is no/negligible (EA, Section 2.4.3.2).

Step 6A-23 Contamination/Hazardous Materials.

TGP reviewed regulatory databases to identify known and potential hazardous waste sites within the area of Loop 325. The database search identified numerous potentially hazardous sites within the general vicinity of Loop 325. Directly adjacent to the conversion area, along the route of the pipeline loop, is the Thunder Mountain Skeet and Trap Shooting Range. This area is being investigated by TGP for possible lead contamination due to the shot and clay pigeons used at the range. TGP is conducting sampling and has applied for an environmental permit needed for the investigation. Although numerous potentially hazardous sites exist surrounding the conversion area, no known contaminated sites were identified on the conversion area itself. Therefore, an assessment of impacts to this resource is considered not applicable (EA, Section 2.4.5.1)

Step 6A-24 Other Important Environmental Resources.

No other important environmental resources are present within or adjacent to the proposed conversion area. Therefore, an assessment of impacts to this resource is considered not applicable.

STEP 6. ENVIRONMENTAL SCREENING FORM (ESF).

Part A – Environmental Resources (Conversion Area: Block 1, Lot 1)

Step 6A-1 Geological Resources.

According to the U.S. Department of Agriculture-Natural Resources Conservation Service's (USDA-NRCS) Soil Data Mart Web Soil Survey information for the Bergen County Soil Survey Area (USDA-NRCS 1995), soils within the conversion area within Block 1, Lot 1 are mapped as the Rockaway-Outcrop. Within Block 1, Lot 1, areas exist that exhibit erosion potential, compaction potential, poor drainage potential, poor revegetation potential, and shallow depth to groundwater table (TGP 2011g, Section 7.1.1.5).

Areas to be excavated during the Project's construction would cause short-term disturbance of subsurface materials by excavation and the installation of the pipeline. Top soils and subsoils would be segregated and soil horizons restored following construction.

Dewatering of the trench, bore pits and/or additional precautions may be necessary where groundwater is encountered during pipeline installation in this particular area. This impact will not extend beyond Project boundaries and will be temporary in nature. Installation of the pipeline may cause settlement of loose sand and soil materials but considering the past disturbance of constructing the initial pipeline, the Project is not expect to result in significant impacts to geological resources (TGP 2011g, Section 7.3.1).

Step 6A-2 Air Quality.

The total air emissions for Loop 325 construction are below de minimis. Impacts to air quality are temporary in nature and limited to emissions from construction equipment. These construction-related increases in particulate matter will be temporarily elevated, but mitigated using dust control measures such as watering activities, which will be implemented as necessary to minimize an increase in dust and particulate matter. As a result, the impact level for this environmental resource is no/negligible (TGP 2011i, Section 9.1.5).

Step 6A-3 Sound.

Bergen County adheres to the N.J.A.C. 7:29 for noise control. This code states that continuous noise between 7 a.m. and 10 p.m. must remain below 65 dBA at any residential property line, and continuous noise between 10 p.m. and 7 a.m. must remain below 50 dBA at any residential property line. At community service facilities, continuous noise must remain below 65 dBA regardless of time of day. The code also places limits on sound pressure level at each octave band. Special instructions are given for impulsive noise (TGP 2011i, Table 9.2-1).

Noise sensitive receptors were identified within the immediate vicinity of the proposed conversion area. Ringwood Manor State Park, a noise sensitive receptor, surrounds the Loop 325 portion of the Project. The Project will result in temporary and short-term noise impacts due to the construction of the Loop 325 portion of the Project. Standard construction equipment and

techniques will be used for this Project to ensure that no significant changes in noise levels would take place. The impact level for this environmental resource is no/negligible (TGP 2011i, Section 9.2.5).

Step 6A-4 Water Quality/Quantity.

Two USEPA SSAs underlie Loop 325; approximately 5.78 miles of Loop 325 overly the Highlands SSA and the remainder of the loop overlies the Ramapo SSA. The Ramapo SSA underlies the proposed conversion area on Block 1, Lot 1 (TGP 2011c, Section 2.1.1.2.1).

Water from the Precambrian gneiss that underlies the region is characteristically low in dissolved solids content, is soft to moderately hard, and is acidic to neutral. Mahwah, with a population of 16,278, is dependent solely on the Ramapo SSA system for its water supply. The total population residing within the aquifer service area is estimated at 300,000. The population dependent on groundwater is estimated at 180,000. An average of 57 percent of the population depends on groundwater for its public water supply (TGP 2011c, Section 2.1.1.2.1).

Construction of Loop 325 could potentially have a minor, temporary, and localized effect on groundwater and surface water resources (EA, Section 2.10.5.2). Increased turbidity, reduced water levels, and contamination could be potentially impact groundwater resources. The greatest potential impacts of pipeline construction on surface waters would result from an increase in sediment loading to surface waters either during active construction within a waterbody or due to runoff from construction near water bodies. The level of impact of the Project on surface waters would depend on precipitation events, sediment loads, stream area/velocity, channel integrity, and bed material. Project impacts on water resources would be greatest during construction and would quickly diminish after construction, as the ROW is restored and re-vegetated (EA, Section 2.10.5.2 and TGP 2011c, Section 2.2.3.2).

A stormwater management plan incorporated into the design of the Project will provide water quality treatment, water quantity control, and groundwater recharge. Erosion and Sediment Control Plans for the Project will be implemented to ensure water quality is protected and no adverse impacts from sedimentation and erosion occur within the Project area. In addition, TGP will obtain a certification under Section 401 of the Clean Water Act; this certification is expected to be received in fall 2012 (EA). An impact level of minor was chosen for this environmental resource.

Step 6A-5 Stream Flow Characteristics.

Based on aerial imagery and topographic mapping, no streams are located within the proposed conversion area and no stream flow characteristics would need to be altered due to the construction of Loop 325. Therefore, an assessment of impacts to this resource is considered not applicable.

Step 6A-6 Marine/Estuarine.

Based on aerial imagery and topographic mapping, no streams are located within the conversion area; therefore, there is no potential for any tidal water resources on the property. An assessment of impacts to this resource is considered not applicable.

Step 6A-7 Floodplains/Wetlands.

No floodplains were mapped within the proposed conversion area.

Wetlands were identified and delineated for Loop 325 in accordance with the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (Federal Interagency Committee for Wetland Delineation 1989, as cited in EA, Section 2.2.4.1) and the Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (USACE 2009, as cited in EA, Section 2.2.4.1). Based on the delineation, two wetlands (L5 W018 and L5 W27) are located within or adjacent to the proposed conversion area. Both wetlands are considered exceptional value and are classified as PFO/PEM and PEM respectively.

Impacts to wetlands will be mitigated in accordance with all applicable NJDEP regulations and permit conditions. A Freshwater Wetlands permit application for Loop 325 has been submitted to NJDEP and is currently under review. The impact level for this environmental resource is no/negligible.

Step 6A-8 Land Use.

Review of the NJDEP GIS data layers of State Owned, Protected Open Space and Recreation Areas in New Jersey (NJDEP 1995, as cited in TGP 2011h, Section 8.3.1.1.2) and Highlands (NJDEP 2007, as cited in TGP 2011h, Section 8.3.1.1.2), as well as a detailed title review conducted by TGP, identified state public conservation lands in the vicinity of Loop 325 and the proposed conversion area. Loop 325 crosses through Ringwood State Park, which encompasses the proposed conversion area. The NJDEP Division of Parks and Forestry manages this 4,044-acre state park. Ringwood State Park offers a visitor's center, botanical garden, hiking, horseback riding, picnicking, swimming, hunting, a skeet range, and two historical manors. The park is used for hiking and fishing, primarily between April and September, with peak use in July and August. One hiking trail, the Halifax Trail, is located within the conversion area and within the Section 6(f) boundary. See Figure 4.

Depending on the timing of the construction, the Project could temporarily impact the public's use of the Halifax Trail. However, these impacts would be short-term (limited to the duration of construction), and restoration of the conversion area would be conducted after construction is completed. As described above, Tennessee drafted a General Trails Crossing Plan, which is designed to minimize impacts to and interference with trails affected by the construction of the NEUP. As provided in the crossing plan, Tennessee will provide alternative access routes to minimize interference with the trails. NJDEP provided comments on the General Trails Crossing Plan, and Tennessee is currently addressing them.

In addition, as described in Step 5-5 above, TGP has been working closely with the NJDEP to avoid and minimize impacts to Ringwood State Park, and will perform appropriate mitigation in accordance with NJDEP's LURP for those impacts that cannot be avoided (TGP 2011h, Section 8.3.1.1.2).

The conversion on Block 1, Lot 1 will be compensated for by the replacement park property described above. Therefore, since no adverse impacts to land use are anticipated as a result of the proposed conversion, the impact level for this environmental resource is no/negligible.

Step 6A-9 Circulation, Transportation.

Tennessee does not anticipate any transportation or circulation impacts to the 3,600-foot conversion area during the construction of Loop 325. L5-AR-65 is an existing park road that is located immediately west of the proposed conversion area, and is outside the Section 6(f) boundary. This access road will be used by light duty vehicles only to access the pipeline ROW for the Loop 325 Project. A temporary slight increase in traffic will occur during construction, which will subside upon completion of the Project. No pipe string trucks and heavy equipment will use this access road. The impact level for this environmental resource is no/negligible (EA, Section 2.5.4).

Step 6A-10 Threatened and Endangered Species.

In New Jersey, threatened and endangered species are protected under the New Jersey State Endangered and Non-game Species Conservation Act and the Endangered Plant Species List Act. Numerous surveys were conducted for threatened or endangered species along Loop 325 and within the proposed conversion area. Consultation with the NJDEP Natural Heritage Program (NHP) was initiated in regard to the presence of threatened and endangered species within the proposed conversion area.

In August 2010 and continuing to June 2012, botanical surveys were conducted. Surveys for Sphagnum moss (*Sphagnum angustifolium* and *Sphagnum majus* ssp. *Norvegicum*) were implemented in appropriate habitats between the Mahwah Meter Station and MP 6.95. None of the target rare species were encountered on this portion of the proposed conversion area (TGP 2011d, Section 3.4.1.3.1).

Timber rattlesnake and northern copperhead surveys were completed along the route of Loop 325 in the summer of 2010. Areas of potential timber rattlesnake gestating habitat were identified, delineated, and Phase II gestation surveys were performed in summer 2010 for the timber rattlesnakes. No gestating rattlesnakes were documented within the proposed conversion area. TGP conducted den presence/absence surveys in accordance with the *Pre-permitting Timber Rattlesnake (Excluding the Pinelands) and Northern Copperhead Survey Protocols* (v. 01/13/ 11) in suitable habitats. No northern copperheads were identified within the proposed conversion area or for the survey (EA, Section 2.3.3.5). Therefore, no impacts will occur to the timber rattlesnake and northern copperhead.

Wood turtle surveys were conducted in April through June 2011 and included visual searches in all areas of potential habitat, including streams and stream banks, emergent and forested wetlands, and upland forest. No potential wood turtle habitat was identified within the conversion area (TGP 2012). Therefore, no impacts to potential wood turtle habitat will occur.

TGP initiated habitat and presence/absence surveys for barred owl and red-shouldered hawk in 2011. No red-shouldered hawks were observed within the conversion area. A barred owl was heard and observed after a playback call sequence within the proposed conversion area (TGP 2011l, Sections 4.1.1 and 4.1.2). To minimize impacts on the birds, TGP would conduct vegetative clearing between August 1 and March 14 in New Jersey (EA, Section 2.3.3.5).

Vernal pool surveys were also conducted in April 2011 and spring of 2012 to identify vernal habitat and survey for blue-spotted salamanders. Field surveys to identify potential vernal habitat were conducted between March and April 2011. Potential vernal pool habitat was identified and confirmed at milepost MP 6.63. Wood frog chorus, spotted salamander (2 egg masses), and adult red-spotted newt were observed within the vernal pool (TGP 2011k, Table 4.0-1). To protect vernal pool habitat areas, TGP will implement the procedures detailed in its Erosion and Sediment Control Plans, including replacement of topsoil, installation of trench plugs, and strict restoration of all pre-construction grades and contours to maintain surface and groundwater hydrology to support seasonal pooling of surface water (Attachment A, Section 2.3.3.5).

New Jersey lists three mussel species as state endangered, and five as state threatened. Field habitat assessments of all identified streams crossed by Loop 325 were evaluated for the potential for habitat of dwarf wedge mussel and other native unionoids during summer 2010 and 2011 at all stream crossings and associated access roads. No mussels or other unionoids were observed within the conversion area (TGP 2011m). Therefore, no impacts to the dwarf wedge mussel and other native unionoids are anticipated.

Implementation of the wetland restoration procedures will help reduce impacts to threatened and endangered species.

The USFWS reviewed Loops 323 (New Jersey portion) and 325 of the NEUP Project pursuant to the Endangered Species Act of 1973 (“ESA”) to ensure the protection of federally listed endangered and threatened species. In a letter dated June 15, 2012, the USFWS concurred that the proposed Project “is not likely to adversely affect federally listed or candidate species …” Accordingly, the USFWS concluded that no further consultation pursuant to the ESA is required. See Attachment G. An assessment of impacts to this resource is, therefore, considered no/negligible (EA, Section 2.3.5).

Step 6A-11 Unique Ecosystems.

No unique ecosystems were identified within the conversion area (EA, Section 3.3.2.2). Therefore, an assessment of impacts to this resource is considered not applicable.

Step 6A-12 Unique or Important Wildlife/Wildlife Habitat.

Loop 325 crosses the Ringwood State Park/Ringwood Manor, which is considered a significant wildlife habitat and wildlife managed land (TGP 2011d, Section 3.2.2).

Long-term impacts to wildlife habitat due to construction and operations of the Project will be limited to clearing of upland and wetland forest required for temporary workspace and new leased area. The wildlife populations that utilize the Project area will not be permanently adversely affected by the Project. While temporary impacts on food, cover, and water sources may occur, none of the species located within the Project area are specialized in such a way that construction of the Project will inhibit the overall fitness or reproductive output of the populations as a whole (TGP 2011d, Section 3.2.3).

TGP will comply with the No Net Loss Reforestation Act (NJSA 13:1L-14 1 et seq.) to restore all areas of forested habitat impacted by the Project. Therefore, the impact level for this environmental resource is no/negligible.

Step 6A-13 Unique or Important Fish/Fish Habitat.

No unique or important fish or fish habitat was identified within the conversion area. Therefore, this environmental resource is considered not applicable (EA).

Step 6A-14 Invasive Species.

TGP has prepared an ISMP for the Project to control the spread of invasive plant species in areas disturbed by construction. Some measures include the removal of invasive species from the ROW in coordination with landowners and applicable Federal, state, and local regulatory agencies; the application of herbicides approved by state and Federal agencies; and monitoring for invasive species during the first five years after construction, with additional annual surveys conducted if required by the FERC, USACE, or applicable state agencies. The reapplication of herbicides would be managed on an as-needed basis. The implementation of the ISMP will significantly reduce existing populations of invasive species while promoting the establishment of native plant populations. Therefore, the impact level for this category is no/negligible (EA, Section 2.3.1.1).

Step 6A-15 Recreational Resources.

The proposed conversion area is located within the Ringwood State Park. Ringwood State Park offers a visitor's center, botanical garden, hiking, horseback riding, picnicking, swimming, hunting, a skeet range, and two historical manors. The park is used for hiking and fishing primarily between April and September, with peak use in July and August. One hiking trail, the Halifax Trail, is located within the conversion area and within the Section 6(f) boundary.

Depending on the timing of construction, the Project could adversely impact hikers, fishers, site-seers, or other recreational users by restricting access and frightening wildlife in close proximity. These impacts would be short-term and limited to the duration of construction, and restoration

within the proposed conversion area would occur once construction is completed. As described in Step 6A-8 above, Tennessee prepared a General Trails Crossing Plan, which is a plan designed to minimize recreational impacts on the trails. NJDEP provided comments on the General Trails Crossing Plan, and Tennessee is currently addressing them. The impact level for this environmental resource is considered no/negligible (EA, Section 2.4.3).

Step 6A-16 Accessibility.

The proposed conversion will have no effect on the accessibility of populations with disabilities to Ringwood State Park. When the Halifax Trail within the conversion area is affected by the construction of Loop 325, hikers will be rerouted to another trail in accordance with the General Trails Crossing Plan described above. It is expected that these temporary alternative trails will be accessible to all populations, including those with disabilities. Therefore, the impact to this category is considered to be negligible.

Step 6A-17 Aesthetics.

Construction for the Loop 325 portion of the Project would alter visual aesthetics by removing existing vegetation and disturbing soils. However, this impact would be temporary and minor in nature to the aesthetics of the surrounding land. The proposed conversion area is located within a forested area. The impact level for this environmental resource is no/negligible (TGP 2011h).

Step 6A-18 Historic/Cultural Resources.

TGP initiated Section 106 consultations in May 2010 for the Loop 325 portion of the Project in accordance with the rules and guidelines issued by the NJ SHPO. The results of the Phase I archaeological survey reports warranted a Phase II archaeological investigation at six sites within Loop 325. However, the six sites evaluated during the Phase II investigation do not include the conversion area on Block 1, Lot 1 because no cultural resources were identified within this area during the Phase I archaeological survey. In fact, no cultural resources were identified within the Section 6(f) boundary on Block 1, Lot 1.

The Draft Phase II archaeological survey report was submitted to the NJ SHPO in January 2012 and included the results presented above. Vincent Maresca, NJ SHPO, is in the process of finalizing his review. An impact level of no/negligible was chosen for this environmental resource.

Step 6A-19 Socioeconomics.

Potential effects related to the number of construction workers that would work on the Loop 325 portion of the Project could impact population, public services, and temporary housing during the construction season. Other effects associated with the Loop 325 portion of the Project include increased property tax revenue, increased job opportunities, and increased income associated with local construction employment. Impacts to this resource as a result of the proposed conversion have been determined to be negligible (TGP 2011f, Sections 5.2 and 5.8.2).

Step 6A-20 Minority and Low Income Populations.

The proposed conversion area is located within Ringwood State Park. The proposed conversion will not unjustly affect minority and low income populations. Therefore, an assessment of impacts to this resource is considered not applicable (TGP 2011f, Sections 5.7).

Step 6A-21 Energy Resources.

The proposed conversion area consists of a portion of Loop 325, which is part of the larger Project. Alternative energy resources (e.g., geothermal, fossil fuels, etc.) were analyzed as part of the EA. While Tennessee supports energy conservation, there remains a need at the present time for the additional natural gas capacity that will be created by the NEUP. Two shippers have executed binding precedent agreements for all of the transportation capacity to be created by the Project, demonstrating that the additional capacity will be immediately utilized (EA, Section 1.2). As there is a demonstrated need for additional natural gas transportation capacity, as found by the FERC in the May 29, 2012 FERC Certificate, there will be no adverse impact to energy resources in the Project area or in the conversion area.

Step 6A-22 Other Agency Land Use Plans or Policies.

The proposed conversion area is located within the Highlands Area Preservation boundary and is subject to the Highlands Act. The main goals of the Highlands Act are to preserve open space and natural resources for public enjoyment and to protect drinking water resources. The converted area will be replaced by a portion of the Ilac Property, which is also located within the Highlands Preservation Area. Moreover, Tennessee will comply with a Comprehensive Mitigation Plan that was developed by the Highlands Council and Tennessee to provide mitigation for the Highlands resources affected by the NEUP. See Attachment B, Table 4. Based on the replacement land and the mitigation for Highlands resources, the impact level for this environmental resource is no/negligible (EA, Section 2.4.3.2).

Step 6A-23 Contamination/Hazardous Materials.

TGP reviewed regulatory databases to identify known and potential hazardous waste sites within the area of Loop 325. The database search identified numerous potentially hazardous sites within the general vicinity of Loop 325. However, no known contaminated sites were identified within or adjacent to the proposed conversion area. Therefore, an assessment of impacts to this resource is considered not applicable (EA, Section 2.4.5.1).

Step 6A-24 Other Important Environmental Resources.

No other important environmental resources are present within or adjacent to the proposed conversion area. Therefore, an assessment of impacts to this resource is considered not applicable.

STEP 6. ENVIRONMENTAL SCREENING FORM (ESF).

Part A – Environmental Resources (Replacement Parcel: Block 20001, Lot 5)

Step 6A-1 Geological Resources.

According to the U.S. Department of Agriculture-Natural Resources Conservation Service's (USDA-NRCS) Soil Data Mart Web Soil Survey information for the Morris County Soil Survey Area (USDA-NRCS 2008), soils within the replacement site area are mapped as Hibernia loam, 3 to 15 percent slopes, stony (HhmCa); Ridgebury loam, 0 to 8 percent slopes, extremely stony (RkgBc); and Rockaway sandy loam, 8 to 15 percent slopes, very stony (RobCb). The entire replacement site exhibits slight erosion potential. Soil drainage within the boundaries of the replacement parcel varies from well drained (RobCb), to somewhat poorly drained (HhmCa), and poorly drained (RkgBc). These soils have low to slight compaction potential and have vastly different depths to the water table: 0 to 6 inches (RkgBc), 6 to 18 inches (HhmCa), and 24 to 36 inches (RobCb).

No excavations will occur to the replacement parcel; therefore, no impacts are anticipated to this environmental resource.

Step 6A-2 Air Quality.

No existing buildings or other stationary sources of air pollution exist within or directly adjacent to the replacement parcel, nor will any infrastructure be built on the replacement property; therefore, no impacts to air quality are anticipated. Although Morris County is located in a $PM_{2.5}$ Nonattainment Area, the Project conforms to the Clean Air Act Amendments of 1990 and no new sources of pollution will be added to the replacement property (USEPA 2012b). The impact level for this environmental resource is no/negligible.

Step 6A-3 Sound.

The Wildcat Ridge Wildlife Management Area, which is considered a sensitive noise receptor, is located within the immediate vicinity of the proposed replacement parcel. However, no changes in noise levels are anticipated by the proposed acquisition of this parcel; therefore, the impact level for this environmental resource is no/negligible.

Step 6A-4 Water Quality/Quantity.

The replacement parcel is located within the Rockaway River Area Aquifer System, a sole source aquifer. The total population that depends on this aquifer is approximately 135,000, with an estimated potable water usage of 12 million gallons per day. Public water supply systems drawing from the unconsolidated Quaternary deposits supply an estimated 90,000 persons within this region. Within the Rockaway River drainage basin, individual wells drawing from the unconsolidated aquifer deposits, as well as bedrock aquifers, supply an estimated 30,000 persons with 2.7 million gallons per day. The Unconsolidated Quaternary Aquifer supplies greater than 75 percent of the potable water in the designated area. The shallow nature of the aquifer and the

permeability of the overlying soils make the aquifer readily susceptible to certain types of contamination (USEPA 2010b).

No impacts to this resource will occur as a result of the acquisition of the replacement parcel. Therefore, the impact level for this environmental resource is no/negligible.

Step 6A-5 Stream Flow Characteristics.

Based on review of the U.S. Geological Survey (USGS) Boonton (1995) and Dover (1997) topographic mapping and the NJDEP i-MapNJ website (NJDEP 2012), no streams were identified on the property. Field reconnaissance revealed a small flow of surface water that moved in an eastern direction across the northern end of the replacement parcel, toward Hibernia Brook. It appeared to be hydraulically connected to the Lake Ames Dam, which is to the far west of the replacement parcel. As the surface water flow appeared to be associated with a wetland, there was no defined channel or bank. However, due to the nature of the Project, the proposed conversion would not have an adverse impact on stream flow characteristics on the replacement parcel.

Step 6A-6 Marine/Estuarine.

The proposed replacement parcel does not contain tidal waters and therefore, impacts to marine or estuarine resources due to the proposed conversion are not applicable (NJDEP 2012).

Step 6A-7 Floodplains/Wetlands.

Based on the 1986 Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), the proposed replacement parcel is not located within the 100-year floodplain. Based on the National Wetlands Inventory (NWI) map (USFWS 2012), no wetlands are mapped within or adjacent to the proposed replacement parcel. Field reconnaissance revealed that an area on the northern portion of the replacement parcel contained hydrophytic vegetation, which is characteristic of wetlands. This area was located within the same corridor where the small flow of surface water connecting to Hibernia Brook was observed. Due to the nature of the Project, the proposed conversion would not have an adverse impact on floodplains or wetlands on the replacement parcel.

Step 6A-8 Land Use.

The replacement parcel is currently vacant, zoned R5-Acre which is a Single Family Planned Residential Development District, and under private ownership. TGP is proposing to purchase the property and, following the approval of this 6(f) conversion proposal, transfer ownership to the NJDEP, Division of Fish and Wildlife. NJDEP will manage this portion of the Wildcat Ridge Wildlife Management Area in accordance with the provisions of Section 6(f) of the LWCF Act. This change in land use will not result in a negative impact to land use/ownership and will result in a benefit to community livability. Therefore, the impact level for this environmental resource is no/negligible.

Step 6A-9 Circulation, Transportation.

An existing parking lot exists, adjacent to the north of the proposed replacement parcel, serving the Lake Ames recreation area. No new roads, facilities, or points of access are proposed for the replacement parcel. Given that the proposed replacement parcel is located adjacent to existing parkland and recreation areas, it can be accessed by other existing points and it is not expected to cause a change in circulation/transportation in the area. Therefore, the impact level for this environmental resource is no/negligible.

Step 6A-10 Threatened and Endangered Species.

The NJDEP Natural Heritage Program (NHP) was consulted in regard to the presence of threatened and endangered species within the proposed replacement parcel in June 2012. The NHP identified numerous state threatened and state endangered species: barred owl (*Strix varia*), golden-winged warbler (*Vermivora chrysoptera*), northern goshawk (*Accipiter gentilis*), red-headed woodpecker (*Melanerpes erythrocephalus*), red-shouldered hawk (*Buteo lineatus*), bobcat (*Lynx rufus*), timber rattlesnake (*Crotalus horridus*), wood turtle (*Glyptemys insculpta*), Indiana bat (*Myotis sodalis*), and Robbin's pondweed (*Potamogeton robbinsii*) (Cartica 2012, personal communication). The Indiana bat is also a federally listed endangered species.

Several species of state special concern are also listed within the replacement parcel. These are blackburnian warbler (*Dendroica fusca*), black-throated green warbler (*Dendroica virens*), blue-headed vireo (*Vireo solitarius*), Canada warbler (*Wilsonia Canadensis*), cerulean warbler (*Dendroica cerulean*), Cooper's hawk (*Accipiter cooperii*), hooded warbler (*Wilsonia citrine*), veery (*Catharus fuscescens*), winter wren (*Troglodytes troglodytes*), wood thrush (*Hylocichla mustelina*), worm-eating warbler (*Helmitheros vermivorum*), arrowhead spiketail (*Cordulegaster obliqua*), brush-tipped (*Somatochlora walshii*), New England bluet (*Enallagma laterale*), ski-tailed emerald (*Somatochlora elongate*), spatterdock darner (*Rhionaeschna mutate*), Williamson's emerald (*Somatochlora williamsoni*), and northern copperhead (*Agkistrodon contortrix mokasen*) (Cartica 2012, personal communication).

Habitat surveys were not completed within the replacement parcel as part of this study; however, field reconnaissance on June 21, 2012 confirmed that habitats suitable for the above-listed species are located within the replacement parcel. Please refer to Step 3B-6b for a description of habitats and species observed during the field reconnaissance of the replacement parcel. As a result of the conversion of Section 6(f) lands and acquisition of the replacement park property, no impacts to threatened and endangered species will occur, and therefore, the impact level for this environmental resource is no/negligible.

Step 6A-11 Unique Ecosystems.

The above-referenced consultation with the NJDEP NHP revealed a rare plant species and ecological community directly adjacent to the replacement parcel. Robbin's pondweed (*Potamogeton robbinsii*), located in the southern portion of Lake Ames, is considered a state endangered species. However, no disturbance will occur to the replacement parcel or to areas

surrounding the parcel. Therefore, an impact level of no/negligible was chosen for this environmental resource (Cartica 2012, personal communication).

Step 6A-12 Unique or Important Wildlife/Wildlife Habitat.

The above-referenced consultation with the NJDEP NHP revealed numerous threatened and endangered species that have occupied habitat (arrowhead spiketail, brush-tipped, New England bluet, spatterdock darner, northern copperhead, timber rattlesnake, and the wood turtle), nesting sites (Cooper's hawk, northern goshawk, red-shouldered hawk, and Indiana bat), or foraging sites (New England bluet) located within the boundary of the replacement parcel. In addition, potential vernal pool habitat was identified adjacent to the boundaries of the replacement parcel.

Please refer to Step 3B-6b for a description of habitats and species observed during the field reconnaissance of the replacement parcel. No impacts will occur to these unique or important wildlife habitats due to the conversion of Section 6(f) lands to the replacement parcel. Therefore, the impact level for this environmental resource is no/negligible (Cartica 2012, personal communication).

Step 6A-13 Unique or Important Fish/Fish Habitat.

Correspondence with the NJDEP NHP did not reveal any unique or important fish/fish habitat (Cartica 2012, personal communication). Therefore, an assessment of impacts to this resource is considered not applicable.

Step 6A-14 Invasive Species.

The replacement parcel is located on forested land and no vegetated areas will be disturbed as a result of the proposed conversion; therefore, the replacement would not create migratory pathways for, or result in, the introduction or promotion of invasive species (Google Earth 2010). An assessment of impacts to this resource is considered not applicable.

Step 6A-15 Recreational Resources.

TGP is proposing to purchase a 6.18 acre parcel of replacement land that is part of Block 20001, Lot 5 in Rockaway Township, Morris County, New Jersey, and transfer ownership to the NJDEP's Division of Fish and Wildlife. The replacement parcel would function as an extension of the Wildcat Ridge Wildlife Management Area and be placed under LWCF encumbrances. No facilities or other improvements are being proposed for the replacement parcel. The replacement land at the Wildlife Management Area would offset the lands lost for the proposed conversion and therefore, impacts are considered no/negligible.

Step 6A-16 Accessibility.

No infrastructure exists within the boundaries of the replacement parcel. Snake Hill Road borders the northern boundary of the replacement property (Google Earth 2010). No new

infrastructure will be constructed within or adjacent to the replacement parcel; therefore, impacts are considered no/negligible.

Step 6A-17 Aesthetics.

No construction, disturbance or permanent structures will be associated with the replacement property due to the conversion of the Section 6(f) lands to the replacement parcel. Therefore, no/negligible impacts to this environmental resource are expected.

Step 6A-18 Historic/Cultural Resources.

No known critical environmental and historic sites or resources are located within the boundaries of the replacement parcel based upon review of the NJDEP's (2012) i-MapNJ website and a review of resources on NJ SHPO website. Therefore, an assessment of impacts to this resource is considered not applicable.

Step 6A-19 Socioeconomics.

The proposed conversion will not result in any socioeconomic impacts because there will be no construction or changes, other than ownership, within the boundaries of the replacement parcel. There would be no changes to employment, income, or tax base within or adjacent to the replacement parcel. Therefore, an assessment of impacts to this resource is considered not applicable.

Step 6A-20 Minority and Low Income Populations.

The proposed conversion will have no disproportionately high or adverse effects on low income and/or minority communities. While there are residences to the northeast of the replacement property (Google Earth, 2012), no residences exist in the immediate area of the proposed replacement and no residences would be displaced. Therefore no/negligible impacts to this environmental resource are anticipated.

Step 6A-21 Energy Resources.

Although the proposed conversion will occur due to a natural gas Project, no energy resources exist within or adjacent to the proposed replacement property. Therefore, an assessment of potential adverse impacts to these resources is not applicable.

Step 6A-22 Other Agency Land Use Plans or Policies.

No other land use plans or policies are in place for the replacement parcel. Therefore, impacts will not occur to this resource and an assessment of it is not applicable.

Step 6A-23 Contamination/Hazardous Materials.

Based on desktop review (NJDEP 2012; USEPA 2012a), no known hazardous substances, waste, underground storage tanks or structures, or improperly sealed or abandoned wells were identified within the boundaries of the replacement parcel, nor were these features identified during the field survey. A large brush pile, which included household trash that had been dumped along the side of the road, was observed to the south of Snake Hill Road along the northwestern edge of the replacement parcel. No evidence of soil staining or odors was observed in that location. A formal site assessment has not been conducted for the replacement site. The impact level for this environmental resource is no/negligible.

Step 6A-24 Other Important Environmental Resources.

Field reconnaissance, which took place on June 21, 2012, revealed dominant canopy and understory species. Dominant canopy species include American beech (*Fagus grandifolia*), red maple (*Acer rubrum*), white oak (*Quercus alba*), red oak (*Quercus rubra*), and chestnut oak (*Quercus prinus*). Dominant understory species observed were poison ivy (*Toxicodendron radicans*), Virginia creeper (*Parthenocissus quinquefolia*), lowbush blueberry (*Vaccinium angustifolium*), and various moss and fern species. In addition to forested and understory habitats, the replacement parcel sloped upward towards the southwest and included rocky outcrops.

Please refer to Step 3B-6b for a description of species and other environmental resources observed during the field reconnaissance of the replacement parcel.

No improvements are to be made to the replacement site; therefore, the impact level for these environmental resources is no/negligible.

STEP 6. ENVIRONMENTAL SCREENING FORM (ESF).

Part B – Mandatory Criteria (Conversion Area: Block 1101, Lot 5)

If LWCF proposal is approved, would it…

Step 6B-1 ***Have significant impacts on public health or safety?***

No. Available data show that natural gas transmission pipelines, similar to the pipeline that will be installed as Loop 325, continue to be a safe, reliable means of energy transportation. From 1990 to 2009, there were an average of 55 significant incidents and 2 fatalities per year (EA, Section 2.9.3). The number of significant incidents distributed over more than 300,000 miles of natural gas transmission pipeline indicated the risk is low to the general public from encountering an incident at any given location. The reliability and safety aspects associated with the Project are addressed in Resource Report 11 (Reliability and Safety), which was submitted as part of the Environmental Report for the Project in the FERC Certificate application (TGP 2011n).

Step 6B-2 ***Have significant impacts on such natural resources and geographic characteristics as historic or cultural resources; park, recreation, or refuge lands, wilderness areas; wild or scenic rivers; national landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (E.O. 11990); floodplains (E.O. 11988); and other ecologically significant or critical areas?***

No. As described in Step 6 – Part A, approval of the Conversion Proposal will have impacts on environmental resources; however, these impacts are either negligible or minor. Moreover, Tennessee will compensate for impacts to affected resources through either tree replacement (under the No Net Loss Act), land replacement, cash compensation, and compliance with applicable FERC Certificate environmental conditions and NJDEP LURP permitting conditions.

Step 6B-3 ***Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA section 102(2)(E)]?***

No. As described in Step 6 – Part A, the conversion area will not have any controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources. The Project has been subjected to significant public process at both the federal and State levels. (See Step 5-7, above.) Although many people have testified against the Project, this opposition does not render the Project highly controversial. On May 29, 2012, the FERC issued a Certificate of Public Convenience

and Necessity for the Project. In the Certificate, the FERC did address public comments. In making the determination that the Project is required by the public convenience and necessity, the FERC concluded that "no substantial dispute as to the effects of the [P]roject exists" (See Attachment A, Number 138). The NJDEP has also responded to numerous public comments received during its public processes. See NJDEP's Response to Comments Document, which is available at www.state.nj.us/dep/greenacres/neup.html. Both the NJDEP Commissioner and the New Jersey State House Commission ultimately approved the Project. As part of the assessment of the Project conducted by the FERC and the NJDEP, both agencies evaluated the alternatives and concluded that the alternative route chosen minimizes environmental impacts to the maximum extent possible while allowing the Project to be safely constructed.

Step 6B-4 ***Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?***

No. As described in Step 6 – Part A, the conversion area will not have any highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks.

Step 6B-5 ***Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?***

Future action and future environmental effects are not anticipated once the approval is granted for the conversion area.

Step 6B-6 ***Have a direct relationship to other actions with individually insignificant, but cumulatively significant, environmental effects?***

No. As described in FERC's EA, the Project, including Loop 325, will not have any cumulatively significant environmental effects.

Step 6B-7 ***Have significant impacts on properties listed or eligible for listing on the National Register of Historic Places, as determined by either the bureau or office? (Attach SHPO/THPO comment)***

No. There are no cultural resources that have been identified within the proposed conversion area or within the Section 6(f) boundary on Block 1101, Lot 5 in Ringwood, Passaic County, New Jersey. A Phase II archaeological survey was conducted for six sites; however, none of these sites is within the proposed conversion area or even within the Section 6(f) boundary (Gray & Pape, Inc. 2012). The Draft Phase II archaeological

survey report was submitted to the NJ SHPO in January 2012, and NJ SHPO is finalizing its review.

Step 6B-8 ***Have significant impacts on species listed or proposed to be listed on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species?***

No. As described in Step 6 – Part A, based on the survey results described herein, approval of this Conversion Proposal will have no or negligible impacts on species listed or proposed to be listed on the List of Endangered or Threatened Species, or their designated Critical Habitat. If impacts do exist, Tennessee will implement appropriate mitigation, as described herein.

Step 6B-9 ***Violate a federal law, or a state, local, or tribal law or requirement imposed for the protection of the environment?***

No. All applications for clearances and permits have or will be filed such that the project will not be in violation of any federal, state, local or tribal law aimed at protecting the environment.

Step 6B-10 ***Have a disproportionately high and adverse effect on low-income or minority populations (Executive Order 12898)?***

No. As described in Step 6 – Part A, the Project will not have a disproportionately high or adverse effect on low-income or minority populations.

Step 6B-11 ***Limit access to and ceremonial use of Indian sacred sites on federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007)?***

No. Indian sacred sites have not been located in or around the proposed conversion area and are therefore not expected to be impacted by the Project (TGP 2011e).

Step 6B-12 ***Contribute to the introduction, continued existence, or spread of noxious weeds or non-native species known to occur in the area, or actions that may promote the introduction, growth or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112)?***

No. As described in Step 6 – Part A, the proposed conversion area will be restored to preexisting contours and revegetated immediately after construction per the approved Erosion and Sediment Control Plan and will not introduce or spread any noxious weeds or non-native species;

therefore, impacts regarding noxious weeds and invasive species are not anticipated.

STEP 6. ENVIRONMENTAL SCREENING FORM (ESF).

Part B – Mandatory Criteria (Conversion Area: Block 1, Lot 1)

If LWCF proposal is approved, would it…

Step 6B-1 ***Have significant impacts on public health or safety?***

No. Available data show that natural gas transmission pipelines, similar to the pipeline that will be installed as part of the Loop 325 portion of the Project, continue to be a safe, reliable means of energy transportation. From 1990 to 2009, there were an average of 55 significant incidents and 2 fatalities per year (Attachment A, Section 2.9.3FERC 2011). The number of significant incidents distributed over more than 300,000 miles of natural gas transmission pipeline indicated the risk is low to the general public from encountering an incident at any given location. The reliability and safety aspects associated with the Project are addressed in Resource Report 11 (Reliability and Safety), which was submitted as part of the Environmental Report for the Project in the FERC Certificate application (TGP 2011n).

Step 6B-2 ***Have significant impacts on such natural resources and geographic characteristics as historic or cultural resources; park, recreation, or refuge lands, wilderness areas; wild or scenic rivers; national landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (E.O. 11990); floodplains (E.O. 11988); and other ecologically significant or critical areas?***

No. As described in Step 6 – Part A, approval of the Conversion Proposal will have impacts on environmental resources; however, these impacts are either negligible or minor. Moreover, Tennessee will compensate for impacts to affected resources through tree replacement (under the No Net Loss Act), land replacement, cash compensation, and compliance with application FERC Certificate environmental conditions and NJDEP LURP permitting conditions.

Step 6B-3 ***Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA section 102(2)(E)]?***

No. As described in Step 6 – Part A, the conversion area will not have any controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources. The Project has been subjected to significant public process at both the federal and State levels. (See Step 5-7, above.) Although many people have testified against the Project, this opposition does not render the Project highly controversial.

On May 29, 2012, the FERC issued a Certificate of Public Convenience and Necessity for the Project. In the Certificate, the FERC did address public comments. In making the determination that the Project is required by the public convenience and necessity, the FERC concluded that "no substantial dispute as to the effects of the [P]roject exists" (See Attachment B, Number 138). The NJDEP also responded to numerous public comments received during its public processes. See NJDEP's Response to Comments Document, which is available at www.state.nj.us/dep/greenacres/neup.html. Both the NJDEP Commissioner and the New Jersey State House Commission ultimately approved the Project. As part of the assessment of the Project conducted by the FERC and the NJDEP, both agencies evaluated the alternatives and concluded that the alternative route chosen minimizes environmental impacts to the maximum extent possible while allowing the Project to be safely constructed.

Step 6B-4 ***Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?***

No. As described in Step 6 – Part A, the conversion area will not have any highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks.

Step 6B-5 ***Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?***

Future action and future environmental effects are not anticipated once the approval is granted for the proposed conversion area.

Step 6B-6 ***Have a direct relationship to other actions with individually insignificant, but cumulatively significant, environmental effects?***

No. As described in FERC's EA, the Project, including Loop 325, will not have any cumulatively significant environmental effects.

Step 6B-7 ***Have significant impacts on properties listed or eligible for listing on the National Register of Historic Places, as determined by either the bureau or office? (Attach SHPO/THPO comments)***

No. There are no cultural resources that have been identified within the proposed conversion area or within the Section 6(f) boundary on Block 1, Lot 1 in Mahwah, Bergen County, New Jersey. A Phase II archaeological survey was conducted for six sites; however, none of these sites is within the conversion area or even within the Section 6(f) boundary (Gray & Pape, Inc. 2012). The Draft Phase II archaeological survey report was

submitted to the NJ SHPO in January 2012, and NJ SHPO is finalizing its review.

Step 6B-8 ***Have significant impacts on species listed or proposed to be listed on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species?***

No. As described in Step 6 – Part A, based on the survey results described herein, approval of this Conversion Proposal will have no or negligible impacts on species listed or proposed to be listed on the List of Endangered or Threatened Species, or their designated Critical Habitat. If impacts do exist, Tennessee will implement appropriate mitigation, as described herein.

Step 6B-9 ***Violate a federal law, or a state, local, or tribal law or requirement imposed for the protection of the environment?***

No. All applications for clearances and permits have or will be filed such that the project will not be in violation of any federal, state, local or tribal law aimed at protecting the environment.

Step 6B-10 ***Have a disproportionately high and adverse effect on low-income or minority populations (Executive Order 12898)?***

No. As described in Step 6 – Part A, the Project will not have a disproportionately high or adverse effect on low-income or minority populations.

Step 6B-11 ***Limit access to and ceremonial use of Indian sacred sites on federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007)?***

No. Indian sacred sites have not been located in or around the proposed conversion area and are therefore not expected to be impacted by the Project (TGP 2011e).

Step 6B-12 ***Contribute to the introduction, continued existence, or spread of noxious weeds or non-native species known to occur in the area, or actions that may promote the introduction, growth or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112)?***

No. As described in Step 6 – Part A, the conversion area will be restored to preexisting contours and revegetated immediately after construction per the approved Erosion and Sediment Control Plan and will not introduce or

spread any noxious weeds or non-native species; therefore, impacts regarding noxious weeds and invasive species are not anticipated.

STEP 6. ENVIRONMENTAL SCREENING FORM (ESF).

Part B – Mandatory Criteria (Replacement Parcel: Block 20001, Lot 5)

If LWCF proposal is approved, would it…

Step 6B-1 ***Have significant impacts on public health or safety?***

No. The replacement parcel is being dedicated to the Wildcat Ridge Wildlife Management Area as-is, in its current condition. No construction or other improvements will be done on the property that would cause impacts to the health or safety of the public.

Step 6B-2 ***Have significant impacts on such natural resources and geographic characteristics as historic or cultural resources; park, recreation, or refuge lands, wilderness areas; wild or scenic rivers; national landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (E.O. 11990); floodplains (E.O. 11988); and other ecologically significant or critical areas?***

The proposed replacement parcel does not include the construction of any buildings, roads or any other improvements. The parcel shall remain in its current condition; therefore, no significant impacts are anticipated.

Step 6B-3 ***Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA section 102(2)(E)]?***

This replacement parcel will not have any controversial effects due to the fact that it will be dedicated parkland. In terms of alternative uses for the site, the proposed dedication is the best use, as it has numerous environmental resources and wildlife.

Step 6B-4 ***Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?***

As previously mentioned, the replacement parcel will not be improved; therefore, impacts will be negligible or non-existent.

Step 6B-5 ***Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?***

Future action is not anticipated once the approval of the Conversion Proposal is granted. Tennessee will purchase the replacement parcel and

transfer it to NJDEP to be managed as part of the Wildcat Ridge Wildlife Management Area in accordance with Section 6(f) of the LWCF Act.

Step 6B-6 ***Have a direct relationship to other actions with individually insignificant, but cumulatively significant, environmental effects?***

No. Other improvements in the area are not expected to interfere with or adversely impact this proposed replacement land.

Step 6B-7 ***Have significant impacts on properties listed or eligible for listing on the National Register of Historic Places, as determined by either the bureau or office? (Attach SHPO/THPO comments)***

No. This property is not located on or near any properties listed on the National Register of Historic Places.

Step 6B-8 ***Have significant impacts on species listed or proposed to be listed on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species?***

New Jersey's Natural Heritage Database was consulted regarding sensitive species on the replacement parcel. The replacement parcel is a good fit for a dedication to the Wildcat Ridge Wildlife Management Area due to the diverse and expansive wildlife resources present on the site. The property will remain in its current state. Moreover, by placing this replacement property under Section 6(f) protection, development pressures will be removed.

Step 6B-9 ***Violate a federal law, or a state, local, or tribal law or requirement imposed for the protection of the environment?***

No. Since no development is being proposed for this replacement property, no permits are required. The NJDEP will take all appropriate steps to ensure that this property is protected and managed in accordance with Section 6(f) of the LWCF Act.

Step 6B-10 ***Have a disproportionately high and adverse effect on low-income or minority populations (Executive Order 12898)?***

No. The Project will not have a disproportionately high or adverse effect on low-income or minority populations. Aerial and site inspections conclude that there are very few residences in the immediate area of the proposed replacement site and no residences will be displaced as a result of this Project. The Project will provide an added benefit by providing nearby communities with continued access to Wildcat Ridge Wildlife Management Area.

Step 6B-11 ***Limit access to and ceremonial use of Indian sacred sites on federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007)?***

No. Indian sacred sites have not been located in or around the replacement parcel and are therefore not expected to be impacted by the Project.

Step 6B-12 ***Contribute to the introduction, continued existence, or spread of noxious weeds or non-native species known to occur in the area, or actions that may promote the introduction, growth or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112)?***

Since improvements are not being proposed for the replacement parcel, there will be no digging, grading, removing or transferring soil or plants to or from the site. Therefore, impacts regarding noxious weeds and invasive species are not anticipated.

FIGURES

Figure 1, "Conversion Parcels, Site Location Map, Block: 1101, Lot: 5, Block: 1, Lot: 1, prepared by SGC Engineering, LLC, dated June 2012."

Figure 2, "Overview Map, Conversion Parcels – Ringwood Borough, Passaic County and Mahwah Township, Bergen County and Replacement Parcel – Rockaway Township, Morris County, prepared by SGC Engineering, LLC, dated June 2012."

Figure 3, "Conversion Parcel, Block: 1101, Lot: 5, prepared by SGC Engineering, LLC, dated June 2012."

Figure 4, "Conversion Parcel, Block: 1, Lot: 1, prepared by SGC Engineering, LLC, dated June 2012."

Figure 5, "Replacement Parcel, p/o Block: 20001, Lot: 5, Rockaway Township, Morris County, prepared by NJDEP, dated June 11, 2012."

ATTACHMENTS

Attachment A, FERC. 2012. Tennessee Gas Pipeline Company, L.L.C., Docket No. CP11-161-000, Order Issuing Certificate and Approving Abandonment, 139 FERC ¶ 61,161 (2012).

Attachment B, New Jersey Department of Environmental Protection, State House Commission Approval Summary Sheet, approved by Commissioner Bob Martin, dated May 14, 2012.

Attachment C, United States Department of the Interior, Bureau of Outdoor Recreation, Land and Water Conservation Fund Project Agreement, Project No. 34-00304, Shepherd Lake Bathhouse, dated June 13, 1978.

Attachment D, United States Department of the Interior, Bureau of Outdoor Recreation, Land and Water Conservation Fund Project Agreement, Project No. 34-00365, Ringwood/Ramapo Greenway, dated September 22, 1994.

Attachment E, March 22, 2012 Letter from Jack W. Howard, Manager, State and Local Assistance Programs, National Park Service, to Richard Boornazian, LWCF State Liaison Officer, NJDEP.

Attachment F, Environmental Assessment for LWCF 6(f) Replacement Land Block 20001, Lot 5, Rockaway Township, Morris County, New Jersey, July 2012

Attachment G, June 15, 2012 Letter from Wendy Walsh of the United States Department of the Interior, Fish and Wildlife Service, to Erica L. Bowyer, Project Manager, CH2MHill.

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TGP. 2011c. Northeast Upgrade Project Environmental Report – Resource Report No. 2. Water Use and Quality. March 2011.

TGP. 2011d. Northeast Upgrade Project Environmental Report – Resource Report No. 3. Fish, Wildlife, and Vegetation. March 2011.

TGP. 2011e. Northeast Upgrade Project Environmental Report – Resource Report No. 4. Cultural Resource. March 2011.

TGP. 2011f. Northeast Upgrade Project Environmental Report – Resource Report No. 5. Socioeconomic. March 2011.

TGP. 2011g. Northeast Upgrade Project Environmental Report – Resource Report No. 7. Soils. March 2011.

TGP. 2011h. Northeast Upgrade Project Environmental Report – Resource Report No. 8. Land Use, Recreation, and Aesthetics. March 2011.

TGP. 2011i. Northeast Upgrade Project Environmental Report – Resource Report No. 9. Air Quality and Noise. March 2011.

TGP. 2011j. Northeast Upgrade Project Environmental Report – Resource Report No. 10. Alternatives. March 2011.

TGP. 2011k. Northeast Upgrade Project – Loop 323 and Loop 325. Vernal Habitat Survey Report. July 2011.

TGP. 2011l. Northeast Upgrade Project – Sussex, Passaic, and Bergen Counties, New Jersey. Red-Shouldered Hawk and Barred Owl Presence/Absence Surveys. October 2011.

TGP. 2011m. Northeast Upgrade Project – Sussex, Passaic, and Bergen Counties, New Jersey. Freshwater Mussel Habitat Assessment and Presence/Absence Survey. November 2011.

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Passaic County, New Jersey

Rockland County, New York

Bergen County, New Jersey

BLOCK 1101
LOT 5

MP: 5

Area of Conversion

MP: 6

RINGWOOD BOROUGH

MAHWAH TOWNSHIP

BLOCK 1
LOT 1

Area of Conversion

MP: 7

N
E
W
S

1 "=1,000 '

0 500 1,000 Feet

6(f) Boundary
Area of Conversion
Mile Markers
Existing Right of Way
State Boundary
County Boundary

PURPOSE NOTE:
This map was specifically developed for use by Kinder Morgan and representatives thereof. Any other duplication of this information without the consent of Kinder Morgan is strictly prohibited.

DATA DISCLAIMER:
Property lines on this plan were compiled from the best available record information and is not the result of a boundary survey. Apparent property lines depicted are for illustration only and should not be relied upon to construct fences, structures, or used in any real property conveyances.

SOURCE NOTE:
Parcel boundary lines depicted on this map are comprised of data developed by SGC Engineering, LLC and data obtained from New Jersey State Agencies.
Aerial Imagery Provided by NJ DEP (2007).

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CONVERSION PARCELS
SITE LOCATION MAP
Block 1101 Lot 5 & Block 1 Lot 1

SGC Engineering, LLC a part of Senergy

Figure 1.

Project #: 146293
JUNE 2012

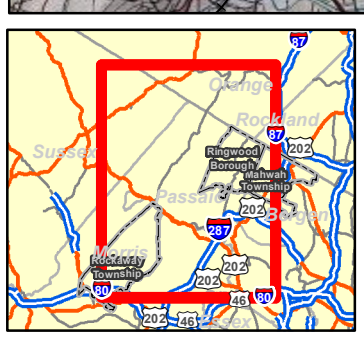
LWCF Replacement Parcel - 6.19 Acres

Conversion Area Block: 1101; Lot: 5

Conversion Area Block: 1; Lot: 1

18.5± Miles

Replacement Conversion Lands Block: 20001; Lot: 5



ConversionAreas

6(f) Boundary

Existing ROW

LWCF Replacement Parcel - 6.19 Acres

Replacement Conversion Lands, ILAC Realty

DATA DISCLAIMER:
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SOURCE NOTE:
Parcel boundary lines shown hereon are comprised of data obtained from New Jersey State Agencies.
Aerial imagery, Wetland, and Water Resource data were provided by New Jersey's GIS office.

PURPOSE NOTE:
This map illustrates the ownership of parcels for planning potential acquisitions.

N
W E
S

1 " = 2 miles

0 1 2 Miles

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OVERVIEW MAP

Conversion Parcels - Ringwood Borough, Passaic County and Mahwah Township, Bergen County and

Replacement Parcel - Rockaway Township, Morris County

SGC Engineering, LLC a part of Senergy

Figure 2. JUNE 2012

6(f) Boundary

SHEPHERD POND ROAD

Block: 1101
Lot: 5

Area of Conversion
(1.22 Acres)

Revised
6(f) Boundary

6(f) Boundary

L5-AR-50

PIPELINE
CROSSOVER

N
W E
S

1 "=100 '

0 50 100 Feet

PARCELS	OWNER NAME	NEW LEASE AREA	TEMPORARY WORKSPACE	TOTAL CONVERSION AREA
Block: 1101, Lot: 5	STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION	0.248	0.972	1.22 Acres

- Revised 6(f) Boundary
- 6(f) Boundary
- Area of Conversion
- Temporary Workspace
- New Lease Area
- ExistingROW
- Access Roads

PURPOSE NOTE:
This map was specifically developed for use by Kinder Morgan and representatives thereof. Any other duplication of this information without the consent of Kinder Morgan is strictly prohibited.

DATA DISCLAIMER:
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SOURCE NOTE:
Parcel boundary lines depicted on this map are comprised of data developed by SGC Engineering, LLC and data obtained from New Jersey State Agencies.
Aerial Imagery Provided by NJ DEP (2007).

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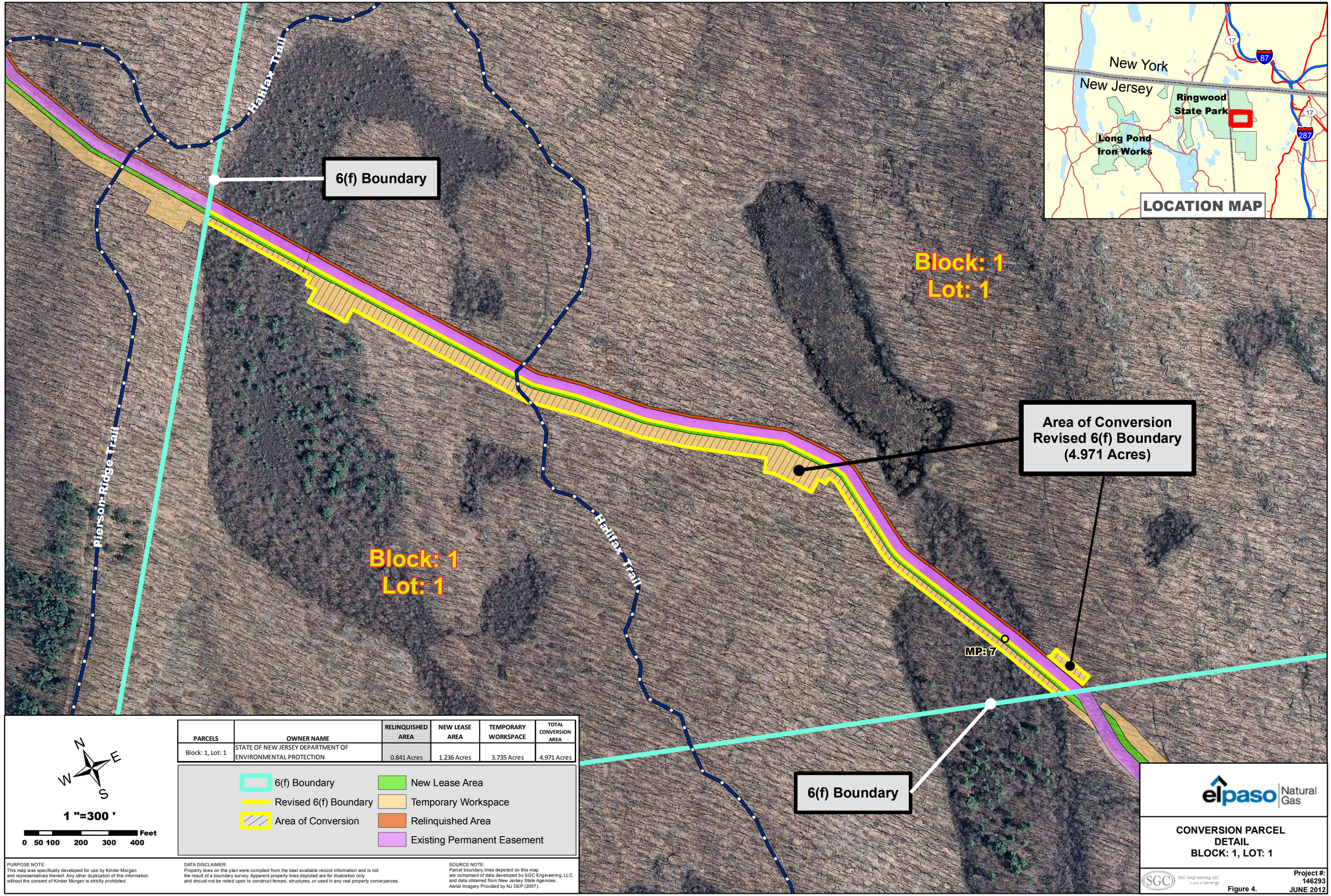
CONVERSION PARCEL DETAIL
BLOCK: 1101, LOT: 5

SGC Engineering, LLC a part of Senergy

Project #: 146293
Figure 3. JUNE 2012



PARCELS	OWNER NAME	RELINQUISHED AREA	NEW LEASE AREA	TEMPORARY WORKSPACE	TOTAL CONVERSION AREA
Block: 1, Lot: 1	STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION	0.841 Acres	1.236 Acres	3.735 Acres	4.971 Acres

N
W
E
S

1 "=300 '

0 50 100 200 300 400 Feet

- 6(f) Boundary
- Revised 6(f) Boundary
- Area of Conversion
- New Lease Area
- Temporary Workspace
- Relinquished Area
- Existing Permanent Easement

PURPOSE NOTE:
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SOURCE NOTE:
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Aerial Imagery Provided by NJ DEP (2007).

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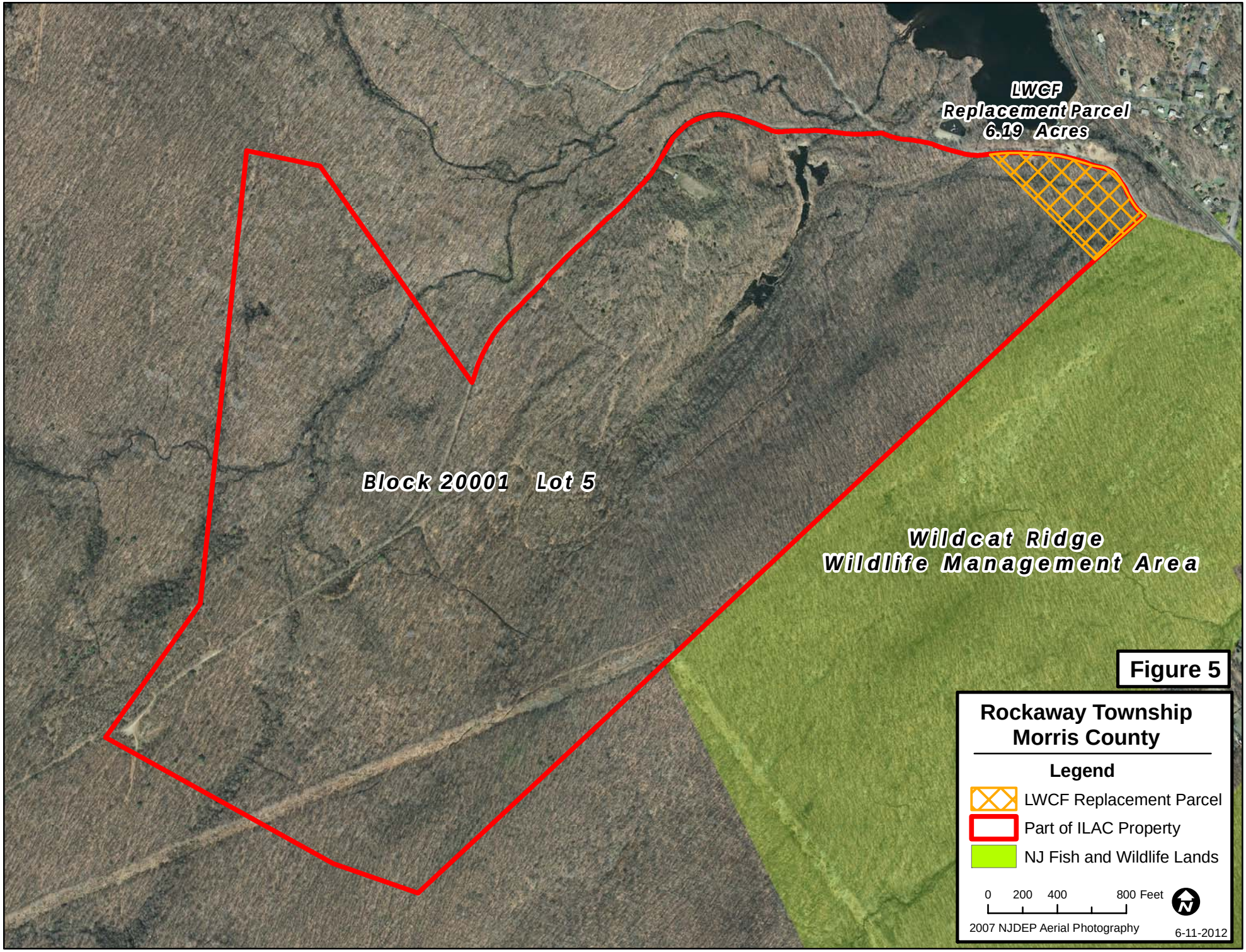
CONVERSION PARCEL DETAIL
BLOCK: 1, LOT: 1

SGC Engineering, LLC
a part of Senergy

Figure 4.

Project #: 146293
JUNE 2012


LWCF
Replacement Parcel
6.19 Acres
Block 20001 Lot 5
Wildcat Ridge
Wildlife Management Area
Figure 5
Rockaway Township
Morris County
Legend
LWCF Replacement Parcel
Part of ILAC Property
NJ Fish and Wildlife Lands
0 200 400 800 Feet
2007 NJDEP Aerial Photography
6-11-2012

ATTACHMENT A

UNITED STATES OF AMERICA

FEDERAL ENERGY REGULATORY COMMISSION

CERTIFICATION

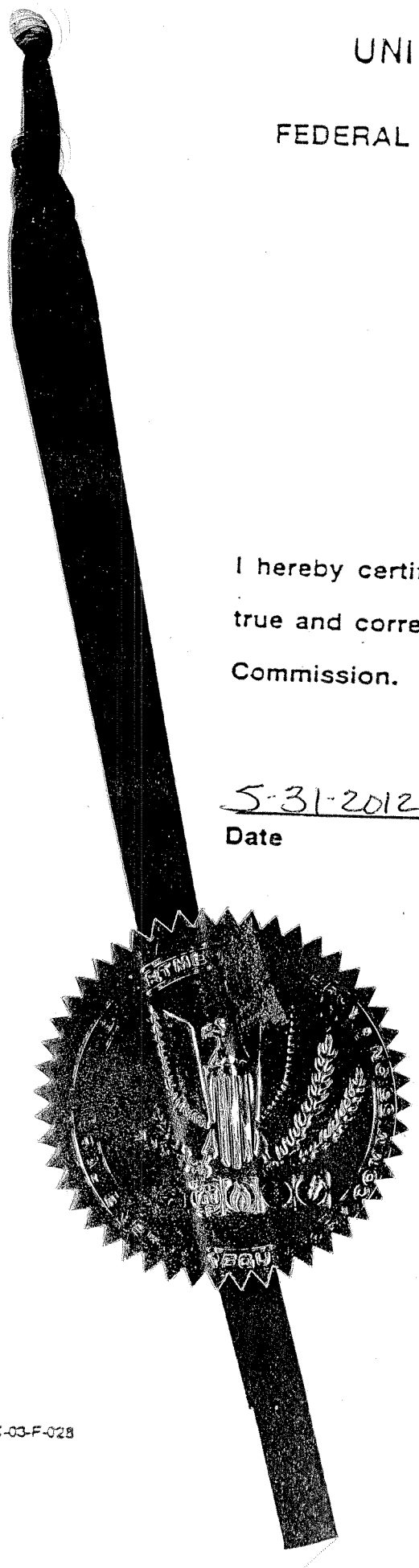
I hereby certify that the attached 83 pages are true and correct copies of a document on file with the Commission.

5-31-2012
Date

Norma L. Anderson
Custodian

I hereby certify that the Custodian, or his designee, which signature appears above, is the official custodian of the records of the Federal Energy Regulatory Commission which certification is made and was such official custodian at the time of executing the above certification.

SECRETARY



ERC-03-F-028

139 FERC ¶ 61,161
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;
Philip D. Moeller, John R. Norris,
and Cheryl A. LaFleur.

Tennessee Gas Pipeline Company, L.L.C. Docket No. CP11-161-000

ORDER ISSUING CERTIFICATE AND APPROVING ABANDONMENT

(Issued May 29, 2012)

1. On March 31, 2011, Tennessee Gas Pipeline Company, L.L.C.[1] (Tennessee) filed an application under section 7(c) of the Natural Gas Act (NGA)[2] and Part 157 of the Commission's regulations[3] for a certificate of public convenience and necessity authorizing Tennessee to construct, install, modify, operate, and maintain certain pipeline and compression facilities to be located in Pennsylvania and New Jersey that will increase natural gas delivery capacity on Tennessee's existing 300 Line System by 636,000 dekatherms (Dth) per day. Tennessee also requests approval of new incremental recourse rates for service on the proposed Northeast Upgrade Project facilities and on the certificated 300 Line Project facilities, as well as authority under section 7(b) of the NGA[4] to abandon certain metering facilities that are to be replaced.

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[1] Although originally filed under Tennessee Gas Pipeline Company, Tennessee converted its corporate structure to a limited liability company and changed its name to Tennessee Gas Pipeline Company, L.L.C., effective October 1, 2011.

[2] 15 U.S.C. § 717f(c) (2006).

[3] 18 C.F.R. Part 157 (2011).

[4] 15 U.S.C. § 717f(b) (2006).

2. We will authorize Tennessee's proposals, with appropriate conditions, as discussed below.

I. Background and Proposal

3. Tennessee is a limited liability company organized and existing under the laws of the State of Delaware. Tennessee's mainline transmission system extends from its principal sources of supply in Texas, Louisiana, and the Gulf of Mexico area, through the States of Texas, Louisiana, Arkansas, Mississippi, Alabama, Tennessee, Kentucky, West Virginia, Ohio, Pennsylvania, New York, New Jersey, Massachusetts, New Hampshire, Rhode Island, and Connecticut. Tennessee is a natural gas company, as defined by section 2(6) of the NGA,[5] engaged in the transportation of natural gas in interstate commerce and is subject to the jurisdiction of the Commission.

4. On May 14, 2010, the Commission issued an order authorizing Tennessee to construct and operate pipeline facilities and replace certain compression facilities in Pennsylvania and New Jersey on its 300 Line System to both increase overall system reliability (the Reliability Component) and increase pipeline capacity by an incremental 350,000 Dth per day (the Market Component) (jointly, the 300 Line Project).[6] The Market Component included the construction of eight pipeline loop segments totaling 127.4 miles of 30-inch diameter pipe, two new compressor stations, and the upgrade/restaging of compressor units at three other compressor stations. Since the filing of Tennessee's application in the instant proceeding, Tennessee completed construction of its 300 Line Project and placed the facilities in service on November 1, 2011.[7]

A. Facilities

5. In its present proposal, Tennessee seeks authorization for its Northeast Upgrade Project, which will add an incremental 636,000 Dth per day of capacity to its existing 300 Line System. Tennessee's proposal consists of the construction of five pipeline loop segments totaling approximately 40.3 miles of 30-inch-diameter pipe (21.9 miles in

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[5] 15 U.S.C. § 717a(6) (2006).

[6] *Tennessee Gas Pipeline Co.*, 131 FERC ¶ 61,140 (2010).

[7] Tennessee's Notification of Placing Facilities In-Service dated November 4, 2011.

Pennsylvania and 18.5 miles in New Jersey) and the addition of approximately 22,310 horsepower (hp) of compression at two existing compressor stations. More specifically, Tennessee's proposed project includes the following facility construction and modifications:

Pipeline Loops

- Loop 317 – construction of 5.4 miles of 30-inch-diameter pipeline in Bradford County, Pennsylvania;
- Loop 319 – construction of 2.0 miles of 30-inch-diameter pipeline in Bradford County, Pennsylvania;
- Loop 321 – construction of 8.1 miles of 30-inch-diameter pipeline in Wayne and Pike Counties, Pennsylvania;
- Loop 323 – construction of 17.2 miles of 30-inch-diameter pipeline in Pike County, Pennsylvania and Sussex County, New Jersey;
- Loop 325 – construction of 7.6 miles of 30-inch-diameter pipeline in Passaic and Bergen Counties, New Jersey;

Compressor Stations

- Station 319 – modification of the compressor station yard and piping to accommodate new appurtenant equipment in Bradford County, Pennsylvania;
- Station 321 – addition of 10,310 hp of compression (compressor and drive), modification of the yard and station piping to accommodate the installation of the new compressor unit and compressor building, and installation of appurtenant facilities in Susquehanna County, Pennsylvania;
- Station 323 – addition of 12,000 hp of compression (compressor and drive), restaging of one existing compressor unit, modification of the yard and station piping to accommodate the installation of the new compressor unit and compressor building, and installation of appurtenant facilities in Pike County, Pennsylvania;
- Station 325 – modification of the yard and station piping to accommodate the installation of appurtenant equipment in Sussex County, New Jersey;

Meter Station and Appurtenant Facilities

- Mahwah meter station – upgrade and modification of the existing meter station, installation of two new taps, three ultrasonic meters, two gas filter-separators, and abandonment of two 12-inch orifice meters; and
- Installation of other appurtenant and auxiliary equipment, as further described in the application.[8]

B. Rates

6. Tennessee proposes to recover the costs associated with the Northeast Upgrade Project facilities through incremental recourse rates charged to shippers using the resulting capacity. The incremental firm recourse rate consists of: (1) a monthly reservation rate of $14.909 per Dth (equivalent to a daily reservation rate of $0.4902 per Dth), (2) a daily commodity rate of $0.00 per Dth, (3) applicable demand and commodity surcharges, and (4) applicable fuel and lost and unaccounted for charges. Tennessee calculated this rate using the costs and design capacities of both the proposed Northeast Upgrade Project and the Market Component facilities of Tennessee's 300 Line Project.[9] Tennessee argues that this is appropriate given that the Market Component of the 300 Line Project makes it possible for Tennessee to achieve the capacity increase of the Northeast Upgrade Project at a much lower cost than would have been possible absent construction of the 300 Line Project Market Component facilities. Tennessee states it has precedent agreements for long-term firm transportation services utilizing the full capacity of the proposed Northeast Upgrade Project with two shippers, Chesapeake Energy Marketing, Inc. (Chesapeake) and Statoil Natural Gas LLC (Statoil), under negotiated rate agreements under Rate Schedule FT-A of Tennessee's FERC Gas Tariff. Tennessee proposes to commence project service on November 1, 2013.

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[8] *See* Exhibit Z-1 of Tennessee's application for description of the appurtenant and auxiliary equipment.

[9] The 300 Line Project had two components: (1) a Replacement Component, the costs of which are to be recovered from system services, and (2) a Market Component, the costs of which are to be recovered through an incremental rate. The Commission-approved Rate Schedule FT-A initial firm recourse rate for the Market Component of the 300 Line Project consists of: (1) a monthly reservation rate of $26.94 per Dth; (2) a daily commodity rate of $0.00 per Dth; (3) applicable demand and commodity surcharges; and (4) applicable fuel and lost-and-unaccounted-for charges. *See Tennessee Gas Pipeline Co.*, 131 FERC ¶ 61,140, at P 24 (2010).

7. Tennessee proposes to use the applicable general system rates for interruptible transportation services through the Northeast Upgrade Project capacity.

C. Open Season

8. Prior to holding its open season for the project, Tennessee executed binding precedent agreements with Chesapeake and Statoil for long-term firm natural gas transportation for the full capacity of the project, subject to the outcome of the open season. Tennessee held the binding open season from February 22 to March 22, 2010. Tennessee states that in the open season it offered rates, terms, and conditions of service to potential shippers that were equivalent to those included in the precedent agreements with Chesapeake and Statoil and that no other parties submitted a bid. Tennessee also solicited turn-back of capacity that could be used to provide transportation service to shippers as part of the Northeast Upgrade Project. Tennessee states that no shippers offered to turn back capacity in response to the solicitation. Tennessee states that it awarded Chesapeake 429,300 Dth per day of capacity and Statoil 206,700 Dth per day of capacity, for a total of 636,000 Dth per day. Thus, all the capacity of the proposed project is currently subscribed under precedent agreements.

9. By committing in the open season to quantities equal to or greater than 125,000 Dth per day for a contract term of at least 20 years, Tennessee states that both Chesapeake and Statoil qualified as Anchor Shippers. Tennessee proposes that Anchor Shippers receive certain benefits, including extension rights and a negotiated rate cap for construction overrun sharing, for helping the project reach critical mass. Tennessee notes that these Anchor Shipper benefits would have been provided on a non-discriminatory basis to any other potential shipper that submitted a qualifying bid as an Anchor Shipper in the open season. Tennessee requests that the Commission approve these contract provisions as permissible material deviations to the form of service agreement contained in Tennessee's tariff.

II. Notice and Interventions

10. Notice of Tennessee's application was published in the *Federal Register* on April 20, 2011 (76 Fed. Reg. 22,093). A number of timely, unopposed motions to intervene were filed.[10] Timely, unopposed motions to intervene are granted by operation

[10] The parties filing timely, unopposed motions to intervene are listed in Appendix A to this order.

of Rule 214(c) of the Commission's Rules of Practice and Procedure.[11] Timely notices of intervention were filed by the New York State Public Service Commission, the New Jersey Department of Environmental Protection (New Jersey DEP), the U.S. Department of the Interior on behalf of the National Park Service (NPS), and the New Jersey Board of Public Utilities. Timely notices of interventions are granted by operation of Rule 214(a) of the Commission's Rules of Practice and Procedure.[12] Chesapeake Energy Marketing, Inc. filed a motion to intervene one day late. Chesapeake demonstrated an interest in this proceeding and its late intervention will not delay or otherwise prejudice the proceeding.[13] Therefore, we will grant this motion.

III. Discussion

11. Because Tennessee seeks to construct, operate, and abandon facilities used to transport natural gas in interstate commerce subject to the jurisdiction of the Commission, the proposal is subject to the requirements of sections 7(b) and (c) of the NGA.[14]

A. Application of the Certificate Policy Statement

12. The Certificate Policy Statement provides guidance for evaluating proposals to certificate new construction.[15] The Certificate Policy Statement established criteria for determining whether there is a need for a proposed project and whether the proposed project will serve the public interest. The Certificate Policy Statement explains that in deciding whether to authorize the construction of major new pipeline facilities, the Commission balances the public benefits against the potential adverse consequences. The Commission's goal is to give appropriate consideration to the enhancement of

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[11] 18 C.F.R. § 385.214(c) (2011).

[12] 18 C.F.R. § 385.214(a) (2011).

[13] 18 C.F.R. § 385.214(d) (2011).

[14] 15 U.S.C. § 717f (2006).

[15] *Certification of New Interstate Natural Gas Pipeline Facilities*, 88 FERC ¶ 61,227 (1999), *clarified*, 90 FERC ¶ 61,128 (2000), *further clarified*, 92 FERC ¶ 61,094 (2000) (Certificate Policy Statement).

competitive transportation alternatives, the possibility of overbuilding, subsidization by existing customers, the applicant's responsibility for unsubscribed capacity, the avoidance of unnecessary disruptions of the environment, and the unneeded exercise of eminent domain in evaluating new pipeline construction.

13. Under this policy, the threshold requirement for pipelines proposing new projects is that the pipeline must be prepared to support the project financially without relying on subsidization from existing customers. The next step is to determine whether the applicant has made efforts to eliminate or minimize any adverse effects the project might have on the applicant's existing customers, existing pipelines in the market and their captive customers, or landowners and communities affected by the route of the new pipeline. If residual adverse effects on these interest groups are identified, after efforts have been made to minimize them, the Commission will evaluate the project by balancing the evidence of public benefits to be achieved against the residual adverse effects. This is essentially an economic test. Only when the benefits outweigh the adverse effects on economic interests will the Commission proceed to complete the environmental analysis where other interests are considered.

14. As noted above, the threshold requirement is that the pipeline must be prepared to financially support the project without relying on subsidization from its existing customers. Tennessee proposes to recover the costs of the proposed facilities through a new incremental rate for service which is higher than Tennessee's existing system-wide rate. Use of an incremental rate, as discussed and approved below, ensures that existing customers that do not use the facilities will not subsidize the expansion. Thus, we find Tennessee's existing shippers will not subsidize the project.

15. The construction and operation of the proposed facilities will not degrade existing customers' service. There will be no adverse impact on existing pipelines in the region or their captive customers because the proposal is not intended to replace existing customers' service on other existing pipelines. In addition, no existing pipelines or their customers have protested the proposal. Moreover, the project will help alleviate pipeline constraints in the region by increasing pipeline capacity to the high-demand markets in the northeast.

16. Regarding impacts on landowners and communities along the route of the project, Tennessee has proposed to locate the pipeline looping segments within or parallel to existing rights-of-way for approximately 84 percent of the length of the proposed segments. In addition, all the construction, installation, and modifications activities at the existing compressor stations will take place within existing Tennessee property boundaries. Tennessee participated in the Commission's pre-filing process and states that it is working diligently to address landowner concerns and questions and has made design changes, to the extent feasible, to address concerns from landowners and negotiate mutually agreeable easement agreements. Although, a number of landowners filed

comments objecting to or concerning the proposed facilities, we find that Tennessee has taken steps to minimize any adverse impacts on landowners and surrounding communities. The specific landowner comments are addressed in the Environmental Assessment (EA) for the project and in the Environmental Analysis section of this order, below.

17. Based on the benefits Tennessee's proposal will provide to the project shippers, the lack of adverse effects on existing customers and other pipelines and their captive customers, and the minimal adverse effects on landowners or communities along the route, we find, consistent with the Certificate Policy Statement and subject to the environmental discussion below, that Tennessee's proposed Northeast Upgrade Project is required by the public convenience and necessity, as conditioned in this order.

18. We also find that Tennessee's proposal to abandon certain facilities that are being replaced or will no longer be required after the proposed project is placed in service is permitted by the present and future public convenience or necessity.

B. Rates

1. Incremental Rates

19. Tennessee proposes to provide the new firm transportation service under Rate Schedule FT-A of Tennessee's tariff. As discussed below, the Commission will approve the recalculated incremental rates for service on the Northeast Upgrade Project.

20. Although Chesapeake and Statoil have elected to pay negotiated rates for service on the Northeast Upgrade Project, Tennessee is required under the Commission's Alternative Rate Policy Statement to provide recourse rates as an alternative.[16]

21. Tennessee has proposed an incremental recourse rate consisting of: (1) a monthly reservation rate of $14.909 per Dth (equivalent to a daily reservation rate of $0.4902 per Dth; (2) a daily commodity rate of $0.00 per Dth; (3) applicable demand and commodity

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[16] *Alternatives to Traditional Cost-of-Service Ratemaking for Natural Gas Pipelines; Regulation of Negotiated Transportation Services of Natural Gas Pipelines*, 74 FERC ¶ 61,076, *order on clarification*, 74 FERC ¶ 61,194 (1996); *reh'g and clarification denied*, 75 FERC ¶ 61,024 (1996); *aff'd sub nom. Burlington Resources Oil & Gas Co. v. FERC*, 172 F.3d 918 (D.C. Cir. 1998) (Alternative Rate Policy Statement).

surcharges; and (4) applicable fuel and lost and unaccounted for charges. In calculating this rate, Tennessee uses an estimated total cost for the Northeast Upgrade Project of $376,283,376,[17] and a design capacity of 636,000 Dth per day. Tennessee's proposed $71,053,000 incremental cost of service reflects the income tax rates, capital structure and rate of return approved in Tennessee's settlement in Docket No. RP95-112-000, et al.[18] and reaffirmed in Tennessee's recent settlement in Docket No. RP11-1566-000.[19] The cost of service also reflects a straight-line depreciation rate of 2.5 percent, based on an estimated useful life of 40 years for the proposed Northeast Upgrade Project facilities. Tennessee then added the $105,345,000 cost of service approved by the Commission for the Market Component of the 300 Line Project, with its accompanying 350,000 Dth per day of design capacity.

22. Tennessee maintains that the Northeast Upgrade Project will build upon the additional capacity created by the Market Component of its 300 Line Project, which was placed into service on November 1, 2011. Tennessee also maintains that the 300 Line Project Market Component facilities have made it possible to achieve the capacity increase of the Northeast Upgrade Project at a lower cost than would have been possible absent the construction of the 300 Line Project Market Component facilities. Therefore, Tennessee contends, it is appropriate to calculate the incremental recourse rate for the Northeast Upgrade Project using a cost of service that combines the costs and design capacities of both the 300 Line Project Market Component facilities and the Northeast Upgrade Project. Tennessee suggests that failure to do so would enable the Northeast Upgrade Project shippers to inappropriately benefit from their project's relatively-cheaper expansibility (made possible by the prior construction of the Line 300 Project Market Component facilities), while the shippers of the Line 300 Project Market Component alone bear all costs of that construction.

23. Tennessee also contends that the combined rate treatment for the Northeast Upgrade Project is fully consistent with the Commission's Certificate Policy Statement, where the Commission recognized the need for certain exceptions to the application of incremental pricing for all projects. Tennessee maintains the inexpensive expansibility of

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[17] Tennessee Application - Exhibit K.

[18] *Tennessee Gas Pipeline Co.*, 94 FERC ¶ 61,117 (2001); 77 FERC ¶ 61,083 (1996), *reh'g denied*, 78 FERC ¶ 61,069 (1997).

[19] *Tennessee Gas Pipeline Co., L.L.C.*, 137 FERC ¶ 61,182 (2011).

the Northeast Upgrade Project facilities is a result of the earlier, more expensive capacity created by the 300 Line Project Market Component facilities.[20] Although Tennessee is not proposing to roll the Northeast Upgrade Project costs into its general system rates, Tennessee contends its proposal to roll the project's costs into the rates of the 300 Line Project Market Component is consistent with the premise that such rolled-in rate treatment is appropriate in cases of inexpensive expansibility made possible because of earlier costly construction.

24. Tennessee further notes that in the precedent agreement that provided the market support for the 300 Line Project, Tennessee and EQT Energy, LLC agreed to a rate adjustment to the negotiated rate "to the extent a subsequent project meeting certain criteria would be constructed and eventually placed in-service within a specified time period."[21] Tennessee also explains that the parties agreed to this negotiated rate adjustment in recognition that Tennessee would likely be able to construct a subsequent project (such as the Northeast Upgrade Project) at a lower cost than would have been possible without the 300 Line Project.[22]

25. The Commission rejects Tennessee's proposal to base the initial recourse rate for the Northeast Upgrade Project on the combined costs and capacities of both the Northeast Upgrade Project and the Market Component of the 300 Line Project because to do so would result in the total costs of the 300 Line Project Market Component being reflected, and recovered, in two separate rates at the same time. Although it would have been possible to amend the previously-authorized initial rate for the 300 Line Project Market Component to reflect the costs of the instant project in an NGA section 7 proceeding before that project went into service, once the 300 Line Project Market Component went into service in November 2011, the rate for service on that project can only be changed pursuant to section 4 of the NGA. Therefore, the Commission will approve an initial incremental Rate Schedule FT-A reservation rate for service on the Northeast Upgrade Project of $9.31 per Dth per month.[23] This is without prejudice to Tennessee proposing

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[20] Tennessee's Application at 14.

[21] *Id.*

[22] *Tennessee Gas Pipeline Co.*, 131 FERC ¶ 61,140 at P 34.

[23] The $71,053,000 incremental cost of service for the Northeast Upgrade Project divided by the annualized monthly billing determinants of 636,000 Dth per day equals $9.31 Dth per month.

in an NGA section 4 proceeding to consolidate the rates of the Northeast Upgrade Project and the 300 Line Project Market Component rates into a single incremental rate.[24] In addition, this finding will not preclude Tennessee from adjusting EQT Energy, LLC's negotiated rate as it previously agreed.

26. Tennessee is directed to file a tariff record reflecting the approved initial rate not less than 30 but no more than 60 days prior to the in service date of the Northeast Upgrade Project.

2. Negotiated Rates

27. Tennessee states that the negotiated rates with Chesapeake and Statoil consist of a monthly reservation rate of $13.5354 per Dth (equivalent to a daily reservation rate of $0.4450 per Dth) and a daily commodity rate of $0.00 per Dth. Tennessee states that these reservation and commodity rates are fixed[25] for the 20-year primary term of the service agreements with the shippers and are exclusive of any applicable surcharges. In addition, Tennessee points out that Chesapeake and Statoil have agreed to pay the designated surcharges and fuel and lost and unaccounted for charges as provided in the binding precedent agreements between Tennessee and the two shippers.

28. As indicated above, Tennessee has entered into agreements with Chesapeake and Statoil to provide firm transportation service at negotiated rates. In certificate proceedings, the Commission establishes initial recourse rates, but does not make determinations regarding specific negotiated rates for proposed services.[26] In accordance with the Alternative Rate Policy Statement[27] and the Commission's negotiated rate

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[24] If Tennessee seeks to accomplish this rate change before the in-service date of the Northeast Upgrade Project, it should combine its NGA section 4 filing with a filing under section 7 to amend the initial rate approved herein.

[25] The negotiated rate agreement for Chesapeake and Statoil includes a rate adjustment mechanism for construction cost overruns.

[26] *Gulf Crossing Pipeline Co. LLC,* 123 FERC ¶ 61,100, at P 97 (2008); *ANR Pipeline Co.,* 108 FERC ¶ 61,028, at P 21 (2004); *Gulfstream Natural Gas System, LLC,* 105 FERC ¶ 61,052, at P 37 (2003); *Tennessee Gas Pipeline Co.,* 101 FERC ¶ 61,360 at n.19 (2002).

[27] *Alternative Rate Policy Statement*, 74 FERC ¶ 61,076 at 61,241.

policy,[28] Tennessee must file any negotiated rate agreements or a tariff record describing the essential elements of the negotiated rate agreements associated with this project. Tennessee shall file its negotiated rate agreements or a tariff record no less than 30 days, and not more than 60 days, prior to the commencement of service.

3. Fuel and Electric Power Cost Recovery Adjustment

29. Tennessee proposes to use its applicable Rate Schedule FT-A fuel charges for the increased transportation services associated with the proposed expansion on its existing 300 Line. Tennessee supported the use of its currently-effective Rate Schedule FT-A gas fuel charge. However, Tennessee did not provide information on how the addition of the proposed 12,000 hp electric-driven compressor will impact the Electric Power Cost Recovery Adjustment (EPCRA)[29] for its existing customers. To the extent that the incremental electric power unit costs for the project compressor are greater than the existing electric power unit costs, the existing customers could subsidize the project compression. Therefore, Tennessee is directed to file an analysis within 30 days of this order to demonstrate what impact the new compression will have on its EPCRA.

C. Non-Conforming Provisions

30. Tennessee states that there are several provisions in its precedent agreements with Chesapeake and Statoil that do not conform with its *pro forma* Rate Schedule FT-A transportation service agreement (*Pro Forma* Agreement) and requests Commission approval of these provisions.

31. Tennessee states that because Chesapeake and Statoil elected to pay negotiated rates in the Northeast Upgrade Project's open season, each was provided the right to

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[28] *See, e.g., Texas Eastern Transmission, LP*, 133 FERC ¶ 61,220 (2010).

[29] Tennessee filed its certificate application during the settlement period of Tennessee's general rate case filed on November 30, 2010, in Docket No. RP11-1566-000. The rate case, among other things, implemented surcharges for two additional tracking mechanisms: a Fuel and Loss Retention Adjustment, which tracks and adjusts for over or under collections of Tennessee's fuel and losses, and the EPCRA, which tracks and adjusts for over or under collections of Tennessee's electric power costs. *See* Sheet Nos. 400, 401 and 402 to Tennessee's FERC Gas Tariff, Sixth Revised Volume No. 1.

extend the 20-year primary term of their respective Firm Transportation Agreements for successive 5-year terms, at the negotiated rate, so long as Chesapeake and Statoil provide written notice to Tennessee at least 24 months prior to the end of the primary term of the Firm Transportation Agreement, or the extended term, as applicable. Tennessee believes that it is reasonable to provide these two Anchor Shippers with this relatively-limited extension provision to address their future capacity needs. Tennessee asserts that this provision was an integral part of the arrangements under which Chesapeake and Statoil agreed to provide firm contractual support for the Northeast Upgrade Project. Tennessee also contends that it was prepared to offer the same extension rights that it offered to Chesapeake and Statoil to any other potential shipper that submitted a qualifying bid as an Anchor Shipper during the open season.

32. Tennessee also states that Chesapeake and Statoil have agreed to be subject to an adjustment to each shipper's negotiated rate due to cost escalations and/or construction cost overruns, which would increase both Chesapeake and Statoil's negotiated rate up to a rate cap of $0.47 per Dth. Tennessee contends that because the precedent agreements pre-date the actual construction of the Northeast Upgrade Project, it is reasonable that Chesapeake and Statoil share the construction risk with Tennessee through this negotiated rate adjustment provision to reflect cost overruns. Tennessee maintains that this provision was an integral part of the transaction that led to Chesapeake and Statoil's support of the Northeast Upgrade Project and will not affect the terms of service once the facilities are placed in-service.

33. In addition, Tennessee states that there will necessarily be a few additional, minor differences between its firm transportation agreements with Chesapeake and Statoil and its pro forma firm transportation agreement. The project transportation agreements will: (1) contain a "Whereas" clauses describing the specific transaction; (2) address the commencement date of the agreements; (3) indicate that Tennessee will construct the project facilities; (4) state that the execution of the firm transportation agreements will supersede the precedent agreements; (5) not contain language through which individual rate components may be adjusted downward or upward (because Chesapeake and Statoil have agreed to pay negotiated rates); and (6) indicate the sections that will survive the execution and effectiveness of the Firm Transportation Agreements.

34. Tennessee states that the executed service agreements with Chesapeake and Statoil will provide the firm contractual support for the project and reflect the contractual incentives that were necessary for the Shippers to make binding commitments. Tennessee argues that, absent these contractual commitments, the project would not proceed. Therefore, Tennessee asserts, other shippers or potential shippers cannot be viewed as being similarly situated to Chesapeake and Statoil. Tennessee argues that, under the Commission's existing negotiated rate and discount policies, project sponsors may provide rate incentives to shippers on a number of grounds, including volumes to be transported, without constituting undue discrimination. For these reasons, Tennessee

does not believe that any aspect of the service agreements executed with Chesapeake and Statoil constitutes a material deviation from the *pro forma* Agreement contained in its tariff.

35. Tennessee argues that, even if the Commission construes these non-conforming provisions in the Shipper's firm transportation agreements to constitute material deviations from Tennessee's *pro forma* Agreement, none of these provisions are unduly discriminatory. Tennessee explains that it agreed to the non-conforming provisions in exchange for the shippers' long-term commitment to the project, and Tennessee claims that absent these contractual commitments, the shippers would not have subscribed to the project. Tennessee further asserts that these deviations simply reflect certain facts about the project, certain justified shipper benefits, and the fact that it cannot provide the services under the firm transportation agreements until it receives the necessary authorizations and constructs the project facilities. Due to the shippers' unique status as project sponsors, Tennessee states that none of the identified provisions create the risk of undue discrimination. Therefore, Tennessee requests that the Commission review and approve these provisions in the firm transportation agreement for each shipper in this certificate proceeding, subject to Tennessee filing such agreements as specified in Commission regulations or this order. Similarly, Tennessee requests a determination from the Commission that even if some contractual provisions could be construed to constitute a material deviation from the *pro forma* service agreement, no provision of the precedent agreements is unduly discriminatory.

36. As required by the Commission's regulations, Tennessee states it intends to file the firm transportation agreements and negotiated/discounted rate agreements and identify any material deviations or non-conforming provisions in each agreement. However, Tennessee requests the Commission address the potentially non-conforming provisions in this proceeding to forgo revisiting any issues raised by these agreements after Tennessee incorporates the subject provisions into executed service agreements filed with the Commission.

37. The Commission finds that the incorporation of non-conforming provisions in Chesapeake's and Statoil's service agreements constitutes material deviations from Tennessee's *pro forma* service agreement.[30] However, in other proceedings, the Commission has found that non-conforming provisions may be necessary to reflect the unique circumstances involved with the construction of new infrastructure and to provide

[30] Tennessee Application at section VII.

the needed security to ensure the viability of a project.[31] We find that the non-conforming provisions identified by Tennessee are permissible because they do not present a risk of undue discrimination, do not affect the operational conditions of providing service, and do not result in any customer receiving a different quality of service.[32]

38. Tennessee must file at least 60 days before the in-service date of the proposed facilities, an executed copy of each non-conforming agreement disclosing and reflecting all non-conforming language as part of Tennessee's tariff and a tariff record identifying these agreements as non-conforming agreements consistent with section 154.112 of the Commission's regulations.[33] This required disclosure includes any transportation provision or agreement detailed in a precedent agreement that survives the execution of the service agreement. In addition, the Commission emphasizes that the above determinations relate only to those items as described by Tennessee in section VII of its application and not to the entirety of the precedent agreements or the language contained in the precedent agreements.[34]

D. Environmental Analysis

39. Commission staff began its environmental review of the Northeast Upgrade Project following approval for Tennessee to use the pre-filing process on July 20, 2010, in Docket No. PF10-23-000. As part of the pre-filing review, the staff issued a *Notice of Intent to Prepare an Environmental Assessment for the Planned Northeast Upgrade Project, Request for Comments on Environmental Issues, and Notice of Public Scoping Meetings* (NOI) on October 8, 2010. The NOI was published in the *Federal Register*[35]

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[31] *See, e.g., Midcontinent Express Pipeline LLC*, 124 FERC ¶ 61,089, at P 82 (2008) and *Rockies Express Pipeline LLC*, 116 FERC ¶ 61,272, at P 78 (2006).

[32] *See, e.g., Gulf South Pipeline Co., L.P.*, 115 FERC ¶ 61,123 (2006) and *Gulf South Pipeline Co.*, 98 FERC ¶ 61,318, at 62,345 (2002).

[33] 18 C.F.R. § 154.112 (2011).

[34] We note we are only ruling herein on the specific provisions of the agreements highlighted by Tennessee in its application. The full agreements will be reviewed upon their filing.

[35] 75 Fed. Reg. 64,303 (October 19, 2010).

and mailed to over 1,500 parties including federal, state, and local government officials; agency representatives; environmental and public interest groups; Native American tribes; local libraries and newspapers; and affected property owners. Staff held three public scoping meetings in communities near the proposed facilities to provide the public with an opportunity to learn more about the project and to comment on environmental issues that should be addressed in the Environmental Assessment (EA). The three scoping meetings were attended by a total of 121 individuals.[36]

40. On July 27, 2011, Commission staff issued an additional notice, after Tennessee filed its project application on March 31, 2011, requesting comments from landowners and other stakeholders potentially affected by route alternatives for Loop 323 in Montague Township, Sussex County, New Jersey. The notice was mailed to over 320 landowners and stakeholders. Tennessee revised its proposed alignment of Loop 323 on August 31, 2011 to incorporate into its proposed route one of these route alternatives in order to reduce impacts on a continuous forest block and the federally-endangered bog turtle.

41. We received written and verbal comments during the public scoping process from affected landowners, concerned citizens, government agencies, and other organizations. The primary issues raised during scoping were the request that the Commission complete an Environmental Impact Statement (EIS) rather than an EA; the development of natural gas from the Marcellus Shale[37] in Pennsylvania and the need to consider the cumulative impacts of shale gas development as part of our review of the project; route alternatives in proximity to the Delaware Water Gap National Recreation Area (Delaware Water Gap NRA); impacts on recreation and special interest areas; impacts on water resources, forest, and wildlife; operational noise at modified compressor stations; impacts on landowners and their homes, including property values; and the need for complete information for state permitting purposes.

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[36] The public scoping meetings were held in Ringwood, New Jersey, and Milford and Wyalusing, Pennsylvania, on November 1, 3, and 4, 2010, respectively.

[37] The unconventional development and production of natural gas resources in shale formations has increased in the United States in recent years. In Pennsylvania, this development is occurring in the Marcellus Shale, which extends primarily from New York through Pennsylvania and into West Virginia and Ohio. EA at 2-121.

1. Pre-EA Scoping Comments

42. Commentors on the NOI, including Skylands Clean, New Jersey Highlands Coalition, and New Jersey Conservation Foundation, contended that the project would result in significant impacts on the human environment and, therefore, an EIS would be required. The EA addresses whether an EIS should have been prepared. It explains that the Commission's regulations implementing the National Environmental Policy Act of 1969 (NEPA) require preparation of an EIS for "[m]ajor pipeline construction projects...."[38] Our regulations do not define or explain what constitutes a "major" pipeline; however, the Commission's years of experience with NEPA implementation for pipeline projects indicate that a new 40.3-mile-long, 30-inch-diameter pipeline that will be co-located within or adjacent to existing rights-of-way for 84 percent of its length normally would not fall under the "major" category for which an EIS is automatically prepared.[39]

43. The Council on Environmental Quality (CEQ) regulations implementing NEPA state that one of the purposes of an EA is to assist agencies in determining whether to prepare an EIS or a finding of no significant impact. Here, Commission staff prepared an EA to determine whether the Northeast Upgrade Project would have significant impact, thus necessitating the preparation of an EIS. As explained below, the EA concludes, and we agree, that the Northeast Upgrade Project would not constitute a major federal action

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[38] EA at 1-2 (citing 18 C.F.R. § 380.6(a)(3) (2011)).

[39] *See, e.g., Tennessee Gas Pipeline Co.*, 131 FERC ¶ 61,140 (2010) (EA issued for Tennessee's 300 Line Project consisting of 127.4 miles of 30-inch-diameter pipeline loops through six counties in Pennsylvania and two counties in New Jersey); *Magnum Gas Storage, LLC*, 134 FERC ¶ 61,197 (2011) (EA issued for new Magnum Gas Storage Project which included gas storage field on 2,050-acre site in Millard County, Utah, and associated 61.6-mile, 36-inch-diameter pipeline traversing three counties in Utah); *Colorado Interstate Gas Co.*, 131 FERC ¶ 61,086 (2010) (EA issued for Colorado Interstate Gas Co.'s Raton 2010 Expansion Project which included two new 16-inch-diameter pipeline laterals totaling 118 miles in length traversing four counties in southeastern Colorado); *Equitrans L.P.*, 117 FERC ¶ 61,184 (2006) (EA issued for Big Sandy Pipeline Project which included 68 miles of new 20-inch-diameter pipeline traversing four counties in eastern Kentucky).

significantly affecting the quality of the human environment.[40] Therefore, an EIS is not required.[41]

44. Some commentors also argued an EIS would be necessary to fully consider the impact of the development of natural gas from the Marcellus Shale in the environmental review of the project. As explained in more detail below, the EA addresses the cumulative impact of other jurisdictional natural gas pipelines, natural gas facilities associated with the project but that are not under the Commission's jurisdiction, unrelated projects, and development of Marcellus Shale. The EA considers the general development of the Marcellus Shale in proximately to the project within the context of cumulative impacts in the project area. The EA notes that the more detailed analysis of Marcellus Shale impacts sought by commentors is outside the scope of the project analysis because the exact location, scale, and timing of future facilities are unknown. Moreover, the EA concludes that the potential cumulative impacts of Marcellus Shale development are not sufficiently causally related to the project to warrant the comprehensive consideration of those impacts in our staff's analysis.[42]

45. Commentors also raised concerns regarding project impacts on recreation and special interest areas including the Delaware River, Appalachian National Scenic Trail, New Jersey Highlands Region, state parks, and properties enlisted in the New Jersey Green Acres program, among others. The EA describes each recreation and special interest area that would be crossed by or within 0.25 mile of the project, and discusses the impacts of the project on each area and Tennessee's consultations with applicable permitting agencies. Tennessee provided state-specific Environmental Construction Plans (ECPs) describing the measures that it will implement to minimize construction and

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[40] EA at 4-1. Under 40 C.F.R. § 1508.18 of the CEQ's regulations, "a 'major federal action' includes actions with effects that may be major and which are potentially subject to Federal control and responsibility. Major reinforces but does not have a meaning independent of significantly. (Sec. 1508.27)." "Significantly" requires consideration of both the context and intensity of the project. *See* 40 C.F.R. § 1508.27 (2011).

[41] CEQ regulations state that, where an EA concludes in a finding of no significant impact, an agency may proceed without preparing an EIS. *See* 40 C.F.R. §§ 1501.4(e), 1508.13 (2011).

[42] EA at 2-125.

operational impacts of the project. Tennessee also provided site-specific crossing plans for the above mentioned recreation and special interest areas and committed to continued consultation with the agencies responsible for these areas regarding the need for any additional mitigation measures. As stated in the EA, our staff reviewed the site-specific plans and found them acceptable.

46. Individuals, non-government organizations, and state agencies raised concern regarding adverse impacts on natural resources, primarily surface water, forest, and wildlife resources. The EA examines project impacts on these and other resources, and describes the mitigation measures that Tennessee will implement to avoid or reduce impacts, as well as the local, state, and federal agency consultations and required permits for the project.

47. Many of the commentors stated concerns that the project could threaten important drinking water resources in the region, including the Delaware River between Pennsylvania and New Jersey, and the Monksville Reservoir in Passaic County, New Jersey. The EA explains that Tennessee would cross both of these waterbodies by the horizontal directional drill (HDD) method. Tennessee's HDD contingency plans include provisions to minimize the impact of an inadvertent release of drilling mud (typically bentonite, a naturally occurring clay) into waterbodies. Tennessee would also implement other measures described in the EA and detailed in its state-specific ECPs to minimize construction-related impacts on other surface waters such as a Spill Prevention, Control and Countermeasure Plan that prohibits fueling and fuel storage within 100 feet of a waterbody. Based on the implementation of the construction and restoration methods described in Tennessee's application, the EA concludes that impacts on waterbodies would be minor and temporary and that operation of the project would not pose a threat to drinking water resources in the area.[43]

48. The EA discusses how Tennessee will further minimize impacts on forest and other vegetation by implementing erosion control measures detailed in its ECPs and by controlling the spread of invasive plant species through implementation of its Invasive Species Management Plan, which includes monitoring for and control of invasive species for at least 5 years after construction. Tennessee has also committed to comply with New Jersey's No Net Loss Reforestation Act to restore or mitigate for all forested habitat impacted on state-owned lands, and with restoration and mitigation measures that may be

[43] EA at 2-12.

required by the U.S. Army Corps of Engineers (Corps) in conjunction with permits under section 404 of the Clean Water Act (CWA).[44]

49. Four federally-listed threatened or endangered species were identified in the project area: the bog turtle, dwarf wedgemussel, Indiana bat, and small whorled pogonia. Tennessee consulted with the U.S. Fish and Wildlife Service (FWS) regarding these species and the FWS assisted us in preparing the EA, which contains our Biological Assessment (BA). As discussed below, Tennessee filed additional survey reports and we have continued consultation with the FWS. Environmental recommendations 13 and 14 are included in this order to ensure compliance with the Endangered Species Act (ESA) as Environmental Condition Nos. 13 and 14.

50. The EA identifies state-listed species of concern in the project area and discusses the field surveys conducted to date, potential impacts on the species, and measures that Tennessee will implement to avoid or minimize impacts on these species. The EA recognizes Tennessee's on-going consultation with appropriate state agencies to complete surveys and develop measures as necessary to avoid adverse impacts on rare, state-listed species. The EA recommends that Tennessee file the results of outstanding surveys for state-listed species and to identify additional mitigation measures developed in consultation with the state agencies (environmental recommendation 16). Since issuance of the EA, Tennessee and the New Jersey Department of Environmental Protection (New Jersey DEP) have filed updates and comments pertaining to state-listed species of concern. Therefore, environmental recommendation 16 is included as Environmental Condition No. 15 to this order. These updates and comments are discussed in more detail below.

51. Several landowners from the Fawn Lake community in Pike County, Pennsylvania expressed concern regarding the potential for increased operational noise at modified Compressor Station 323. The EA evaluates the predicted noise levels from the modified Compressor Station 323 at the nearest noise-sensitive areas and finds that the potential noise increase would be barely noticeable. Environmental Condition No. 18 to this order, requires Tennessee to file the results of noise surveys after placing the authorized units at Compressor Stations 321 and 323 in service and requires Tennessee to install noise controls if noise levels exceed the threshold.

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[44] 33 U.S.C. § 1344 (2006).

52. In response to landowner concerns, the EA discusses Tennessee's special construction techniques to minimize project impacts on residential properties and states that Tennessee would repair, replace, or compensate landowners for project-related damages. The EA includes site-specific residential construction plans for those residences within 50 feet of the construction work area and requests that landowners provide comment on these plans. The EA recommends that Tennessee file evidence of landowner concurrence with the residential construction plan for the residence at milepost (MP) 8.3 of Loop 323. After the issuance of the EA, Tennessee provided that landowner concurrence; therefore, the recommended condition in the EA is not included as a condition to this order. The EA concludes that implementation of the special construction methods and site-specific residential construction plans will minimize disruption to residential areas to the extent practicable and facilitate restoration of these areas as soon as possible upon completion of construction.

53. In its scoping comments, New Jersey DEP cited deficiencies and discrepancies in information it had received from Tennessee in support of its application for the state permits and federally-delegated permitting under section 401 of the CWA.[45] New Jersey DEP requested that we delay issuance of the EA until the outstanding information was submitted and reviewed by the New Jersey DEP and other applicable state agencies. The EA discusses the state's need for complete information for its permitting purposes, but concludes that the information in the EA was sufficient for the purpose of the Commission's NEPA analysis. The EA states that no more than nine percent of the proposed facilities in New Jersey remain to be surveyed due to lack of landowner permission, and that a substantial amount of environmental information was obtained from federal, state, and local resources, including for those areas not accessible for survey. The EA also explains that Tennessee has committed to obtaining all necessary environmental permits and would be required to complete and file with the Commission the results of all resource surveys upon gaining access to unsurveyed properties prior to construction. Further, Environmental Condition No. 8 requires Tennessee to provide documentation that it has received all necessary federal authorizations before construction will be allowed to proceed. This includes the section 401 permit under consideration by the New Jersey DEP.

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[45] 33 U.S.C. § 1341 (2006).

2. Late Scoping Comments

54. We also received late scoping comment letters from three affected landowners (George Feighner (two letters), Joseph and Chris Butto, and Stanley Buczek[46]) and one state agency (New Jersey DEP).[47] In addition, a form letter was filed by several non-governmental organizations (NGO)[48] and approximately 150 individuals who are not landowners affected by the project. Some individuals added additional specific concerns to these form letters. These comments were filed just before the issuance of the EA and were too late to be included. However, the majority of the late letters and comments on the EA reiterate comments previously received and are thoroughly addressed in the EA. The remaining, substantive environmental comments are addressed below.

55. In both of his late scoping comments, George Feighner states that he does not oppose the project, but opposes the proposed alignment of Loop 323, which crosses his property in Montague Township, Sussex County, New Jersey. Mr. Feighner notes that the proposed alignment, which deviates from Tennessee's existing right-of-way to avoid crossing the Delaware Water Gap NRA and requires about 3.5 miles of additional pipeline, could adversely affect air quality, animal migration routes, drainage patterns, and visual resources in the area. We note that other late commentors provided additional scoping comments on the proposed route and alternatives around the Delaware Water Gap NRA. Mr. Feighner also states concerns that the project would require removal of old growth trees and impact the water supply well and septic system on his property. In addition, Mr. Feighner and additional commentors noted their concerns about the impact on cultural resources, steep slopes, vernal pools, wetlands, and waterbodies.

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[46] In its comments on the EA filed on December 21, 2011, Tennessee responded to the comments received from both George Feighner and Stanley Buczek.

[47] Tennessee filed a response to the New Jersey DEP late scoping comment on December 13, 2011.

[48] The letter was filed jointly by New Jersey Chapter of Sierra Club, Delaware Riverkeeper Network, New Jersey Highlands Coalition, Earthjustice, New Jersey Audubon Society, Pequannock River Coalition, New Jersey Conservation Foundation, North Jersey Public Policy Network, ClimateMama, Morris County Trust for Historic Preservation, and Burham Park Association.

56. As explained in the EA, Tennessee's existing pipeline crosses the Delaware Water Gap NRA for 1 mile in Pike County, Pennsylvania and Sussex County, New Jersey, and was installed prior to 1965 when the Delaware Water Gap NRA was established. The EA analyzes two route alternatives that would cross the Delaware Water Gap NRA and finds that each of the alternatives would result in fewer environmental impact than the proposed alignment in this area. However, the EA does not recommend either alternative because of a substantial land use conflict. The EA explains that the legislation that created Delaware Water Gap NRA precludes the NPS, which manages the Delaware Water Gap NRA, from approving any route across the Delaware Water Gap NRA without federal legislation allowing it to do so, and the NPS has stated its opposition to any routing across the Delaware Water Gap NRA. Therefore, if the Commission were to approve one of the alternatives crossing the Delaware Water Gap NRA, Tennessee would still not be able to construct the project as approved. As a result, the EA concludes that while the alternative routes may be environmentally preferable, the proposed route for Loop 323, with the mitigation proposed by Tennessee and recommended by staff, is considered environmentally acceptable and would not result in significant impacts.

57. Mr. Feighner contends that the 3.5 miles of additional pipeline on Loop 323 to route around the Delaware Water Gap NRA would create the need for increased compression which would result in an increase of greenhouse gas emissions. While we agree that there would be some decrease in downstream pressure because of the additional pipe, the increased compression to compensate for this pressure drop would not result in an appreciable amount of associated greenhouse gas emissions. Any increase in greenhouse gas emissions would be minimal when comparing these 3.5 extra miles to the scope of the project facilities.

58. The EA discusses the environmental concerns raised by Mr. Feighner and other commentors and describes how Tennessee's construction plans would minimize impacts on these resources including those specific to their properties. The EA states that Tennessee would be required complete all remaining surveys, conduct any necessary agency consultations, and implement measures to address issues identified by the surveys. We believe that this process, coupled with the construction and restoration measures described in the EA and input from Mr. Feighner and other landowners, will minimize effects on property impacted by the project to the greatest extent practicable. The loss of some mature trees may be unavoidable; however, any construction-related damages are a point of negotiation between landowners and Tennessee, and Tennessee will compensate landowners for damages and the temporary and permanent easement on their land.

59. Joseph and Chris Butto are homeowners near MP 8.1 of Loop 323 in Montague Township, Sussex County, New Jersey. The Buttos' late scoping comments stated their concern that the project could impact the federally-endangered bog turtle as well as wetlands, springs, and steep slopes in the area. The EA states that Tennessee would be

required to complete its bog turtle surveys prior to construction. On January 11, 2012, Tennessee filed with the Commission, and provided to FWS, the results of its bog turtle survey for the segment of Loop 323 near the Buttos' property. The FWS concurred that the survey did not document any suitable bog turtle habitat on the referenced segment of Loop 323.

60. The Buttos also asked whether Tennessee is required to identify the potential impact radius of the pipelines and requested that information. The U.S. Department of Transportation (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA) requires that pipeline operators identify the potential impact radius at all points along their pipelines as part of determining high consequence areas. The EA addresses the methodology for identifying high consequence areas by using pipeline class locations, the associated potential impact radius, and potential impact circle.[49]

61. Stanley Buczek's late comments relay his concern that he would be unable to cross the pipeline, thereby rendering approximately 25 acres to the rear of his property unusable. In a filed response to these comments, Tennessee noted that it met with Mr. Buczek on a number of occasions, but was not granted access to his property to complete an evaluation of his concerns. Tennessee informed Mr. Buczek that it is possible to construct the pipeline in a manner that would allow heavy equipment to cross over the pipeline, allowing him access to the rear of his property. We believe that Tennessee and Mr. Buczek can resolve this issue during the easement negotiation process.

62. The general form letter requested that the Commission hold public meetings in New Jersey for the purpose of taking comments on a draft of the EA and to consider potential project impacts on drinking water resources, including the Monksville Reservoir in Passaic County, New Jersey. Three commentors filed an expanded version of the general form letter that contained a section of specific issues of importance to the commentor. In a version of the form letter, the New Jersey Chapter of Sierra Club, along with several other NGOs, added that the project would result in significant harm to critical habitat for rare, threatened, and endangered species, core forest, and native plants. The Food and Water Watch and Cornucopia Network of New Jersey added concerns of excess erosion and residential impacts from the project, respectively. Judith Sullivan added her concern regarding cumulative impacts on historic roads and Native American

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[49] The potential impact circle is a circle with a radius equal to the potential impact radius.

cultural resources in New Jersey. Ms. Sullivan's comments are addressed in greater detail below.

63. Regarding the request for additional public meetings, we believe that our process has allowed the public sufficient opportunity to comment on the project. As previously described, our environmental review process included a 30-day public scoping period and three public scoping meetings. In addition, we continued to accept and address comments until the EA was ready to be printed After the EA was issued , landowners and other stakeholders had an additional 30-day opportunity to comment on the project. Although the EA comment period closed on December 21, 2011, we continued to accept comments on the EA. Based on this, we find that interested individuals and groups had sufficient opportunity to provide comments and input on our environmental review of the project. We also find that the environmental issues raised in the form letters are adequately addressed in the EA or in the response to comments on the EA contained in this order without the need for additional public meetings.

3. EA and Post-EA Comments

64. To satisfy the requirements of the NEPA,[50] Commission staff prepared an EA for the Northeast Upgrade Project. FWS and the Corps participated in the preparation of the EA as cooperating agencies. On November 21, 2011, the EA was placed into the public record of this proceeding[51] and issued for a 30-day comment period. The EA addresses geology and soils, water resources, fisheries and wetlands, vegetation and wildlife, land use, recreation and visual resources, socioeconomics, cultural resources, air quality and noise, reliability and safety, cumulative impacts, and alternatives. As summarized below, the EA also addresses all substantive issues raised during the scoping process or otherwise identified prior to the issuance of the EA.

65. We received comments on the EA from a number of individuals, agencies, and NGOs including: the Environmental Protection Agency (EPA); the New Jersey DEP; three county agencies in Pennsylvania: Pike County Planning Commission, Pike County Conservation District, and Bradford County Office of Community Planning and Grants (Bradford County); one county agency in New Jersey: Bergen County Department of

[50] 42 U.S.C. §§ 4321-4370f (2006).

[51] A notice announcing the availability of the EA was published in the *Federal Register* on November 29, 2011. 76 Fed. Reg. 73,618 (2011).

Planning and Economic Development; three NGOs filing jointly: New Jersey Chapter of the Sierra Club, Delaware Riverkeeper Network, and New Jersey Highlands Coalition (referred to henceforth collectively as Sierra Club); William Anastasio, an affected landowner in Pennsylvania; George Feighner, an affected landowner in New Jersey; Jean Public and Steven Vitale, two concerned citizens; and Tennessee.[52] The NPS filed a statement that it had no comments on the EA. The New Jersey State Historic Preservation Office (SHPO), Ramapough Lenape Indian Nation (Ramapough Lenape), and Ms. Judith Sullivan each filed comment letters concerning cultural resource issues and our responsibilities under section 106 of the National Historic Preservation Act (NHPA),[53] that were not in response to the EA.

66. In comments on the EA, New Jersey DEP states that NPS approval will be required if the project activity of Loop 325 constitutes a conversion of federally-protected parkland funded by the Land and Water Conservation Fund. Environmental Condition No. 8 of this order requires Tennessee to file with the Commission documentation that it has received all applicable authorizations required under federal law (or evidence of waiver thereof) prior to receiving authorization to commence construction of any project facilities. Therefore, Tennessee is required to resolve the Land and Water Conservation Fund issues prior to construction.

67. The New Jersey DEP also recommends that Tennessee conduct field investigations to determine whether Loop 325 will cross historical quarries or underground mines, including the former Monks and Board mines. As discussed in the EA, previous field surveys, mapping, and title searches did not identify any mines crossed by the project. The opening to the former Monks mine was found to be 125 feet south of Tennessee's existing pipeline and historical descriptions indicate that the mine shafts extend southeasterly, away from the existing pipeline. Loop 325 will be installed on the north side of the existing pipeline at this location, opposite of the mine, and Tennessee states that the existing pipeline has not been affected by the mine. No indication of the former Board mine was found during initial field surveys, but Tennessee has agreed to revisit the area to determine if the former mine workings can be located, and will file its findings prior to any construction.

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[52] Tennessee filed its comments on the EA on December 21, 2011. Tennessee filed a response to comments that were received on the EA on January 27, 2012.

[53] 16 U.S.C. § 470f (2006).

68. New Jersey DEP recommends that blasting be conducted in accordance with New Jersey Department of Labor codes. As described in the EA, blasting will comply with federal, state, and local regulations. Tennessee notes in its response to comments that the New Jersey Department of Labor regulations do not specify a distance for conducting monitoring from blast sites.

69. We also received additional comments regarding blasting concerning the impacts of blasting on underground mines. The EA discloses that approximately 32.7 miles (82 percent) of the proposed pipeline loops would cross areas of shallow bedrock that may require blasting but would not cross any known underground mines. It also identifies Tennessee's Blasting Plan to minimize the effects of blasting and ensure the safety of its existing pipeline and nearby structures during blasting operations. In its blasting Plan, Tennessee states that all blasting techniques would comply with federal, state, and local regulations governing the safe storage, handling, firing, and disposal of explosive materials. Considering the limited, controlled nature of blasting that would be used to excavate the narrow, shallow trench, blasting is not anticipated to impact underground mines and will have minimal impact to other resources. Tennessee will be responsible for any construction-related damages, including from any blasting activities.

70. Regarding project construction and operation on state-owned lands and Natural Heritage Priority Sites, New Jersey DEP comments that some botanical surveys remain to be completed and recommends that surveys for invasive plant species be extended 150 feet from the edge of the construction work space. New Jersey DEP requests that Tennessee conduct invasive species monitoring over the life of the project, fund an independent botanist to monitor construction and restoration activities, post a bond to ensure that sufficient funds will exist to monitor for and manage invasive species and repair other biological impacts, and evaluate alternatives to minimize project impacts. As discussed in the EA, Tennessee will complete any remaining botanical surveys in the spring or early summer of 2012 and provide the survey results to the Commission and New Jersey DEP. The EA references Tennessee's Invasive Species Management Plan which discusses the extent and duration of invasive species surveys, monitoring, and management practices that Tennessee will implement. Tennessee has agreed to continue to discuss invasive species management with New Jersey DEP, as well as the posting of a bond for work on state lands.

71. The EA discusses Tennessee's environmental inspection program, which will consist of trained individuals to ensure implementation of appropriate measures to minimize impacts and ensure compliance with federal, state, and local permit stipulations. In addition, Tennessee has agreed to fund a third-party environmental monitoring program that will include full-time personnel working under the direction of the Commission. Regarding alternatives to minimize impacts, the EA includes a detailed analysis of alternatives to avoid or reduce project impacts. In addition, Tennessee's Freshwater Wetlands and Flood Hazard Area Individual Permit applications to

New Jersey DEP include an alternatives analysis and an avoidance and minimization measures summary that specifically address the minimization measures that Tennessee will employ on state-owned lands.

72. Regarding impacts on wildlife, New Jersey DEP recommends measures to minimize impacts on the state-listed eastern floater (mussel) in Holiday Lake (Loop 323), repeats its earlier concern regarding potential impacts on state-listed snake species, comments that the pipeline trench needs to include animal escape slopes, recommends that the permanent right-of-way be maintained in a low shrub state, and recommends that tree clearing timing restrictions be imposed along the entire length of Loops 323 and 325 to protect Indiana bats and state-listed bat species. New Jersey DEP also recommends that Tennessee develop a detailed construction plan for the project.

73. In response, Tennessee states that landowners surrounding Holiday Lake have opposed draining the lake in order to conduct a dry crossing. Therefore, Tennessee proposes a wet crossing of Holiday Lake using barges and turbidity curtains, similar to the method used to replace the existing 24-inch-diameter pipeline in 2003, to avoid significant impact on the eastern floater. Tennessee also commits to continue to work with New Jersey DEP on the Holiday Lake crossing. With regard to potential project impacts on state-listed snake species, Tennessee will implement measures to avoid, minimize and mitigate for impacts and will employ biological monitors if required by New Jersey DEP permit conditions. Similarly, Tennessee will comply with state permit conditions requiring animal escape ramps from open trenches. As described in the EA, Tennessee will maintain the permanent right-of-way in an herbaceous and low shrub cover type to comply with safety requirements and protocol. Regarding tree clearing timing restrictions related to the federally-listed Indiana bat, we are including Environmental Condition No. 13 to this order to protect the Indiana bat in New Jersey by prohibiting the clearing of trees greater than 5-inch-diameter breast height from April 1 to September 30 between mileposts 13.9 and 16.4 on loop 323. We believe that implementation of this condition will also be protective of other bat species in the area. Finally, Environmental Condition No. 6 of this order requires Tennessee to submit an Implementation Plan for our review and approval detailing how Tennessee will implement the construction procedures and mitigation measures described in its application materials, supplements, and this order.

74. New Jersey DEP provides several comments concerning the applicability analysis completed for this project with regards to the federal General Conformity regulations. New Jersey DEP inquired whether the air emissions associated with the Corps' Philadelphia District permit was included in the General Conformity Applicability Analysis. As the lead federal agency for analyzing the applicability of the General Conformity program requirements, Commission staff's EA analyzes all emission sources that are associated with the project, including actions such as wetland and waterbody crossings that are under the jurisdiction of the Corps. New Jersey DEP also states that

the EPA's NONROAD Model should be used when calculating the non-road air emissions for the project using the latest and most accurate emission estimation techniques available for the applicability analysis. In addition, New Jersey DEP questioned whether the scope of the General Conformity Applicability Analysis includes all direct and indirect emissions from the project construction in 2012 and 2013 and from all air emission sources (e.g., pipe/contractor yards). We reviewed Tennessee's calculation methodologies and verified the scope of the General Conformity Applicability Analysis to confirm the EA's conclusion that the reasonably foreseeable direct and indirect emissions from the project will not exceed the General Conformity thresholds by county or by the project as a whole. Therefore, the project does not require a General Conformity Determination.

75. New Jersey DEP notes that it continues finalizing the review of all properties within the New Jersey Green Acres program that will be disturbed by the project. In response, Tennessee states that it will continue to coordinate with the New Jersey Green Acres program to obtain all necessary approvals.

76. New Jersey DEP notes that trench dewatering permits will be required for the portion of Loop 323 in Montague Township. As stated in the EA, Tennessee would obtain the necessary permits and approvals prior to any construction in New Jersey and Pennsylvania.

77. New Jersey DEP Land Use Regulation Program (LURP) does not believe that the project schedule can be met largely because Tennessee has not filed administratively complete LURP permit applications and approval of Loop 325 has not been received from the New Jersey Highlands Council or New Jersey DEP's Division of Watershed Management. The LURP also notes discrepancies pertaining to access roads, wetland impacts, vegetation impacts, construction methods, and construction timing restrictions between the information presented in the EA and information submitted to the New Jersey DEP for state permitting purposes. The LURP reasserts its contention that, because of these discrepancies, the Commission cannot clearly understand the full impact of the project and urges the Commission to deny approval until Tennessee rectifies the discrepancies.

78. We recognize New Jersey DEP's need for complete information for its permitting purposes, but conclude that the information in the EA is adequate for the purpose of our analysis. Tennessee has also stated that it recognizes the multiple state permits and approvals to be obtained for the project and has committed to continue to work with the Highlands Council, New Jersey DEP, and LURP to obtain the necessary approvals. In addition, as a component of its state permit applications, Tennessee has agreed to compensatory mitigation in the form of land acquisition or monetary compensation acceptable to the New Jersey DEP for unavoidable project impacts on wetlands, forest, and other natural resources.

79. In conclusion, we believe that construction, monitoring, and operation of the project in accordance with Tennessee's plans and our required measures, and Tennessee's continued commitment to work with the New Jersey DEP in finalizing and implementing state permitting requirements, will minimize and compensate for impacts on state lands to the greatest extent practicable.

80. In its comments on the EA, the EPA notes that the degree of co-location of the project with Tennessee's existing facilities will help to minimize impacts on the environment, provided Tennessee implements best management practices during project construction and operation. EPA also agreed that secondary and cumulative impacts are likely to occur as described in the EA, but expressed non-specific concern regarding cumulative impacts on water quality, air quality, and loss of forested land and other sensitive wildlife habitat.

81. In the EPA's view, the EA did not adequately analyze potential project impacts on sensitive surface water resources. We disagree. The EA describes potential impacts on waterbodies and explains that the greatest potential impact will be increased sediment loading and turbidity during construction, which will be minimized by implementing dry crossing methods at nearly all waterbodies and completing most in-stream construction within 24 to 48 hours. Tennessee will also install and maintain erosion control adjacent to waterbodies for the project in accordance with its ECPs, implement its Spill Prevention, Control and Countermeasure Plan to avoid fuel and other product spills into waterbodies, have absorbent materials available if spills occur, and restore the stream bed and bank after construction. The EPA also clarifies that it delegated CWA section 404 program authority to the New Jersey DEP, but retains oversight authority of the program in cooperation with the state.[54]

82. The EPA notes that some forest impacts in New Jersey will be mitigated under New Jersey's No Net Loss Reforestation Act and recommends that Tennessee commit to the same level of mitigation for forest impacts in Pennsylvania. We believe that the mitigation proposed by Tennessee and required by this order are sufficient to minimize impacts on forested areas in Pennsylvania and New Jersey. However, as discussed in the EA, Tennessee has committed to obtaining all necessary environmental permits and will construct, operate, and maintain the proposed facilities in compliance with the required permits and applicable federal and state regulations and guidelines.

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[54] The EA mistakenly refers to delegation by the Corps. EA at 2-22.

83. Pike County Planning Commission reiterated its objection to the proposed alignment of Loop 323 around the Delaware Water Gap NRA and indicated that it prefers the co-location of Loop 323 with the existing pipeline, which staff analyzed in the EA as Delaware Water Gap Alternative 1. Pike County Planning Commission also restated its opinion that an EIS should be conducted to fully evaluate the environmental impacts of the project. The issue of EA versus EIS is addressed in more detail later in this order.

84. Pike County Planning Commission contends that the proposed alignment would require 6.3 miles more of large diameter pipe and additional compression when compared to Delaware Water Gap Alternative 1. For clarification and as described in more detail in the EA, the proposed route will actually be a total of 3.5 miles longer than Delaware Water Gap Alternative 1 and will not require additional compression.[55]

85. In addition to Pike County Planning Commission's comments regarding the routing of Loop 323, we received either written or verbal comments from Pike County Conservation District and four landowners affected by the proposed route around the Delaware Water Gap NRA who also favored Delaware Water Gap Alternative 1. In contrast, the NPS, Save the Park, and Burnham Park Association opposed an alignment across the Delaware Water Gap NRA. Of the four affected landowners who filed comments, three are located in Montague Township, New Jersey and one is located in Pike County, Pennsylvania. Based on Tennessee's alignment sheets, ten landowners in Pike County will be affected by the segment of Loop 323 around the Delaware Water Gap NRA. The EA fully analyzes three possible routes near the Delaware Water Gap NRA and concludes that Tennessee's proposed route, outside of the Delaware Water Gap NRA, will not result in a significant environmental impact. While we recognize that the other route alternatives could have less environmental impact, they would require federal legislation and NPS support, which are absent. The rationale for not recommending the use of either of the alternative routes through the Delaware Water Gap NRA was discussed previously.

86. Pike County Planning Commission states that the proposed alignment of Loop 323 would create a bottleneck in Tennessee's system, resulting in gas velocities within the existing 24-inch-diameter pipeline that would increase safety risks to Pike County residents. This is not the case. Although the pipelines will not be adjacent, the new pipeline and the existing pipeline will operate together to transport the additional capacity. Based on our engineering review, this will not result in an increase of natural

[55] EA at 3-5.

gas velocity above safety design standards in the existing or proposed pipelines. The EA did consider a system alternative that would involve construction of Loop 323 as proposed, with the exception of the one mile crossing of the Delaware Water Gap NRA. For this system alternative, Loop 323 would follow Tennessee's existing pipeline up to the boundaries of the Delaware Water Gap NRA where it would tie into the existing pipeline and only the existing 24-inch-diameter pipeline would traverse the Delaware Water Gap NRA. This would essentially create a mile gap in Loop 323 across the Delaware Water Gap NRA. This system alternative was determined to be infeasible because it would have potentially resulted in a situation where the velocity of the natural gas in the single 24-inch-diameter pipeline across the Delaware Water Gap NRA would have to exceed design standards to transport the same volume of natural gas that would be carried by the existing pipeline and proposed larger diameter loop.[56]

87. Pike County Planning Commission reiterates its position that the proposed alignment would result in increased environmental impacts on forest, sensitive surface waters, cultural resources, and other resources, and would impact private landowners that are currently unaffected by a pipeline right-of-way. Pike County Planning Commission is concerned that the added length of pipeline would pose a greater operational safety concern to the citizens of Pike County and notes that the proposed alignment is within approximately 750 feet of a public school and 300 feet of a senior care facility.

88. Regarding Pike County Planning Commission's concern that the proposed alignment would result in an increased safety risk due to its added length, we note that the proposed alignment in Pike County will traverse wooded, undeveloped land for 82 percent of its length and will be installed by HDD for the remainder of its length near the developed area along the Delaware River. The public school and senior care center referenced by the Pike County Planning Commission are located in this area of the HDD so Loop 323 will be approximately 30 to 50 feet below ground level at its nearest approach to these facilities. The EA discusses the design and operational safety features of interstate natural gas pipeline systems and the requirement that Tennessee must construct and operate the project in accordance with applicable DOT regulations. The EA concludes, and we agree, that the project will pose only a slight increase in risk to the nearby public.

89. In its comments on the EA, Pike County Conservation District states that the environmental consequences of the project are understated because the EA relies on

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[56] EA at 3-3.

pipeline construction and restoration techniques that do not adequately protect water and land resources. Pike County Conservation District's primary concern is that the construction and restoration measures do not adequately control stormwater runoff or promote successful revegetation of the right-of-way. Pike County Conservation District also argues that additional temporary workspace could be utilized more judiciously and urged the Commission to deny Tennessee's request for additional temporary workspace within 50 feet of a wetland or waterbody. Pike County Conservation District also noted additional concerns about cumulative impacts, soils, wetland and waterbody crossings, fisheries, impact on vegetation and wildlife, residential impacts, and access road impacts, all of which we believe were adequately addressed in the EA or in this Order.

90. As the EA explained, Tennessee's ECPs are based on our Upland Erosion Control, Revegetation, and Maintenance Plan (Plan) and Wetland and Waterbody Construction and Mitigation Procedures (Procedures), which contain measures that are specifically designed to avoid or minimize the environmental impacts associated with the construction of interstate natural gas transmission projects and promote restoration of the right-of-way. Based on Tennessee's detailed alignment sheets, site-specific construction plans, and site visits, and considering standard industry practices and our experience in pipeline construction, we determined that Tennessee's proposed construction workspace, including additional temporary workspace, is appropriate and justified. The EA clarifies that, with implementation of Tennessee's proposed measures and the staff's recommended mitigation measures, the project would not significantly impact the human environment. Furthermore, Tennessee has committed to work with Pike County Conservation District to address its concerns and has agreed to fund a full-time, third-party environmental compliance monitoring program during project construction, which will help ensure Tennessee's compliance with the approved construction and restoration methods and other environmental permit stipulations that do not conflict with any authorization issued by this Commission. We also note that Pike County Conservation District administers both the Pennsylvania Chapter 102 Erosion and Sediment Control and Stormwater Management and the CWA National Pollutant Discharge Elimination System programs in Pike County, including permit application and plan reviews and approvals, site inspections, complaint investigations and technical assistance.

91. Pike County Conservation District states that the proposed Wayne County, Pennsylvania wetland mitigation site was not appropriate for impacts in Pike County. We note that the Corps has regulatory oversight for wetland impact mitigation in Pennsylvania; therefore this issue should be brought before the Corps rather than the Commission.

92. Pike County Conservation District asserts that the Northeast Upgrade Project is related to Tennessee's previously authorized 300 Line Project and questions why the Commission allowed these projects to be submitted and approved in a "piecemeal" fashion. We authorized the 300 Line Project almost two years ago in May 2010, which

was a stand-alone project and designed to provide a contracted-for volume of gas to a certain customer within a certain timeframe. The proposed project is designed to provide another contracted-for volume of gas within a different timeframe to different customers. Commission policy does not allow the overbuilding of capacity so that customers are not paying for facilities that are not being used and to minimize impacts on landowners and communities for facilities that are not needed.[57] The 300 Line Project is currently in operation and is not dependent on the Northeast Upgrade Project facilities. The impacts associated with the 300 Line Project are included in the cumulative impacts discussion in the EA.

93. Pike County Conservation District also notes concerns with tree clearing occurring well before the start of construction and the project remaining unstabilized for long periods. Tennessee must complete tree clearing in the fall, winter, or early spring to comply with the Migratory Bird Treaty Act and other federal and state regulations to minimize impacts on threatened, endangered, and sensitive species. However, once the ground is disturbed, Tennessee will be required to install the appropriate erosion and sedimentation controls as described in its state-specific ECPs.

94. Bradford County comments that pipelines being constructed in the county are essential to transport natural gas from the Marcellus Shale to market, but requests that Tennessee be required to comply with county land use ordinances and submit for county approval land development applications, plans, and associated data for proposed pipe/contractor yards in the county. The county states its belief that this land development process will not hinder, prohibit, or unreasonably delay the construction or operation of Commission-approved facilities.

95. In its response to comments on the EA, Tennessee asserts its belief that Bradford County approval is not required because the proposed pipe/contractor yards in Bradford County do not meet the definition of a "land development" under the county's land use ordinances. We encourage the cooperation of Tennessee with local jurisdictions such as Bradford County and expect Tennessee to abide by all state, local, or municipal permit stipulations to the extent they do not conflict with any authorization issued by this Commission. This does not mean that state, local, or municipal agencies, through application of state or local laws, may prohibit or unreasonably delay the construction or operation of facilities approved by this Commission.

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[57] *See* Certificate Policy Statement, 88 FERC ¶ 61,227 at 61,750.

96. In its comments on the EA, Bergen County, New Jersey recommends that, for project activities on Bergen County parkland, Tennessee conduct an ecological community assessment and invasive species inventory within 150 feet adjacent to the project right-of-way, post a bond to fund environmental monitoring during construction and restoration and retain an independent botanist/ecologist to monitor construction and restoration activities, conduct alternatives analysis to minimize impacts on high priority and critical habitat areas, provide a plan regarding work crews needed on Bergen County parkland, and comply with all New Jersey DEP requirements to protect the natural environment.

97. As indicated in the EA, Tennessee has conducted the majority of the biological surveys required for state permitting purposes, but some surveys remain to be completed due to its lack of property access. The EA also references Tennessee's state-specific Invasive Species Management Plan developed for Pennsylvania and New Jersey, which we typically require for all interstate projects under our jurisdiction. The EA describes the environmental inspection and compliance monitoring programs that will ensure the project is constructed and restored in accordance with applicable authorizations and permit stipulations. The EA also includes a detailed analysis of alternatives that would minimize environmental impacts. Through comments filed by the New Jersey DEP, we are aware that Tennessee has worked with the New Jersey DEP to reduce project impacts, including in Bergen County, which is located in the New Jersey Highlands Preservation Area.

98. Tennessee responded to Bergen County's comments and commits to consult with the New Jersey DEP to ensure that all areas requiring survey are covered during biologic and invasive species surveys. Tennessee also states that it will post a performance bond for work in the Highlands area and is discussing the terms of the bond with the New Jersey DEP. Further, Tennessee agrees to provide Bergen County with project plans and give advanced notice to the county prior to construction, and commits to comply with all New Jersey DEP permit requirements to protect the natural environment and enjoyment of public parkland. Other Bergen County comments concerning the Mahwah Meter Station, cultural resources, recreational land impacts, and the use of Bear Swamp Road and Bear Swamp Bridge are discussed in the EA or addressed below in this order.

99. William and Amy Anastasio comment that the proposed alignment of Loop 321 on their 28-acre property in Pike County, Pennsylvania, would place the pipeline within 120 feet of their residence and 100 feet of their water supply well, and would require the removal of hundreds of mature trees that are home to a variety of wildlife. The Anastasios recommend that Loop 321 be routed along the north side of the existing Tennessee easement to avoid forest impacts and provide further separation from their residence and well.

100. On the Anastasio property, the existing 300 Line pipeline is located along the southern border of an approximate 100-foot-wide electric transmission corridor containing overhead power lines. Loop 321 will be off-set from the existing pipeline by 25 feet to the south, further from the electric transmission lines but nearer to the Anastasio residence. As proposed, the construction workspace will be 100 feet wide across the majority of the property, consisting of 25 feet of Tennessee's currently maintained right-of-way, 25 feet of new operational right-of-way, and 50 feet of additional temporary workspace. The construction workspace will approach within approximately 80 feet of the Anastasio residence, and an approximate 50-foot-wide buffer of trees will remain between the residence and construction workspace.

101. The Anastasios' recommended route change would place the pipeline only 60 feet from the transmission towers, making it extremely difficult to install the pipeline between the existing pipeline and the towers. Based on our review, an alignment along the north side of the electric transmission corridor would result in increased permanent impacts on forest resources. This alternative alignment would establish a new, 50-foot-wide operational right-of-way through a largely forested area rather than expand Tennessee's existing permanent right-of-way by 25 feet. Such an alignment would also place the construction workspace and pipeline similarly close to another residence. Therefore, an alignment along the north side of the electric transmission corridor is not environmentally preferable to the proposed alignment.

102. Since issuance of the EA, Tennessee states that it has modified the original construction plan for the Anastasio property to reduce the new permanent right-of-way and temporary workspace near the residence. This modification will reduce the number of trees that will be permanently removed and provide a greater forested buffer between the Anastasio residence and construction workspace. Tennessee also states that it intends to review the modified construction plan with the Anastasios and will report the results to the Commission. Therefore, we have added Environmental Condition No. 19 of this order to require that Tennessee provide the modified construction plan and results of communications with the Anastasios to the Director of Office of Energy Projects (OEP) for review and written approval, prior to construction on the Anastasio property.

103. Steven Vitale provided information regarding a proposed elementary school within the Delaware Water Gap NRA near where Tennessee's existing 24-inch-diameter pipeline crosses the Delaware River. Mr. Vitale appears to advocate for replacement of the existing 24-inch-diameter pipeline in its current location to meet Class 3 standards if the school is constructed. In addition, Mr. Vitale recommends installation of Loop 323 in

a new right-of-way at least 2,000 feet to the south of the existing pipeline and proposed school site.[58]

104. As described in the EA, Loop 323 will avoid this area by routing to the north, around the Delaware Water Gap NRA. As proposed, Loop 323 will be at least 1 mile from the elementary school site identified by Mr. Vitale. Similar to the Pike County Planning Commission, Mr. Vitale is concerned that the proposed alignment of Loop 323 would result in increased natural gas velocities above design standards. As discussed above, the proposed alignment will result in a continuous loop of the existing pipeline and will not result in gas velocities above design standards in the existing 24-inch-diameter pipeline.

105. Mr. Vitale also provided additional recommendations for an alternative that would use Tennessee's existing right-of-way across the Delaware Water Gap NRA. While this alternative was not raised by any party during the scoping process, Mr. Vitale states that Tennessee should replace the existing 24-inch-diameter pipeline with a new 36-inch-diameter pipeline to obviate the need for Tennessee's proposed route outside of the Delaware Water Gap NRA. We note that because of concerns with the Delaware River being designated as National Scenic and Recreational River within the Delaware Water Gap NRA and the possible presence of the federally-listed endangered dwarf wedgemussel, this alternative would require an HDD to avoid impacts. An HDD at this river location would require workspace outside of Tennessee's existing easement on NPS property, which would still require congressional approval. Tennessee would also be required to take its existing line out of service to install the new line within the same trench. As a result, this alternative would require Tennessee to stop service for an extended amount of time during construction and would prevent it from supplying gas to fulfill its existing contractual obligations. Therefore, as mentioned above for the other alternatives within the Delaware Water Gap NRA, we consider this alternative infeasible due to the NPS opposition, the permitting conflicts within the Delaware Water Gap NRA, and contractual obligation conflicts for operation of Tennessee's existing line.

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[58] Our review of Delaware Valley School Board meeting minutes indicate that the school board is considering three sites for the future elementary school and is aware of Tennessee's existing pipeline near the site of concern to Mr. Vitale.

106. In October and November 2011, Tennessee filed final survey results for the federally-listed Indiana bat in New Jersey and Pennsylvania, respectively, in support of our continued consultation with the New Jersey and Pennsylvania Field Offices of the FWS under section 7 of the ESA.[59]

107. After review of the final Indiana bat survey report for New Jersey, the New Jersey FWS indicates in a January 24, 2012 consultation letter that no seasonal restriction on tree clearing is necessary in New Jersey except for the eastern 2.5 miles of Loop 323 (MPs 13.9-16.4). The 2.5-mile segment is within the foraging range of a known maternity colony of Indiana bat (the EA includes a typographical error identifying the maternity colony near the eastern 2.5 miles of Loop 325).[60] The New Jersey FWS recommends that, among other things, Tennessee: (1) submit a draft plan to limit habitat impacts around the known colony, (2) provide updated estimates of temporary and permanent forest loss in New Jersey, and (3) provide a draft mitigation plan to help offset permanent and temporary loss of Indiana bat habitat. New Jersey FWS states that this mitigation plan should include preferential planting of tree species that provide suitable bat roosts as part of both on-site reforestation and off-site compensatory mitigation as required by other authorities (e.g., impacts on state lands, the Highlands Preservation Area, and wetlands/riparian areas in New Jersey).

108. After review of the final Indiana bat survey report for Pennsylvania, the Pennsylvania FWS recommends in a January 18, 2012 consultation letter that Tennessee implement a seasonal tree clearing restriction from April 1 to October 14 within 2.5 miles of a site along Loop 321 where an Indiana bat had been captured in August, 2010 (the 2.5-mile radius corresponds to approximate MPs 3.2-8.1 of Loop 321). Pennsylvania FWS also recommends that Tennessee either submit a plan for Pennsylvania FWS review that addresses Indiana bat habitat loss within 2.5 miles of the capture site or make an appropriate contribution to the Indiana Bat Conservation Fund. Pennsylvania FWS states that, with implementation of their recommendations, the effects of the project on the Indiana bat will be insignificant or discountable.

109. In its response to comments on the EA, Tennessee agreed to provide the information and plans requested by the New Jersey FWS, and states that it is evaluating the mitigation measures recommended by the Pennsylvania FWS and will provide a

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[59] 16 U.S.C. § 1536 (2006).

[60] EA at 2-19.

response to the Pennsylvania FWS and the Commission. We have incorporated the EA's environmental recommendation 14 into Environmental Condition No. 13 of this order. In addition we have amended environmental recommendations 13 and 15 from the EA to reflect the final survey results, our on-going consultation with both FWS offices, and Tennessee's commitments and incorporated them as Environmental Condition Nos. 13 and 14 of this order.

110. The EA includes environmental recommendation 13 that Tennessee file the results of a habitat assessment and surveys for the federally-listed dwarf wedgemussel in New Jersey. On December 5, 2011, Tennessee filed these outstanding reports and, based on its review of the final reports and Tennessee's contingency plan for minimizing the impact of an inadvertent release of drilling mud during the HDD installation of Loop 323 beneath the Delaware River, the Pennsylvania and New Jersey offices of FWS concurred that the project is not likely to adversely affect the dwarf wedgemussel. Thus, our consultation with the FWS concerning the dwarf wedgemussel is concluded and Environmental Condition No. 13 of this order has been amended accordingly.

111. The EA also recommends that Tennessee file the results of a Phase I survey for the federally-listed bog turtle between approximate MPs 7.6 and 9.3 of Loop 323 in New Jersey. On January 11, 2012, Tennessee filed the outstanding survey and New Jersey FWS concurred that the survey did not document any suitable bog turtle habitat along the referenced segment of Loop 323. New Jersey FWS reiterated an earlier request that Tennessee provide project construction plans and a draft Fencing and Monitoring Plan for wetland W003 on Loop 323, consistent with New Jersey FWS conservation measures outlined in a June 16, 2010 letter to Tennessee. The New Jersey FWS also requested that Tennessee provide an electronic copy of the New Jersey ECP.

112. In its response to comments on the EA, Tennessee commits to provide the requested construction plans and draft Fencing and Monitoring Plan for wetland W003 to the New Jersey FWS. Environmental Condition No. 13 of this order specifies that Tennessee shall not begin construction of Loop 323 until we complete any necessary consultation with the New Jersey FWS concerning the bog turtle.

113. Tennessee provided an update regarding two bald eagle nests identified in the project area. As discussed in the EA, the nests were located approximately 350 feet and 2,450 feet from proposed Loop 323 in Pike County, Pennsylvania. Tennessee conducted additional aerial and ground surveys and monitoring in 2011 and determined that the farther nest was active whereas the nearer nest was inactive. In a letter dated September 2, 2011, the Pennsylvania FWS stated that, based on the survey results, it does not anticipate that the project will disturb bald eagles. As a result, Tennessee does not intend to limit construction activities and other disturbances within buffers specified under the National Bald Eagle Management Guidelines for the nearer, inactive nest. The

farther nest is outside the buffers recommended in the National Bald Eagle Management Guidelines.

114. Tennessee provided several updates[61] regarding the status of surveys for state-listed species of concern including rare plants and snakes, and reiterated its commitment to complete and submit the survey results to appropriate state agencies and the Commission. As previously noted, the EA recommends that, prior to construction, Tennessee file the results of any outstanding surveys for state-listed species and to identify additional mitigation measures developed in consultation with applicable state agencies. This recommendation is included as Environmental Condition No. 15 to this order.

115. Tennessee provides clarification in its comments on the EA that it will temporarily divert hikers to the Iris Trail during specific construction activities at the Appalachian National Scenic Trail crossing. Loop 323 will cross the Appalachian National Scenic Trail at MP 14.4 in Sussex County, New Jersey. As discussed in the EA, Tennessee consulted with the NPS and Appalachian Trail Conservancy in developing a plan to minimize potential interruptions to trail users during construction and to restore the crossing location after construction.

116. The EA includes a recommendation that prior to construction, Tennessee file a plan with the Director of OEP detailing the additional noise mitigation measures that Tennessee would use to ensure that the noise levels attributable to the 24-hour HDD activities do not exceed an L_{dn} of 55 dBA at the noise sensitive areas near the Susquehanna River HDD entry site. In its comments on the EA, Tennessee requests that the recommendation be amended to require submittal and approval of the noise mitigation plan "prior to initiation of HDD activities at the Susquehanna River," rather than "prior to construction" as indicated in the recommendation. We concur with this clarification and have phrased Environmental Condition No. 17 of this order accordingly.

117. The alignment of Loop 325 crosses land historically occupied by the Ramapough Lenape, which is a Native American tribe recognized by the State of New Jersey. The Ramapough Lenape, through Judith Joan Sullivan, have continued to express concern that some of its known cultural resources sites were missed by Tennessee's inventory surveys, its local experts were not consulted, potential impacts from blasting on cultural

[61] Updates to biological surveys were filed on November 4 and 7, 2011, December 5, 2011, January 11, 2012, and February 6, 2012.

resources sites were not fully considered, and cumulative impacts were not considered for an historic road, bridge, and Mahwah Meter Station site that would be used for both the Northeast Upgrade Project and the New Jersey-New York Expansion Project (Docket No. CP11-56-000). The Ramapough Lenape also assert that their participation in the project under the NHPA was compromised by a lack of funding and an abbreviated review period. New Jersey DEP and Bergen County acknowledged the Ramapough Lenape concerns and indicated that any deficiencies in the identification of cultural resources should be addressed.

118. The EA thoroughly explains the process that was undertaken to identify cultural resources and describes potential project impacts on historic properties. The EA also discusses Tennessee's consultation with the relevant SHPOs, federal agencies, Native American tribes, and interested parties regarding potential project impacts on cultural resources. As described in the EA, Tennessee conducted Phase I field surveys for the majority of the project's area of potential effect (APE), and has committed to completing all remaining surveys. Phase II evaluative studies are underway for some sites and Tennessee will either avoid or conduct further study of potentially eligible or unevaluated sites. Tennessee also identified five historic architecture sites within the project APE, all of which are considered potentially eligible for listing on the National Register of Historic Places, and is consulting with us and the SHPOs to design measures to avoid impacts on the sites.

119. In its response to comments, Tennessee notes that the APE for direct impacts is a 300-foot-wide survey corridor centered on the pipeline alignment, and sites known to the Ramapough Lenape outside of this corridor may not have been identified. Tennessee and Commission staff visited areas of concern with the Ramapough Lenape on March 2, 2012, and Tennessee has committed to re-examine portions of the right-of-way that may contain burial sites, identify areas of potential blasting and address potential blasting impacts on historic properties, and continue consultation with the Ramapough Lenape. Tennessee will report the additional field inventory results in a revised Phase IB report, as required by Environmental Condition No. 16. Additionally, because the information provided by the Ramapough Lenape suggests that portions of the project area have a high probability for burials, we are requiring Tennessee to update their unanticipated discoveries plan in consultation with the Ramapough Lenape and the New Jersey SHPO.

120. The EA discloses that Tennessee and Algonquin Gas Transmission, LLC (Algonquin) will each construct new aboveground facilities at the existing Mahwah Meter Station for the Northeast Upgrade Project and the New Jersey-New York

Expansion Project, respectively. Tennessee and Algonquin filed drawings depicting the location of the proposed facilities for each project[62] and clarified that Tennessee will develop the entire footprint at the site, with each company constructing and operating their own facilities. The construction-related impacts for the site are included in the EA and will take place within the 10-acre parcel owned by Algonquin. Tennessee commits to avoid and/or mitigate impacts on archaeological sites within the APE for the Mahwah Meter Station, and to continue consulting with the New Jersey SHPO.

121. Tennessee will also make minor modifications to Bear Swamp Road, which will serve as a temporary access road during construction and as a permanent access road to the Mahwah Meter Station by both companies. The road modifications will be accomplished entirely within the existing road bed. Use of Bear Swamp Road will include the Bear Swamp Bridge (also known as the Cleveland Bridge). In response to comments concerning the historic significance and potential cumulative impacts on the bridge, Tennessee stated its belief that the bridge does not retain sufficient historic integrity to be considered eligible for National Register or Historic Places listing. The issue will be addressed in Tennessee's revised Phase IB report.

122. Cumulative impacts associated with construction and operation of the Tennessee and Algonquin facilities at the Mahwah Meter Station are discussed in the EA including a temporary increase of traffic on Bear Swamp Road during construction. The EA concludes that, due to the implementation of specialized construction techniques, the relatively short construction timeframe, and carefully developed resource protection and mitigation plans, only minimal cumulative effects are anticipated when the impacts of Tennessee's project are added to on-going projects in the area, including Algonquin's proposed New Jersey - New York Expansion Project.

123. We have modified the originally recommended condition 18 in the EA and included it as Environmental Condition No. 16 to this order to reflect information provided by Tennessee, the New Jersey SHPO, and the Ramapough Lenape regarding the cultural resources reports. This condition ensures that the Commission's responsibilities under section 106 of the NHPA and its implementing regulations are met prior to Tennessee's construction and use of the facilities associated with the project, including at the Mahwah Meter Station.

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[62] Algonquin and Tennessee filed their drawings on December 9, 2011 and December 15, 2011, respectively.

EA vs. EIS

124. Echoing concerns raised earlier during scoping, the Sierra Club argues that the Commission staff's EA is inadequate and cannot support a finding of no significant impact and that, therefore, we should prepare a full EIS to satisfy the Commission's obligations under NEPA.

125. The Sierra Club starts by arguing the EA is too long and an EIS should have been prepared instead. Sierra Club cites CEQ guidance that states that agencies should avoid preparing lengthy EAs except in unusual cases, where a proposal is so complex that a concise document cannot meet the goals of 40 C.F.R. § 1508.9 and where it is extremely difficult to determine whether the proposal could have a significant impact. Sierra Club specifically asserts the CEQ has generally advised agencies to limit EAs to not more than 10-15 pages and that since the Commission's EA is over 250 pages of text, tables, maps, and appendices the Commission should have undertaken an EIS.

126. The CEQ's advisory memorandum is general guidance to agencies that urges brevity in the preparation of an EA and does not require an agency to prepare an EIS after issuance of an EA with more than 15 pages. The CEQ's guidance recognizes that a lengthy EA may be appropriate in cases of complexity, and while a lengthy EA may suggest that an EIS may be needed in some cases, the CEQ's guidance does not establish a blanket requirement. In this case, the broad range of environmental issues in the resource reports and the workability of the required mitigation to reduce the project's effects below the level of significance warranted a relatively lengthy EA, but not further analysis in an EIS. The EA adequately addresses the myriad of issues as concisely and briefly as possible as Commission and CEQ regulations require. The fact that all the analysis of environmental issues consumed approximately 250 pages does not imply that an EIS is warranted. Moreover, the CEQ guidance cited by Sierra Club is over thirty years old.[63] Courts have held that the length of an EA "has no bearing on the necessity of an EIS."[64] "What ultimately determines whether an EIS rather than an EA is required is the scope of the project itself, not the length of the agency's report."[65] A rule requiring an

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[63] http://ceq.hss.doe.gov/nepa/regs/40/40P1.HTM (originally published in the *Federal Register* on March 23, 1981 (46 Fed. Reg. 18,026)).

[64] *Tomac v. Norton*, 433 F.3d 852, 862 (D.C. Cir. 2005) (citing *Sierra Club v. Marsh*, 769 F.2d 868, 875 (1st Cir. 1985)).

EIS for any EA over a certain number of pages would create a perverse incentive for agencies to produce bare-bones EAs.[66]

127. The Sierra Club also argues that the Commission should have prepared an EIS as opposed to an EA because it believes the project will significantly affect the quality of the human environment. Sierra Club argues that both the context and intensity of the project mandates a finding of significant impacts. Under the CEQ regulations, context refers to "society as a whole (human, national), the affected region, the affected interests, and the locality."[67] The Sierra Club argues that the context of the project includes the rapid development of the Marcellus Shale and that the looping segments will be constructed in high-value resource areas and special protection waters, including habitat for federal and state endangered and threatened species. "Intensity" "refers to the severity of the impact" and Sierra Club argues that intensity factors 2 through 10 listed in 40 C.F.R. § 1508.27(b) weigh in favor of a finding of severe and significant impacts necessitating an EIS rather than an EA.[68] We disagree. We will address the Sierra Club's arguments regarding cumulative impacts, intensity factor 7, in a separate section of this order. We address Sierra Club's arguments with respect to the other intensity factors below.

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[65] *Id.* quoting *Heartwood, Inc. v. U.S. Forest Serv.*, 380 F.3d 428, 434 (8th Cir. 2004).

[66] *Heartwood, Inc. v. U.S. Forest Serv.*, 380 F.3d at 434.

[67] 40 C.F.R. § 1508.27(a) (2011).

[68] Sierra Club cites intensity factors 2 through 10 (40 C.F.R. §§ 1508.27(b)(2) through (b)(10) (2011)) arguing that the project: poses a significant threat to public health and safety (27(b)(2)); will affect numerous unique geographic areas and may cause destruction of significant scientific, cultural, and historical resources (27(b)(3) and (b)(8)); will have environmental impacts likely to be highly controversial (27(b)(4)); could have possible effects on the quality of the human environment that are highly uncertain (27(b)(5)); is likely to establish a precedent for future actions with significant effects (27(b)(6)); will have cumulatively significant impacts on the environment (27(b)(7)); may adversely affect several endangered and threatened species and their habitat (27(b)(9)); and might violate federal, state, and local law requirements imposed for the protection of the environment (27(b)(10)).

128. Sierra Club argues that the project poses a significant threat to public health and safety, the second intensity factor.[69] Sierra Club argues that Tennessee's safety record, the age of the original pipeline, and the proximity of the project to hazardous waste sites pose numerous and significant public health and safety concerns. Sierra Club states that in the past year, three pipeline segments owned and operated by Tennessee have exploded and two segments experienced significant failures in the same time period. Sierra Club argues that the original pipeline was installed in the 1950s and older pipelines have a higher frequency of corrosion incidents. In addition, Sierra Club points out that the EA identifies 35 hazardous sites within 1700 feet of the project, including the Ringwood Mines/Landfill Site in Ringwood, NJ, located 500 feet from the pipeline where hazardous materials continue to be found.[70] As a result, Sierra Club argues the Commission must conduct an EIS to fully assess the risks.

129. Commission staff addresses the potential threat of the project to public health and safety in the EA and determined that the operation of the project would only represent a slight increase in risk to the nearby public.[71] Tennessee will be required to design, install, inspect, test, construct, operate, replace, and maintain the certificated facilities in accordance with PHMSA's *Minimum Federal Safety Standards* in 46 C.F.R. Part 192.[72] As discussed in more detail in the EA, these rules prescribe that each pipeline operator is required to establish an emergency plan that includes procedures for: receiving, identifying, and classifying events, gas leakage, fires, explosions, and natural disasters; establishing communications with local authorities; emergency system shutdown and safe restoration of service; and other requirements.[73] Tennessee's past safety record and the age of the existing 300 Line pipeline are outside the scope of our environmental review.

130. As for hazardous waste sites in the project's vicinity, there is no evidence that any sites will impact, or be impacted by, the project, including the Ringwood Mines/Landfill site. As discussed in the EA, the EPA reports that human exposure and groundwater

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[69] 40 C.F.R. § 1508.27(b)(2) (2011).

[70] EA at 2-80.

[71] EA at 2-121.

[72] EA at 2-115.

[73] EA at 2-116.

mitigation is under control at the site and Tennessee is committed to continuing site research with EPA and New Jersey DEP. In addition, Tennessee will implement the protocols prescribed in its ECPs and Spill Prevention, Control, and Countermeasure Plan, which have been reviewed by the relevant resource agencies, in the event contaminated material is encountered.

131. We are confident, therefore, that if Tennessee constructs and operates the project as required by this authorization and PHMSA's standards, the project would only result in a slight increase in risk to the nearby general public, as described in the EA.

132. Sierra Club also argues that the project will affect numerous unique geographic areas and may cause destruction of significant scientific, cultural, and historical resources, the third and eighth intensity factors, respectively.[74] Sierra Club argues that a number of unique resource areas will be adversely affected by the project, including the Susquehanna River, U.S. Route 6 Grand Army of the Republic Highway Trail, Delaware State Forest, High Point State Park, Appalachian Trail National Scenic Trail, Clove Brook Road Corridor Important Bird Area, Delaware River, Highlands Region, Long Pond Ironworks State Park, Monksville Reservoir, and Ringwood State Park. Sierra Club also points out that the project will also cross seven miles of farmland, dozens of high quality coldwater and warmwater fisheries and almost 50 acres of wetlands. In addition, Sierra Club states that the project area will serve as habitat for four federally-listed threatened or endangered species, the bald eagle, and 65 state endangered, threatened, or special concern species and permanently convert 85 acres of forested land and degrade an additional 265.4 acres of forested land.

133. The EA addresses the effects of the project on unique geographic areas and significant scientific, cultural, and historical resources and describes Tennessee's intention to implement general mitigation measures and provide site-specific measures for each special interest area as determined by the managing agency or permitting authority. In addition, the EA specifically addresses impacts to each special interest area.[75] For example, the EA analyzes impacts to the Susquehanna River, concluding that construction and operation would not result in direct impact on the river because Tennessee will use Horizontal Directional Drilling (HDD) to cross the river.

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[74] 40 C.F.R. §§ 1507.27(b)(3), (8) (2011).

[75] EA at 2-68-79.

134. Sierra Club also argues that staff failed to adequately address how affected wetlands would continue to provide important ecological functions, how wildlife temporarily relocated during construction would be expected to return, and why permanent conversion of wildlife habitat would be minor because wildlife would be expected to return.

135. As explained in the EA, Tennessee will implement a series of mitigation measures to reduce wetland impacts and, where impacts cannot be sufficiently reduced, Tennessee will provide compensatory mitigation pursuant to agreements with the Corps and state agencies. Regarding wildlife habitat, the EA concludes that project impacts on non-forested lands will be temporary and limited, based on Tennessee's ECPs, lasting only several weeks or several months in a given area. Forested lands will experience long-term and permanent impacts because the permanent right-of-way will be maintained in an herbaceous state, however, forested land makes up only a small portion of the project area.[76] Where forested lands are impacted, Tennessee's proposed right-of-way is primarily widening an existing right-of-way rather than a new greenfield pipeline through forested land. Although some project impacts are permanent we do not believe them to be significant.[77]

136. The EA considers all of these issues in depth, satisfying our responsibility to take a hard look at the project's impacts, and concludes with a finding of no significant impact.

137. Sierra Club also argues that the degree to which possible effects of the project on the quality of the human environment are likely to be highly controversial, the fourth intensity factor.[78] Sierra Club argues that a major federal action is controversial when "a substantial dispute exists as to the size, nature, or effect of the . . . action."[79] Sierra Club then argues that many facts in the EA are disputed, including the effects of the project on soil in the project area, movement of sensitive species, increase in undesirable species,

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[76] EA at 2-70.

[77] Impacts on federally-listed and state species are addressed below.

[78] 40 C.F.R. § 1508.27(b)(4) (2011).

[79] Citing *LaFlamme v. FERC*, 852 F.2d 389, 400–01 (9th Cir. 1988) (citations and quotations omitted).

increased forest fragmentation, and degradation in habitat conditions. Sierra Club also argues that agencies cannot assume restorative measures will succeed. Therefore, Sierra Club argues the controversial nature of the project supports the preparation of an EIS.

138. Sierra Club, however, misapprehends the meaning of "controversial" in the context of the Commission review of the project. While the existence of a controversy over the effect of an agency action is one factor to consider in determining whether the agency should prepare an EIS,[80] a federal action is "controversial" "where a substantial dispute exists as to the size, nature, or effect" of the action "rather than to the existence of opposition to a use."[81] Furthermore, the use of the word "highly" to modify "controversial" "means that information merely favorable" to Sierra Club's position in the EA "does not necessarily raise a substantial question about the significance of the project's environmental effects."[82] Sierra Club cannot cherry pick information and data out of the administrative record to support its argument that the project is highly controversial.[83] In this case, no substantial dispute as to the effects of the project exists. Although Sierra Club presents some evidence of the potential for the degradation of habitat, those effects were properly addressed in the EA and staff's discussion of those effects does not make the effects of the project highly controversial.

139. The EA concludes that the impact of fragmentation will be minimal because the project will mostly expand the width of the existing right-of-way which already has edge habitat. Edge habitat will not be created in these cases, but will be offset from its existing location to the new right-of-way edge. As discussed in the EA, in the limited areas where a new right-of-way is created, wildlife may be adversely affected by forest fragmentation and there would be a shift from forest species to species that are more adapted to edge habitat at the border of the new right-of-way and inward for a distance.[84] The EA also

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[80] 40 C.F.R. § 1508.27(b)(4) (2011).

[81] *Foundation for North American Wild Sheep v. U.S. Dept. of Agriculture*, 681 F.2d 1172, 1182 (9th Cir. 1982) (quoting *Rucker v. Willis*, 484 F.2d 158, 162 (4th Cir. 1973)) (internal quotations omitted).

[82] *Native Ecosystems Council v. U.S. Forest Serv.*, 428 F.3d 1233, 1240 (9th Cir. 2005).

[83] *Id.*

[84] EA at 2-43.

states that Tennessee will restore the topographic conditions after construction. The EA evaluates stream and wetland crossings and the efficacy of Tennessee's ECPs. These plans contain best management practices that reduce impacts on streams and wetlands during construction and promote their restoration after construction. Based on the analysis in the EA, which includes and references best management practices, mitigation, and the required restoration measures Tennessee has adopted, we continue to affirm that the project will not have a significant impact on streams or wetlands.

140. The EA includes a reference to and provides some measures that are included in Tennessee's Invasive Species Management Plan. As stated in Tennessee's ECP, it has developed specific procedures in coordination with the appropriate agency to prevent the introduction or spread of noxious weeds and soil pests resulting from construction and restoration activities. This Invasive Species Management Plan is in compliance with the Commission's requirement and provides specific details by state as to what species need to be monitored for and how this monitoring will occur. Tennessee will monitor invasive species within their certificated and approved right-of-way, but will not have access or the right to monitor for invasive species outside of their certificated right-of-way.

141. Although the Sierra Club and others object to the project and Commission staff preparation of an EA, numerous state and federal agencies participated in staff's preparation of the EA. Both the FWS and the Corps acted as cooperating agencies in preparing the EA. Other state and federal agencies participated in the EA process by submitting comments and recommending mitigation. In many cases, the EA recommends, and we adopt here, mitigation measures put forth by other agencies. As for restoration, Tennessee is required to restore the areas affected by project construction to the greatest extent practicable. We retain compliance management oversight of the pipeline until such time as construction and restoration is complete and will require Tennessee to do what is necessary to restore the affected lands. Although some disagreement exists as to the effects of the project, we do not find that a substantial dispute exists as to the size, nature, or effect of the project.

142. Sierra Club also argues that the Commission failed to properly evaluate the "degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks," the fifth intensity factor.[85] Sierra Club alleges that the EA failed to gather and assess information regarding the geology of the projects area (incomplete field studies on landslides, karst formations, and the potential for blasting),

[85] 40 C.F.R. § 1508.27(b)(5) (2011).

the effect of the project on revegetation, potential for harm to water resources, affects on threatened and endangered species (incomplete surveys for the bog turtle, dwarf wedgemussel, small whorled pogonia, and bald eagle), and the effect of the project on cultural resources (due to incomplete survey results). Sierra Club argues that NEPA does not permit agencies to "act first and study later."[86] Therefore, the Sierra Club argues the Commission must collect and assess this missing information in an EIS.

143. We disagree. The EA discloses that the majority of the project is located in an area considered to be moderately to highly susceptible to landslides. If an area susceptible to landslides is identified, Tennessee will implement specific measures to minimize the potential for landslides and erosion, like installing water bars diagonally across the right-of-way on steep slopes, installing trench breakers within the pipeline trench, inspecting erosion control devices on a daily basis, and reestablishing vegetative cover as soon as possible following final grading.[87] During construction, field surveys will be conducted to assess the necessary mitigation measures to employ.

144. The EA discusses karst and discloses that there could be areas prone to sinkhole development in the proximity to Loop 323. If karst features are identified during construction, Tennessee will implement measures to stabilize the trench and minimize impacts associated with surface water runoff, erosion, and the discharge of hydrostatic test water. Tennessee will restore the project area to pre-construction contours and elevations to maintain the existing drainage at the site and to prevent diversion of stormwater into areas prone to sinkhole development. Tennessee will monitor the area identified by the New Jersey Geologic Society on an annual basis following construction to identify any evidence of sinkhole development and implement mitigation measures as needed.[88] We also note that for a majority of its length the new pipeline will be located within 25 feet of the existing pipeline, which has been in service for well over 50 years and has not been adversely affected by geologic hazards.

145. The EA discloses that approximately 32.7 miles (82 percent) of the proposed pipeline loops would cross areas of shallow bedrock that may require blasting. It also

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[86] Sierra Club Comments at 11 citing *Nat'l Parks & Conservation Ass'n v. Babbit*, 241 F.3d 722, 734 (9th Cir. 2001) (*NPCA*).

[87] EA at 2-2.

[88] *Id.*

identifies Tennessee's *Blasting Plan* prepared to minimize the effects of blasting and ensure the safety of its existing pipeline during blasting operations. All blasting techniques would comply with federal, state, and local regulations governing the safe storage, handling, firing, and disposal of explosive materials. Based on the above information, we reiterate that project impacts on geological resources and impacts from geological resources on the project would be minimal.

146. As noted above, Tennessee's ECPs are designed to minimize impacts associated with the construction of the project and promote the restoration of the right-of-way. In forested areas, Tennessee will clear the right-of-way and will install erosion control measures to minimize erosion and sedimentation impacts. Following construction, Tennessee will reseed all previously vegetated workspace areas and monitor disturbed areas for a minimum of two growing seasons. After construction on open land, Tennessee will reseed and restore the right-of-way and the EA states that vegetation impacts on this type of land are typically temporary to short-term. As for agricultural land, Tennessee will test the topsoil and subsoil for compaction at regular intervals and strictly control traffic on agricultural land to minimize compaction and rutting. Tennessee will segregate topsoil, as stipulated in landowner agreements, and store it separately from subsoil. Tennessee will also monitor the crops during the first and second growing seasons after seeding to determine if additional restoration is necessary.[89] Although much of the right-of-way is underlain by stony, rocky, or droughty soils and restoration may be difficult,[90] Tennessee's mitigation and restoration measures will help to ensure that the right-of-way is restored as close as practicably possible to its original condition.

147. The EA also evaluated stream and wetland crossings and the efficacy of Tennessee's ECPs. These plans contain best management practices that reduce impacts on streams and wetlands during construction and promote their restoration after construction. Based on the analysis in the EA, which includes and references best management practices, mitigation, and the required restoration measures Tennessee has adopted, we affirm that the project will not have a significant impact on streams or wetlands.[91]

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[89] EA at 2-37.

[90] EA at 2-6.

[91] EA at 2-22.

148. As noted in the EA, Tennessee will develop a Comprehensive Mitigation Plan for the construction and operation of the project through the Highlands Region. The New Jersey Highlands Council issued a Highlands Act Consistency Determination on February 16, 2012 and will have to approve any mitigation, the results of which will not be known until after the New Jersey Highlands Council acts, but Tennessee will be required to carry out the identified mitigation.

149. Sierra Club argues possible effects are uncertain where, as here, an EA reveals significant gaps in data collection and, thus, a finding of no significant impact cannot be supported "where uncertainty may be resolved by further collection of data, or where the collection of such data may prevent speculation of potential effects."[92] However, Sierra Club omits the beginning of the cited language in which the Ninth Circuit explains that an agency must generally prepare an EIS if the effects of the proposed action are "highly uncertain."[93] As the Ninth Circuit explained, the use of the word "highly" to modify "uncertain" means that information merely favorable to Sierra Club's position does not necessarily raise a substantial question about the significance of the project's effects.[94] Based on the evidence in the EA and above discussion, we believe that the EA appropriately assessed the impacts of the project on the areas identified by Sierra Club and reasonably concluded that the risks were neither highly uncertain, unique, nor unknown.

150. Sierra Club also argues that the Commission should have prepared an EIS because the project is likely to establish precedent for future actions with significant effects, the sixth intensity factor.[95] Sierra Club argues that the inquiry here is whether "approval of a single action will establish a precedent for other actions which may cumulatively have a negative impact on the environment."[96] Sierra Club argues there is a serious risk that the Commission will feel bound, when reviewing other certificate applications in the

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[92] *NPCA*, 241 F.3d at 732-33.

[93] *Id.* at 731-732.

[94] *Native Ecosystems Council v. U.S. Forest Serv.*, 428 F.3d 1233, 1240 (9th Cir. 2005).

[95] 40 C.F.R. § 1508.27(b)(6) (2011).

[96] *Anderson v. Evans*, 371 F.3d 475, 493 (9th Cir. 2004).

Marcellus Shale region, like the New York-New Jersey Expansion Project, Docket No. CP11-56-000, to the conclusions presented in the EA for the Northeast Upgrade Project. Therefore, Sierra Club argues, the Commission should conduct a full EIS because the precedential value of the project is substantial and the issuance of a finding of no significant impacts could open the floodgates to detrimental impacts on highly valued natural resources.

151. As explained above, when deciding whether to prepare an EIS or an EA the Commission's NEPA regulations explain that an EIS is only necessary for "[m]ajor pipeline construction projects...",[97] a category into which the Northeast Upgrade Project does not fit. Sierra Club's argument that Commission staff's EA for the project would establish a precedent is without merit because the EA is a non-binding document and creates no precedent to which the Commission is bound.[98] Each proposed project is unique and has different effects on different resources. In determining whether to prepare an EIS or an EA, Commission staff relies upon the Commission's regulations and makes an individual determination for each new proposal. Just because Commission staff has decided one action requires an EA, does not mean that a seemingly similar action will not require an EIS. Specifically, it is important to point out that the Commission prepared an EIS for the New York-New Jersey Expansion Project evincing the independence of our review and lack of precedential value in our decision whether to prepare an EA for each individual project.

152. Sierra Club argues that the Commission must consider the degree to which our action "may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973,"[99] the ninth intensity factor.[100] Sierra Club argues that the Supreme Court has held that the loss of any endangered species has been determined by Congress to be environmentally

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[97] 18 C.F.R. § 380.6(a)(3) (2011).

[98] *See e.g. Town of Cave Creek v. FAA*, 325 F.3d 320, 332 (D.C. Cir. 2003) (finding that the Federal Aviation Administration reasonably concluded that an EIS was unnecessary and preparing an EA for the agency review of high-altitude arrival and departure procedures would not be binding precedent).

[99] 16 U.S.C. §§ 1531-1544 (2006).

[100] 40 C.F.R. § 1508.27(b)(9) (2011).

significant.[101] In addition, Sierra Club argues that incomplete survey information cannot be relied upon to support a finding of no significant impact and mandates the further collection of data and an EIS.[102] Sierra Club states that although mitigation plans have been used in the past to avoid preparing an EIS, courts have a high standard for what constitutes a sufficient mitigation plan and have held that plans need to be thoroughly developed to be valid.[103] Sierra Club argues that the EA cites to incomplete surveys for the Indiana bat (a federally-endangered species), the bog turtle (a federally-threatened species), and the dwarf wedgemussel (a federally-endangered species).

153. Specifically, Sierra Club argues that Indiana bat surveys around portions of Loop 321 and all of Loop 323, where bats are likely to be present, were never conducted and that the EA fails to discuss mitigation plans in depth. Further, that although Tennessee has agreed to a seasonal restriction of vegetation clearing, it has not committed to the additional aspects of FWS recommended measures.

154. As explained above, Tennessee has now completed the necessary Indiana bat surveys in Pennsylvania and New Jersey. According to the New Jersey FWS, to avoid any effects of the project on the Indiana bat in New Jersey, Tennessee must implement a seasonal tree-clearing restriction for the eastern 2.5 miles of Loop 323. Pennsylvania FWS recommends mitigation and states that with the implementation of the mitigation, the effects of the project on Indiana bats will be insignificant or discountable. Environmental Condition Nos. 13 and 14 of this order require a tree-clearing restriction on Loops 321 and 323 to protect the Indiana bat, and other bat species, and requires Tennessee to file a plan that addresses Indiana bat habitat loss with the Pennsylvania FWS and the Secretary before starting construction over those loops.

155. As for the bog turtle, Sierra Club states that bog turtle survey methodology is not included in the EA. Sierra Club states that Commission staff's recommendation that Tennessee not begin construction until (1) certain bog turtle surveys are completed, (2) staff completes ESA section 7 consultation, and (3) Tennessee receives written notification from the Director of OEP that construction may begin, does not ensure these measures will be implemented. Sierra Club argues that framing these conditions as

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[101] *Tennessee Valley Auth. v. Hill*, 437 U.S. 153, 188 (1978).

[102] *NPCA*, 241 F.3d at 734.

[103] *NPCA*, 241 F.3d at 734.

"recommendations" here and throughout the EA casts doubt on whether measures to mitigate harms to the species in the project area will ever be undertaken.

156. As explained above, Tennessee filed the outstanding bog turtle survey with the Commission in January 2012, and the New Jersey FWS concurred that the survey did not document any suitable bog turtle habitat between approximate MPs 7.6 and 9.3 of Loop 323 in New Jersey. Sierra Club seems to misunderstand the role of the EA within the Commission. Commission staff prepares the EA to provide recommendations to the Commission and aid the Commission in its decision-making. The EA is not a final order approved by the Commission. Instead, we take the recommendations made by staff under consideration when we issue our final order. Generally, we adopt many of the EA's recommendations as final environmental conditions to our orders. In this case, as mentioned above, we adopt Commission staff's environmental recommendation concerning the bog turtle and modify it as Environmental Condition No. 13 to this order.

157. Sierra Club points out that the EA concludes that no additional surveys are needed for the dwarf wedgemussel "so long as the crossing of the Delaware River can be completed using the HDD crossing method."[104] Sierra Club also points out that Tennessee has not yet completed surveys for a 2.9-mile segment of Loop 323 and argues that the EA prematurely concludes that the project is not likely to adversely affect the dwarf wedgemussel.[105] Sierra Club argues that reliance on HDD to justify a lack of additional surveying is premature because Tennessee has not developed a contingency crossing method for the Delaware River HDD; it adds that although the EA mentions a frac-out as a possibility, it does not address any mitigation measures to address and minimize the potential for habitat destruction. Therefore, Sierra Club argues, the EA does not sufficiently consider the potential effect of the project on endangered and threatened species.

158. As explained above, Tennessee filed the necessary reports on the effects of the project on the dwarf wedgemussel and the Pennsylvania and New Jersey FWS offices concurred that the project is not likely to adversely affect the species, thus concluding the Commission's consultation with FWS regarding the dwarf wedgemussel.

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[104] EA at 2-48.

[105] EA at 2-51.

159. The EA does not address the possibility of a frac-out, because such an occurance is unlikely under the circumstances. The proposed action that the EA considers is the HDD crossing of the Delaware River. Although, a frac-out may occur, it is not reasonably foreseeable. The EA generally describes the potential impacts of an HDD-drilling fluid release on fisheries and other aquatic organisms. The EA also notes that Tennessee filed site-specific plans for each HDD and a frac-out contingency plan that describes how Tennessee would monitor for and respond to an inadvertent release of drilling fluid on land or into water. The EA summarizes the process that Tennessee would implement to minimize the likelihood of a frac-out, monitor for frac-outs, and notify agencies in the event of a frac-out. Tennessee included the contingency plan in its application and details how a land release would be cleaned up. If a release would occur in water, Tennessee would consult with applicable agencies within 24 hours after detection of the frac-out and implement containment and cleanup measures to the satisfaction of governing agencies and any affected party. In the event that a successful crossing using by HDD is not achievable, Tennessee will notify the Commission and consult with the applicable state and federal agencies to obtain the necessary permits prior to initiating another crossing method.[106] The EA concludes, and we concur, that Tennessee's site-specific HDD plans and frac-out contingency plan will adequately reduce the potential for, and impact of, a drilling fluid release.[107]

160. Sierra Club argues that incomplete survey data mandates the preparation of an EIS. In this case, although some surveys were incomplete at the time of the EA, a substantial amount of the project area had already been surveyed. As explained above, no more than nine percent of the proposed facilities in New Jersey remain to be surveyed due to lack of landowner permission and a substantial amount of environmental information was obtained from federal, state, and local resources, including for those areas not accessible for survey. The EA discloses the lack of this data and recommends the Commission require Tennessee to perform the studies before construction could begin on the limited areas where additional study was necessary. Since the issuance of the EA, Tennessee has completed several of the studies necessary for ESA section 7 consultations, including surveys for Indiana bat and the bog turtle. All other necessary outstanding surveys are required by the environmental conditions attached to this order prior to construction of the affected pipeline sections. Therefore, Tennessee will not receive our approval to proceed until it completes the studies that confirm the project will

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[106] EA at 2-17.

[107] EA at 2-18-19.

be consistent with our and other agencies' authorizations. As the Commission has found, "if the studies do not support such a finding, the project cannot proceed until it is modified or measures are put in place to ensure the project will not cause any unacceptable adverse environmental impacts."[108]

161. Finally, Sierra Club argues that the project will threaten a violation of federal, state, or local law or requirements imposed for the protection of the environment, the tenth intensity factor.[109] Specifically, Sierra Club alleges that the project will violate the Endangered Species Act; the Migratory Bird Treaty Act and the Bald and Golden Eagles Protection Act; the New Jersey Endangered and Nongame Species Conservation Act, the New Jersey Natural Heritage Program, and the Division of Land Use Regulation; the New York Endangered Species Act; Pennsylvania Endangered Species laws; the Clean Water Act; the Federal Safe Water Drinking Act; and the Pennsylvania Clean Streams Act.

162. With respect to the ESA, Sierra Club points out that FWS requested the Commission consider the effects on the federally-petitioned Northern long-eared bat, but argues that the analysis in the EA is so cursory that it ignores the threat of future violation of federal law. In addition, Sierra Club argues the EA ignores the possibility of effects on the American eel in the case of frac-out. Although the Northern long-eared bat is currently not a federally-protected species, the EA addresses impacts to that bat as well as the Indiana bat and concludes that the requirement that Tennessee clear trees only between September 1 and March 31 in Pennsylvania and August 1 and March 14 in New Jersey will be protective of both species of bat within the project area. Impacts from a potential frac-out are addressed above.

163. Sierra Club also argues that there is a risk of violation of the Migratory Bird Treaty Act and the Bald and Golden Eagles Protection Act based on the two bald eagles' nests that were identified.[110] As discussed above, based on additional surveying, one of the identified bald eagles' nests is outside the buffer zone recommended in the National Bald Eagle Management Guidelines and the other nest is currently inactive. Tennessee

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[108] *AES Sparrows Point LNG, LLC*, 129 FERC ¶ 61,245 (2009) (citing *Cal. Public Utilities Comm'n*, 900 F.2d 269, 282 (D.C. Cir. 1990)).

[109] 40 C.F.R. § 1508.27(b)(10) (2011).

[110] EA at 2-53.

has explicitly agreed to the tree-clearing limitations, and we believe these limitations will protect migratory bird habitat effectively.

164. Sierra Club also alleges that the project implicates 46 threatened, endangered, and special concern species in New Jersey protected under the New Jersey Endangered and Nongame Species Conservation Act, the New Jersey Natural Heritage Program, and the Division of Land Use Regulation. Accordingly, Sierra Club asserts the EA fails to adequately address the project's affect on protected species. For example, Sierra Club argues the EA fails to evaluate route deviations or mitigation measures that are designed to protect the timber rattlesnake at the Mahwah meter station site. In addition, Sierra Club states that the results of surveys on red-shouldered hawks and barred owls are still pending. Sierra Club states that regarding mussel species of concern, Tennessee will use the HDD crossing method to avoid impacts.

165. We note that at the Mahwah Meter Station there exists habitat for the timber rattlesnake, a New Jersey state protected species. Tennessee has continued to provide updates to its surveys for protected species and will provide additional survey information as it is completed in the spring of 2012. Both Tennessee and Algonquin propose work at the site and have provided updates on their respective work proposals at the meter station because the work could have a cumulative impact on protected species. Tennessee and Algonquin note that while both companies are completing work within the same area, Tennessee would be responsible for developing the footprint of the site. The EA discloses numerous measures Tennessee would take to avoid or minimize impact on any protected species within New Jersey. The EA notes that the only area of direct habitat impact for the timber rattlesnake is Mahwah Meter Station and that no northern copperheads were identified within the project area. We note that Tennessee is required to submit all outstanding surveys and any mitigation that is developed with the state of New Jersey for protected state species. Concerning mussel species, we reiterate that Tennessee will employ its site specific HDD plans which include a frac-out contingency plan.

166. In New York, Sierra Club states that rare species are protected under the New York Endangered Species Act.[111] Sierra Club points out that a bald eagle was found in the vicinity of the Port Jervis, New York pipe yard.[112] Sierra Club argues that the EA

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[111] N.Y. Envtl. Conserv. Law § 11-0535 (Consol. 2012).

[112] EA at 2-55.

offers no analysis of which species may be implicated by the law, instead indicating that Tennessee would transplant individual plants to locations outside the construction workspace or right-of-way.[113] Sierra Club argues that according to the Fifth Circuit, this "mere perfunctory or conclusory language will not be deemed to constitute an adequate record and cannot serve to support the agency's decision not to prepare an EIS."[114]

167. The Port Jervis pipe yard is the only project element located in New York State. Based on aerial photographs and descriptions from Tennessee, the Port Jervis Yard consists of a cleared lot with one or two commercial buildings on the property. The yard is situated in a mixed commercial and residential area, with buildings or roads on three sides, and a small wooded area on the fourth side. The EA discusses the bald eagle in the vicinity of the Port Jervis pipe yard. Tennessee contacted the New York FWS and the New York Natural Heritage Program. Based on these discussions Tennessee committed to working with the New York State Department of Environmental Conservation to determine whether adverse impacts on bald eagle could occur and to limit construction activities and other disturbances within buffers established under the National Bald Eagle Management Guidelines.[115] Therefore, no impacts on the bald eagle are expected. It should also be noted that the New York State Department of Environmental Conservation stated that "historical records of the dragonfly and plants in the vicinity of the pipe yard do not require habitat surveys."[116] Nevertheless, Tennessee has committed to completing surveys and would attempt to relocate workspaces to avoid impacts on state-protected plants. If impacts are unavoidable, Tennessee would mitigate them by preserving seed banks and rootstocks or transplanting individual plants.[117]

168. Sierra Club states that Pennsylvania law also protects and monitors the taking of endangered species.[118] Sierra Club argues that the EA conducts the same superficial

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[113] EA at 2-56.

[114] Citing *Citizen Advocates for Responsible Expansion, Inc. (I-Care) v. Dole*, 770 F.2d 423, 434 (5th Cir. 1985).

[115] EA at 2-53.

[116] EA at 2-56.

[117] EA at 2-56.

[118] 30 Pa. Cons. Stat. § 2305 (2012).

review that it does for all endangered species. Specifically, Sierra Club argues that although timber rattlesnakes were documented along portions for Loop 321, the EA fails to supply information on snakes that were not gestating or what the habitat implications would be.

169. Pennsylvania currently lists the timber rattlesnake as a candidate species, rather than threatened or endangered. The EA notes that a report of denning surveys was pending, but that Tennessee would: avoid direct impacts on any dens that may be identified by reducing the workspace or implementing a route deviation, employ snake monitors to remove any snakes from the right-of-way on a daily basis, and restore gestation habitat after construction.[119] At the request of the Pennsylvania Fish and Boat Commission, Tennessee conducted the final denning survey on October 26, 2011, as staff was preparing the EA. The report documented three dens near the Loop 321 construction right-of-way and none near Loop 323. Although none of the dens near Loop 321 are located within the construction right-of-way, the report documented potential denning, gestating, and basking habitat. Tennessee also committed to train its construction workers to recognize species of snakes and contact the snake monitor and add snake fencing and signage along the right-of-way near the dens. In addition, Environmental Condition No. 15 to this order, originally environmental recommendation 16 in the EA, requires Tennessee to file the results of any outstanding surveys for Pennsylvania and New Jersey state-listed species and identify any additional mitigation measures developed in consultation with the applicable state agencies prior to construction. Based on the mitigation measures Tennessee has committed to, and its consultation with the Pennsylvania Fish and Boat Commission, we do not believe the project will result in a violation of Pennsylvania's endangered species law.

170. As for the CWA, Sierra Club argues that the EA contains little analysis of proposed dredge and fill activities and relies on the assumption that Tennessee will meet permit requirements. In addition, Sierra Club argues that the EA fails to explain the impact of the project on wetlands and sensitive waterbodies, including the Monksville Reservoir and Valentine Brook.[120]

171. It is not unreasonable for the EA to assume that Tennessee will comply with permit requirements because other agencies will require Tennessee to do so. Multiple

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[119] EA at 2-54.

[120] EA at 2-13.

agencies, including New Jersey DEP, Pennsylvania DEP, the Corps, and others must issue separate authorizations for many of the planned construction activities and environmental impacts. As pointed out throughout the EA and in this order, many of the resource areas addressed in the EA are protected by different federal and state laws to which Tennessee is obligated to adhere. By assuming that Tennessee will adhere to these different requirements, the Commission is not abdicating its responsibility; rather we are looking at the impacts of the project within that context. Sierra Club offers no evidence why it is inappropriate to assume Tennessee will adhere to its permit requirements.[121]

172. Tennessee must cross wetlands and waterbodies in accordance with Tennessee's ECPs and federal and state permit requirements, minimizing impacts. The EA also addresses impacts to the Valentine Brook, stating that Loop 323 would cross one minor, unnamed tributary to the brook that is classified as intermittent and located approximately 1.7 miles upstream of the Milford Township Water Authority water withdrawal. The project will also cross the Monksville Reservoir, for which Tennessee will use the HDD method which would avoid direct impacts from trenching within this waterbody. The EA discusses at length the impacts that are anticipated for waterbody and wetland crossings associated with the project.

173. Sierra Club also argues the project may violate the Federal Safe Drinking Water Act.[122] Sierra Club points out that when discussing impacts to the New Jersey Highlands Planning and Preservation areas, the EA addresses Tennessee's mitigation plans by stating Tennessee "would" develop comprehensive mitigation plan that "would" be submitted as part of a Highland Applicability Determination.[123] Sierra Club argues that the lack of developed mitigation plan and reliance on hypothetical future scenario interferes with the ability to assess the impact of drinking water. In addition, Sierra Club

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[121] *See, e.g., Sierra Club v. Hassell*, 636 F.2d 1095, 1098 (5th Cir. 1981) (Finding that the Federal Highway Administration acted reasonably in not preparing an EIS for the reconstruction of a hurricane-damaged bridge linking an island to the mainland. The court found laws which restricted development and use on the island, including construction permit requirements, regulation of fish habitat, and prohibition on development on sand dunes, were sufficient to protect the island, stating "[a]ppellants have failed to establish why this regulatory scheme is insufficient to protect against adverse environmental effects resulting from increased development or otherwise.").

[122] 42 U.S.C §§ 300f-300j-26 (2006).

[123] *See* EA at 2-11.

argues that the EA fails to address the impacts of potential hazardous waste contamination, hydrostatic testing, and the effect of a possible frac-out.

174. As noted above, Tennessee has received a Highlands Act Consistency Determination in order to construct within the Highlands area. In addition, Tennessee will be required to develop a mitigation plan as part of its approval process, separate from Commission approval.

175. Impacts to drinking water related to construction and operation of the project are expected to be minimal, as it relates to both the Monksville Reservoir and Valentine Brook. The Monksville Reservoir HDD would avoid direct impacts to the waterbody and Valentine Brook would not be directly crossed (an intermittent tributary would be). The EA concludes that crossing waterbodies in accordance with the construction and restoration methods proposed within Tennessee's ECP and outlined in the EA, and any other federal or state requirements, will ensure that any potential impacts on waterbodies are minimal.

176. Sierra Club argues that the project threatens a violation of the Pennsylvania Clean Streams Act[124] because, it asserts, Tennessee has a history of violations of the Clean Streams Act and these violations imply a near certainty that the project will violate clean water laws, and, therefore, requires the preparation of an EIS. Tennessee's compliance with the Pennsylvania Clean Streams Act is the responsibility of the Pennsylvania DEP to which Tennessee will answer if it does not comply. Tennessee's alleged past history of non-compliance of this law has no bearing in this proceeding and, consequently, does not raise the potential of a violation of state law.

177. As discussed above, the EA thoroughly addresses the potential impact of the project on all the federal, state, and local laws cited by Sierra Club. We find that the project, as authorized, will not likely result in a violation of any of these laws. Accordingly, we reject Sierra Club's assertion that an EIS is required.

Cumulative Impact of Marcellus Shale Region

178. Sierra Club argues that the project will have cumulatively significant impacts on the environment, the seventh intensity factor, and that the Commission, therefore, should

[124] 35 Pa. Cons. Stat. § 691.401 (2012).

have prepared an EIS rather than an EA.[125] Sierra Club argues that the EA's treatment of the cumulative impacts falls short of what NEPA requires by failing to consider the full scope of impacts of the project. Sierra Club also argues that the cumulative impacts analysis is devoid of detailed, reasoned conclusions and quantified information. Further, Sierra Club argues that instead of performing an independent assessment of cumulative impacts, the EA impermissibly relies on Tennessee's assumed compliance with other agencies' permitting requirements. Therefore, Sierra Club argues, the cumulative impacts analysis is insufficient and the EA cannot support the finding of no significant impact.

179. Under CEQ's NEPA regulations, agencies must consider the three types of impacts: direct, indirect, and cumulative.[126] The regulations state that "direct effects" of a proposed action are "caused by the action and occur at the same time and place."[127] "Indirect effects" are "caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable."[128] "Cumulative impact" is defined as the "impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions."[129]

180. The EA includes an analysis of the cumulative impacts of related past, present, and reasonably foreseeable activities in the project area.[130] As noted above, the EA describes the impacts of existing and pending jurisdictional natural gas pipelines, natural gas facilities associated with the project but that are not under the Commission's jurisdiction, unrelated projects, and development of Marcellus Shale.

181. The EA considers the general development of the Marcellus Shale region in the vicinity of the project. For example, the EA identifies that 1,454 Marcellus Shale wells

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[125] 40 C.F.R. § 1508.27(b)(7) (2011).

[126] 40 C.F.R. § 1508.25 (2011).

[127] 40 C.F.R. § 1508.8(a) (2011).

[128] 40 C.F.R. § 1508.8(b) (2011).

[129] 40 C.F.R. § 1508.7 (2011).

[130] EA at 2-121-134.

were drilled in Pennsylvania in 2010 and approximately 1,740 wells would be drilled in 2011 based on January through July data, according to the Pennsylvania DEP. The project facilities closest to active Marcellus Shale drilling activities are Loops 317 and 319 in Bradford County and the modifications at existing Compressor Station 321 in Susquehanna County. The EA concludes that it is likely that drilling would continue through the period of construction of the project, but that the exact extent of the drilling is unknown.[131]

182. However, notwithstanding the EA's description of Marcellus Shale development in the project area, and contrary to Sierra Club's assertion, we are not required to include a fuller discussion in the cumulative effects analysis. Development of the Marcellus Shale region is neither causally-related to the project, nor reasonably foreseeable and, as the EA concludes, a more specific analysis is outside the scope of the cumulative impact analysis in the EA because the exact location, scale, and timing of future Marcellus Shale facilities are unknown.[132]

183. When looking at project impacts, the Supreme Court held in *U.S. Dep't of Transp. v. Public Citizen* (*Public Citizen*),[133] that NEPA requires a "reasonably close causal relationship" between the environmental effect and the alleged cause.[134] The Court further explained that this is similar to "the familiar doctrine of proximate cause from tort law."[135] In *Public Citizen*, the Court upheld the Federal Motor Carrier Safety Administration's (FMCSA) decision not to consider the potential environmental impacts of an increased number of Mexican trucks on U.S. roads in its EA assessing new safety regulations governing Mexican motor carriers. The Court based its decision upon the agency's finding that the relationship between the increased number of trucks and the safety regulations was not a reasonably close causal relationship.[136] Similarly, there is

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[131] EA at 2-125.

[132] EA at 2-125.

[133] 541 U.S. 752, 767 (2004).

[134] *Public Citizen,* 541 U.S. at 767 (citing *Metropolitan Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766, 774 (1983)).

[135] *Id.*

[136] *Id.*

not a reasonably close causal relationship between the development of Marcellus Shale in Pennsylvania and our approval of the Northeast Upgrade Project.

184. Sierra Club argues that the Commission cannot rely upon *Public Citizen*, where the Court found that the critical feature of the case was that FMCSA had "no ability" to prevent Mexican motor carriers from operating within the United States.[137] In contrast, Sierra Club argues that the Commission's exclusive jurisdiction over the interstate pipeline system grants the Commission substantial authority to affect development of Marcellus Shale upstream activities.

185. We disagree. The EA notes that natural gas development in the Marcellus Shale region in Pennsylvania began in 2005 and has rapidly expanded. The EA adds that Pennsylvania is forecast to produce approximately 7.5 billion cubic feet (Bcf) of natural gas per day by 2015 and 13.4 Bcf per day by 2020.[138] In contrast, the Northeast Upgrade Project will only transport 636,000 Dth per day – a very small percentage of the projected growth. Natural gas development in the Marcellus Shale region will continue with or without the project and will find other avenues to market. Furthermore, the Commonwealth of Pennsylvania regulates new permits, wells, gathering lines, and other facilities and determines whether gas will be developed in Pennsylvania, whereas, the Commission's NGA section 7 jurisdiction is limited only to the construction, operation, and maintenance of the project and natural gas in interstate commerce. The Commission, therefore, has no statutory authority to prevent the types of impacts involved in the development of the Marcellus Shale region. Even if we decided not to issue a certificate for the project, there is no evidence to show that would prevent impacts from the construction and operation of well pads, access roads, gathering lines, and compressor stations that Sierra Club is concerned about. Certainly, there is a relationship between the project and Marcellus Shale development (Tennessee states in its application that the project will provide shippers access to natural gas supplies being produced in the Marcellus Shale supply area); however, this link is not the "close causal relationship" the Supreme Court described in *Public Citizen*.

186. Similarly, the Commission cannot be said to be the "gatekeeper" for approval of development of Marcellus Shale upstream activities as Sierra Club argues. Sierra Club

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[137] *Id.* at 766.

[138] EA at 2-125.

relies on *Humane Society of U.S. v. Johanns* (*Humane Society*),[139] to argue that the Commission is able to promote, prevent, or otherwise affect upstream development in the Marcellus Shale region noting that "when an agency serves effectively as a gatekeeper for private action, that agency can no longer be said to have no ability to prevent a certain effect."[140] However, *Humane Society* is inapplicable here. In that case, the district court found that the U.S. Department of Agriculture violated NEPA by failing to prepare either an EIS or an EA for the promulgation of a rule governing inspectors of horse-slaughter facilities, and found that the environmental effects of horse slaughter should have been assessed under NEPA prior to the promulgation of the horse-slaughter rule.[141] In this case, Commission staff prepared a detailed and in-depth EA in compliance with NEPA, which, as described above, assesses all the impacts of the project and, after review, recommends a finding of no significant impact.

187. Consideration of the project's cumulative impacts does not change the analysis of impacts under *Public Citizen*, where the Court also held that the FMCSA appropriately examined the cumulative impacts of its safety rule.[142] As we recently explained in *Central New York Oil and Gas Co.* (*Central New York*), the Ninth Circuit analogized cumulative impacts to links in a single chain:

> Environmental impacts are in some respects like ripples following the casting of a stone in a pool. The simile is beguiling but useless as a standard. So employed it suggests that the entire pool must be considered each time a substance heavier than a hair lands upon its surface. This is not a practical guide. A better image is that of scattered bits of broken chain, some segments of which contain numerous links, while others have only one or two. Each segment stands alone, but each link within a segment does not.[143]

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[139] 520 F.Supp 2d 8, 25 (D.D.C. 2007).

[140] *Id.* (internal quotations omitted).

[141] *Humane Society of U.S. v. Johanns*, 520 F.Supp 2d at 27.

[142] *Public Citizen*, 541 U.S. at 769-770.

[143] *Central New York.*, 137 FERC ¶ 61,121, at P 88 (2011), *order on reh'g, clarification and stay*, 138 FERC ¶ 61,104 (2012) (quoting *Sylvester v. U.S. Army Corps of Engineers*, 884 F.2d 394, 400 (9th Cir. 1989)).

188. The EA considers past, present, and future Marcellus Shale activities and logically concludes that the project and impacts from Marcellus Shale production activities are not links in the same chain. Specifically, the EA states the purpose of the project is to expand the natural gas delivery capacity to the northeast U.S., meet market demand for new transportation services, and help alleviate the already constrained pipeline capacity in the region. All four pipeline systems in the region are currently fully subscribed during the peak heating season and, even when underground storage in northwestern Pennsylvania and New York is used to meet peak day requirements, pipeline capacity must still be used to reach market areas. In addition, according to Tennessee, natural gas deliveries into its system in the region have increased from about 25 million cubic feet per day to 1 Bcf per day within the last 2 years. Development of natural gas resources in the Marcellus Shale region will continue even without the project and unregulated developers will continue to build new wells and gathering systems to serve the shale gas. The Northeast Upgrade Project is designed as a high-pressure, high-capacity pipeline to transport natural gas in interstate commerce supporting Tennessee's entire system, not as a gathering system for low-pressure shale gas produced in the region.

189. In addition, future Marcellus Shale drilling activities and the potential associated environmental impacts are not reasonably foreseeable. As explained in the EA, the exact location, scale, and timing of future actions are unknown.[144] Sierra Club disagrees, noting that publicly available maps prepared by Bradford County and the Pennsylvania DEP provide quantitative and geographic data on the location of permitted gas wells in Pennsylvania and show the locations of existing and proposed wells in the counties crossed by the project. Therefore, Sierra Club argues, the Commission can ascertain with relative certainty the locations of wells the project will facilitate by looking at maps that identify Chesapeake-owned permits and active wells along a proposed gathering pipeline that would connect with the Tennessee's system.

190. However, the available maps do not provide the degree of specificity necessary for an in-depth review and meaningful analysis in the EA. Knowing the location of a permitted, yet unconstructed, well does not mean that other specific factors are known such as the specific location of gathering lines, access roads, and other associated infrastructure and related facilities, information that is not provided in the maps cited by Sierra Club. In addition, although Pennsylvania has issued thousands of well permits, and continues to do so, it is unknown when, or even if, these wells will be drilled. The EA concludes, and we agree, that the factors necessary for meaningful analysis of when,

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[144] EA at 2-125.

where, and how Marcellus Shale development will occur are ultimately unknowable and not reasonably foreseeable at this time. The EA provides general information on the number and general location of wells permitted in order to provide public disclosure of environmental issues. However, this information does not inform our finding of no significant impact.

191. Sierra Club argues that this situation is analogous to *Thomas v. Peterson*,[145] where the court considered an EA prepared by the Forest Service for a timber road through a National Forest and held that the cumulative impacts of the road and any future timber sales had to be considered together. The court rejected the argument that "sales are too uncertain and too far in the future for their impacts to be analyzed along with the road" reasoning that "if sales are sufficiently certain to justify construction of the road, then they are sufficiently certain for their environmental impacts to be analyzed along with the road."[146] Similarly, Sierra Club argues, the Commission cannot claim that the effects of past, present, and reasonably foreseeable upstream Marcellus shale development do not have a "reasonably close causal relation" to the project, or that they are entirely unknown and, thus, outside the scope of analysis.

192. However, *Thomas v. Peterson* is inapplicable here. In that case, the court held that the Forest Service's plan to prepare separate EAs for the forest road approval and timber sales approvals was an impermissible segmentation of connected actions.[147] The court first found the approval of the new road and timber sales were "connected actions" under NEPA,[148] stating that "[w]here agency actions are sufficiently related so as to be 'connected' within the meaning of NEPA, the agency may not escape compliance with the regulations by proceeding with one action while characterizing the others as remote

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[145] 753 F.2d 754 (9th Cir. 1985).

[146] *Id.* at 760.

[147] *Id.* at 759.

[148] CEQ regulations state that "Connected actions, which means they are closely related and therefore should be discussed in the same impact statement. Actions are connected if they: (i) Automatically trigger other actions which may require environmental impact statements. (ii) Cannot or will not proceed unless other actions are taken previously or simultaneously. (iii) Are interdependent parts of a larger action and depend on the larger action for their justification." 40 C.F.R. § 1508.25 (2011).

or speculative."[149] Therefore the issue in *Thomas v. Peterson* was the Forest Service's attempt to segment several federal actions into small enough parts to avoid the preparation of an EIS. Our review and approval of the project, and impacts from the development of the Marcellus Shale region, are not connected actions within the meaning of NEPA. As we stated before, development of the Marcellus Shale region will proceed with or without the project and the Commission has no control over the siting and drilling of natural gas wells and related infrastructure in Pennsylvania.

193. More analogous to the instant case is *Sylvester v. U.S. Army Corps of Engineers* (*Sylvester*),[150] where the court addressed the scope of analysis that federal agencies must conduct in determining whether their actions, when combined with private actions, require an EIS under NEPA.[151] The court in *Sylvester* upheld the Corps decision to limit its NEPA review to impacts of the construction of a golf course for which the Corps issued a permit, rather than look at the impacts of the larger resort complex.[152] The court explicitly distinguished *Sylvester* from *Thomas v. Peterson* finding that the federal actions in *Thomas v. Peterson* were joined to each other as links in the same chain in a way that the golf course and resort were not.[153] The court explained that the golf course and the resort complex were separate segments of chain and, although the golf course and resort complex would each benefit from the other's presence, each project could exist without the other.[154] The Northeast Upgrade Project and development of the Marcellus Shale region are related in a similar way as the golf course and the resort in *Sylvester*: separate segments of chain each of which can exist without the other. Marcellus Shale development will continue with or without the project and there is no "reasonably close causal relationship" between the alleged impacts and the project.

194. Sierra Club and other commentors also argue that the EA fails to adequately address the cumulative impacts of related existing and reasonably foreseeable pipelines

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[149] *Thomas v. Peterson*, 753 F.2d at 760.

[150] 884 F.2d 394 (9th Cir. 1989).

[151] *Id.* at 398.

[152] *Id.* at 401.

[153] *Id.* at 400.

[154] *Id.*

within the Commission's jurisdiction. Sierra Club points out that the EA identifies ten existing or proposed pipelines totaling approximately 240 miles of new or improved pipelines and argues that the EA does not say what the cumulative effects might be or provide a basis that mitigation will be sufficient. In particular, the Sierra Club argues that to the extent the Northeast Upgrade Project and the 300 Line Project are connected and similar actions, the impact of both should have been considered in the EA but that the EA fails to analyze the cumulative impact of the 300 Line Project.

195. We disagree. The EA addresses other jurisdictional pipelines, including the 300 Line Project, in its cumulative impacts analysis. The EA concludes that the impacts from most of the other jurisdictional pipelines in the region are too far away from the project (over 25 miles) to significantly contribute to cumulative impacts in the project area. In addition, EA concludes that the majority of the recently-approved MARC 1 Hub Line Project would also be located a substantial distance from the project and most of the impact would be ameliorated by the time Tennessee begins construction of its project. As for the 300 Line Project, most of the construction impacts were temporary in nature and will be separated by time and distance from the impacts of the Northeast Upgrade Project. In addition, both projects either have been or would be required to implement construction practices and restoration measures that minimize overall environmental impacts and, thus, reduce potential cumulative effects of the projects to less than significant levels. For these reasons and considering that the Northeast Upgrade Project is primarily an expansion of an existing right-of-way, the EA properly concludes that only minor cumulative impacts will result when the impact of Tennessee's proposal are added to impacts from other projects in the area, including the 300 Line Project.

196. We also disagree with Sierra Club's assertion that the EA fails to adequately consider the cumulative effects to groundwater resources, vegetation and wildlife, land use and visual resources, and recreation. The EA explains that project construction could have a minor, temporary, and localized effect on groundwater resources, including increased turbidity, reduced water levels, contamination, and damage to nearby water wells. These impacts would be greatest during construction and would quickly diminish after construction, as Tennessee restores and revegetates the right-of-way. In addition, Tennessee will monitor nearby wells and will repair affected wells and compensate owners.[155] The EA also addresses the cumulative impacts on vegetation and wildlife explaining that other projects in the same general location and time frame could have a cumulative impact on local vegetation and wildlife, but concludes that the scale and short

[155] EA at 2-129-130.

time frame for construction of the project, other nearby jurisdictional projects, and a proposed electric generation plant would not contribute significantly to cumulative impacts on vegetation and wildlife.[156]

197. With respect to cumulative impacts on land use, visual resources, and recreation, the EA concludes that construction and operation of the project would not significantly impact these resource areas. The EA explains that effects on land use, visual resources, and recreation will be temporary in nature and minimized by the use of the existing right-of-way. In addition, the project will not cross the Delaware Water Gap NRA, avoiding impacts to this federal recreation area, and Tennessee will minimize impacts to the Appalachian National Scenic Trail through consultation with the NPS.[157] Tennessee has also developed site-specific plans for working in special interest areas and will obtain all necessary permits and approvals.

198. The purpose of the requirement that agencies consider the cumulative impacts of its actions "is to prevent agencies from dividing one project into multiple individual actions 'each of which individually has an insignificant environmental impact, but which collectively have a substantial impact.'"[158] Such is not the case here. The cumulative impacts analysis in the EA identifies recently completed, ongoing, and planned projects in the project area, including, to a limited extent, development of natural gas reserves in the Marcellus Shale. The EA concludes, and we agree, due to the implementation of specialized construction techniques, the relatively short timeframe in any one location, and carefully developed resource protection and mitigation plans, only small cumulative impacts are anticipated when the impacts of the Northeast Upgrade Project are added to identified, ongoing projects in the project area.[159]

199. Finally, Sierra Club argues that the EA impermissibly relies on compliance with other agencies' permitting requirements as a basis for a finding of no significant impact. Sierra Club argues that Commission staff abdicates its NEPA responsibility by deferring

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[156] EA at 2-131.

[157] EA at 2-132.

[158] *Natural Resources Defense Council, Inc. v. Hodel*, 865 F.2d 288, 297 (D.C. Cir. 1988) (quoting *Thomas v. Peterson*, 753 F.2d at 758).

[159] EA at 1-134.

to standards administered by other agencies without independently assessing the impacts. Sierra Club argues that the EA subverts the purpose of NEPA by repeatedly pointing to oil and gas well permitting standards as a reason for concluding that the project will have no significant cumulative impact when considered in the context of Marcellus Shale development. For example, Sierra Club points to the fact that the EA notes that non-jurisdictional facilities in Pennsylvania will be required to implement best management practices developed by the Pennsylvania DEP which the EA determines would avoid or minimize cumulative impacts. Sierra Club argues that the EA's reliance on other agencies' regulations does not supplant the requirement of a thorough EA analysis and does not suffice as a hard look under NEPA.[160]

200. As explained above, we are not required to look at the impacts of the development of Marcellus Shale in the EA because the project and such development do not have a reasonably close causal connection, nor are the impacts from Marcellus Shale development reasonably foreseeable. Nonetheless, staff looked at the general impacts of Marcellus Shale development to inform the public. The EA thoroughly analyzes each aspect of the project and its impacts, as detailed throughout this order. The EA does not defer our NEPA responsibilities to other agencies; rather it explains that based on Tennessee's compliance with other laws and mitigation required by the Commission and other agencies, the EA can recommend a finding of no significant impact. The Commission is not abdicating its responsibility under NEPA. The EA acknowledges the reality that Tennessee will be required to comply with other federal and state laws not administered by the Commission and implement additional mitigation measures required by other federal and state agencies. The EA also finds that based on the regulation of natural gas producers by Pennsylvania, the Susquehanna River Basin Commission, the Delaware River Basin Commission, and other federal agencies, cumulative impacts of the project will not be significant. The fact that we take these laws and measures into account in assessing the environmental impact of the project is not an abdication of our responsibility.

201. In conclusion, we have reviewed the information and analysis contained in the record, including the EA, regarding the potential environmental effect of the project. Based on our consideration of this information, we agree with the conclusions presented in the EA and find that if constructed and operated in accordance with Tennessee's

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[160] Citing *Limerick Ecology Action, Inc. v. U.S. Nuclear Regulatory Comm'n*, 869 F.2d 719, 729 (3d Cir. 1989); *Calvert Cliffs' Coordinating Comm. v. U.S. Atomic Energy Comm'n*, 449 F.2d 1109 (D.C. Cir. 1971).

application, as supplemented, and the conditions imposed herein, approval of this proposal would not constitute a major federal action significantly affecting the quality of the human environment.

202. Any state or local permits issued with respect to the jurisdictional facilities authorized herein must be consistent with the conditions of this certificate. The Commission encourages cooperation between interstate pipelines and local authorities. However, this does not mean that state and local agencies, through application of state or local laws, may prohibit or unreasonably delay the construction, replacement, or operation of facilities approved by this Commission.[161]

IV. Conclusion

203. For all of the reasons discussed above, and with the conditions imposed herein, the Commission finds that Tennessee's proposal is required by the public convenience and necessity and we are issuing the requested certificate and abandonment authorizations.

204. The Commission on its own motion received and made a part of the record in this proceeding all evidence, including the application and exhibits thereto, submitted in support of the authorizations sought herein, and upon consideration of the record,

The Commission orders:

(A) A certificate of public convenience and necessity is issued authorizing Tennessee to construct and operate the facilities, as more fully described in the application and in this order.

(B) Tennessee is authorized to abandon the facilities, as more fully described in the application and this order.

(C) Tennessee shall complete the construction of the facilities and make them available for service within one year of the date of the order, pursuant to section 157.20(b) of the Commission's regulations.

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[161] *See, e.g., Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293 (1988); *National Fuel Gas Supply v. Public Service Comm'n*, 894 F.2d 571 (2d Cir. 1990); and *Iroquois Gas Transmission System, L.P.*, 52 FERC ¶ 61,091 (1990) and 59 FERC ¶ 61,094 (1992).

(D) The authorization in Ordering Paragraph (A) is conditioned on Tennessee's compliance with the provisions of all applicable Commission regulations and the NGA, including, but not limited to, sections 157.20 (a), (c), (e), and (f) of the Commission's regulations.

(E) The authorization in Ordering Paragraph (A) is conditioned upon Tennessee's compliance with the environmental mitigation measures set forth in the Appendix B to this order.

(F) Tennessee shall notify the Commission's environmental staff by telephone, electronic mail, and/or facsimile of any environmental noncompliance identified by other federal, state, or local agencies on the same day that such agency notifies Tennessee. Tennessee shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

(G) Tennessee is directed to file actual tariff records to implement its proposed Northeast Upgrade Project rates not less than 30 but not more than 60 days prior to the proposed facilities being placed into service.

(H) Tennessee's incremental recourse rates for firm services and applicable general system rate under Rate Schedule IT for any interruptible service on the Northeast Upgrade Project are approved, as described above. This approval is subject to Tennessee filing, within 30 days of the date of this order, an analysis demonstrating what impact operation of the new compressor will have on the Electric Power Cost Recovery Adjustment for existing customers.

(I) Tennessee must file not less than 30 but not more than 60 days before the in service date of the proposed facilities an executed copy of each non-conforming agreement as a tariff record reflecting the non-conforming language and a tariff record identifying these agreements as non-conforming agreements, consistent with section 154.112 of the Commission's regulations.

(J) Tennessee must execute firm natural gas transportation contracts equal to the level of service and in accordance with the terms of service represented in its precedent agreements prior to commencing construction.

(K) The motion to intervene out of time is granted.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.

Appendix A

Parties Filing Timely, Unopposed Interventions

Atmos Energy Corporation
Atmos Energy Marketing LLC
Calpine Energy Services, L.P.
Consolidated Edison of New York, Inc. and Orange and Rockland Utilities, Inc.
Constellation Energy Commodities Group, Inc.
Delaware Riverkeeper Network
EQT Energy, LLC
George C. Feighner
Ellen Hay and Milton Newman
Inergy Midstream, LLC
Louisville Gas & Electric Company
Millennium Pipeline Company, LLC
National Fuel Gas Distribution Corporation
National Grid Gas Delivery Companies
New England Local Distribution Companies[162]
New Jersey Chapter of the Sierra Club
New Jersey Highlands Coalition
New Jersey Natural Gas Company
NJR Energy Services Company
Piedmont Natural Gas Company, Inc.
ProLiance Energy, LLC
PSEG Energy Resources & Trade LLC
Statoil Natural Gas LLC
UGI Distribution Companies[163]

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[162] Bay State Gas Company d/b/a Columbia Gas of Massachusetts, The Berkshire Gas Company, Connecticut Natural Gas Corporation, Fitchburg Gas and Electric Company, City of Holyoke, Massachusetts Gas and Electric Department, Northern Utilities, Inc., NSTAR Gas Company, The Southern Connecticut Gas Company, Westfield Gas & Electric Department, and Yankee Gas Services Company.

[163] UGI Utilities, Inc., UGI Penn Natural Gas, Inc., and UGI Central Penn Gas, Inc.

Appendix B

Environmental Conditions

As recommended in the Environmental Assessment (EA), this authorization includes the following conditions:

1. Tennessee Gas Pipeline Company (Tennessee) shall follow the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests) and as identified in the EA, unless modified by the Order. Tennessee must:

   a. request any modification to these procedures, measures, or conditions in a filing with the Secretary of the Commission (Secretary);
   b. justify each modification relative to site-specific conditions;
   c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and
   d. receive approval in writing from the Director of Office of Energy Projects (OEP) before using that modification.

2. The Director of OEP has delegated authority to take whatever steps are necessary to ensure the protection of all environmental resources during construction and operation of the project. This authority shall allow:

   a. the modification of conditions of the Order; and
   b. the design and implementation of any additional measures deemed necessary (including stop-work authority) to assure continued compliance with the intent of the environmental conditions as well as the avoidance or mitigation of adverse environmental impact resulting from project construction and operation.

3. **Prior to any construction**, Tennessee shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, Environmental Inspectors (EIs), and contractor personnel will be informed of the EI's authority and have been or will be trained on the implementation of the environmental mitigation measures appropriate to their jobs **before** becoming involved with construction and restoration activities.

4. The authorized facility locations shall be as shown in the EA, as supplemented by filed alignment sheets. **As soon as they are available, and before the start of construction**, Tennessee shall file with the Secretary any revised detailed survey alignment maps/sheets at a scale not smaller than 1:6,000 with station positions for all facilities approved by the Order. All requests for modifications of

environmental conditions of the Order or site-specific clearances must be written and must reference locations designated on these alignment maps/sheets.

Tennessee's exercise of eminent domain authority granted under Natural Gas Act (NGA) section 7(h) in any condemnation proceedings related to the Order must be consistent with these authorized facilities and locations. Tennessee's right of eminent domain granted under NGA section 7(h) does not authorize it to increase the size of its natural gas facilities to accommodate future needs or to acquire a right-of-way for a pipeline to transport a commodity other than natural gas.

5. Tennessee shall file with the Secretary detailed alignment maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all route realignments or facility relocations, and staging areas, pipe storage yards, new access roads, and other areas that would be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps/sheets/aerial photographs. Each area must be approved in writing by the Director of OEP **before construction in or near that area.**

   This requirement does not apply to extra workspace allowed by Tennessee's Environmental Construction Plans (ECPs) and/or minor field realignments per landowner needs and requirements which do not affect other landowners or sensitive environmental areas such as wetlands.

   Examples of alterations requiring approval include all route realignments and facility location changes resulting from:

   a. implementation of cultural resources mitigation measures;
   b. implementation of endangered, threatened, or special concern species mitigation measures;
   c. recommendations by state regulatory authorities; and
   d. agreements with individual landowners that affect other landowners or could affect sensitive environmental areas.

6. **At least 60 days prior to construction**, Tennessee shall file an Implementation Plan with the Secretary for review and written approval by the Director of OEP. Tennessee must file revisions to the plan as schedules change. The plan shall identify:

a. how Tennessee will implement the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests), identified in the EA, and required by the Order;

b. how Tennessee will incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to onsite construction and inspection personnel;

c. the number of EIs assigned per loop segment and aboveground facility sites, and how the company will ensure that sufficient personnel are available to implement the environmental mitigation;

d. company personnel, including EIs and contractors, who will receive copies of the appropriate material;

e. the location and dates of the environmental compliance training and instructions Tennessee will give to all personnel involved with construction and restoration (initial and refresher training as the project progresses and personnel change, with the opportunity for OEP staff to participate in the training sessions);

f. the company personnel (if known) and specific portion of Tennessee's organization having responsibility for compliance;

g. the procedures (including use of contract penalties) Tennessee will follow if noncompliance occurs; and

h. for each discrete facility, a Gantt or PERT chart (or similar project scheduling diagram), and dates for:
   (1) the completion of all required surveys and reports;
   (2) the environmental compliance training of onsite personnel;
   (3) the start of construction; and
   (4) the start and completion of restoration.

7. Beginning with the filing of its Implementation Plan, Tennessee shall file updated status reports with the Secretary on a **weekly basis until all construction and restoration activities are complete**. On request, these status reports will also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:

   a. an update on Tennessee's efforts to obtain the necessary federal authorizations;

   b. the construction status of the project, work planned for the following reporting period, and any schedule changes for stream crossings or work in other environmentally-sensitive areas;

   c. a listing of all problems encountered and each instance of noncompliance observed by the EIs during the reporting period (both for the conditions imposed by the Commission and any environmental conditions/permit requirements imposed by other federal, state, or local agencies);

d. a description of the corrective actions implemented in response to all instances of noncompliance, and their cost;
e. the effectiveness of all corrective actions implemented;
f. a description of any landowner/resident complaints which may relate to compliance with the requirements of the Order, and the measures taken to satisfy their concerns; and
g. copies of any correspondence received by Tennessee from other federal, state, or local permitting agencies concerning instances of noncompliance, and Tennessee's response.

8. **Prior to receiving written authorization from the Director of OEP to commence construction of any project facilities**, Tennessee shall file with the Secretary documentation that it has received all applicable authorizations required under federal law (or evidence of waiver thereof).

9. Tennessee must receive written authorization from the Director of OEP **before placing each phase of the project into service**. Such authorization will only be granted following a determination that rehabilitation and restoration of the right-of-way and other areas affected by the project are proceeding satisfactorily.

10. **Within 30 days of placing the authorized project facilities in service**, Tennessee shall file an affirmative statement with the Secretary, certified by a senior company official:

a. that the facilities have been constructed and/or abandoned in compliance with all applicable conditions, and that continuing activities will be consistent with all applicable conditions; or
b. identifying which of the Certificate conditions Tennessee has complied with or will comply with. This statement shall also identify any areas affected by the project where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.

11. **Within 30 days of placing the facilities in service**, Tennessee shall file a report with the Secretary identifying all water supply wells/systems damaged by construction and how they were repaired. The report shall also include a discussion of any other complaints concerning well yield or water quality and how each problem was resolved.

12. **Prior to construction**, Tennessee shall file with the Secretary for review and written approval from the Director of OEP a revised Pennsylvania ECP that includes in-stream construction timing windows consistent with section V.B.1 of the FERC's Wetland and Waterbody Construction and Mitigation Procedures.

13. Tennessee **shall not begin construction of Loop 323 in New Jersey until:**

    a. Tennessee files with the New Jersey Field Office of the U.S. Fish and Wildlife Service (FWS) and the Secretary the results of all outstanding small whorled pogonia surveys. If small whorled pogonia are identified in any of the proposed construction work spaces, Tennessee shall consult with the FWS for measures that avoid impacts on this species;
    b. Tennessee adopts a seasonal restriction for clearing trees greater than 5-inch-diameter breast height from April 1 to September 30 between mileposts (MP) 13.9 and 16.4;
    c. the FERC staff completes any necessary ESA section 7 consultation with the NJFWS for the small whorled pogonia, Indiana bat, and bog turtle; and
    d. Tennessee receives written notification from the Director of OEP that construction and/or use of mitigation (including implementation of conservation measures) may begin.

14. Tennessee **shall not begin construction of Loops 321 until:**

    a. Tennessee files with the Pennsylvania Field Office of the FWS and the Secretary a plan that addresses Indiana bat habitat loss between approximate MPs 3.2 and 8.1;
    b. Tennessee adopts a seasonal restriction for clearing trees greater than 5-inch-diameter breast height from April 1 to October 14 between MPs 3.2 and 8.1;
    c. the FERC staff completes any necessary ESA section 7 consultation with the FWS; and
    d. Tennessee receives written notification from the Director of OEP that construction and/or use of mitigation (including implementation of conservation measures) may begin.

15. **Prior to construction**, Tennessee shall file the results of any outstanding surveys for Pennsylvania and New Jersey state-listed species and identify any additional mitigation measures developed in consultation with the applicable state agencies.

16. Tennessee **shall not begin construction** of facilities, including the pipeline loops and compressor stations, meter stations, and/or use of all staging, storage, or temporary work areas and new or to-be-improved access roads **until:**

    a. Tennessee files with the Secretary:

        (1) any Phase IB survey reports for areas of denied access, and/or Phase IB survey reports revised to address comments;

(2) Phase I cultural resources survey report(s) for any previously unreported areas for Pennsylvania and New Jersey, including proposed wetland mitigation sites;
(3) Phase II site evaluation reports, as required, to provide National Register of Historic Places-eligibility recommendations for sites in Pennsylvania and New Jersey, including additional geomorphological testing;
(4) a revised unanticipated discovery plan developed in consultation with the Ramapough Lenape and New Jersey SHPO;
(5) any other reports, plans, or special studies not yet filed, including archaeological site avoidance and treatment plans, and historic architectural avoidance plans;
(6) comments on the cultural resource reports and plans from the Pennsylvania State Historic Preservation Office, New Jersey State Historic Preservation Office, and any comments from other consulting parties not yet filed; and
(7) the records of continued consultation with the Ramapough Lenape Indian Nation, Delaware Nation, Delaware Tribe of Indians, Oneida Indian Nation, Eastern Shawnee Tribe of Oklahoma, and Stockbridge Munsee Community of Wisconsin, and any other American Indian tribe that have not yet been filed.

b. the Advisory Council on Historic Preservation is afforded an opportunity to comment if historic properties would be adversely affected; and
c. the FERC staff reviews and the Director of OEP approves the cultural resources reports and plans, and notifies Tennessee in writing that treatment plans/mitigation measures may be implemented and/or construction may proceed.

All material filed with the Commission containing **location, character, and ownership** information about cultural resources must have the cover and any relevant pages therein clearly labeled in bold lettering: **"CONTAINS PRIVILEGED INFORMATION--DO NOT RELEASE."**

17. **Prior to initiation of horizontal directional drilling (HDD) activities at the Susquehanna River**, Tennessee shall file for the review and written approval of the Director of OEP a plan detailing the additional noise mitigation measures Tennessee would use to ensure that the noise levels attributable to the 24-hour HDD activities do not exceed a day-night sound level of 55 decibels on the A-weighted scale (L_{dn}) at the noise-sensitive areas near the Susquehanna River HDD entry site.

18. Tennessee shall file noise surveys with the Secretary **no later than 60 days** after placing the authorized units at the Compressor Stations 321 and 323 in service. If the noise attributable to the operation of all of the equipment at the identified compressor stations at full load exceeds an L_{dn} of 55 dBA at the nearby noise sensitive areas, Tennessee shall install additional noise controls to meet the level **within 1 year** of each stations in-service date. Tennessee shall confirm compliance with the above requirement by filing a second set of noise surveys with the Secretary **no later than 60 days** after it installs the additional noise controls.

19. **Prior to construction of Loop 321 on the Anastasio property near milepost 6.7 in Lackawaxen Township, Pike County, Pennsylvania,** Tennessee shall file with the Secretary for review and written approval from the Director of OEP the results of Tennessee's communication with the Anastasios and the finalized construction plan for crossing the Anastasio property.

ATTACHMENT B

DEPARTMENT OF ENVIRONMENTAL PROTECTION
SHC APPROVAL SUMMARY SHEET

PARK NAME: High Point State Park, Long Pond Ironworks State Park, and Ringwood State Park

PARK OWNER: Department of Environmental Protection

COUNTY:	**Bergen**	**MUNICIPALITY: Mahwah Township (Ringwood State Park)**
COUNTY:	**Passaic**	**MUNICIPALITY: Ringwood Borough (Long Pond Ironworks State Park)**
COUNTY:	**Passaic**	**MUNICIPALITY: Ringwood Borough (Ringwood State Park)**
COUNTY:	**Passaic**	**MUNICIPALITY: West Milford Township (Long Pond Ironworks State Park)**
COUNTY:	**Sussex**	**MUNICIPALITY: Montague Township (High Point State Park)**

REASON FOR REQUEST:

Lease ☒ — Total Acre(s): 19.536 acres +/-
Lease Term: 25 years

(See Table 1 for block/lot/acreage)

Right of Entry ☒ — Total Acres: 75.751 acres +/-
Term: 2 years

(See Table 2 for block/lot/acreage)

COMPENSATION:

Types: Cash Payment, Replacement Land and Environmental Mitigation

Total Value: ≥ $12.5 million.[1]

Ground Rent for Proposed Lease Area	$3,963,798.09
Total rental for 1.776 acres to be leased for ROW for a 2-year term (as 10% contingency)	$23,419.49
Ground Rent for Proposed Temporary Work Space	$1,230,925.72
Estimated Value of Proposed Replacement Lands	$1,030,080.00
Estimated Value of Mitigation Measures for Environmental Impacts of Construction (including mitigation required by NJDEP permits and the Highlands Council) (see Table 4)	≥$6,344,595.50
Total	$12,569,399.31

[1] The value of the total compensation is subject to change pending the outcome of negotiations with the owner of the proposed replacement lands. Full details of the proposed compensation and mitigation commitments can be found in Table 4 to this Summary.

SYNOPSIS: The New Jersey Department of Environmental Protection requests approval to lease for 25 years approximately 19.536 acres+/- of land within High Point State Park, Long Pond Ironworks State Park and Ringwood State Park to Tennessee Gas Pipeline Company, L.L.C. ("Tennessee") for the purpose of constructing, installing, operating, and maintaining two 30-inch diameter underground natural gas pipeline looping segments (known as "Loop 323" and "Loop 325") to be constructed parallel to and connected to its existing 24-inch diameter natural gas pipeline as part of Tennessee's Northeast Upgrade Project ("NEUP" or the "Project"). An additional 75.751 +/- acres of State land are needed by Tennessee on a temporary basis during construction (for temporary work space and access roads). As compensation for the proposed conveyances and temporary impacts, the Department of Environmental Protection has negotiated a combination of ground rental, replacement land and other mitigation measures valued at more than $12.5 million (including mitigation required by NJDEP permits and the Highlands Council).

PUBLIC HEARINGS:

Dates: August 17, 2011 (Montague Township, Sussex County)
August 18, 2011 (Ringwood Township, Passaic County)
September 7, 2011 (City of Trenton, Mercer County)

Comments: Significant general public opposition to the Project (and to the natural gas extraction industry) was expressed at all three public hearings. In addition, the commenters raised specific concerns related to the terms and conditions of the proposed lease. See Public Hearings, below, for a more detailed discussion of the public hearings and public comments.

APPLICABLE STATUTES: *N.J.S.A.* 13:1L-1 *et seq.*, *N.J.S.A.* 13:8C-1 *et seq.*, *N.J.S.A.* 13:1D-51 *et seq.* and *N.J.S.A.* 23:8A-1 *et seq.*

APPROVAL:

I, Bob Martin, Commissioner of the Department of Environmental Protection, hereby approve this request in accordance with the provisions of *N.J.S.A.* 13:1L-1 *et seq.*, *N.J.S.A.* 13:8C-1 *et seq.*, *N.J.S.A.* 13:1D-51 *et seq.* and *N.J.S.A.* 23:8A-1 *et seq.*

Bob Martin, Commissioner

5/14/2012
Date

SHC FACT SHEET

Purpose of the Lease:

Tennessee Gas Pipeline Company, L.L.C. ("Tennessee") is requesting to lease from the New Jersey Department of Environmental Protection ("NJDEP" or "Department") for 25 years approximately 19.536 acres of land located in High Point State Park in Montague Township (Sussex County), Long Pond Ironworks State Park in Ringwood Borough and West Milford Township (Passaic County), and Ringwood State Park in Ringwood Borough (Passaic County) and Mahwah Township (Bergen County) for the purpose of constructing, installing, operating, and maintaining two 30-inch diameter pipeline looping segments (known as "Loop 323" and "Loop 325") as part of Tennessee's overall Northeast Upgrade Project ("NEUP" or the "Project"). The Project is intended to provide increased natural gas transportation capacity to serve markets in the northeastern United States.

On March 2011, Tennessee filed an application with the Federal Energy Regulatory Commission ("FERC") for a Certificate of Public Convenience and Necessity ("Certificate") for the Project pursuant to Section 7 of the Natural Gas Act, 15 U.S.C., §717 et seq. ("NGA") (Docket No. CP11-161-000).

By way of background, in 1954 Tennessee Gas Transmission Company (now Tennessee Gas Pipeline Company, L.L.C.), received authorization from the Federal Power Commission, the predecessor to the FERC, for the construction of a 24-inch diameter natural gas pipeline in northern New Jersey (now known as the 300 Line). Tennessee built the 300 Line in this area in accordance with a 50-year easement agreement granted by the NJDEP's predecessor agency, which gave Tennessee the right to use a certain right-of-way ("ROW") across State-owned lands. This easement expired in October 2005. In 2007, the NJDEP Commissioner and the State House Commission approved a 20-year lease between the NJDEP and Tennessee that allowed for the continued use of the existing ROW for the 300 Line.

In November 2010, after approval by the State House Commission, the NJDEP entered into a 24-year lease with Tennessee that allowed it to construct, install, operate, and maintain a 30-inch diameter pipeline looping segment across State-owned lands located within Long Pond Ironworks State Park, Wawayanda State Park, and Hamburg Mountain Wildlife Management Area as part of Tennessee's 300 Line Project, certificated by the FERC in Docket No. CP09-444-000. This new pipeline loop was connected to Tennessee's existing 24-inch diameter pipeline. Tennessee has completed construction of the 300 Line Project facilities and placed that project in service on November 1, 2011.

Under *L.* 1993, *c.* 38, codified at *N.J.S.A.* 13:1D-51 through *N.J.S.A.* 13:1D-58, no lands acquired or developed by the State with Green Acres funds, or

developed by the State in any other manner and administered by the NJDEP, may be conveyed unless the NJDEP first prepares a report on the proposed conveyance in accordance with *N.J.S.A.* 13:1D-52a(1), transmits the report to the individuals listed at *N.J.S.A.* 13:1D-52a(2), makes the report available to the public in accordance with *N.J.S.A* 13:1D-52a(3), and conducts one or more public hearings as required by *N.J.S.A.* 13:1D-52a(4).

Pursuant to *N.J.S.A.* 13:1D-52a(1) through (3), a report analyzing the proposed conveyance was prepared by the Green Acres Program and released to the public 30 days prior to the first public hearing. The report was mailed to the parties specified at *N.J.S.A.* 13:1D-52a(2) and is currently posted on the Green Acres Program web site at *www.state.nj.us/dep/greenacres/pdf/tgp.neup.report.pdf.*

Project Description:

The NEUP includes the construction, installation, operation, and maintenance of approximately 40.3 miles of 30-inch diameter pipeline, consisting of five separate natural gas pipeline loops in northern Pennsylvania and northwestern New Jersey. Approximately 21.9 miles of the Project will be in Pennsylvania and approximately 18.5 miles will be in New Jersey. The NEUP also includes modifications at three existing compressor stations in Pennsylvania, at a compressor station in Wantage Township, Sussex County, and at a meter station in Mahwah Township, Bergen County.

In New Jersey, the NEUP consists of a 10.9-mile portion of new pipeline loop in Montague and Wantage Townships, Sussex County (known as "Loop 323"[2]) and a 7.60-mile new pipeline loop in West Milford Township and Ringwood Borough, Passaic County, and Mahwah Township, Bergen County (known as "Loop 325"). As proposed, Loop 323 will cross through High Point State Park, and Loop 325 will cross through Long Pond Ironworks State Park and Ringwood State Park. In accordance with current NJDEP policy with respect to linear infrastructure projects, and to the extent practicable, feasible and in compliance with existing law, Tennessee proposes to locate the pipeline within or adjacent to its existing ROW associated with the existing 300 Line that has been in service since 1954.

The purpose of the NEUP is to increase natural gas transportation capacity to the northeast region of the United States by up to approximately 636,000 dekatherms per day. Tennessee has signed binding precedent agreements with two shippers, Chesapeake Energy Marketing, Inc. and Statoil Natural Gas LLC, for all of the additional transportation capacity to be created from the Project. Tennessee has asserted to the FERC that the full subscription of the natural gas

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[2] The proposed Loop 323 will include approximately 6.33 miles in Pennsylvania. For purposes of this Summary, references to Loop 323 include the New Jersey portion of the loop only.

transportation capacity to be created by the NEUP demonstrates the need for the Project, consistent with the FERC's Certificate Policy Statement.

Public Need/Benefit:

Under section 7 of the NGA, the FERC reviews applications for the construction and operation of natural gas pipelines. If the FERC finds that there is a need for the natural gas transmission capacity, and a proposed pipeline project is otherwise in the public interest, it will issue a Certificate. The Certificate allows the recipient to engage in the transportation and/or sale for resale of natural gas in interstate commerce or to acquire and operate facilities needed to accomplish these objectives. By issuance of a Certificate and pursuant to the NGA, the FERC will authorize the Certificate holder to acquire necessary property rights by eminent domain if the Certificate holder is unable to reach agreement with the affected landowners. In its application review, the FERC also ensures that the applicant has certified that it will comply with Department of Transportation safety standards for the construction and operation of the pipeline.

The existing 300 Line pipeline system is part of Tennessee's high-pressure natural gas transmission network that stretches from the Gulf of Mexico to the Canadian border. Tennessee maintains and operates approximately 14,900 miles of pipeline. As an interstate natural gas transmission company, Tennessee provides transportation service to a number of shippers, including local distribution companies. In New Jersey, it provides natural gas transportation service to PSE&G, New Jersey Natural Gas, Elizabethtown Gas, and other suppliers. These distribution companies convey the gas transported on the pipeline to the thousands of customers within their service areas. The delivery point for the gas transported by the Project is the existing Mahwah Meter Station, located in the Township of Mahwah, Bergen County, New Jersey.

Currently Tennessee's pipeline system in this area is fully subscribed and frequently experiences supply restrictions during both peak heating and cooling seasons. Supply restrictions occur when more gas is demanded than the pipeline can physically deliver, a condition which Tennessee has seen steadily increase in the area this Project will serve. The NEUP will provide additional natural gas transportation capacity on Tennessee's pipeline system, which Tennessee asserts will provide a significant public benefit by alleviating these restrictions and thereby providing supply and price stability.

This public benefits to be realized by the NEUP must be balanced against the Department's legitimate role as the trustee and protector of State lands against nonconforming uses. In proposing to lease the State lands described in Table 1 to Tennessee for 25 years, the Department believes that it has reached an appropriate balance in recognizing the significant public need for natural gas while ensuring that the State of New Jersey is adequately compensated and the public interest protected during this transaction. In addition to providing

compensation in the form of money and land replacement, Tennessee will mitigate for the environmental impacts caused by the construction of the NEUP in accordance with all applicable laws, including the Freshwater Wetlands Protection Act, Flood Hazard Area Control Act, No Net Loss Reforestation Act, and the Highlands Water Protection and Planning Act. Details on compensation and mitigation will be described below.

The Department has also determined that the public interest will be better served by entering into a term lease, rather than conveying perpetual rights in the State lands to Tennessee for the NEUP. Technology and energy needs will almost certainly change over time, and although the Department does not anticipate Tennessee removing the pipeline at the end of the lease term, the Department believes that maintaining flexibility to address the changing times will be in the public interest.

Alternatives:

As part of the process for applying for a FERC Certificate, Tennessee undertook an extensive needs and alternative routing analysis for the NEUP. The goal of that analysis was to determine whether the Project was, in fact, needed, and if so, whether the route chosen by Tennessee minimized impacts to the environment and to landowners to the greatest extent possible.

As required by the FERC regulations implementing the National Environmental Policy Act ("NEPA") at 18 C.F.R. 380.12(l), Tennessee included Resource Report 10 as part of the Environmental Report for the Project submitted with its FERC Certificate application. This report, which is available for review at *www.ferc.gov* under Docket No. CP11-161-000, provided a detailed description of alternatives to the proposed Project. Specifically, Resource Report 10 evaluated:

- The No Action Alternative, including the effect of energy conservation or energy alternatives to the Project;
- System alternatives, such as pipeline looping options only, new compression options, modifications to existing compression, and combinations of compression and pipeline looping options, and the rationale for rejecting each system alternative; and
- Route alternatives, including major and minor route alternatives designed to minimize environmental and land use impacts, permanent easement acquisition,[3] and overall Project costs.

a. No Action Alternative

[3] Although the analysis in this section and Tennessee's Resource Report 10 refer to a "permanent easement" area, as discussed above the NJDEP proposes a 25-year lease for the NEUP as it crosses State lands (not a permanent easement).

Tennessee evaluated the "No Action" alternative, which would involve not constructing the Project and completely avoiding all temporary and permanent impacts associated with the construction. However, by not building the Project, Tennessee would be unable to provide the necessary natural gas transportation service that is required to meet the needs of the market, as evidenced by the two shippers who signed binding precedent agreements for all of the proposed capacity to be created by the Project. If the Project is not built, it is likely that other natural gas companies would be required to increase their capacity by building new facilities to meet the demand for additional capacity in the northeastern part of the United States. Any additional construction would likely create new environmental impacts, thus transferring impacts from this Project to other projects and locations.

Tennessee also evaluated energy conservation and alternative forms of energy, such as wind, solar, geothermal coal, oil, nuclear, and fuel cells. While Tennessee strongly encourages energy conservation, there remains a need at the present time for the additional natural gas capacity that will be created by the NEUP (see the U.S. Energy Information Administration's Annual Energy Outlook 2010 at *www.eia.gov/oiaf/archive/aeo10/pdf/0383(2010).pdf*). Currently, alternative forms of energy, including wind, solar and geothermal, are not able to meet the projected demand for energy in the northeast region.

In the Environmental Assessment ("EA") for the Project that was issued in November 2011, the FERC determined that the "No Action" alternative and a postponed action alternative were not reasonable since no action or postponed action would not accomplish the Project's objectives, and would likely result in the construction of other facilities that may not provide a significant environmental advantage over the Project.

b. System Alternatives

Tennessee analyzed different configurations of pipeline and compression facilities within its transmission system, as well as efficiency improvements, to determine whether there were technical and feasible alternatives that would allow Tennessee to meet the Project's objectives, as set forth in the two binding precedent agreements, without constructing the Project. Specifically, Tennessee considered efficiency improvements, looping only, a combination of looping and compression, additional compression only at existing or new compressor stations, and no looping at all within the Delaware Water Gap National Recreation Area.

In the EA, the FERC evaluated whether other existing pipeline systems that currently transport natural gas through Pennsylvania into New Jersey could satisfy the objectives of the Project. Tennessee Gas asserts that FERC's issuance of an Environmental Assessment concludes that these interstate

pipelines (including Tennessee's pipeline) are already fully subscribed during the peak heating season.

Based on the analysis found in Resource Report 10, Tennessee concluded that the additional approximately 40 miles of additional pipeline looping (consisting of five separate pipeline loops), coupled with the addition of horsepower at two existing compressor stations (Station 321 in West Clifford, Pennsylvania and Station 323 in Lackawaxen, Pennsylvania) and modifications at two other compressor stations and one meter station would allow it to meet the objectives of the Project, which is to provide up to 636,000 dekatherms per day of incremental transportation capacity to the two shippers from receipt points to the specified delivery point in Mahwah, New Jersey. By using a combination of looping and compression on its transmission system, Tennessee will be able to avoid the looping only option, which would have caused significantly greater environmental impacts, more ground disturbance, an increased number of affected landowners, and greater costs associated with the construction of 42 miles of additional pipeline looping that would have been required to meet Project demand.

c. **Route Alternatives.**

In Resource Report 10, Tennessee included an analysis of both major and minor route alternatives to its proposed route for the pipeline loops. The analysis was based on environmental and land use impacts, as well as permanent easement acquisitions and overall Project costs. In evaluating the routing options for the NEUP, Tennessee determined that, since there is an existing 300 Line pipeline in northwestern New Jersey, the new pipeline loops should be co-located within or adjacent to the existing pipeline ROW, to the maximum extent practicable, feasible, and legally permitted. The use of co-location is favored by the FERC and encouraged by the NJDEP, which has expressed a strong policy preference that expansion of lateral infrastructure projects should remain in existing rights of way, if such rights of way exist. Such an approach generally minimizes environmental impacts in previously undisturbed areas and reduces construction costs.

In evaluating the proposed pipeline alignments, Tennessee evaluated the following route alternatives:

- **Loop 323 – Delaware Water Gap National Recreational Area**

Tennessee originally proposed to construct Loop 323 adjacent to its existing 24-inch diameter pipeline across the Delaware Water Gap National Recreational Area. However, in comments filed with the FERC and in meetings and other communications with Tennessee and FERC staff, the National Park Service ("NPS") (through the Superintendant of the Delaware Water Gap National Recreational Area) explained that any new or expanded ROW across the

Delaware Water Gap National Recreation Area would require an Act of Congress, and that the NPS would strenuously oppose such legislation as being inconsistent with the purpose of the Delaware Water Gap National Recreational Area. Due to the lack of support from the NPS for the legislation and the uncertainty of successful passage of such legislation within a time period that would align with Tennessee's proposed in-service date of November 1, 2013, Tennessee revised its original alignment.

Tennessee's proposed alignment for Loop 323 is located around the northern end of the Delaware Water Gap National Recreational Area before reconnecting with the existing pipeline ROW. The EA concludes that the proposed routing for Loop 323 ensures that Tennessee would meet its Project objective and does not result in any significant environmental impact.

- **Loop 323 – Montague Township, New Jersey Alternatives**

The original proposed routing of Loop 323, as set forth in the Certificate application, included a 6,700-foot long greenfield crossing of a largely contiguous block of forest. The New Jersey Field Office of the United States Fish and Wildlife Service ("USFWS") expressed concern about this proposed route because it could result in direct habitat loss, habitat fragmentation, and potential impacts on the federally listed bog turtle. The USFWS recommended that Tennessee evaluate alternative routes to avoid or reduce impacts to the contiguous forest block.

In response, Tennessee considered four route alternatives to avoid or reduce impacts on the contiguous forest block, including one referred to as TGP Alternative B. This alternative was designed to minimize forest fragmentation of the contiguous forest block, avoid the documented bog turtle habitat, generally parallel River Road, and use Tennessee's existing pipeline ROW to a greater extent than the preferred alternative. The NJDEP supported TGP Alternative B in comments provided to the FERC on July 18, 2011.

The FERC solicited comments from affected landowners along the TGP Alternative B route, and no comments were received. In an August 31, 2011 supplemental filing, Tennessee modified its original proposed route for Loop 323 to incorporate the Revised TGP Alternative B route (revised from the original TGP Alternative B route to incorporate minor modifications following final engineering), which satisfied the USFWS concern regarding the contiguous forest block. The FERC included the Revised TGP Alternative B it its analysis of the Project in the EA.

- **Loop 325 – Monksville Reservoir**

Tennessee is proposing to install Loop 325 across the Monksville Reservoir by implementing a 2,870 foot horizontal directional drill ("HDD").[4] The alternatives to the HDD are a complete re-routing around the reservoir. As part of its alternatives analysis in Resource Report 10, Tennessee evaluated a Northern Alternative and a Southern Alternative to avoid impacts to the Monksville Reservoir. Based on this analysis, Tennessee concluded that both of these alternatives would significantly increase the environmental impacts of the Project. In addition, both of these alternatives would create new ROW within Long Pond Ironworks State Park. Accordingly, re-routing around the Monksville Reservoir is not a feasible alternative. The FERC did not recommend adoption of either the Northern Alternative or the Southern Alternative in the EA.

- **Loop 325 – Highlands Region**

Proposed Loop 325 would cross the Preservation Area within the Highlands Region. The FERC received public comments requesting that the Preservation Area should be completely avoided. Based on its analysis, the FERC concluded that avoidance of the Preservation Area is not feasible.

The segment of Tennessee's existing pipeline system that would be crossed by Loop 325 is located entirely within the Preservation Area, and connects to the existing Mahwah Meter Station in Bergen County. There would be no way to connect the pipeline to the meter station and entirely avoid the Highlands Region.

Tennessee evaluated the possibility of re-routing Loop 325 north into New York and then returning south to connect to the Mahwah Meter Station in New Jersey. However, such an alternative alignment would still have to traverse through the Highlands Preservation Area, would require a much longer pipeline, and would create significant environmental impacts to similar resources in New York. Accordingly, the FERC concluded in the EA that this alternative is not environmentally preferable when compared to the proposed route which is co-located almost entirely within or adjacent to Tennessee's existing ROW. As will be explained below, Tennessee will mitigate for the Highlands resources impacted by the NEUP.

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[4] The HDD method of construction is a trenchless excavation method that is accomplished in phases using a specialized horizontal drilling rig with ancillary tools and equipment. The HDD will involve drilling a hole under the waterbody and pulling a prefabricated segment of pipe through the hole. One of the biggest advantages to the HDD crossing technique is that it can minimize environmental impacts to sensitive resource areas, including the bed and banks of major or sensitive waterbodies during pipeline construction.

Project Impacts/Avoidance and Minimization of Impacts:

Subsequent to the issuance of the State-level approvals for Tennessee's 300 Line Project in 2010, the NJDEP endeavored to work with Tennessee to set up a general framework for the review of the NEUP and to implement the "lessons learned" from the 300 Line Project. In addition to its review of how to value leases of State property, the NJDEP emphasized to Tennessee that the starting point for any consideration of new or expanded major utility crossings of State property, protected parklands and other environmentally sensitive areas is to require applicants to demonstrate that they have taken all feasible measures to avoid and/or reduce both permanent and temporary impacts on these areas.

Under any scenario except the "no build" scenario, the Project will cause impacts, both temporary and permanent, to a significant amount of public land in New Jersey. Many of these public lands are within the Highlands Region and contain critical natural resources recognized by the Federal Highlands Conservation Act and the New Jersey Highlands Act.

Based on the linear nature of the Project and the NJDEP's (and FERC's) preference that infrastructure projects be constructed within already disturbed rights of way, Tennessee's preferred route on NJDEP-owned lands places the pipeline loops adjacent to the existing pipeline corridor that was established in 1954. After reviewing Tennessee's March 2011 FERC Certificate application, the NJDEP requested that Tennessee make all reasonable efforts to avoid State property for the Project, and, if avoidance is not feasible, to minimize the impacts of the Project on NJDEP's public open space lands. At NJDEP's direction, Tennessee undertook a comprehensive analysis of ways to avoid permanent and temporary impacts to State lands to the maximum extent feasible, while ensuring that the Project could be safely constructed. As a result of this analysis, Tennessee developed a plan to reduce the permanent impacts of the Project from its original FERC Certificate application.

Specifically, Tennessee has proposed to minimize the impacts of the Project to State lands by implementing the following measures:

1. Tennessee will reduce the width of the new, permanently maintained area to be leased from the NJDEP from 25 feet to 15 feet. This will result in a reduction of 10.21 acres to be leased;

2. Tennessee will shift its temporary construction workspace by 10 feet, such that the construction footprint will overlap into the already maintained ROW that is leased by Tennessee for the existing 24-inch pipeline. This shift will result in the avoidance of 10.75 acres of new disturbance to State lands;

3. Tennessee will reduce its temporary workspace ("TWS") in riparian zones to 75 feet, compared to the typical 100-foot footprint that is used in other upland areas of the Project. Reducing the temporary workspace, where feasible, will reduce Project impact by 3.0 acres;

4. Tennessee will generally reduce the width of any needed access roads to 20 feet from the 24 feet width originally proposed in its FERC Certificate application. Where the existing access road width is less than 20 feet, Tennessee will use the existing width of the access road in order to avoid cutting down trees, except in limited locations where additional width is required for passing, pull outs or turn outs for the construction equipment. Approximately 11 acres of upland forest and forested wetlands will not be impacted as a result of Tennessee's access road minimization plan. In total, Tennessee's minimization plan results in the reduction in temporary construction impacts to previously undisturbed upland forest and forested wetlands of 21.47 acres and 1.82 acres;

5. Tennessee will give up its rights under the 2007 lease with NJDEP for 10 feet of existing permanently maintained lease area on the edge of the leased ROW (opposite from the proposed NEUP construction) that is associated with the existing 24-inch diameter pipeline. As a result, approximately 9.71 acres will be returned to the State and will no longer be maintained for pipeline operations; and

6. Tennessee will use the HDD method of construction to cross the Monksville Reservoir, which is a specialized construction technique designed to minimize environmental impacts to sensitive resources.

Tables 1 and 2, attached to this Summary, depict the acreage of State lands by Lot and Block that will be affected by the NEUP, both permanently and temporarily. These tables incorporate Tennessee's avoidance and minimization plans.

Proposed Conveyances Involving State-Held Conservation Restrictions

In addition to the NJDEP properties described in Exhibit B, several properties owned by the Passaic River Coalition (Block 311, Lots 1.01 and 1.03 in the Borough of Ringwood) will be crossed by the NEUP. Since these parcels were acquired with Green Acres nonprofit acquisition funds, the NJDEP now holds a conservation restriction on the properties as a condition of funding.[5] See

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[5] It is the practice of the Green Acres Program to impose conservation restrictions on properties purchased with its funding by nonprofit organizations, as an extra layer of protection in the event the organization disbands. Properties purchased by the State, counties or

N.J.A.C. 7:36-20.1(g). In addition to the proposed 25-year lease of lands owned in fee by the State, Tennessee is seeking the permanent release of a portion of these conservation restrictions. The new ROW will then be conveyed to Tennessee by the Passaic River Coalition. The acreage of the NJDEP-held conservation easements to be released/conveyed by the NJDEP is also listed in Table 3.

The Green Acres conservation restriction was imposed on the Passaic River Coalition properties in accordance with the "New Jersey Conservation Restriction and Historic Preservation Restriction Act" ("Conservation Restriction Act"), *N.J.S.A.* 13:8B-1, *et seq.* Pursuant to the Conservation Restriction Act, the NJDEP Commissioner has jurisdiction over releases of conservation restrictions, whether the NJDEP holds the restriction or not. See *N.J.S.A.* 13:8B-5. The Act requires the holder of the restriction to conduct a public hearing prior to seeking the Commissioner's approval of the release (*N.J.S.A.* 13:8B-5) and specifies the standards for the Commissioner's approval (*N.J.S.A.* 13:8B-6).

On August 18, 2011, the NJDEP held a public hearing in Montague Township to discuss the proposed lease and the proposed partial release of the conservation restriction on the Passaic River Coalition properties. There were no specific objections to the proposed partial release of conservation restrictions. The Passaic River Coalition properties are also the subject of a separate diversion application (on this agenda under NJDEP SHC file #1600010), for which Tennessee is offering cash compensation for land acquisition by the Passaic River Coalition. Therefore, the NJDEP does not propose to assess any additional compensation for the partial release of the conservation restriction.

In the course of its due diligence for the proposed pipeline route, Tennessee identified two other possible conservation restrictions for which a partial release may be necessary under the Conservation Restriction Act, as follows:

1. As a result of prior local development approvals, there may be either a "conservation easement" or a "wetlands conservation easement" on a privately held property in Wantage Township, Sussex County (Block 153, Lot 9). Although the existence of the easement is suggested on several maps of the property, no evidence of the easement (or why it would have been required) was located at either the Township or NJDEP offices.

2. The tax map for Block 19.01, Lots 1, 3, 4, 6, 16 and 17 in Montague Township, Sussex County depicts a "watercourse easement" across a portion of the lots. The easement also appears on several filed maps and a survey for Lot 5, but there are discrepancies between the maps as to the location of the easement. Lot 5 was purchased by the State with Green

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municipalities with Green Acres funds are subject to deed restrictions in the chain of title (along with statutory and contractual restrictions), but not a separate conservation restriction.

Acres funding. Lots 4 and 16 are owned by the Township but were not purchased with Green Acres funds. The remaining lots are privately owned. The permanent ROW for the proposed pipeline route does not affect Lot 5 but will have very small impacts on several other lots.

Given the above, it has been impossible for the Tennessee and the NJDEP to determine who is the holder (if any) of the conservation restrictions on these properties. However, as part of this application, the NJDEP seeks the approval of the Commission to release any Green Acres restrictions that may have attached to the portions of these lots that are needed for the Project (and to convey any necessary interest in Lot 5 if the easement is later confirmed to be on the portion of Lot 5 affected by the new ROW). If it is later determined that further actions must be taken under the Conservation Restriction Act to allow the Project to be constructed, Tennessee and NJDEP will undertake those actions at the appropriate time.

Public Hearings:

On August 17, 2011, August 18, 2011, and September 7, 2011 the Green Acres Program conducted public hearings under *N.J.S.A.* 13:1D-51 *et* seq. to accept comments on the proposed lease. Under *N.J.S.A.* 13:1D-52a(4), the Department is required to conduct at least two public hearings for any proposed conveyance of more than five acres of its land. Because the proposed lease is for 25 years, it qualifies as a "conveyance" under the definitions at *N.J.S.A.* 13:1D-51.

The statute requires one of the two hearings to be held in the City of Trenton, and the other "in the municipality wherein the lands proposed to be conveyed are located or, if that is not practicable, in a municipality as close thereto as can reasonably be arranged." *N.J.S.A.* 13:1D-52a(4). The proposed lease affects State property in four State parks and forests (High Point State Park, Long Pond Ironworks State Park, Ramapo Mountain State Forest and Ringwood State Park) located in four municipalities (Mahwah Township, Bergen County; Ringwood Borough and West Milford Township, Passaic County and Montague Township, Sussex County). Therefore, consistent with *N.J.S.A.* 13:1D-52a(4), two "local" public hearings were scheduled, one in Monatague Township on August 17, 2011 and one in Ringwood Borough on August 18, 2011.

The transcripts of all three public hearings were posted on the Green Acres Program web site on September 16, 2011 and are available at http://www.state.nj.us/dep/greenacres/neup.html. Although the public hearing notice originally established a deadline of September 21, 2011 for submission of written comments on the proposed conveyance (that is, two weeks after the September 7th hearing in the City of Trenton), the Green Acres Program extended the public comment period to September 30, 2011 in order to allow the public the opportunity to review the transcripts before the close of the public comment period. The notice of extension of the deadline was also posted on

September 16, 2011 and is available at *www.state.nj.us/dep/greenacres/pdf/notice_of_extension_of_comment_period.pdf.*

A detailed response to comments document has been prepared by the NJDEP and will be posted at *www.state.nj.us/dep/greenacres/neup.html.*

Compensation:

The proposed compensation for the proposed conveyance of State lands to Tennessee under a 25-year lease consists of three major components: (1) cash compensation in the form of yearly rental payments based on the State's August 18, 2011 Interagency State Land Lease Valuation Report ("Valuation Report") (a copy of the report is attached as Attachment A; (2) replacement lands to compensate for permanent and temporary impacts to State lands, as adjusted to take into account a 10-foot wide "give back" of existing ROW currently used by Tennessee for its existing 24-inch diameter pipeline. and (3) mitigation requirements imposed on the Project by the NJDEP (acting in its proprietary capacity as a property owner) to address construction-related impacts of the Project not already addressed by the requirements of the Freshwater Wetlands Protection Act, Flood Hazard Control Act, No Net Loss Reforestation Act, and the Highlands Water Protection and Planning Act.

As will be described in detail below, the total compensation and mitigation for anticipated environmental impacts of the Project is valued at over $12 million.[6] This number includes a cost estimate for the mitigation measures required by the NJDEP's regulatory programs and by the Highlands Council as a condition of its approval of the Project. This number does not include the costs of special construction methods, such as HDD and drag-section or stove-pipe construction, that may be implemented by Tennessee in certain areas of the Project to avoid and/or minimize environmental impacts from the construction. A Summary Table of Compensation and Mitigation Commitments for the NEUP is provided in Table 4.

Given the proposed route of the Project and taking into account the avoidance and minimization of impacts measures undertaken by Tennessee described above, Tennessee has proposed to occupy 17.760 acres of State land for the ROW for the new 30-inch pipeline. A list of the specific State properties proposed to be leased is attached as Table 1. In addition, Tennessee has proposed to use 75.751 acres of State lands during construction for TWS and 17.280 acres of State lands for access roads for a 2-year term. The total

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[6] Tennessee is currently engaged in negotiations with the landowner on the replacement lands to be provided to NJDEP as compensation/mitigation acreage. Accordingly, this final number may be subject to change.

acreage for the TWS and access roads is 93.031 acres. A list of the specific State properties to be used for TWS is attached as Table 2.

As it did for the 300 Line Project, the NJDEP has required Tennessee to include a 10% contingency for the proposed ROW to take into account any potential increases in acreage that may be needed as a result of site conditions encountered during construction.[7] For this Project, the NJDEP is requiring Tennessee to pay an additional 10% contingency of the rental fee for the first two years of the lease ($23,419.49) to take into account this possibility. At the end of the two years, once construction is completed, Tennessee will submit "as-built" drawings of the actual ROW area to be occupied for the remainder of the lease, and Tennessee will pay rent based on the true amount of acreage leased for the remaining 23 years of the lease.

In addition to setting forth a formula for valuation of rental for leases on State property, the Valuation Report also articulated another guiding principal that the NJDEP applied to the Project:

> In addition to the annual rent payment associated with the lease, the DEP seeks to account, through additional compensation or mitigation, for any permanent or significant negative impacts of its leases on the values for which the leased property was preserved. If the lease involves an activity that is truly short term and which can be discontinued at the end of the lease without any permanent or significant impact on the property, additional compensation or mitigation will not be due. For example, the lease of a portion of a DEP parking lot for use by a construction trailer or other temporary structure (as long as such lease does not interfere with public use of the surrounding State park, forest or wildlife management area). However, if the lease involves significant long-term or permanent negative impacts on DEP property, including but not limited to recreational impacts, endangered species habitat alteration or loss, significant vegetation alteration or removal, blasting, trenching, disturbance of steep slopes, water resource impacts, significant aesthetic impacts or loss of public access, then the DEP shall require additional compensation or mitigation to account for such impacts (under guidelines to be developed as outlined below). [Valuation Report, p. 19.]

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[7] The NJDEP intends to allow Tennessee to use the identified TWS and access roads for Project construction under a Right of Entry Agreement. The Right of Entry Agreement does not require approval from the State House Commission because these lands are not being "conveyed." Rather, NJDEP would be allowing their use for up to two years in connection with the construction of the Project. Compensation for these properties is described in this Summary only to provide the Commission with a complete description of the compensation that Tennessee is proposing to the NJDEP. Because acreage adjustments can be made administratively under a Right of Entry, the NJDEP is not requiring Tennessee to build in an upfront 10% contingency for the use of the TWS or access roads.

Based on the Valuation Report and its evaluation of the anticipated impacts of the Project on State lands, the NJDEP is requiring Tennessee to tender replacement land (to address long-term impacts of the Project on its lands) and to perform additional mitigation activities (to address construction-related impacts of the Project on its lands) in addition to paying rent for the proposed lease.

1. **Cash Compensation**.

The cash payment component of the proposed compensation is intended to compensate the State for the use/rental value of the new ROW and the TWS and access roads needed to construct the Project. The amount of this payment was calculated using the formula in the Valuation Report. The formula is intended to capture the "highest and best use" value for utility corridor lands in most areas of the State, or the fair market value of these State lands, whichever is higher. This payment is considered to be the base rent that will be due to the NJDEP.

In most areas of the State, the Valuation Report formula provides as follows[8]:

> **[Acreage] x [43,560 square feet/acre] x [$0.15 per square foot] = annual rental (Year 1 of the lease).**

After the first year of the lease, the $0.15 per square foot value will be adjusted upward by 2.5% per year.

Applying this formula to the Project, the total cash compensation due to the State for the lands to be leased for ROW and for the use of the TWS and access roads is:

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[8] The Valuation Report requires appraisals to be performed in "high value" areas of the State in order to adjust the $0.15 per square foot base rent to reflect actual property values.

Total rental for 17.760 acres to be leased for ROW for a 25-year term	$3,963,798.09
Total rental for 1.776 acres to be leased for ROW for a 2-year term (as 10% contingency)	$23,419.49
Total rental of 93.031 acres for TWS and access roads for a 2-year term	$1,230,925.72
Total rental payments to the State for ROW (for 25 years), TWS and access roads (for 2 years)	$5,194,723.81

2. Replacement Lands.

In addition to the annual rental payments or base rent described above, the NJDEP is requiring Tennessee to compensate the State with replacement lands. For the lands to be leased to Tennessee for the pipeline ROW, the NJDEP is requiring Tennessee to provide replacement lands at a 4 to 1 ratio. This means that for every one acre impacted by the new ROW, Tennessee must provide 4 times the amount of replacement land as compensation. The NJDEP is requiring replacement land at this ratio (in addition to cash compensation) in recognition of the fact that the installation and maintenance of the new natural gas pipeline will cause a long-term alteration of certain features of the State lands crossed by the NEUP. Applying the 4 to 1 ratio, Tennessee will be required to provide 71.04 acres of replacement land to compensate for the impacts to 17.760 acres of proposed ROW.

Tennessee has identified certain property located in Rockaway Township, Morris County, New Jersey as appropriate replacement land, in terms of size and natural resource values. This property, known as the "Ilac" property, was identified by the Green Acres Program as an acquisition priority. It contains high quality natural resource areas, including wooded uplands, streams, and wooded wetlands. It also possesses significant natural resource values; it is on NJDEP's Landscape Project 3.0, Species Based Patches, and is mapped for federally listed threatened and endangered species. The majority of the property is located within the Highlands Preservation Area.

Tennessee is negotiating with the owner of the Ilac property for an option to purchase the property for approximately $14,500 per acre. Thus, the total cost to acquire 71.04 acres to satisfy the replacement land requirement is estimated at $1,030,080.00.[9] The option that is being negotiated will include the right to purchase enough acreage to compensate the NJDEP for the leased ROW, the 10% contingency, and other mitigation acreages, as discussed below.

As discussed above, Tennessee has agreed to "give back" to the NJDEP 10 feet of its 50-foot wide ROW, or 9.71 acres, that is currently used for the existing 24-inch diameter natural gas pipeline that was installed across State lands in 1954. The areas to be given back are leased to Tennessee as part of its 2007 lease renewal and are not subject to a permanent easement. However, the NJDEP believes there is a public benefit and economic value to the State to be gained by narrowing the ROW corridor (and allowing the "give back" area to revert to its natural state). In exchange for this "give back," Tennessee will receive credit of 9.71 acres against the total required acreage of replacement land (resulting in a net obligation of 61.33 before any adjustments for the 10% contingency.)

In addition to the 4 to 1 replacement land obligation for the ROW to be leased to Tennessee, the NJDEP is requiring replacement land for the use of the TWS, as follows:

Temporary workspace (TWS)	1:1 land compensation	73.751 acres
Areas to be blasted within the TWS	4:1 land compensation	2.00 acres

The requirement to purchase replacement land for the use of the TWS is intended to address the temporal loss of the resources until restoration can be accomplished in accordance with Tennessee's Environmental Construction Plan for New Jersey (see Mitigation, below). Compensating for TWS with replacement land is in addition to the base rent for the TWS.

Similarly, where areas of TWS need to be blasted in order for the NEUP to be constructed, the NJDEP is requiring Tennessee to compensate with replacement lands at a 4 to 1 ratio. Where blasting must occur, the lands are permanently impacted. Therefore, the NJDEP has required replacement lands at the same ratio as the "permanent" impacts within the leased ROW.

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[9] Again, since negotiations with the owners of the Ilac property are ongoing, the total purchase price is subject to change.

3. Mitigation for Environmental Impacts and Trail Impacts Due to Construction.

Some of the State lands needed for the NEUP are protected by various statutes and implementing regulations, such as the Freshwater Wetlands Protection Act, Flood Hazard Control Act, No Net Loss Reforestation Act, and the Highlands Water Protection and Planning Act. Tennessee will comply with each of these laws, and will provide mitigation for impacts, as required by those laws. Specifically, Tennessee has submitted a permit application to the NJDEP for a freshwater wetlands and stream encroachment permit for Loop 323, which is currently under review. Tennessee anticipates submitting a freshwater wetlands and stream encroachment permit application for Loop 325 shortly. Under no circumstance, however, will construction of the NEUP begin until these permits are approved by the NJDEP. The mitigation acreage and cost associated with the necessary Land Use permits is listed in the first section of Table 4.

To satisfy the requirements of the No Net Loss Reforestation Act ("NNL Act"), Tennessee held two public hearings on August 3 and 4, 2011 to discuss its reforestation plans for the deforestation that will occur on State lands. Tennessee has prepared a final reforestation plan, and once approved by the NJDEP, Tennessee will conduct on-site and off-site plantings in accordance with the NNL Act and approved reforestation plan. Tennessee will also compensate the State $200,000 for the value of timber resources impacted by the Project.

As it did for its recent 300 Line Project, Tennessee applied to the NJDEP for an exemption from the Highlands Water Protection and Planning Act for Loop 325, which is located within an area designated as the Highlands Preservation Area. By Resolution 2012-8 dated February 16, 2012 and letter dated March 20, 2012, the Highlands Council determined that the Project (Loop 325) qualified for the requested exemption. By letter dated April 25, 2012, the NJDEP adopted this finding and found the Project to be exempted. In addition to complying with all applicable statutes and regulations that require mitigation for impacts to sensitive environmental areas, features, or threatened or endangered species or plants,

Tennessee also understands that construction of the NEUP will temporarily affect some of the trails located within the State parks. In order to minimize these impacts, Tennessee has developed a specific trail crossing plan for the Appalachian Trail and a general trail crossing plan for other trails located within the parks that are currently under review by the Department. The purpose of these plans is to minimize disruption to hikers who use the Appalachian Trail, as well as the other trails. Although the plans will minimize trail closures to the maximum extent possible, some trails will have to be closed temporarily.

As it did for the 300 Line Project, Tennessee has agreed to a list of mitigation projects negotiated with the NJDEP to address a variety of construction-related impacts associated with the project. The list, which is to be memorialized in a

Construction Work Plan that will be a component of the lease, includes specific requirements for restoration and maintenance of the right of way for the pipeline These commitments do not have to be accomplished prior to the start of the construction for the project but are a condition of this approval. This mitigation is a one-time compensation intended to address the construction-related impacts of the project. Future mitigation for construction- related impacts would not be required upon a renewal of the lease unless there is a future expansion of the pipeline. A draft of the list is attached; the final list will be at least as stringent as the draft list and will be finalized prior to the start of construction.

In addition to complying with all applicable statutes and regulations that require mitigation for impacts to sensitive environmental areas, features, or threatened or endangered species or plants, complete restoration of the areas impacted by the construction will also be undertaken by Tennessee. The restoration work will be monitored by both the NJDEP and the FERC. The basic standards for such restoration are established by the FERC but in some cases will be supplemented by mitigation measures negotiated between the NJDEP under the Construction Work Plan.

In summary, the total compensation and mitigation plan that will be implemented by Tennessee for the NEUP is greater than $12,000,000.[10] The total compensation/mitigation commitments are shown in Table 4.

Conditions of Approval:

The approval and execution of the proposed lease is subject to the following terms and conditions:

- Issuance of a Certificate of Public Convenience and Necessity by FERC for the proposed Project.
- Issuance of NJDEP Land Use (freshwater wetlands and flood hazard area) permits for the Project.
- As applicable, review of the Project by the State Historic Preservation Office under Section 106 of the National Historic Preservation Act, as amended, for impacts on historic properties.
- Issuance of any other required Federal, State or local approvals required for the Project to commence construction.
- Completion of all technical requirements for the lease, including land surveys, to the NJDEP's satisfaction and at Tennessee's expense.

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10 As described above, this total number may change based on the outcome of negotiations with the owner of the replacement lands.

- Finalization of the Appalachian Trail crossing plan and the general trail crossing plan prior to execution of the lease.
- Finalization of the Construction Work Plan for the lease prior to execution of the lease.
- Final Approval of the No Net Loss Reforestation Plan
- Finalization of the Invasive Species Management Plan
- Review and approval of the lease by the Division of Law.

MAPS ☒
ATTACHMENTS ☒

STATEMENT OF VALUE ☐

TABLE 1

BLOCK AND LOT INFORMATION FOR STATE LANDS TO BE LEASED BY NJDEP TO TENNESSEE GAS PIPELINE COMPANY, L.L.C. NORTHEAST UPGRADE PROJECT

	County	Facility	Landowner	Block	Lot	ROW (Acres)
LOOP 323						
	Sussex	150' NE of the end of Twin Brook Drive	State of NJ – DEP	19.00	25.000	0.389
	Sussex	Residential Lot off of Twin Brook Drive	State of NJ – DEP	19.010	5.000	0.00
	Sussex	High Point Park	State of NJ – DEP	19.000	30.000	1.103
	Sussex	High Point Park	State of NJ – DEP	19.000	29.000	0.818
	Sussex	High Point Park	State of NJ – DEP	19.000	28.000	0.317
	Sussex	High Point Park	State of NJ – DEP	23.000	1.000	2.650
	Sussex	High Point Park	State of NJ – DEP	24.000	2.000	2.128
					Loop 323 Totals:	**7.405**
LOOP 325						
	Passaic	Ringwood Lake Turnpike	State of NJ – DEP	4601.000	8.000	2.266
	Passaic	Borough of Ringwood Adjacent to Monksville Reservoir	State of NJ – DEP	310.000	1.000	0.516
	Passaic	Ringwood State Park	State of NJ – DEP	601.000	8.000	0.330
	Passaic	Ringwood State Park	State of NJ – DEP	902.000	2.000	0.768
	Passaic	Ringwood State Park	State of NJ – DEP	902.000	3.000	1.389
	Passaic & Bergen	Ringwood State Park	State of NJ – DEP	Passaic – 1000 Bergen - 1	Passaic – 2 Bergen – 2	0.608
	Passaic	Ringwood State Park	State of NJ – DEP	1100.000	3.000	0.345
	Passaic	Ringwood State Park	State of NJ – DEP	1101.000	5.000	1.628
	Passaic	Ringwood State Park	State of NJ – DEP	1101.000	3.000	0.766
	Passaic & Bergen	Ringwood State Park	State of NJ – DEP	Passaic – 1000 Bergen - 1	Passaic – 2 Bergen – 2	0.526
	Bergen	Ringwood State Park	State of NJ – DEP	1.000	1.000	1.213
					Loop 325 Totals:	**10.355**
					SUBTOTAL:	17.760 acres
					10% contingency	1.776 acres
					GRAND TOTAL	19.536 acres

TABLE 2

BLOCK AND LOT INFORMATION FOR TEMPORARY WORK SPACE ("TWS") NORTHEAST UPGRADE PROJECT

County	Facility	Landowner	Block	Lot	TWS in Existing ROW used During Construction (Acres)	New Temporary Workspace (Acres)
LOOP 323						
Sussex	150' NE of the end of Twin Brook Drive	State of NJ - DEP	19.00	25.000	1.186	0.112
Sussex	Residential Lot off of Twin Brook Drive	State of NJ - DEP	19.010	5.000	0.000	0.060
Sussex	High Point Park	State of NJ - DEP	19.000	30.000	2.293	3.656
Sussex	High Point Park	State of NJ - DEP	19.000	29.000	1.879	2.810
Sussex	High Point Park	State of NJ - DEP	19.000	28.000	0.795	0.780
Sussex	High Point Park	State of NJ - DEP	23.000	1.000	4.780	7.058
Sussex	High Point Park	State of NJ - DEP	24.000	2.000	5.276	6.571
				Loop 323 Totals:	**16.209**	**21.047**
LOOP 325						
Passaic	Ringwood Lake Turnpike	State of NJ - DEP	4601.000	8.000	2.854	3.105
Passaic	Borough of Ringwood Adjacent to Monksville Reservoir	State of NJ - DEP	310.000	1.000	1.263	1.455
Passaic	Ringwood State Park	State of NJ - DEP	601.000	8.000	0.220	0.531
Passaic	Ringwood State Park	State of NJ - DEP	902.000	2.000	2.144	1.277
Passaic	Ringwood State Park	State of NJ - DEP	902.000	3.000	0.024	2.379
Passaic & Bergen	Ringwood State Park	State of NJ - DEP	Passaic – 1000 Bergen - 1	Passaic – 2 Bergen – 2	1.432	1.859
Passaic	Ringwood State Park	State of NJ - DEP	1100.000	3.000	0.785	0.813
Passaic	Ringwood State Park	State of NJ - DEP	1101.000	5.000	3.893	4.785
Passaic	Ringwood State Park	State of NJ - DEP	1101.000	3.000	1.738	2.135
Passaic & Bergen	Ringwood State Park	State of NJ - DEP	Passaic – 1000 Bergen - 1	Passaic – 2 Bergen – 2	1.300	1.960
Bergen	Ringwood State Park	State of NJ - DEP	1.0	1.000	2.962	3.698
				Loop 325 Totals:	**18.615**	**23.997**

Table 2 (Con't)

		TOTAL	34.824	45.044
		GRAND TOTAL OF TWS FOR LOOPS 325 AND 323		75.751[11]

[11] There are two NJDEP-owned parcels across which Tennessee has multi-line rights and therefore does not need to lease the TWS within the existing ROW (total acreage is 4.117 acres). These parcels are identified as Lot 4601, in Block 8 and Lot 310 in Block 1 in the Borough of Ringwood, Sussex County.

TABLE 3

Proposed Conveyances Involving State-Held Conservation Restrictions

County	Owner	Block	Lot(s)	Municipality	Permanent Easement (Acres)	New Temporary Workspace (Acres)
Passaic	Passaic River Coalition[12]	311	1.01 and 1.03	Borough of Ringwood	+/- 2.292	+/- 4.475
Sussex	private land owner[13]	153	9	Wantage Township	0.00	Unknown (minimal)
Sussex	3 private land owners (lots 1,3,17), 2 owned by Twp. Of Montague (lots 4 & 16)	19.01	1, 3, 4, 16 & 17	Montague Township (watercourse easement)	0.03	0.087

[12] Compensation for the release of this restriction will be satisfied by the compensation paid in connection with the Green Acres local diversion.
[13] Tennessee has a 100'-wide ROW (multiline rights) so no additional permanent rights across this tract are needed. Temporary workspace needed, if any, would be minimal (less than 0.25 acre).

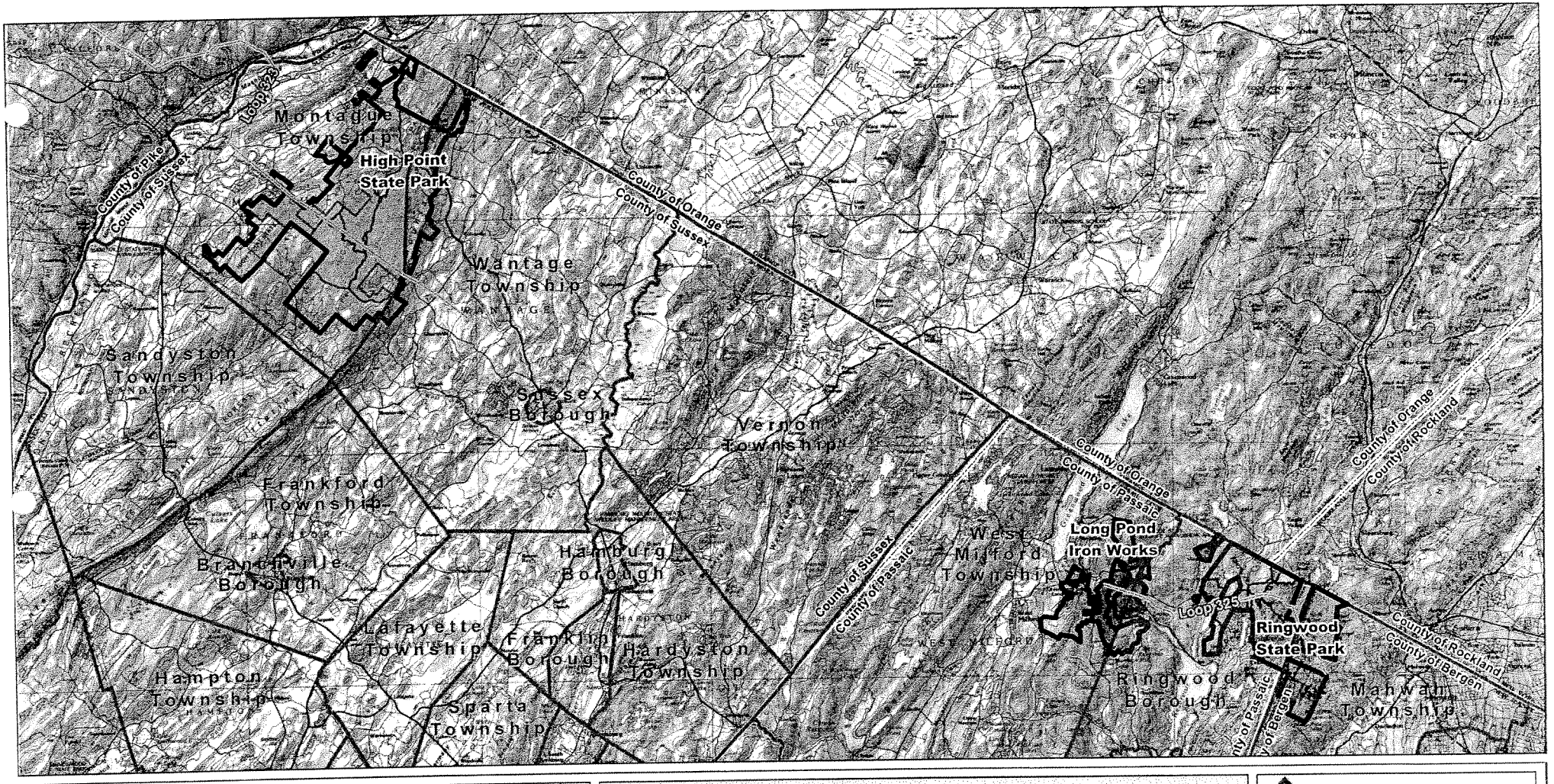
TABLE 4
NORTHEAST UPGRADE PROJECT MITIGATION COMMITMENTS
New Jersey
January 30, 2012 (Revised March 14, 2012)

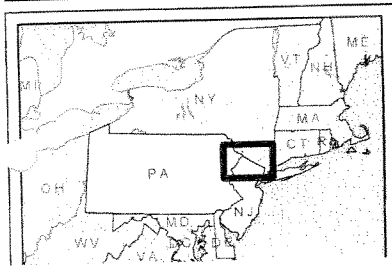
	Characteristic	Approx. Acreage Requiring Mitigation	Mitigation/Compensation/Activity	Offsite Land Compensation Acres	Compensation
NJDEP - LURP Mitigation	Permanent Wetland incl.:		1:1 onsite (scrub-shrub, emergent, and open water)	N/A	$2,000,000.00
	Forested Wetlands	6.62	1:1 onsite, 1:1 offsite		
	Temporary Wetland	17.54	1:1 onsite		
	Riparian Zone	16.60	1:1 onsite, 1:1 offsite		
	T&E Habitat Mitigation	TBD	Rattlesnake Habitat Mitigation for Mahwah Meter Station	TBD	
NJ Green Acres and State Parks & Forestry	Lease Agreement and Right of Entry Agreement	Temp. - 93.03 Perm. - 17.76	Compensation proposed by NJDEP in hearing notice is $.15/square foot/year, escalated by 2.5% for each year	N/A	$5,194,723.81
	Permanent acreage impacted	17.76	4:1 mitigation; ~71.04 acres estimated at $14,500.00/acre (1)	71.04	$1,030,080.00
	Temporary Acreage Impacted	75.751	1:1 ratio mitigation estimated at $14,500.00/acre (1)	73.751	$1,069,389.50
	10-foot give back of existing permanent easement	-9.71	1:1 replacement land reduction estimated at $14,500 (1)	(9..71)	$140,795.00
	Acreage impacted as a result of blasting in temporary workspace	2.00	4:1 mitigation offsite estimated at $14,500 (1)	8.00	$116,000.00
	Rattlesnake Habitat Mitigation on state owned lands	N/A		N/A	$0.00
	Timber Value	N/A	TGP to compensate NJDEP based on DEP timber calculations/estimate	N/A	$200,000.00
	Trails – NY/NJ Trails Conference	N/A	Donation	N/A	$150,000.00
	No Net Loss/Reforestation Plan (Loop 323)	Perm. - 8.67	Offsite Planting on State-owned lands	N/A	$75,000.00
	No Net Loss/Reforestation Plan (Loop 325)	Perm. - 9.68	Offsite Planting on State-owned lands	N/A	$75,000.00

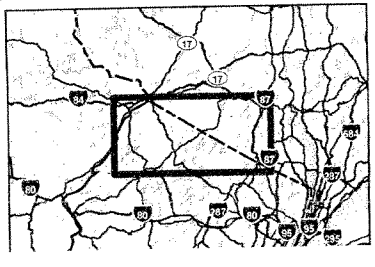
	No Net Loss/Reforestation Plan (Loop 323)	Temp. - 19.60	Onsite planting in TWS/ATWS	N/A	$125,000.00
	No Net Loss/Reforestation Plan (Loop 325)	Temp. - 24.34	Onsite planting in TWS/ATWS	N/A	$175,000.00
NJ Highlands Region	Forested Acreage	Temp. - 86.1 Perm. - 15.8	Onsite planting in TWS/ATWS. Offsite mitigation captured below for CHMA.	N/A	$250,000.00
	Special Environmental Zone (SEZ)	0		N/A	$0.00
	Prime Groundwater Recharge Area (PGWRA)	62.27	100% onsite mitigation via restoration. 25% offsite mitigation within parcel to be procured for forest/habitat mitigation	15.5*	$0.00
	Critical Habitat Management Area (CHMA)	Temp. - 86.1 Perm. - 15.8	Temp acreage to be mitigated offsite at a ratio of 1.25:1. Perm to be mitigated offsite at a ratio of 2.5:1.	147.00	$2,100,000.00
	Comprehensive Mitigation Plan (CMP)Requirements	109.35	Additional bmp (best management practices) measures required not identified above. Temp and Perm	N/A	$300,000.00
				299.79	
			Total Mitigation Dollars		$ 12,719,398.00

(1) Replacement lands negotiations are ongoing, total cost to purchase is pending final negotiations

*Falls within the 147.00 acres of CHMA acreage.







Northeast Upgrade Project
Loop 323-NJ & 325

- NEUP Centerlines
- NJDEP Protected Open Space
- High Point State Park
- Ringwood State Park
- Long Pond Iron Works State Park
- Town Boundary
- County Boundary
- USA Topo Maps

SOURCE NOTE:
Parcel boundary lines shown hereon are comprised on data developed by SGC Engineering, LLC and data obtained from New Jersey State Agencies. TOPO data Provided by ESRI Base Map Services.

PURPOSE NOTE:
This map was specifically developed for use by El Paso Corporation and representatives thereof. Any other duplication of this information without the consent of El Paso is strictly prohibited.

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N
W E
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1" = 13,000'

0 6,500 13,000 26,000 Feet

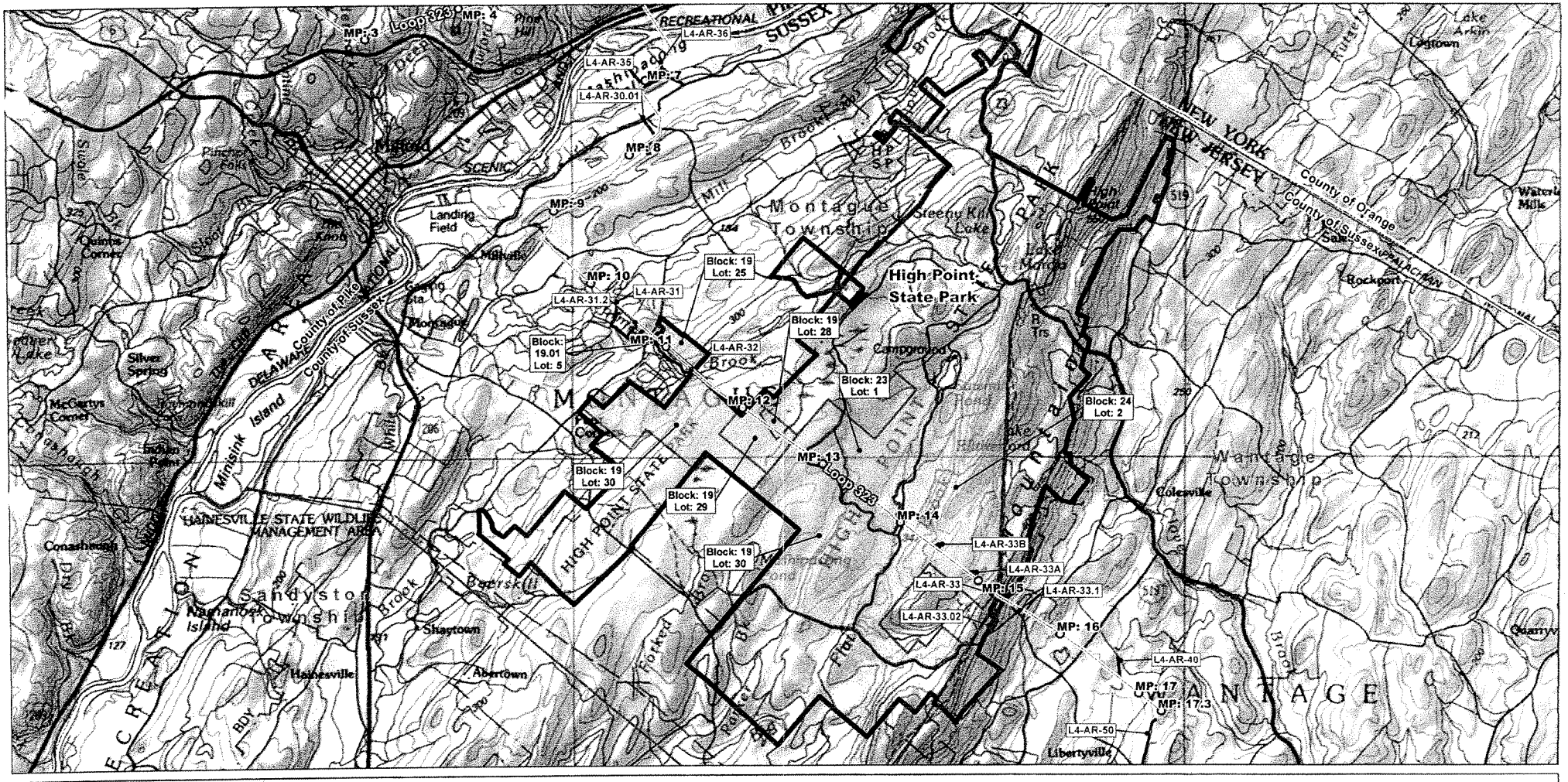
elpaso Natural Gas

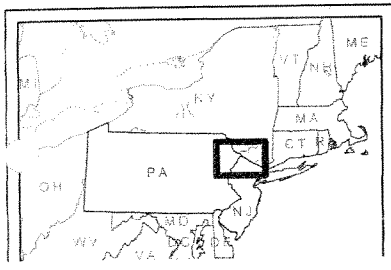
SGC Engineering, LLC

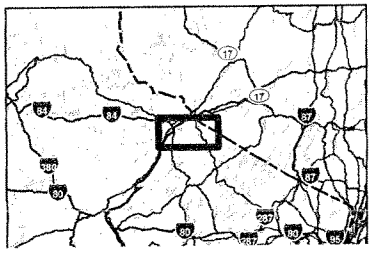
Loop 323-NJ & 325
State Owned Lands Mapping

Figure 1

Project#: 146293 &146299 Date: April 2012







Northeast Upgrade Project
Loop 323 NJ

- Mile Markers
- NEUP Centerline
- Access Roads
- NJDEP Protected Open Space
- High Point State Park
- Town Boundary
- County Boundary
- USA Topo Maps

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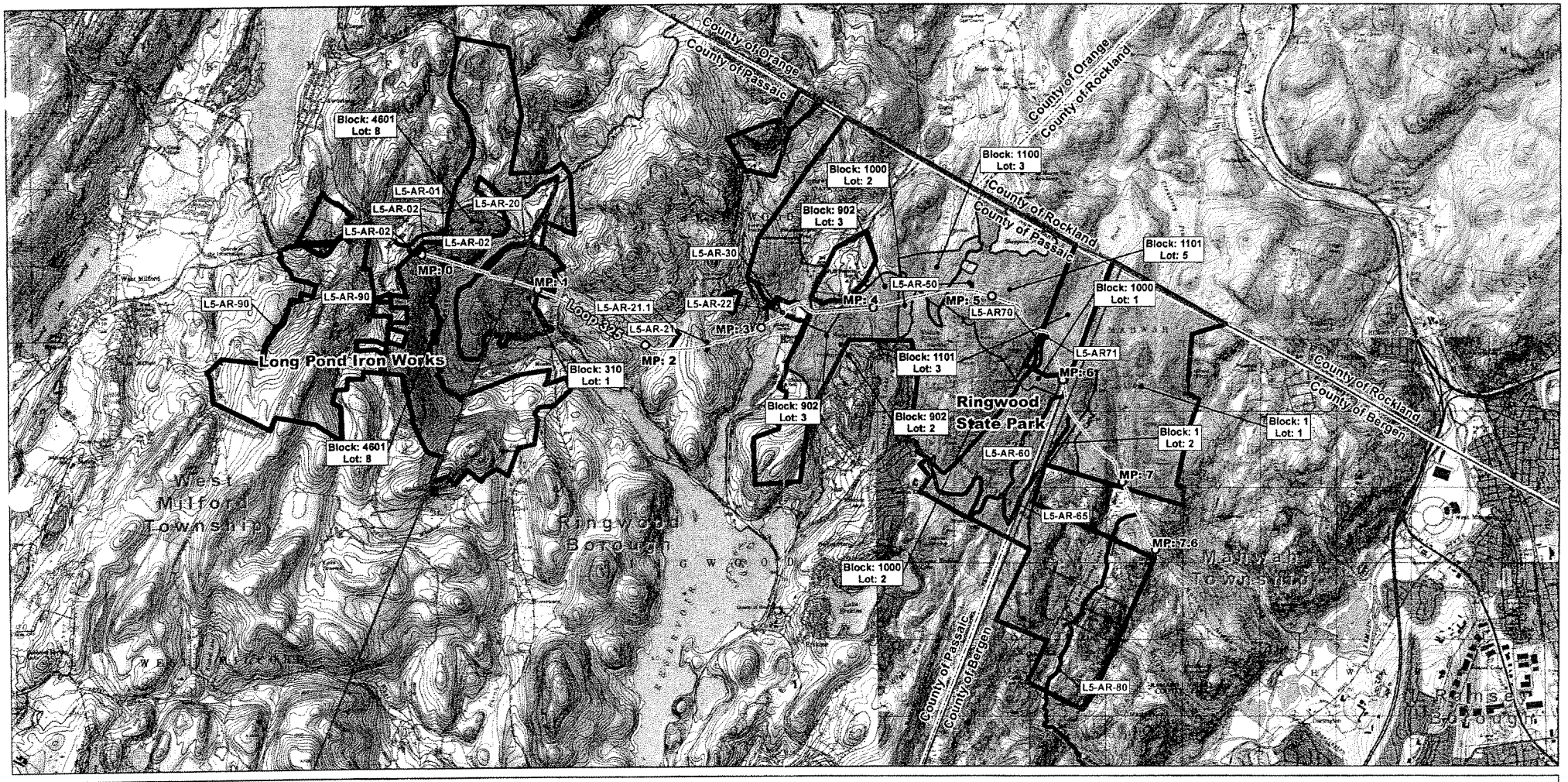
elpaso Natural Gas

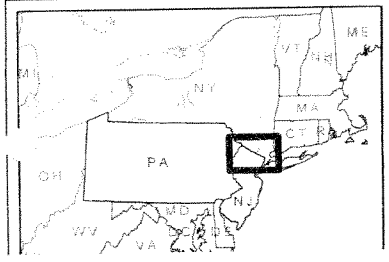
SGC Engineering, LLC

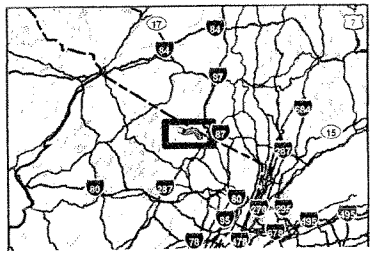
Loop 323 NJ
State Owned Lands
High Point State Park

Figure 2

Project#: 146299 Date: April 2012







Northeast Upgrade Project
Loop 325

- Mile Markers
- NEUP Centerlines
- Access Roads
- NJDEP Protected Open Space
- Ringwood State Park
- Long Pond Iron Works State Park
- Town Boundary
- County Boundary
- USA Topo Maps

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elpaso Natural Gas
SGC SGC Engineering, LLC

Loop 325
State Owned Lands
Long Pond Iron Works
Ringwood State Park

Figure 3

Project#: 146293 Date: April 2012


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Legend
Potential Replacement & Mitigation Area (300 +/- acres)
Ilac Property (Block 20001 Lot 5)
Wildcat Ridge Wildlife Management Area
1 inch = 850 feet
State House Commission Application # 2011-001
Potential Replacement and Mitigation Parcel
Block 20001 Lot 5 (part of)
Rockaway Township, Morris County

Attachment A

Interagency State Land Lease Valuation Panel Report

August 2011

New Jersey Interagency State Land Lease Valuation Panel

Board of Public Utilities
Kristina Miller, Legal Specialist
Ken Sheehan, Chief Counsel

Department of Agriculture and SADC
Monique Purcell, Director, Division of Agriculture and Natural Resources
Charles Roohr, Stewardship Manager

Department of Consumer Affairs
Beth Gates, Acting Director, Division of Local Government Services

Department of Environmental Protection
Scott Brubaker, Director, Office of Permit Coordination and Environmental Review
Marci Green, Administrator, Office of Leases
Madhu Guru, Assistant Director, Division of Land Use Regulation
William Mates, Research Scientist
Ben Witherell, Panel Chair and Director, Office of Economic Analysis
Judeth Yeany, Chief, Bureau of Legal Services and Stewardship, Green Acres

Department of Transportation
David Kook, Real Estate Appraiser III, ROW and Access Division

Economic Development Authority
Dave Nuse, Managing Director of Finance and Development

Highlands Council
Eileen Swan, Executive Director

New Jersey Water Supply Authority
Julie Hajdusek, Property Administrator
Henry Patterson, Executive Director

Office of the State Treasurer
Rob Romano, Deputy State Treasurer
Bob Tighue, Director, Property Management and Construction

Pinelands Commission
Susan Grogan, Chief Planner

Interagency State Land Lease Valuation Panel Report

Table of Contents

Introduction

Recent lease negotiations for private rights-of-way on State land indicate the current system for valuing certain types of leases is broken. Out-of-state companies as well as New Jersey utility companies that locate pipelines, electricity transmission lines and telecommunication towers and lines across many acres and hundreds of miles of State-owned land and water require right-of-way areas for their corridors.

In some cases, agency fee schedules are terribly outdated; in other cases, current rules and statutes prevent the State from realizing fair compensation for the private use of our precious state land, much of it preserved as unique open space, wildlife habitat, or recreational use. Concerned that New Jersey's approach to setting values for certain types of leases and easements on State land is not resulting in a fair and equitable return to the citizens of New Jersey, DEP Commissioner Martin established an interagency work group to evaluate leasing programs of State agencies and develop an improved valuation process. The valuation process described in this report will benefit business by providing a predictable cost structure for leasing those lands; and it will help satisfy our obligation to taxpayers that the public receives fair compensation.

The work group included members representing the Department of Environmental Protection, New Jersey State Treasurer's Office, Board of Public Utilities, Economic Development Authority, Pinelands Commission, New Jersey Department of Agriculture, State Agriculture Development Committee, New Jersey Water Supply Authority, Department of Consumer Affairs, Department of Transportation, and New Jersey Highlands Council. In addition to the work group effort, stakeholder meetings were held on September 27 (to discuss issues specific to Tidelands leases, licenses and grants) and October 22, 2010 (to discuss permitting and leasing issues associated with linear/corridor projects). A third stakeholder meeting was held on February 18, 2011 (general overview of recommendations). These meetings afforded a diverse group of stakeholders the opportunity to provide valuable input to the work group.

Scope

The scope of the work group's efforts was to review department and agency programs responsible for leasing State lands, including submerged lands (tidelands), and to review the practices and procedures for valuing those leases. This report includes recommendations for improvements to lease valuation from the perspective of the State as land owner. Areas evaluated and presented in this report include leases and easements of, on , and through land and property owned by: the Department of Environmental Protection, New Jersey Water Supply Authority, State Agriculture Development Committee and Department of Transportation, and property managed by the Department of the Treasury and the Economic Development Authority. The word "lease" in this report is meant to include conveyances of various rights in, on and under State lands, including easements, rights-of-way and licenses, but not fee simple.

The scope did not include an evaluation of how to value concessions (e.g. tour operators) and licenses to vend (e.g., operation of a food cart). These are usually activities with short-term lease or concession agreements and are usually let for bid or based on prevailing market conditions. Mitigation (e.g., compensation for disturbed or degraded environmentally sensitive areas) related to linear corridor projects, particularly for cases where those projects are subject to review by multiple agencies, is discussed in the last section of the report. This report does not address valuation of mitigation for the loss or degradation of environmental attributes, but does suggest a framework for future work in this area.

Findings and Recommendations

The work group found that some types of leases were common to multiple programs and agencies, while others are unique to specific programs. We found that many leases are achieving a fair and equitable return and are being managed in a manner consistent with specific program goals; however many other leases were outdated, below market value, or inconsistent with the goals of the State. In an effort to apply a uniform approach to valuing leases across program boundaries to the extent practicable, the recommendations in this report are organized into four sections:

1. Key Principles;
2. Appraisals;
3. Specific Recommendations; and
4. Mitigation and Coordination.

Key principles are applicable to all leases, with some exceptions noted here. Specific recommendations are classified by lease type to promote a consistent valuation approach across agencies and programs, where appropriate.

Based on its findings, the work group makes the following recommendations:

1. Key Principles

These key principles, some of which have already been adopted by State agencies, should apply to all leases, where applicable and unless otherwise noted:

A. *Program Coordination.* The State should adopt a simple, predictable, and consistent approach and cost structure for leasing State land for private use, including cross-agency valuation where more than one agency or department has jurisdiction over some or all aspects of managing private use of State land for a given project or type of project. It is recognized, however, that a uniform approach and cost structure is not feasible for all the different types of leases on State-owned land and the variety of purposes for which such land is leased. The specific recommendations in Section 3 provide guidance in this area.

B. *Lease Valuation.* Leases should be valued to ensure that the taxpayers of New Jersey receive fair and equitable compensation for private use of State land and property. The value of a lease and the decision to lease should include a determination of consistency with the mission of the subject parcel.

C. *Dedicated and Sufficient Funds.* The revenue generated by leases of State land/property should be designated for the department or program managing that land/property, at least as much as is sufficient to administer the program effectively and efficiently. Lease

income must also be properly identified and utilized for the program or funding source when that source has statutory, regulatory or contractual conditions which require reinvestment into other projects.

D. *Rent for Temporary Use.* The State should collect rent for State land that is used by a private entity on a temporary basis. For example, a developer who wants temporary access to a park road during the construction phase of a project should pay rent for that access.

E. *Terms and Inflation Adjustment.* Leases of State land should be for a finite term, include a regular payment schedule (e.g., annual), and should be adjusted on an annual basis for inflation (two and one-half percent yearly, which is slightly below the long-term consumer price index (CPI) trend). Generally, if and when the State leases occupancy rights on parkland and other preserved lands, it should be for a finite term, not a permanent easement. This will keep maximum management control of those lands in the State's hands.

F. *Clear Sublease Terms.* Allowance or disallowance of sublets, and the terms for sublets when allowed should be clearly spelled out in the lease. For example, cell tower owners often co-locate other companies' antennas on their tower, for a fee, and the State's approach to capturing revenue from the subtenants has not been consistent.

G. *Application Fees.* Where appropriate, processing fees for lease applications should be adjusted based on the actual cost of materials, staff time, and resources required (some have not been adjusted in many years).

H. *Flexibility.* Provisions for a flexible response on a case-by-case basis should be built into the process.

I. *Value Added.* The Interagency Work Group recognized the added, but difficult to quantify, value that attaches to land when it is preserved as open space or its use restricted specifically for its environmental, historical, or heritage attributes on behalf of the citizens of New Jersey. Because they have been preserved for the benefit of all New Jersey, these lands have added value wherever they occur in the State. Some of the recommendations in this report will help provide sustainable sources of funding for state parks.

J. *Protect Existing Infrastructure.* A key guiding element for determining where and when leases are appropriate on State-owned land is to protect the existing State-owned infrastructure. Much of the land owned by the State of New Jersey includes critical infrastructure, such as buildings or artifacts with important historical and heritage significance, water supply and stormwater management, and roads and bridges.

K. *Uses Inconsistent with Mission.* Generally, uses that are not consistent with the managing agencies mission, such as an industrial use in a State park, are not permitted. However, when there is an over-riding public interest, often certified by a federal mandate, these inconsistent uses do occur. For those cases in particular, the recommendations in this report will help ensure that fair compensation is received by the State, and that public access and use of these areas are maintained to the maximum extent practicable.

2. Appraisals

A. ***Recommendation****: Guidance for appraisals of State land should include an adjustment for the intended private use of the land.* An appraisal is not always the most appropriate or cost-effective method for valuing an easement or lease on State land. However, when an appraisal is appropriate or required, guidance for appraisals of State land should include an adjustment for the intended private use of the land. Too often State land is appraised based on the State's public use, such as preservation, conservation or transportation. The public use of the land may not be equivalent to the highest and best private use of that land, and therefore it has often been appraised at inappropriately low values. For example, a company seeks a lease for an electric substation within a State park. Assuming the substation cannot be located elsewhere, determination of the land value should reflect the industrial/commercial use represented by the substation, regardless of the zoning of the area around the park, or the fact that the park is restricted from development.

B. ***Recommendation****: Provide guidance or training for appraisers.* The State Agriculture Development Committee (SADC) holds training seminars for appraisers working in the area of preserved farmland regarding how to implement their rules. Similar guidance or training should be provided for appraisers in the specialty areas of corridor valuation and preserved State parkland and wildlife areas.

3. Specific Recommendations by Lease Type

The Work Group proposes specific recommendations for six categories of leases:

A. Tidelands (former "one-fee" licenses for linear projects)
B. Linear upland corridors
C. Publicly bid, market-based, and nominal fee
D. Telecommunication and broadcast towers/antennas
E. Aquaculture
F. Department of Transportation

Appendix I lists legislative, regulatory and/or policy actions necessary to implement the specific recommendations listed in this section. Appendix II summarizes recommended changes to the valuation approach by lease type.

A. Tidelands

The DEP Bureau of Tidelands Management, under the authority provided to the Tidelands Resource Council (TRC), manages 1) land that was previously tidally flowed, and 2) land that is currently tidally flowed. Tidelands include the entire coast of New Jersey and the tidal portion of rivers and streams. When the DEP conveys tidelands to a private party, the tidelands are either sold via grants or leased via licenses and leases. The State does not grant beaches or currently tidally flowed areas except for roads,

bridges and parks. Various discounts currently exist for both grants and leases. The recommendations related to lease values in this report concern only linear projects, formerly referred to as "one-fee" licenses.

Revenue generated by the Tidelands program is not currently designated for the program or even for coastal zone protection and management. Revenue generated through grants, leases and licenses under the Tidelands Resource Council are constitutionally dedicated to the Fund for Support of Free Public Schools. A greater portion of revenue from Tidelands leases, licenses and grants should be appropriated back to the Department's budget to offset program administrative costs and improve application processing time. As there is a real nexus between tideland conveyances and protection of coastal areas, a greater portion of these revenues could be used to promote protection of coastal resources and tourism.

➢ *Tideland Leases and Licenses*

Leases and licenses are granted by the TRC for corridor-type projects such as pipelines, electric power lines, telecommunication cables and outfalls, as well as structures in the water (e.g., docks, piers, bulkheads, moorings, aquaculture cages and racks). The recommendations below will put New Jersey on par with other states regarding fair value for use of the State's tidelands. As the TRC had previously identified some of the same recommendations as identified by the work group, many of the recommendations below have already been implemented. These are indicated in Appendix I.

The table below indicates a comparison of tidal area linear project easement/license fees assessed by other states based on fee schedules or recent permit negotiations (normalized to $/square foot/year).

State	Base Lease ($/SF/YR)
Massachusetts	$0.22
New York	$0.05
Delaware	$0.03
Maryland	$0.05
California	$0.50
New Jersey	*$0.10*

Recommendations:

1. No new one-fee lump sum payments;
2. No new perpetual term leases;
3. Eliminate the discount for linear projects greater than 3,000 feet;
4. Leases/licenses for non-residential linear structures should be assessed as annual payments on a $0.10 per square foot basis;
5. Leases/licenses for projects conducted by a public agency should be assessed at a discounted per square foot basis of $0.03/SF;
6. Eliminate ancillary fees for extra cables and wires for linear projects;

7. Create umbrella licenses for entities with multiple licenses in the same category (e.g., outfalls and bridges) for a substantial cost savings to the Department and the licensed entity;
8. Adjust current minimum fees for inflation;
9. Include an annual adjustment for inflation (2.5%);
10. Eliminate buffer areas and *de minimis* areas in fee calculations;
11. Allocate additional human resources to shorten the turn-around time for decisions on licenses and grants; and
12. Greater share of revenue should be dedicated to remain in DEP for efficient and timely management of the program.

B. Linear Corridor Projects

Upland corridor or linear projects such as pipelines, electric power lines, telecommunication cables, water lines and sewer lines and outfalls have been criticized recently as undervalued. This criticism appears to occur most frequently as a result of inappropriate appraisal methods being used. Often an "across-the-fence" appraisal, which only considers nearby property values, is conducted which does not include the added value of preservation and ownership by the State on behalf of the citizens of New Jersey, nor does it include a corridor value analysis, which may represent the highest and best use.

The recommendations below include a flat rate lease fee of $0.15 per square foot per year for private sector projects and $0.05 per square foot per year for public projects. A flat rate would eliminate the need for costly and time-consuming appraisals that are also open to appeal due to their subjective nature. In addition, a lease rate based on square feet provides a strong incentive for project sponsors to minimize the environmental footprint of their project. A flat rate fee should represent a floor price, with the option for the agency to still conduct an appraisal if circumstances suggest the flat rate is too low for a particular parcel. If the anticipated value of the parcel is greater than $65,000 per acre, then a proper appraisal is also recommended. A flat rate will also facilitate umbrella lease agreements with easement holders, such as utilities, who lease many parcels throughout the State.

The following table provides a few examples of existing leases and how the value of the leasehold would change under the proposed recommendations. These recommended changes would apply to new leases and upon renewal or re-opening of existing leases.

Example leases on New Jersey State Park land

Facility Type	Lease Type	Location	Appraisal Year	Square Footage of Leased Area*	Current Annual Lease Value	Proposed Annual Lease Value ($0.15/sq ft)
Gas pipeline	Linear	Franklin	2009	7,405	$100	$1,111
Aerial line	Linear (with DEP land)	Franklin/ Millstone	2009	385,942	$2,900	$57,891
Aerial line	Linear	Delaware	2009	24,000	$210	$3,600
Aerial line	Linear	S Bound Brook	2006	48,700	$450	$7,305
Gas pipeline	Linear	S Bound Brook	2007	4,177	$200	$627
Aerial line	Linear	Franklin	2008	9,104	$100	$1,366
Monopole/ Aerial Line	Linear	Franklin	2008	15,507	$150	$2,326
Gas pipeline	Linear	Clinton/ Somerville	2002	81,000	$17,800	$12,150

* 43,560 square feet = 1 acre

Many public and private owners of transportation corridors (railroad, road and highway) provide easements to other longitudinal corridor industries such as telecommunication, electricity transmission, natural gas transmission, and municipal utilities. A survey of recent (1990-2000) transactions for joint use of transportation right-of-way for installation of fiber optic cable in the Northeast and Mid-Atlantic region indicates an average value of $0.40/SF/YR in 2010 dollars. In addition, fee schedules for the Virginia Department of Transportation (for cable/telecom) and New Jersey Transit (pipelines) are both around $0.11/SF/YR. The New Jersey Turnpike Authority also uses a rate based on square feet to determine the value of linear leases (a linear lease for a permanent easement along the Garden State Parkway in Ocean County in 2004 was for $1.25/SF), but they still grant permanent easements. The following recommendations apply to both longitudinal (corridor) leases and transverse (crossings of existing corridors or small parcels) leases.

Recommendations:

1. No new perpetual term leases or easements;
2. Replace current parcel-by-parcel negotiation and appraisal method with a flat annual rate of $0.15/square foot for private projects and $0.05/SF for public projects;
3. Include annual rental fee for temporary work space and/or temporary access areas at a flat annual rate of $0.15/square foot for private projects and $0.05/SF for public projects;
4. Set an anticipated value threshold of $65,000 per acre to trigger an appraisal;
5. Minimum lease fee of $700 per year;

6. Revenue generated through these leases should be used to offset the cost of managing the program and for maintenance and improvement of State lands;
7. Provide umbrella leases to entities that have multiple leases and easements on State land;
8. Include an annual adjustment for inflation (2.5%); and
9. Manage through an automated, electronic management and billing system. Contracting these activities to a lease management company may provide added efficiency.

C. *Publicly Bid, Market-based and Nominal Fee Leases*

➢ *Leases consistent with mission of State agency*

Most New Jersey agencies that lease or rent State-owned property do so for uses consistent with the intended use of the overall property. It is obvious in these cases that the lease is consistent with the mission for that agency. These leases are typically valued through an appraisal process and/or publicly bid.

- *Natural and Historic Resources Group (DEP)*

The Natural and Historic Resources Group (NHR) within the Department of Environmental Protection administers approximately 300 leases on parkland and wildlife management areas (WMAs) for a variety of uses. Many of these leases are consistent with or further DEP's mission to preserve, manage and provide access to New Jersey's natural and historic resources. Examples of leased land and facilities within this category include marinas, interpretive centers, historic structures, golf courses, agricultural land, houses, and docks. Leases are with commercial entities, private individuals, non-profit organizations (NPOs), local government entities, and the federal government.

Most leases with NPOs are for nominal consideration and many of these NPOs assist DEP in managing land and providing interpretive services. Likewise, leases with other government entities that manage land on behalf of DEP are for nominal consideration. These leases are mostly for historic structures in parks or historic areas. NPO-State partnerships are key to maintaining these properties. Nominal fee leases are essential to obtaining these in-kind benefits for the State, and it is recommended that they continue to be encouraged and expanded.

Leases for the commercial or private use of DEP-owned land are typically conducted through a public bidding process. These leases are normally undertaken only when they are deemed public-private partnerships that enhance the public's enjoyment of State parkland and wildlife management areas while at the same time generating revenue for the State. In general, these leases return fair value, and are directly or closely tied to market rates through an appraisal and bid process.

Included among NHR's commercial, private leases are approximately 100 farm leases, constituting approximately one-third of all parkland/WMA leases. DEP recently initiated a new agricultural leasing program in WMAs. The leases were publicly bid at live auctions which, for the first time, provided all farmers with the

opportunity to farm in WMAs. DEP established the fair market rental value/minimum bids using soil rental rates established by the United States Department of Agriculture, discounted by 20 percent to account for the limitations of farming on public lands.

NHR's policy for at least ten years has been not to grant leases in perpetuity and, in most cases, for no more than 20 years. Leases granted within the last five years generally contain annual rent escalation clauses that either mirror the CPI, or are for three percent annually. In addition, through the pursuit of back rental payments, creation of new leases, and better enforcement of payment obligations, DEP has increased its annual lease revenue by almost 50 percent since 2006.

DEP manages its own leases and has implemented many changes to the leasing program over the last few years. Notably, it created an inventory of its leases in the Land and Building Asset Management (LBAM) database system maintained by the Department of the Treasury. While the database continues to be reviewed and refined for accuracy, it is an enormous improvement to the leasing program, as it allows DEP to readily access data regarding individual leases and rental payments and generate reports to give a more complete picture of the leasing program.

Despite many recent improvements, the lease management database has deficiencies and DEP lacks an automated billing system and efficient way of tracking rental payments. In addition, a large percentage of leases are expired. Although the tenants on those properties remain on the land legally as "holdover" tenants, the rental values for those leases are outdated and undervalued. It is recommended that DEP update its data base of leases and revalue leases as they are due for renewal. In addition, the DEP should seek new leasing opportunities that benefit the public and generate revenue for continued support of the park system.

For most of the leases on State parkland, the lease revenue goes directly to the Department of the Treasury and is not directly allocated back to the State Park Service. This compromises DEP's ability and responsibility as a landlord to maintain the leased structures and ensure their use and habitability. As noted above, this problem could be alleviated by ensuring that DEP retains at least the portion of revenue that is necessary to manage the leased properties.

- *Economic Development Authority*

The Economic Development Authority (EDA) leases office space and grants long-term leases and easements of State property for private use. EDA manages about sixty permanent leases and ten temporary right-of-entry agreements on an annual basis. In general, these leases return fair value, and are directly or closely tied to market rates through a bid or auction process. EDA's projected revenue from permanent leases is $4.7 million for 2011. EDA currently manages its leases in-house, but outsources property management and brokerage services. The EDA also leases a few facilities to public or not-for-profit organizations (NPOs) for nominal

amounts. These NPOs often conduct fund-raising and provide in-kind services to upkeep or enhance the facilities they lease. No changes are recommended for this program at this time.

- *State Agriculture Development Committee*

The State Agriculture Development Committee also manages a few short –term (typically 1-year) farm leases on farmland that it has purchased for preservation. Because the purpose of these leases is not to generate revenue, but to keep the land actively farmed pending public auction for the resale of the farm, the SADC does not set minimum bids when it solicits bids for leases. These short-term leases are provided through an open public bidding process. Rental rates as a result of this process average about $50/acre for temporary agricultural use of good quality farmland. This policy is reasonable given the short-term nature of the leases and the goal to keep the land in agricultural production. No changes are recommended for SADC leases at this time.

➢ *Leases that are <u>not</u> consistent with mission of State agency*

Utility companies hold many leases, easements and licenses on State-owned land, much of it on DEP-owned land. Though many utility projects are considered to provide a public service, the utility companies are typically private for-profit companies, and the projects are not consistent with the mission of the agency. DEP inherited many of these leases and easements when it acquired title to the land. Most of these rights were granted in perpetuity by the prior owner, for a one-time payment that has long since been paid. There are others, however, that DEP negotiated after it acquired the land, and an occasional new lease request.

Given recent developments in the energy industry, DEP anticipates that electric utility and natural gas pipeline companies will be proposing a number of new projects in the near future to accommodate rising consumer demand for energy. These projects will include the need to transport domestic natural gas and electricity across New Jersey from production and generation facilities in other states to customers in New York and other New England states. In addition, new "green energy" projects may require utility crossings on State land. It is anticipated that these types of leases will fall into the linear corridor category going forward.

DEP has not maintained an inventory of the utility rights on its land, but is currently compiling one. Once an inventory is established, the DEP hopes to be able to determine whether utility companies owe back rent, and which easements or leases have expired.

Currently, fifteen utility leases are in DEP's lease management database, described above. Because DEP lacks an automated billing system, some of the utility companies/tenants of those 15 leases had been behind in paying their rent. Over the last few years, DEP made a concerted effort to collect back rental payments on those leases, collecting approximately $24,000.

Recommendations:

1. Develop and maintain inventory of utility leases;
2. Revenue generated from DEP-NHR leases should be dedicated to remain in DEP, as happens in the other agencies;
3. Assess and develop new leasing opportunities that are consistent DEP's mission; and
4. Increase efficiency, revenue generation and tenant satisfaction through:
   a. added resources, improvement of database, and implementation of an automated billing system, and/or
   b. contract with a property management company;
5. Include an annual adjustment for inflation (minimum 2.5%).

D. Telecommunications Towers and Antennas

Some programs and agencies lease space for telecommunications towers, including wireless communication and television/radio transmittal, and antennas. However, although the Department of the Treasury adopted guidelines on this subject in 1998, in practice there is not a consistent State-wide approach to valuing such leases. The table below summarizes current lease rates set by several New Jersey agencies. For comparison, the State of Maryland has a fee range for cellular and other antenna installations on State land. The range is from $12,420 to $62,160 per year depending on the type of antenna and the volume of traffic in the immediate area. Maryland also imposes an annual increase of 4% on its antenna licenses.

Annual Lease Fees for Wireless Communication Antennas and Towers

Department	Antenna on Existing Structure (base rent)	Cell Tower (base rent)	Inflation adjustment	Co-locator Fees (in addition to base rent)
NJ Turnpike Auth.	$40,000	$40,000		50% of whatever the primary wireless company charges
NJ Treasury	$38,000	$38,000	3 to 5%	50% of whatever the primary wireless company charges
NJDOT	$17,250	$37,500	3 or 3.5%	50% of whatever the primary wireless company charges
NJWSA*		$30,000	3%	50% of whatever the primary wireless company charges

*NJWSA and NJDEP lease terms are typically negotiated based on appraisal information.

With limited exceptions for the purpose of improving public safety, the DEP has not permitted the siting of new telecommunications towers on its properties (although it has re-leased towers already located on properties it has purchased and has allowed co-location of antennas on existing electric utility transmission towers.) This policy stems from concerns about conflicts with DEP's mission. When towers are located on State property, often to address public safety issues, they should be subject to the following recommendations:

Recommendation:

1. The fee formula or amount charged to lease space for a television/radio tower, wireless communications tower or antenna should be consistent from agency to agency. DEP and other agencies should adopt the methodology and pricing terms established by Treasury. Agencies should review private market and other states' market conditions periodically and at the renewal of each lease.
2. Explore the opportunity to maximize the value of current and future communication tower and antenna assets through master agreements and portfolio management, rather than individual sites. In addition, evaluate the potential savings from contracting with a private firm for management services related to leases of this asset class including integration with management of other asset classes described previously.
3. Telecommunications towers and antennas on Green Acres encumbered State property and other properties purchased with restricted sources of funding may require additional reviews and/or approvals.

E. Aquaculture

Background

The NJDEP Bureau of Shellfisheries, in conjunction with the New Jersey Shellfisheries Council, administers the shellfish leasing program which supports private aquaculture activities via the leasing of bay bottom for shellfish culture and harvest. Prior to the issuance of any shellfish lease within the Atlantic Coast Section, the Bureau performs a biological investigation to assess the area's natural productivity. Each year the Bureau performs approximately 30-50 biological investigations of prospective leases. Naturally-productive areas are not leased because the Bureau and the Atlantic Coast Shellfish Council (empowered by statute to grant shellfish leases) wants these areas to remain open for all shellfishers to use. This process facilitates aquaculture development while ensuring that naturally productive areas remain available for use by all.

DEP currently manages approximately 1,700 shellfish leases. The leases are mostly along the Atlantic Coast, with some linear parcels in the Mullica River system, and Delaware Bay. The Atlantic Coast leases are predominantly held by hard shell clam harvesters and the Delaware Bay leases are limited to harvesting oysters. New leases are limited to two acres each along the Atlantic coast, but individuals may own multiple leases. Existing leases total around 2,160 acres and 31,000 linear feet along the Mullica River system. New Delaware Bay leases are limited to a maximum of 200 acres each and existing leases cover approximately 32,200 acres. Some older established leases exceed the current "maximums." The leases are renewed annually.

The Shellfisheries Council is authorized by statute to set the rent for shellfish harvesting areas, with the approval of the Commissioner (N.J.S.A. 50:1-27). The annual lease fee along the Atlantic Coast is currently $2.00/acre (N.J.A.C. 7:25-24.7(b)). The annual lease fee in Delaware Bay is currently $0.50/acre and has not been included in regulations. These fees were established by the Council, but not codified by regulation. These lease fees have remained largely unchanged in almost 100 years.

The requirements to administer and manage the lease program include but are not limited to the following tasks: take lease applications, answer questions from applicants and lease holders, biological sampling of prospective lease areas, preparation of lease area reports reviewed by the Council, participation at Council meetings, routine inspections required by the federal Food and Drug Administration, and hydrographic surveys and marker placement for approved leases. The DEP oversees these leases as part of its mission and mandate to maintain and protect the diversity of New Jersey's fish and wildlife and the habitats they depend on, as well as to maximize the recreational and commercial use of New Jersey fisheries for both current and future generations. The Shellfisheries Council previously proposed nominal increases in lease fees, but those recommendations will not be enough to cover program costs.

Co-jurisdiction
The Tidelands Resource Council (TRC) has authority and a statutory mandate to require a license for occupation of State tidelands. In the case of shellfish leases, the TRC has interpreted this to apply only to the area of tidelands occupied by structures. The NJDEP Bureau of Tidelands administers these licenses. The Tidelands Resource Council passed a resolution in March 2010 setting the license price at $0.01/square foot for structures only related to shellfish growing and harvesting, for a trial period of three years. This policy, the lease price and the individual leases will be re-evaluated toward the end of the three-year period.

Aquaculture Development Zones
The NJDEP and the New Jersey Department of Agriculture have been pursuing the expansion of aquaculture to allow for the utilization of non-traditional (structural) aquaculture gear in Aquaculture Development Zones (ADZs). Before the NJDEP can lease these areas, regulations need to be promulgated and a statutory change was needed to allow leasing on one of the four ADZs that was below the "clam line."

Recommendations:

1. It is recommended that lease fees for aquaculture growing and harvesting be adjusted. At a minimum, lease prices should be increased to a level that will support the administration of the leasing program at its current level.
2. It is recommended to continue the pilot ADZ program before proposing regulations.
3. It is recommended that NJDEP, in consultation with the NJ Department of Agriculture assess the economic and environmental and benefits and costs of the shellfish industry in New Jersey.
4. Revenue generated through this program should be dedicated to remain in DEP for effective administration of the programs.

F. Leases Related to Transportation Corridors

The New Jersey Department of Transportation holds several types of leases. These include: temporary rental arrangements for parties being relocated from NJDOT property (acquisition lease), nominal rent leases for public use, general property leases valued by traditional real estate appraisal methods, cell tower licenses, and utility easements (no fee charged for occupancy, DOT charges a permit fee for road openings related to utility work on State roads). As stated in section B (above), the New Jersey Turnpike Authority requires compensation for easements provided to utilities and other private users on a square foot basis. In addition, a survey of recent transactions for joint use of transportation right-of-way for installation of fiber optic cable in the Northeast and Mid-Atlantic region indicates an average value of $0.40/SF/YR in 2010 dollars. In addition fee schedules for the Virginia Department of Transportation (for cable/telecom) and New Jersey Transit (pipelines) are both about $0.11/SF/YR.

Recommendation:

1. NJDOT should establish occupancy fees for private utility use of public NJDOT right-of-way areas. This will bring New Jersey DOT in line with other states, local units, and transportation authorities that rent their rights-of-way to private users. This will require a statutory change as the NJDOT is currently required to accommodate utilities within its right of way.
2. Occupancy leases in state-owned transportation corridors should be for finite terms and based on unit measures (e.g., square feet or linear feet). Minimum annual occupancy fees of $1.20/linear foot for fiber optic in an existing conduit and $0.15/SF for other than fiber optic are recommended in transportation corridors.

4. Mitigation and Coordination

Large projects, especially linear corridor projects often intersect multiple State-owned properties (e.g., DEP and DOT) and areas managed by one of New Jersey's regional planning entities: the Meadowlands Commission, the Highlands Council, or the Pinelands Commission. It is outside the scope of this report to make detailed recommendations on mitigation requirements and coordination between agencies, but some general recommendations and discussion are appropriate and included below. The DEP in partnership with other State agencies and the regional entities listed above will undertake a review of mitigation and coordination related to linear projects. The findings and recommendations of that study will be published separately.

For leases that are not consistent with DEP's mission to preserve, manage and provide access to New Jersey's natural and historic resources, the Department makes a distinction between its role as landlord and property owner (that is, its proprietary role) and its role as the agency responsible for protecting New Jersey's environment (that is, its regulatory role). As landlord and property owner, the Department will require fair value for the private use of State land through leases, licenses and easements, and may also require compensation and/or mitigation measures to address damage to State property and

impacts on the recreation, aesthetic, or natural resource value of these lands. As environmental regulator, the DEP will require mitigation and/or compensation for environmental impacts associated with projects that require permits or approvals, whether or not the projects are located on State land.

Other agencies may also have jurisdiction for protection of specific environmental resources, or for private use of State land managed by that agency. Some projects, especially large corridor projects, are likely to cross these various jurisdictional boundaries. For timely review of these types of projects and predictability of outcomes, multi-program and multi-agency coordination is crucial.

Since 1961, the DEP has used a variety of State and federal funding sources to purchase over 650,000 acres of land for public use and enjoyment. Prior to the creation of the DEP, several large tracts were donated to the State or purchased by the State as public parks, forests and wildlife management areas. The DEP is now the guardian of this vast public trust resource. In general, the use of this land is limited (by statute) to recreation and conservation purposes. However, it may sometimes be necessary to allow leases of DEP property that are not consistent with DEP's mission to advance another competing public interest (such as the provision of utility services), as acknowledged in *N.J.S.A.* 13:1L-6 (which allows leasing of Parks properties for public benefit) and *N.J.S.A.* 23:8A-1 (which allows leasing of Fish and Wildlife lands "in the State interest."). In such cases, the DEP (as landlord/property owner) has an obligation to account for damages or other significant adverse impacts of the leases on its public lands (in addition to the base rent for the corridor or lease area that can be calculated under the methodologies recommended in this report.)

Given the above, we envision applying the following guiding principles to the determination of additional compensation or mitigation for leases and easements on DEP lands:

1. The recommended compensation to be calculated for corridor, utility or other leases described in this report shall be considered the base rent or occupancy value for the activity that will occur on DEP property.

2. In addition to the annual rent payment associated with the lease, the DEP seeks to account, through additional compensation or mitigation, for any permanent or significant negative impacts of its leases on the values for which the leased property was preserved. If the lease involves an activity that is truly short term and which can be discontinued at the end of the lease without any permanent or significant impact on the property, additional compensation or mitigation will not be due. For example, the lease of a portion of a DEP parking lot for use by a construction trailer or other temporary structure (as long as such lease does not interfere with public use of the surrounding State park, forest or wildlife management area). However, if the lease involves significant long-term or permanent negative impacts on DEP property, including but not limited to recreational impacts, endangered species habitat alteration or loss, significant

vegetation alteration or removal, blasting, trenching, disturbance of steep slopes, water resource impacts, significant aesthetic impacts or loss of public access, then the DEP shall require additional compensation or mitigation to account for such impacts (under guidelines to be developed as outlined below).

3. In calculating additional compensation and/or mitigation for leases of DEP lands, the DEP will be guided, to the extent practicable, by the rules and policies applicable to the diversion or disposal of Green Acres-restricted properties owned by municipalities, counties and nonprofits (currently found at *N.J.A.C.* 7:36).

   It may be necessary to calculate additional compensation and mitigation on a case by case basis, taking into account the impacts of construction and operation of a project on the DEP's property and the likely duration of the project.

   In order to provide predictability for leases requiring additional compensation and/or mitigation, the DEP will inform lease applicants about these requirements at the beginning of the project review process.

4. In order to coordinate State agency actions with respect to the environmental review of projects with a lease or easement component that is not consistent with DEP's mission, including the determination of the appropriate compensation for the use of State property, a project team approach and clearly defined process will be implemented through the DEP Office of Permit Coordination. To provide additional transparency and coordination, the DEP will evaluate the benefits of entering into Memorandums of Agreement (MOAs) with other State or regional agencies having authority to require mitigation or compensation for linear corridor projects.

   Leases are one aspect of a larger environmental review process. To allow for all appropriate input in this process, the DEP will coordinate closely among and between other agencies and programs within DEP (such as Land Use Regulation, the No Net Loss Program, the Pinelands Commission, the Highlands Council, or the Meadowlands Commission) with authority to require compensation or mitigation for environmental impacts from private use of State land. This close coordination will ensure that regulated entities are offered an efficient "One Stop" point of contact to interact with all regulating agencies early in the project's planning phase to receive information, guidance, and program specific contacts with which to pursue their necessary approvals and mitigation requirements.

   As part of the One Stop process and to provide applicants and stakeholders with a clear understanding at the outset, a pre-application meeting will be provided to ensure that all relevant State agencies and programs provide the applicant with the scope and anticipated timeline of any needed agency approvals. To receive the benefit of a clear and predictable framework, the applicant must submit complete and detailed project plans, that can be used to determine lease value (where applicable) and mitigation plans to address environmental impacts.

Appendix I

Specific Recommendations by Lease Type

Lease Type		Recommendation	Required Action	Implemented
Tideland Lease/License	1	No new one-fee lump sum payments	Policy/TRC approval	Y
	2	No new perpetual term leases	Policy/TRC approval	Y
	3	Eliminate the discount for linear projects greater than 3,000 feet	Policy/TRC approval	Y
	4	Leases for private linear structures assessed at $0.10/SF/year	Policy/TRC approval	Y
	5	Leases for public linear structures assessed at $0.03/SF/year	Policy/TRC approval	N
	6	Eliminate ancillary fees for extra cables and wires for corridor projects	Policy/TRC approval	Y
	7	Create umbrella licenses for entities with multiple licenses in the same category	Policy/TRC approval	N
	8	Adjust current minimum fees for inflation since date of last adjustment and annually thereafter	Policy/TRC approval	Y
	9	Include an annual adjustment for inflation (2.5%)	Policy/TRC approval	Y
	10	Eliminate buffer area from fee calculation	Policy/TRC approval	Y
	11	Allocate additional resources to shorten the turn-around time for decisions on licenses and grants, and to identify tideland encroachments (missing revenue) that have not come into the program voluntarily	Budgetary/Mgmt.	N
	12	Greater share of revenue generated through this program should be dedicated to remain in DEP	Budgetary	N
Upland Corridor Lease/Easement	1	No new perpetual term leases	Policy/State House Comm	N
	2	Replace current parcel-by-parcel negotiation with a flat rate (square foot basis)	Policy/State House Comm	N
	3	Assess flat rate (square foot basis) fee for rental of temporary work space or access	Policy/State House Comm	N
	4	Set anticipated value threshold of $65,000/acre to trigger an appraisal	Policy/State House Comm	N
	5	Minimum lease fee of $700 per year	Policy/State House Comm	N
	6	Revenue generated through this program should be dedicated to remain in DEP	Budgetary	N
	7	Provide umbrella leases to entities with multiple easements	Management	N
	8	Include an annual adjustment for inflation (2.5%) in lease terms and conditions	Policy/State House Comm	N
	9	Manage through an automated, electronic management and billing system	Management	N
Bid, Market-based and Nominal Fee Leases	1	Develop and maintain inventory of utility leases	Management	ongoing
	2	Revenue generated from DEP-NHR leases should be dedicated to remain in NHR, as happens in other agencies	Budgetary	N
	3	Assess and develop new leasing opportunities	Policy/Mgmt.	ongoing
	4	Develop a robust and maximally-automated system for management of leases (internally or through contract with outside lease mgmt. firm)	Management	N
	5	Include an annual adjustment for inflation in lease terms and conditions	Management	ongoing
Cellular Towers/Antennas	1	All agencies adopt a consistent method for pricing and lease terms (e.g., adopt Department of Treasury method and pricing)	Policy/Mgmt.	N
	2	Explore opportunities for portfolio management	Policy/Mgmt.	ongoing
	3	Require Green Acres review for towers/antenna on property purchased with restricted sources of funding	Policy/Mgmt.	N
Aquaculture	1	Increase lease fees to support administration of the leasing program	DEP/Shellfish council	N
	2	Create pilot ADZ program before proposing regulations	DEP/Shellfish Council/Dept. of Ag	ongoing
	3	Conduct economic analysis of shellfish industry in NJ	DEP/Dept. of Ag	ongoing
	4	Sufficient funds, based on lease revenue, should be dedicated to remain in the program(s) administering leases	Budgetary	N
Roadway right-of-way	1	NJDOT should establish occupancy fees for private use of public NJDOT right-of-way areas	Legislation	N
	2	Establish minimum occupancy fees for transportation corridors	Policy/Mgmt.	N
Mitigation Coordination (inter-agency)	1	Establish a project-based team approach, with a clearly defined process and designated inter-agency liaisons	Policy	ongoing

Appendix II

Specific Recommendations on Valuation Approach by Lease Type

Valuation Approach by Lease Type

Lease Type	Recommendation	Current Approach
Tidelands Lease/License		
Linear projects*	$0.10/SF/YR	$0.375/SF in perpetuity, with discount if greater than 3,000 feet
Other tidelands licenses/leases	unchanged	varies from $0.01/SF/YR to $0.49/SF/YR depending on use
Upland Corridor Lease		
Linear projects	$0.15/SF/YR or appraisal for very high value parcels	appraisal-based negotiation
Rectangular parcels w/structures associated with corridors (e.g., electrical sub-stations, pump stations, etc.)	$0.15/SF/YR or appraisal for very high value parcels	appraisal-based negotiation
Publicly Bid and Market-based Leases	unchanged	open public bids and retail/office leases at market rates
Nominal Fee leases for non-profits that provide educational opportunities and other in-kind services	unchanged	mostly parkland or historic areas: non-profit groups are key to assisting the state maintain these properties. Nominal fee leases are essential to obtaining these in-kind benefits for the State
Cellular and other communications towers and antennas	adopt consistent state-wide pricing and lease terms	varies by agency
Aquaculture	Increase lease price, based on pending joint economic analysis by NJDEP and NJ Dept. of Agriculture	Atlantic Coast $2/acre Delaware Bay $0.50/acre
Roadway right-of-ways	Establish annual occupancy leases for private use of right-of-ways	NJTA/GSP - square foot basis (often in perpetuity) NJDOT - none

*this recommendation already implemented by the Tidelands Resource Council

ATTACHMENT C

UNITED STATES DEPARTMENT OF THE INTERIOR
Bureau of Outdoor Recreation
Land and Water Conservation Fund Project Agreement

State New Jersey	Project Number 34-00304

Project Title: Shephard Lake Bathhouse

Project Period: Date of Approval to July 1, 1983

Project Scope (Description of Project)

The State of New Jersey Department of Environmental Protection will develop a bathhouse/concession building located at Shepard Lake in Ringwood State Park.

Project Stage Covered by this Agreement

Entire

Project Cost

Total Cost	$ 2,200,000.
Fund Support	35 %
Fund Amount	$ 770,000.
Cost of this Stage	$ 2,200,000.
Assistance this Stage	$ 770,000.

The following attachments are hereby incorporated into this agreement:

1. General Provisions Dated December 1965
2. Project Proposal
3. _____
4. _____

8/21/78
MM

BOR 8-92
(Rev. April 1974)

The United States of America, represented by the Director, Bureau of Outdoor Recreation, United States Department of the Interior, and the State named above (hereinafter referred to as the State), mutually agree to perform this agreement in accordance with the Land and Water Conservation Fund Act of 1965, 78 Stat. 897 (1964), and with the terms, promises, conditions, plans, specifications, estimates, procedures, project proposals, maps, and assurances attached hereto and hereby made a part hereof.

The United States hereby promises, in consideration of the promises made by the State herein, to obligate to the State the amount of money referred to above, and to tender to the State that portion of the obligation which is required to pay the United States' share of the costs of the above project stage, based upon the above percentage of assistance. The State hereby promises, in consideration of the promises made by the United States herein, to execute the project described above in accordance with the terms of this agreement.

The following special project terms and conditions were added to this agreement before it was signed by the parties hereto:

This Agreement is not subject to provisions of Section B.2(d) and D-4 of the attached General Provision dated December, 1965.

~~Reference to $10,000.00 in B.2(a), (b) and (c) of the General Provision is changed to $2,500.00.~~

This agreement is subject to the clause, dated July 1, 1975, which outlines responsibilities pursuant to the Clean Air and Water Acts.

The State agrees to comply with the terms and intent of the Flood Disaster Protection Act of 1973 (Public Law 93-234) and all applicable regulations and procedures implementing that Act.

In witness whereof, the parties hereto have executed this agreement as of the date entered below.

THE UNITED STATES OF AMERICA

By _____ (Signature)

DEPUTY Regional Director

(Title)

Bureau of Outdoor Recreation
United States Department of
the Interior

Date JUN 13 1978

STATE

New Jersey

(State)

By _____ (Signature)

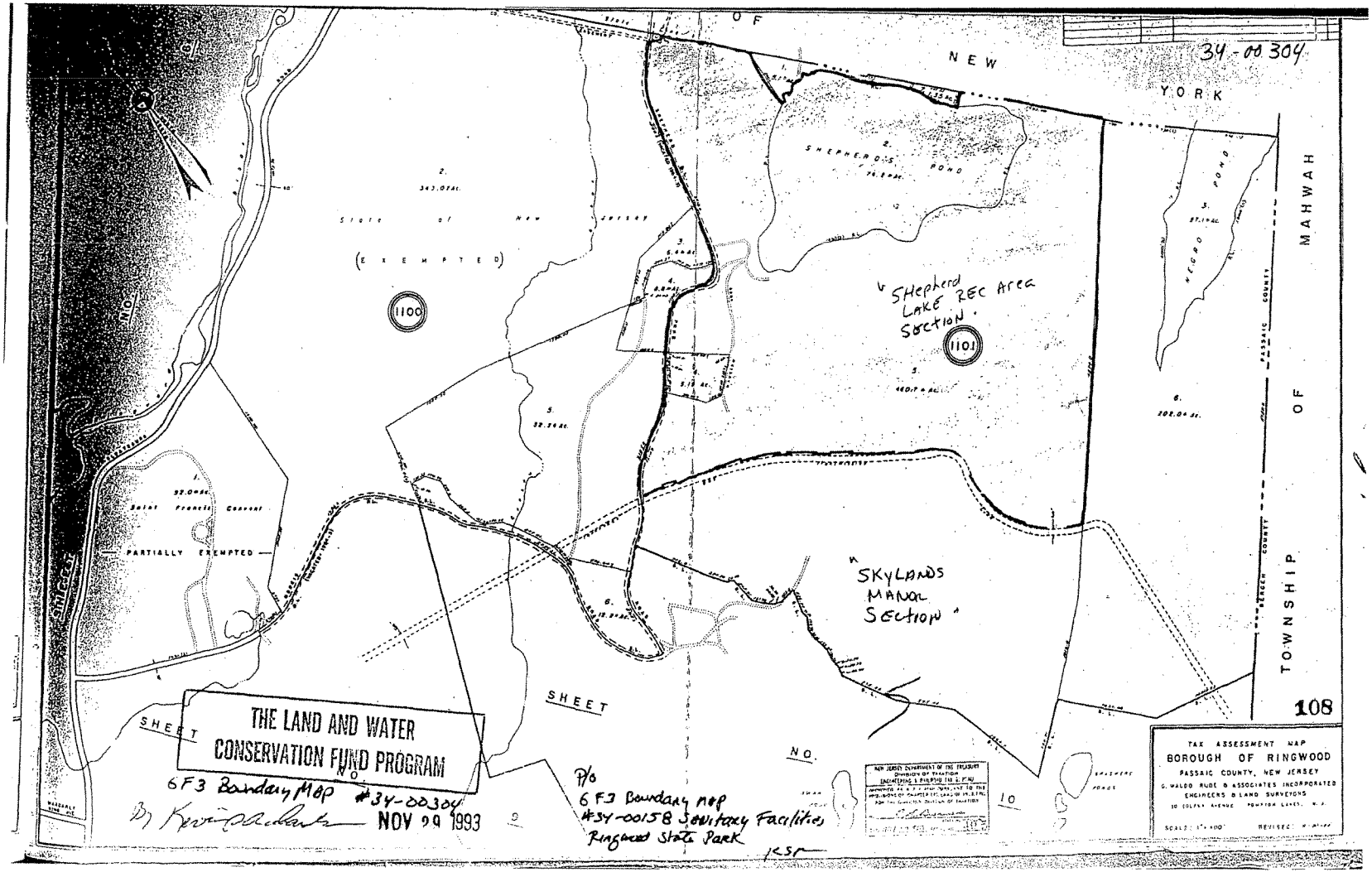
Betty Wilson

(Name)

Alternate State Liaison Officer

(Title)

INT. 2570-77


34-00304
NEW YORK
STATE OF NEW JERSEY
(EXEMPTED)
1100
SHEPHERDS POND
Shepherd Lake REC Area Section
1101
KEGGO POND
PASSAIC COUNTY
BERGEN COUNTY
TOWNSHIP OF MAHWAH
PARTIALLY EXEMPTED
SKYLANDS MANOR SECTION
SHEET
NO.
108
10
THE LAND AND WATER CONSERVATION FUND PROGRAM
6F3 Boundary Map #34-00304
By Kevin Richards NOV 29 1993
P/O
6F3 Boundary Map
#34-00158 Sanitary Facilities
Ringwood State Park
TAX ASSESSMENT MAP
BOROUGH OF RINGWOOD
PASSAIC COUNTY, NEW JERSEY

ATTACHMENT D

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
Land and Water Conservation Fund Project Agreement

State New Jersey	Project Number 34-00365
Project Title Ringwood/Ramapo Greenway	
Project Period April 19, 1993 - June 1, 1996	Project Stage Covered by this Agreement Entire

Project Scope (Description of Project)

The New Jersey Department of Environmental Protection and Energy, will acquire, in fee simple, 745± acres located in Mahwah Township, Bergen County and identified as tax block 1, part of lot 1. The property will serve to extend existing State holdings at Ringwood State Park.

Project Cost	
Total Cost	$ 2,092,100.00
Fund Support not to exceed 50%	
Fund Amount	$ 1,046,050.00
Cost of this Stage	$ 2,092,100.00
Assistance this Stage	$ 1,046,050.00

The following are hereby incorporated into this agreement:

1. General Provisions (LWCF Manual)
2. Project Application and Attachments.
3. _____
4. _____

NPS 10-902
(7-81)

34-00365

The United States of America, represented by the Director, National Park Service, United States Department of the Interior, and the State named above (hereinafter referred to as the State), mutually agree to perform this agreement in accordance with the Land and Water Conservation Fund Act of 1965, 78 Stat. 897 (1964), the provisions and conditions of the Land and Water Conservation Fund Grants Manual, and with the terms, promises, conditions, plans, specifications, estimates, procedures, project proposals, maps, and assurances attached hereto or retained by the State and hereby made a part hereof.

The United States hereby promises, in consideration of the promises made by the State herein, to obligate to the State the amount of money referred to above, and to tender to the State that portion of the obligation which is required to pay the United States' share of the costs of the above project stage, based upon the above percentage of assistance. The State hereby promises, in consideration of the promises made by the United States herein, to execute the project described above in accordance with the terms of this agreement.

The following special project terms and conditions were added to this agreement before it was signed by the parties hereto:

This project is subject to a Waiver of Retroactivity granted by the National Park Service on April 19, 1993.

In witness whereof, the parties hereto have executed this agreement as of the date entered below.

THE UNITED STATES OF AMERICA

By _____
ACTING REGIONAL DIRECTOR
(Signature)

National Park Service
United States Department
of the Interior

Date 22 SEP 1994

STATE

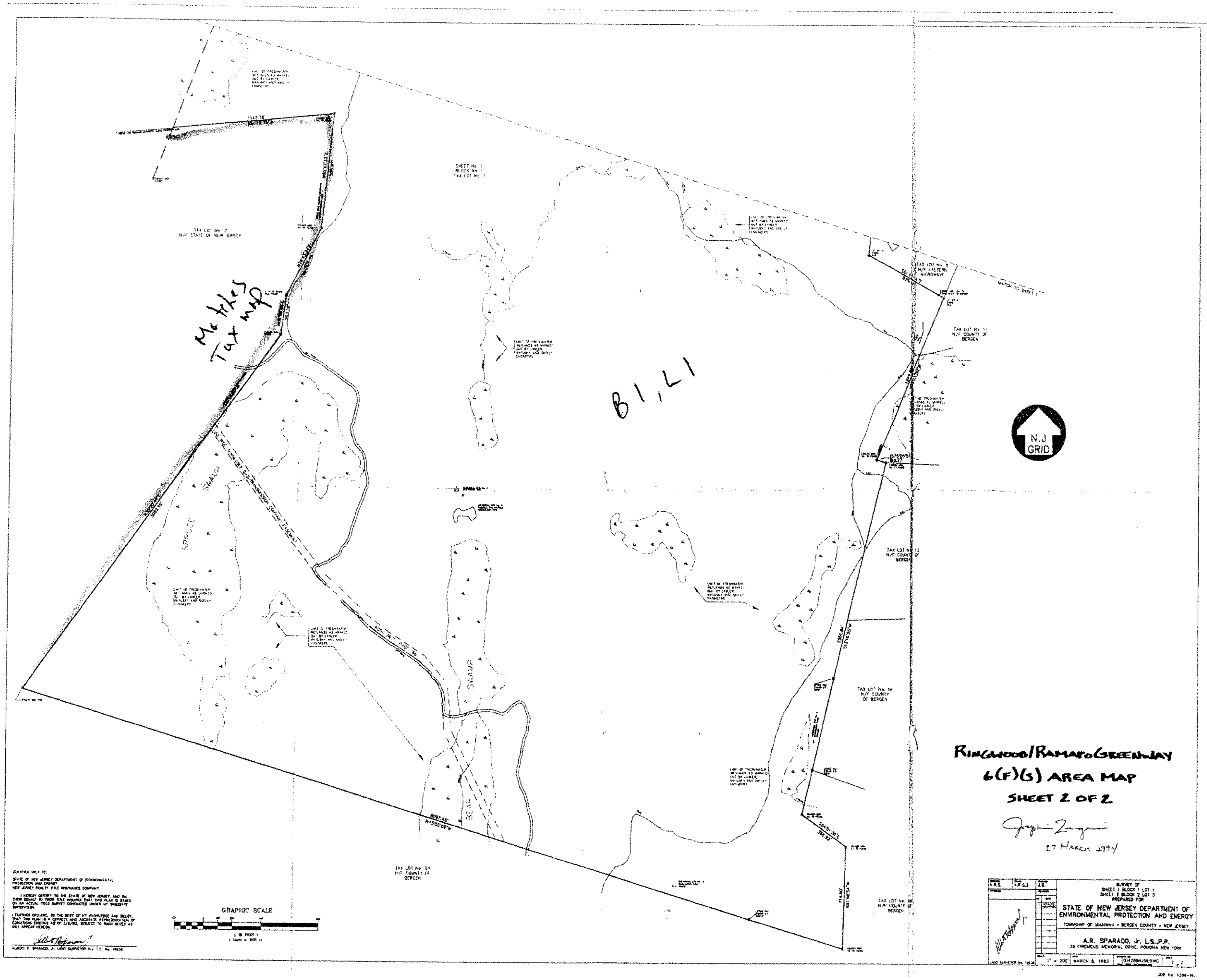
New Jersey

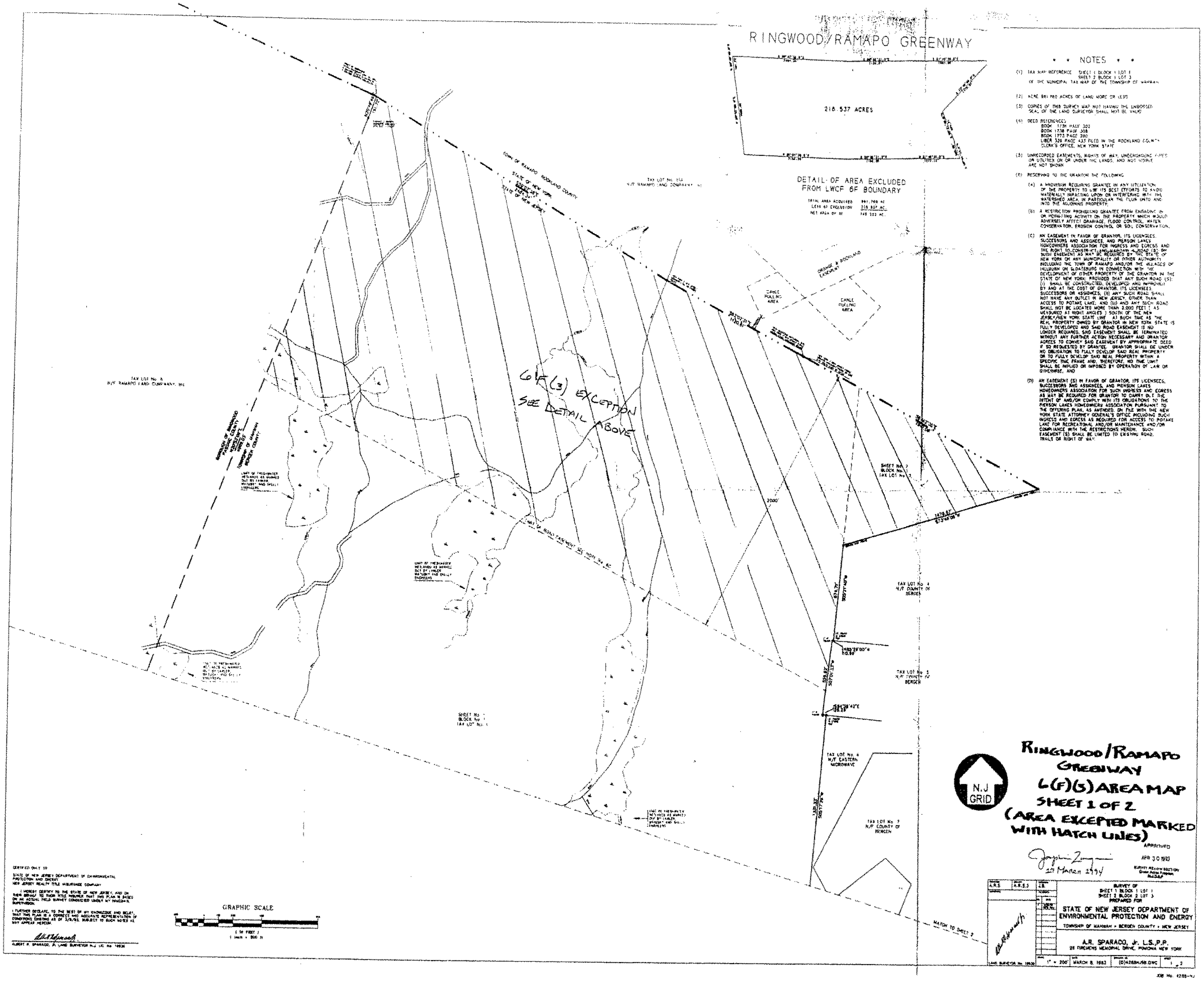
By _____
(Signature)

James F. Hall
(Name)

State Liaison Officer
(Title)

NPS 10-902
(7-81)


Matches Tax map
B1, L1
SHEET No. 1
BLOCK No. 1
TAX LOT No. 1
TAX LOT No. 2
N/F STATE OF NEW JERSEY
SPRUCE
SWAMP
BEAR
SWAMP
TAX LOT No. 54
N/F COUNTY OF BERGEN
TAX LOT No. 56
N/F COUNTY OF BERGEN
TAX LOT No. 12
N/F COUNTY OF BERGEN
TAX LOT No. 11
N/F COUNTY OF BERGEN
TAX LOT No. 9
N/F EASTERN MICROWAVE
MATCH TO SHEET 1
N.J GRID
GRAPHIC SCALE
Ringwood/Ramapo Greenway
6(F)(S) AREA MAP
SHEET 2 OF 2
27 March 1994
A.R.S.
A.R.S.S.
J.B.
SURVEY OF
SHEET 1 BLOCK 1 LOT 1
SHEET 2 BLOCK 2 LOT 3
PREPARED FOR
STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY
TOWNSHIP OF MAHWAH • BERGEN COUNTY • NEW JERSEY
A.R. SPARACO, Jr. L.S.,P.P.
1" = 200'
MARCH 8, 1983
JOB No. 4266-NJ


RINGWOOD/RAMAPO GREENWAY
218.537 ACRES
DETAIL OF AREA EXCLUDED FROM LWCF 6F BOUNDARY
NOTES
(1) TAX MAP REFERENCE SHEET 1 BLOCK 1 LOT 1 SHEET 2 BLOCK 1 LOT 3 OF THE MUNICIPAL TAX MAP OF THE TOWNSHIP OF MAHWAH
(3) COPIES OF THIS SURVEY MAP NOT HAVING THE EMBOSSED SEAL OF THE LAND SURVEYOR SHALL NOT BE VALID
(4) DEED REFERENCES
(5) UNRECORDED EASEMENTS, RIGHTS OF WAY, UNDERGROUND PIPES OR UTILITIES ON OR UNDER THE LANDS, AND NOT VISIBLE ARE NOT SHOWN
(6) RESERVING TO THE GRANTOR THE FOLLOWING
6(F)(3) EXCEPTION SEE DETAIL ABOVE
TAX LOT No. 6 N/F RAMAPO LAND COMPANY, INC.
SHEET No. 1 BLOCK No. 1 TAX LOT No. 1
TAX LOT No. 4 N/F COUNTY OF BERGEN
TAX LOT No. 5 N/F COUNTY OF BERGEN
TAX LOT No. 7 N/F COUNTY OF BERGEN
CABLE PULLING AREA
2000'
GRAPHIC SCALE
MATCH TO SHEET 2
N.J GRID
RINGWOOD/RAMAPO GREENWAY 6(F)(3) AREA MAP SHEET 1 OF 2 (AREA EXCEPTED MARKED WITH HATCH LINES)
APPROVED
APR 30 1993
27 MARCH 1994
SURVEY OF SHEET 1 BLOCK 1 LOT 1 SHEET 2 BLOCK 2 LOT 3 PREPARED FOR
STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY
TOWNSHIP OF MAHWAH • BERGEN COUNTY • NEW JERSEY
A.R. SPARACO, Jr. L.S.,P.P.
1" = 200'
MARCH 8, 1993

ATTACHMENT E

United States Department of the Interior

NATIONAL PARK SERVICE
Northeast Region
U.S. Custom House
200 Chestnut Street
Philadelphia, PA 19106-2878

IN REPLY REFER TO:
L32 (4531)

March 22, 2012

Mr. Richard Boornazian
LWCF State Liaison Officer
Green Acres Program Administrator
Dept. of Environmental Protection
P.O. Box 420, Mail Code 501-01
Trenton, NJ 08625-0420

Dear Mr. Boornazian:

This is in response to your request letter dated February 23, 2012, for a waiver of retroactivity to allow the State of New Jersey to acquire 71.04 acres of property located in Rockaway Township, Morris County, New Jersey. It is the State's intent to use the subject property to fulfill the Land and Water Conservation Fund State and Local Assistance Program's replacement requirements (36 CFR 59.3) for Section 6(f) conversions. This property may become available to New Jersey for acquisition before the State is able to complete a conversion proposal for National Park Service review and decision to convert 6(f) park land impacted by the Tennessee Gas Pipeline project making it necessary for the State to request this waiver.

We have reviewed and approved your waiver of retroactivity request. In accordance with LWCF requirements, granting this waiver does not assure NPS approval of this property for conversion replacement purposes. The issuance of this waiver only acknowledges the need for immediate action and is effective through September 30, 2013.

If you have any questions, please do not hesitate to contact me at (215) 597-1565 or by e-mail at jack_howard@nps.gov.

Sincerely,

Jack W. Howard

Jack W. Howard, Manager
State and Local Assistance Programs

cc:
Steve Jandoli

ATTACHMENT F

Environmental Assessment for LWCF 6(f) Replacement Land Block 20001, Lot 5, Rockaway Township, Morris County, New Jersey

Prepared for

New Jersey Department of Environmental Protection

July 2012

CH2MHILL®

1717 Arch Street Suite 4400
Philadelphia, PA 19103
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(215) 563-3828

Contents

Section **Page**

Attachments

Attachment A: Written request for sensitive species, New Jersey Department of Environmental Protection - Natural Heritage Program. June 18.

Figures

Acronyms and Abbreviations

%	percent
CFR	Code of Federal Regulations
EA	Environmental Assessment
ESI	Environmental Solutions & Innovations, Inc.
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FWS	United States Fish and Wildlife Service
LWCF	Land and Water Conservation Fund
NEPA	National Environmental Policy Act
NEUP	Northeast Upgrade Project
NHP	Natural Heritage Program
NJDEP	New Jersey Department of Environmental Protection
NJ SHPO	New Jersey's State Historic Preservation Office
NPS	National Park Service
PEM	palustrine emergent
PFO	palustrine forested
Project	Northeast Upgrade Project
ROW	rights-of-way
Tennessee	Tennessee Gas Pipeline Company, L.L.C.
TGP	Tennessee Gas Pipeline Company, L.L.C.
USACOE	United States Army Corps of Engineers
USDA-NRCS	United States Department of Agriculture-Natural Resources Conservation Service
USEPA	United States Environmental Protection Agency
WMA	Wildlife Management Area

Executive Summary

Tennessee Gas Pipeline Company, L.L.C. ("TGP" or "Tennessee") received a Certificate of Public Convenience and Necessity ("Certificate") from the Federal Energy Regulatory Commission ("FERC") authorizing it to construct, install, operate, and maintain the Northeast Upgrade Project ("NEUP" or "Project"), Docket No. CP11-161-000, 139 FERC ¶ 61,161 (2012). The Project involves pipeline looping and compression in New Jersey and Pennsylvania, including the two new natural gas pipeline looping segments that will traverse two parcels of State of New Jersey -owned land within Ringwood State Park, requiring replacement lands to be acquired to mitigate this loss.

As part of the of the Land and Water Conservation Fund ("LWCF") conversion process, the New Jersey Department of Environmental Protection ("NJDEP") has prepared an Environmental Assessment ("EA") to determine potential environmental consequences resulting from the acquisition of replacement lands. The purpose of the Proposed Replacement Land, as defined below, is to acquire a 6.19 acre parcel of land and dedicate it to New Jersey's Wildcat Ridge Wildlife Management Area ("WMA"), which will create new parkland in the northwest portion of the existing Wildcat Ridge WMA. This EA will be used by the National Park Service ("NPS") to evaluate the environmental impacts of the Proposed Replacement Land on the human and natural environment, and assist the affected public and decision-makers in understanding the context for the Proposed Alternative.

CHAPTER 1

Purpose, Need, Background

1.1 Background

The approved alignment of the Project will traverse two parcels of State of New Jersey-owned land within Ringwood State Park that are encumbered by Section 6(f)(3) of the LWCF Act (hereinafter referred to as the "Section 6(f) lands").[1] The size of the first conversion, located on Block 1101, Lot 5 in the Borough of Ringwood, Passaic County, New Jersey, is 0.34 percent ("%") of the total Section 6(f) lands; the size of the second conversion, located on Block 1, Lot 1 in the Township of Mahwah, Bergen County, New Jersey, is 0.67 % of the total Section 6(f) lands. As part of the construction of the NEUP and for ongoing operations and maintenance of its pipeline system, Tennessee will also be using Bear Swamp Road (L5 AR 80), a portion of which crosses a parcel that is encumbered by Section 6(f) of the LWCF Act.[2]

During the summer of 2011, Tennessee provided information to the NJDEP Green Acres Program about whether the use of these parcels would constitute a "conversion" under the LWCF Act. NJDEP reviewed this information, and provided it to the NPS, the entity with authority to determine conversions of LWCF lands. Representatives from NJDEP and Tennessee met with NPS on February 7, 2012, and had a subsequent conference call to discuss whether Tennessee's crossing of these parcels would constitute a conversion. On April 23, 2012, NPS determined that construction of the pipeline likely necessitates a conversion of the two parcels. The NPS concluded that the conversion would apply to both the new leased area for the pipeline right-of-way ("ROW") and the temporary work space needed during construction, and further concluded that Tennessee's use of Bear Swamp Road in the Borough of Ringwood would not constitute a conversion. Another unnamed access road (L5-AR 50) has been identified on Block 1101, Lot 5, which is to the east of the conversion area, but within the Section 6(f) boundary. NJDEP has determined that the pre-existing, conforming use of this road to access the existing pipeline ROW since the mid-1950s is not a conversion.

As replacement land for the total proposed conversion, Tennessee has identified and is moving forward with the purchase of, and with the intent to give to the State of New Jersey, a 6.19-acre portion of a larger parcel of land known as the "Ilac Property," or p/o Block 20001, Lot 5 on the tax map of Rockaway Township, New Jersey. The Ilac Property is directly adjacent to the Wildcat Ridge WMA and will be added to the State's WMA. See "Rockaway Township, Morris County, prepared by NJDEP, dated June 11, 2012" which is attached hereto and is referred to as Figure 5. If the NPS approves this Conversion Proposal, there will be no loss of open space available for recreational and conservation uses. The replacement property is of a sufficient size and possesses natural resources that are aimed at protecting biodiversity and quality of life.

In Resource Report 10 (TGP 2011e), Tennessee included an analysis of both major and minor route alternatives to its proposed route for the NEUP pipeline loops. The analysis was based on environmental and land use impacts, as well as permanent easement acquisitions and overall Project costs. In evaluating the routing options for the NEUP, Tennessee determined that, since there is an existing 300 Line pipeline in northwestern New Jersey, the new pipeline loops should be collocated within or adjacent to the existing pipeline ROW, to the maximum extent practicable, feasible, and legally permitted. The use of collocation is favored by the FERC and encouraged by the NJDEP, which has expressed a strong policy preference that expansion of lateral infrastructure projects should remain in or adjacent to existing ROWs, if such ROWs exist and are legally permitted. In reviewing the proposed pipeline alignment and whether Tennessee can avoid the impacted Section 6(f) encumbered lands within Loop 325 of the NEUP, Tennessee evaluated the both Section 6(f) boundaries.

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[1] 16 U.S.C. Sec. 460l-8(f)(3). A parcel that is encumbered by Section 6(f) means that it is located within a Section 6(f) boundary.

[2] The National Park Service and the New Jersey Department of Environmental Protection have determined that Tennessee's pre-existing, conforming use of Bear Swamp Road does not constitute a conversion.

Tennessee evaluated whether it could avoid Block 1101, Lot 5 altogether by completing a crossover of the pipeline to the south side of the ROW, which is outside of the Section 6(f) boundary. In fact, the pipeline looping segment was originally designed to be constructed entirely on the south side of the existing 300 Line pipeline (and thereby avoid the Section 6(f) boundary); however, the crossover to the north side of the existing 300 Line pipeline ROW was developed in order to avoid impacting a treatment plant and wells on the west side of Morris Road, and to reduce wetland impacts on L5 W010 and L5 W011. If the pipeline were to be constructed entirely to the south of the existing ROW and avoid the Section 6(f) boundary, there would be a net increase in wetland impacts and other impacts.

Tennessee also evaluated whether it could avoid the Section 6(f) boundary by constructing a portion of Loop 325 to the north into New York State, and then connecting to the existing Mahwah Meter Station in Bergen County, New Jersey, which is the terminus of the Tennessee pipeline system (see Figure 2). This alternative alignment would require a much longer pipeline, and would create significant environmental impacts to similar resources in New York State. The EA concluded that this route was not an environmentally preferable alternative when compared to the proposed route, which is collocated almost entirely within or adjacent to Tennessee's existing ROW, and the FERC adopted the EA recommendations in the certificate order authorizing the Project (see the FERC NEUP EA 2011, Section 3.3.4).

During the construction of the Project, there will be a temporary interruption of the use of the Ringwood State Park Halifax Trail, a hiking trail, which crosses Block 1, Lot 1 in Mahwah Township. This trail is addressed in the General Trails Crossing Plan, which is a plan designed to minimize impacts to recreational trails during construction of the NEUP. As provided in this Plan, Tennessee will provide alternative routes and will restore the trail impacted to its pre-construction condition to the maximum extent possible. The NJDEP has provided review for the General Trails Crossing Plan.

Two existing State single track trails, Mountain Bike Loop and Ringwood-Ramapo Trail, are located east and outside of the conversion area, but within the Section 6(f) boundary, on Block 1101, Lot 5 in Ringwood Borough. The Project does not cross the Mountain Bike Loop at any point either within or outside of the 6(f) boundary. The Ringwood-Ramapo Trail is crossed by the Project, but such crossing occurs outside of the Section 6(f) boundary. Like the Halifax Trail, these trails are addressed in the General Trails Crossing Plan. Details on the proposed conversion properties and proposed replacement parcel are provided in Chapter 2, Description of Alternatives, of this EA.

1.2 Purpose and Need

NJDEP has prepared this EA to assess the environmental impacts of the approval of the Proposed Replacement Land as presented in the LWCF Act Section 6(f)(3) application. The EA has been prepared in compliance with the National Environmental Policy Act ("NEPA") (Title 40 of the Code of Federal Regulations ["CFR"], Parts 1500-1508) and the LWCF Manual Chapter 4(B). This EA solely evaluates the environmental impacts associated with placing the replacement parcel into conservation as part of the Wildcat Ridge WMA. As part of the certificate application process for the Project, a separate EA was prepared by the FERC in 2011 for the entire Project, which included environmental impact analyses for the two conversion areas and boundaries of the 6(f) lands. Please refer to FERC Docket No. CP11-161-000 and the corresponding LWCF Proposal Description and Environmental Screening Form for detailed environmental analyses of the conversion areas.

The EA serves to provide a framework for the NPS to evaluate the environmental consequences of the proposed action on the human environment. The environmental review of the replacement parcel included a site reconnaissance field visit on June 21, 2012 and a desktop review of relevant environmental resources found on the replacement parcel.

NJDEP's principal purposes in preparing this EA are to:

- Identify and assess potential impacts on the natural and human environmental that would result from NPS approval of the replacement parcel as part of the NJDEP conversion proposal (referred to as the "Proposed Replacement Land"); and
- Assess reasonable alternatives to the Proposed Replacement Land that would avoid or minimize adverse effects to the natural and human environment.

The NJDEP is the lead agency for the preparation of this EA. The United States Army Corps of Engineers ("USACOE") and the United States Fish and Wildlife Service ("FWS") were not consulted as federal cooperating agencies in regards to the replacement parcel due to a lack of environmental impacts and controversy associated with the acquisition of the replacement lands as part of the federal approval of the LWCF proposal. However, the USACOE and FWS were federal cooperating agencies in the FERC's EA process in 2011. Please refer to FERC Docket No. CP11-161-000 for details on these consultations.

CHAPTER 2

Description of Alternatives

By way of background, Tennessee undertook an extensive needs and alternative routing analysis for the NEUP as part of the process for applying for a FERC certificate for the Project. The goal of that analysis was to determine whether the NEUP was, in fact, needed, and if so, whether the route proposed by Tennessee minimized impacts to the environment and to landowners to the greatest extent possible.

As required by the FERC regulations implementing the NEPA, 18 CFR § 380.12(l), Tennessee included Resource Report 10 (Alternatives) as part of the Environmental Report for the Project, submitted with its certificate application for the Project in Docket No. CP11-161-000 (see TGP 2011e). The FERC also considered alternatives in the NEUP EA, as did the NJDEP when it evaluated whether to approve the 25-year lease of State of New Jersey-owned lands to Tennessee. An Alternatives Analysis was included in the State House Commission Summary Sheet that was submitted to the New Jersey State House Commission for the lease approval.

The route certificated by the FERC, which will cross State of New Jersey-owned lands pursuant to a lease approved by the NJDEP and the New Jersey State House Commission, will impact portions of the two parcels of land identified below, which are encumbered by Section 6(f) of the LWCF Act:

- Block 1101, Lot 5 in the Borough of Ringwood, Passaic County, New Jersey; and
- Block 1, Lot 1 in the Township of Mahwah, Bergen County, New Jersey.

Both parcels are located within Ringwood State Park, located in Passaic and Bergen Counties. See "Conversion Parcels, Site Location Map, Block 1101 Lot 5 & Block 1 Lot 1, Project # 146293, prepared by SGC Engineering, LLC, dated June 2012," which is attached hereto and referred to as Figure 1.

The area of conversion on Block 1101, Lot 5 is a total of 1.22 acres (0.248 acres for the new leased area and 0.972 acres of temporary workspace). The proposed conversion is depicted on a map entitled, "Conversion Parcel Detail, Block: 1101, Lot: 5, Project # 146293, prepared by SGC Engineering, LLC, dated June 2012," which is attached hereto and referred to as Figure 3. Access Road L5-AR-50 is shown on Figure 3, however, for the reasons provided above, the use of this road does not constitute a conversion.

The area of conversion on Block 1, Lot 1 is a total of 4.971 acres (1.236 acres for the new leased area and 3.735 acres of temporary workspace). The proposed conversion is depicted on a map entitled, "Conversion Parcel Detail, Block: 1, Lot: 1, Project # 146293, prepared by SGC Engineering, LLC, dated June 2012," which is attached hereto and referred to as Figure 4.

The total area sought to be converted on Block 1101, Lot 5 (Ringwood) and Block 1, Lot 1 (Mahwah) as part of the Conversion Proposal is 6.19 acres. Accordingly, NJDEP has identified a 6.19-acre parcel of land, which is a part of larger property known as the "Ilac" Property. The Ilac Property, as shown in Figure 5, is being proposed as replacement land to be preserved, such that there will not be a net loss of lands protected under Section 6(f) of the LWCF Act.

For the purposes of this EA, the following alternatives were evaluated:

- The No Action Alternative; and
- The Proposed Alternative.

The evaluated alternatives are discussed in further detail below.

2.1 No Action Alternative

NJDEP has identified the Ilac Property as an acquisition priority due to its high quality natural resources, including wooded uplands, streams, wooded wetlands, and habitat for a variety of threatened and endangered species. If this property were not preserved, then this property may be vulnerable to development pressures. Because this property possesses such valuable natural resources, which have been identified and confirmed by NJDEP, no other replacement properties were analyzed as part of this EA.

2.2 Proposed Alternative

NJDEP proposes to replace the encumbered Section 6(f) lands (portions of Block 1101, Lot 5 and Block 1, Lot 1 in Ringwood State Park) with the 6.19-acre replacement parcel (Block 20001, Lot 5), which is located directly adjacent to the north-northwest of the Wildcat Ridge WMA in Rockaway Township, Morris County, New Jersey. The replacement parcel, in relationship to the two conversion areas, is depicted in a map entitled, "Overview Map, Conversion Parcels - Ringwood Borough, Passaic County and Mahwah Township, Bergen County and Replacement Parcel - Rockaway Township, Morris County, prepared by SGC Engineering, LLC, dated June 2012," and is attached hereto as Figure2.

The replacement parcel will be added to the Wildcat Ridge WMA, which is a 3,745-acre parcel known for its "wildlife with wings" feature. At its southern end, the Wildcat Ridge WMA is home to New Jersey's largest bat hibernacula. The Wildcat Ridge WMA is also known as an official Hawk Migration Association of North America "hawkwatch" site and contains a Hawk Watch Overlook observation platform. Two annual seasonal migration flights, spring (February 15 thru May 15) and fall (August 15 thru November 15) are monitored each year at the Wildcat Ridge WMA and reported to biologists for analysis. Approximately 18,000 raptors can be seen in the fall, and 3,000 in the spring (Wildcat Ridge Hawkwatch, No Date). The Wildcat Ridge WMA has three trails that form a 2.2 mile loop.

2.2.1.1 Description of Parkland Proposed for Replacement (Ilac Property: Block 20001, Lot 5)

The proposed replacement site is located approximately 18.5 miles from the conversion area at Block 1101, Lot 5 and 17.5 miles from the conversion area at Block 1, Lot 1 and is depicted in Figure 5, entitled, "Replacement Parcel, p/o Block: 20001, Lot: 5, Rockaway Township, Morris County, prepared by NJDEP, dated June 11, 2012".

Field reconnaissance of the replacement parcel was conducted on June 21, 2012 and revealed dominant canopy and understory habitat. Dominant canopy species observed were American beech, red maple, white oak, red oak, and chestnut oak; and dominant understory species observed were poison ivy (*Toxicodendron radicans*), Virginia creeper (*Parthenocissus quinquefolia*), lowbush blueberry (*Vaccinium angustifolium*), and various moss and fern species. The majority of the trees were noted to be healthy with relatively straight trunks and narrow, but full crowns. In addition to forested and understory habitats, the replacement parcel sloped upward towards the southwest and included rocky outcrops.

The NJDEP Natural Heritage Program ("NHP") was consulted in regard to the presence of threatened and endangered species within the proposed replacement parcel in June 2012 (Attachment A). The NHP identified numerous state-threatened and state-endangered species: barred owl (*Strix varia*), golden-winged warbler (*Vermivora chrysoptera*), northern goshawk (*Accipiter gentilis*), red-headed woodpecker (*Melanerpes erythrocephalus*), red-shouldered hawk (*Buteo lineatus*), bobcat (*Lynx rufus*), timber rattlesnake (*Crotalus horridus*), wood turtle (*Glyptemys insculpta*), Indiana bat (*Myotis sodalis*), and Robbin's pondweed (*Potamogeton robbinsii*) (Attachment A). The Indiana bat is also a federally-listed endangered species. Several species of state special concern are also listed within the replacement parcel. These are blackburnian warbler (*Dendroica fusca*), black-throated green warbler (*Dendroica virens*), blue-headed vireo (*Vireo solitarius*), Canada warbler (*Wilsonia Canadensis*), cerulean warbler (*Dendroica cerulean*), Cooper's hawk (*Accipiter cooperii*), hooded warbler (*Wilsonia citrine*), veery (*Catharus fuscescens*), winter wren (*Troglodytes troglodytes*), wood thrush (*Hylocichla mustelina*), worm-eating warbler (*Helmitheros vermivorum*), arrowhead spiketail (*Cordulegaster obliqua*), brush-tipped emerald (*Somatochlora walshii*), New England bluet (*Enallagma laterale*), ski-tailed emerald (*Somatochlora elongate*), spatterdock darner (*Rhionaeschna mutate*), Williamson's emerald (*Somatochlora williamsoni*), and

northern copperhead (*Agkistrodon contortrix mokasen*) (Attachment A). Field reconnaissance concentrated on identifying habitat and/or evidence of the above-listed species.

During site reconnaissance, a hawk was observed flying over the replacement site. The species could not be confirmed; however, the habitat present (closed canopy of tall trees with open sub-canopy and variable amounts of understory cover) appeared to be suitable for a number of raptor species (ESI 2011a). In addition, the NHP listed timber rattlesnakes and northern copperheads as being on the replacement site (Attachment A). Per Environmental Solutions & Innovations, Inc.'s (ESI's) 2011 Timber Rattlesnake Hibernacula Survey report, timber rattlesnakes and northern copperheads are found in northern New Jersey in rocky, forested hillsides, similar to the habitat observed on the replacement parcel (ESI 2011b).

This NHP consultation also listed that potential vernal habitat was located on the replacement site (Attachment A). The mapped potential vernal habitat was not directly observed during site reconnaissance due to seasonal constraints, as vernal pools are typically only full of water during the winter and spring months (United States Environmental Protection Agency [USEPA] 2012c). Vernal habitats are suitable as breeding grounds for a large variety of salamanders and frogs, some of them rare and endangered. Field observations noted a small isolated depression in the upland area adjacent to the replacement site, which was approximately 10-feet in diameter and contained decaying leaf litter; no amphibians or reptiles were observed in or near this depression. Potential vernal habitat may be present on the replacement site; however, a vernal pool survey conducted by a trained vernal pool surveyor would need to be performed to confirm or refute this habitat type's presence on the replacement site.

The environmental resources observed on the replacement parcel are equal to, if not greater than, those observed on the conversion properties. Although no recreational facilities currently exist on the replacement parcel, its usefulness as such, due to its size and adjacency to the Lake Ames recreational area, are equal to that of the conversion parcels. In addition, given the replacement parcel's adjacency to the Wildcat Ridge WMA, the same populations that utilize this WMA would conceivably also be served by the replacement parcel. No facilities are located or proposed to be located within the boundaries of the replacement parcel.

Tennessee is presently negotiating with the current owner of the Ilac Property and intends on entering into an option agreement within the next several weeks of the date of this EA. If the NPS selects the proposed alternative, the Ilac Property will be transferred to NJDEP, the Division of Fish and Wildlife, and be managed as part of the Wildcat Ridge WMA in accordance with the provisions of Section 6(f) of the LWCF Act.

CHAPTER 3

Affected Environment

This chapter provides a detailed description of the current state of resources on the replacement parcel that serve as baseline information upon which impacts will be compared in Chapter 4 of this EA. The analysis area boundary for each resource area is the 6.19-acre replacement parcel, unless otherwise stated within each resource section. If NPS approves the Conversion Proposal, then the resources on this replacement parcel will be protected under Section 6(f) of the LWCF Act. No resources on the replacement parcel are expected to experience any environmental impact as part of the conversion process. Generally speaking, the replacement parcel consists of undeveloped woodlands that are indistinguishable from the WMA that they border.

3.1 Air Quality

3.1.1 Existing Conditions

Although Morris County is located in a $PM_{2.5}$ Nonattainment Area, the Project conforms to the Clean Air Act Amendments of 1990 and no new sources of pollution will be added to the replacement property (USEPA 2012b). Existing buildings or other stationary sources of air pollution do not exist within or directly adjacent to the replacement parcel. No air quality testing or analysis was conducted and performed for the replacement parcel.

3.2 Cultural Resources

3.2.1 Analysis Area Boundary

The analysis area boundary for cultural resources included the 6.19 acres of the replacement parcel (desktop review and site reconnaissance), as well as the surrounding area within one-quarter-mile radius of the replacement parcel (desktop review only).

3.2.2 Existing Conditions

Historic sites or resources were not found to be located within the boundaries of the replacement parcel based upon review of the NJDEP's (2012) i-MapNJ website and a review of resources on New Jersey's State Historic Preservation Office's ("NJ SHPO") website. No National Register-eligible or -listed resources were identified within the replacement parcel. In addition, review of NJ SHPO's website data did not result in any known historic or archaeological sites present within the replacement parcel. Furthermore, there are no sensitive cultural resources within one-quarter-mile of the replacement parcel.

Field testing or digs were not conducted within the replacement parcel during the field reconnaissance in June 2012.

3.3 Ecosystems

3.3.1 Existing Conditions

Dominant canopy and understory species were observed during site reconnaissance on June 21, 2012. Dominant canopy species include American beech, red maple, white oak, red oak, and chestnut oak. Dominant understory species observed were poison ivy, Virginia creeper, lowbush blueberry, and various moss and fern species. In addition to forested and understory habitats, the replacement parcel sloped upward towards the southwest and included rocky outcrops.

In addition to field reconnaissance, the NJDEP NHP was consulted in regard to the presence of threatened and endangered species within the proposed replacement parcel in June 2012 (Attachment A). The NHP identified numerous state-threatened and state-endangered species: barred owl, golden-winged warbler, northern

goshawk, red-headed woodpecker, red-shouldered hawk, bobcat, timber rattlesnake, wood turtle, Indiana bat, and Robbin's pondweed (Attachment A). The Indiana bat is also a federally-listed endangered species.

Several species of state special concern are also listed within the replacement parcel. These are blackburnian warbler, black-throated green warbler, blue-headed vireo, Canada warbler, cerulean warbler, Cooper's hawk, hooded warbler, veery, winter wren, wood thrush, worm-eating warbler, arrowhead spiketail, brush-tipped emerald, New England bluet, ski-tailed emerald, spatterdock darner, Williamson's emerald, and northern copperhead (Attachment A).

In addition, the NJDEP NHP identified potential vernal pool habitat adjacent to the boundaries of the replacement parcel. Field observations from June 21, 2012 noted a small isolated depression in an upland area adjacent to the replacement site. The depression was approximately 10-feet in diameter and contained decaying leaf litter; no amphibians or reptiles were observed in or near this depression. Potential vernal habitat may be present on the replacement site.

The state endangered plant species identified by the NJDEP NHP (Robbin' pondweed) is found directly adjacent to the replacement parcel in the southern portion of Lake Ames (Attachment A).

Habitat surveys were not completed within the replacement parcel as part of this study; however, field reconnaissance on June 21, 2012 confirmed that habitats suitable for the above-listed species are located within the replacement parcel.

3.4 Environmental Justice

3.4.1 Analysis Area Boundary

The analysis area for this resource is the general community surrounding the replacement parcel that could potentially be affected by the Section 6(f) conversion proposal.

3.4.2 Existing Conditions

Field reconnaissance on June 21, 2012 confirmed that no residences exist within the proposed replacement parcel. As a result of the conversion of Section 6(f) lands and acquisition of the replacement park property, no adverse human health or environmental effects/impacts on minority and/or low-income communities or Native American tribes will occur.

3.5 Floodplains

3.5.1 Existing Conditions

Based on the 1986 Federal Emergency Management Agency ("FEMA") Flood Insurance Rate Map (FIRM, panel #3403600007B), the proposed replacement parcel is not located within the 100-year floodplain.

3.6 Geology and Soils

3.6.1 Existing Conditions

According to the United States Department of Agriculture-Natural Resources Conservation Service's ("USDA-NRCS") Soil Data Mart Web Soil Survey information for the Morris County Soil Survey Area (USDA-NRCS 2008), soils within the replacement site area are mapped as Hibernia loam, 3 to 15 % slopes, stony (HhmCa); Ridgebury loam, 0 to 8 % slopes, extremely stony (RkgBc); and Rockaway sandy loam, 8 to 15 % slopes, very stony (RobCb). The entire replacement site exhibits slight erosion potential. Soil drainage within the boundaries of the replacement parcel varies from well drained (RobCb), to somewhat poorly drained (HhmCa), and poorly drained (RkgBc). These soils have low to slight compaction potential and have vastly different depths to the water table: 0 to 6 inches (RkgBc), 6 to 18 inches (HhmCa), and 24 to 36 inches (RobCb).

No soil analysis was conducted within the replacement parcel.

3.7 Hazardous Waste

3.7.1 Analysis Area Boundary

Regulatory databases were reviewed for the replacement parcel to determine if any potential hazardous waste sites exist on the replacement parcel and/or within a one-mile radius of the replacement parcel.

3.7.2 Existing Conditions

Based on desktop review (NJDEP 2012; USEPA 2012a), no known hazardous substances, waste, underground storage tanks or structures, or improperly sealed or abandoned wells were identified within the boundaries of the replacement parcel, nor were these features identified during the field survey on June 21, 2012 or within a one-mile radius of the replacement parcel. However, a large brush pile, which included household trash that had been dumped along the side of the road, was observed to the south of Snake Hill Road along the northwestern edge of the replacement parcel. No evidence of soil staining or odors was observed in that location or any other locations within the replacement parcel. No formal Property Transfer Site Assessment was completed for the replacement parcel.

3.8 Land Use

3.8.1 Existing Conditions

The replacement parcel is currently vacant, zoned R5-Acre which is a Single Family Planned Residential Development District, and under private ownership. TGP intends to acquire a larger portion of the Ilac Property and, if NPS selects the Proposed Alternative, transfer ownership of 6.19 acres to the NJDEP, Division of Fish and Wildlife. NJDEP will add this parcel to the Wildcat Ridge WMA and manage it in accordance with the provisions of Section 6(f) of the LWCF Act.

3.9 Noise

3.9.1 Existing Conditions

The Wildcat Ridge WMA is considered a sensitive noise receptor and is located directly adjacent to the Project. Because the replacement land will become a managed part of the Wildcat Ridge WMA, it is assumed that it too is a sensitive noise receptor. As the acquisition of the replacement land consists solely of putting vacant forested land into conservation as part of the Wildcat Ridge WMA, there will be no noise generating activities (i.e., construction, operation, or maintenance of a project).

3.10 Parks and Recreation

3.10.1 Analysis Area Boundary

Although the proposed replacement land is not contiguous with the remaining Section 6(f)(3) encumbered parkland in Ringwood State Park, the proposed replacement land is contiguous with the existing Wildcat Ridge WMA. The proposed 6.19 acre replacement land will be added to this 3,745-acre WMA, and will also be known as the Wildcat Ridge WMA. The analysis area boundary is the 6.19 acres of the proposed replacement parcel.

3.10.2 Existing Conditions

The proposed replacement site is located approximately 18.5 miles from the conversion area at Block 1101, Lot 5 and 17.5 miles from the conversion area at Block 1, Lot 1 in Rockaway Township, Morris County, New Jersey. Based on existing mapping (Google Earth 2010) and field verification on June 21, 2012, no recreational amenities currently exist within the boundaries of the replacement parcel; however, a hiking trail running in the north-south direction is directly adjacent to the west of the replacement parcel. The Lake Ames recreation area is across

Snake Hill Road to the north of the replacement parcel, which provides off-road parking along Snake Hill Road that may be utilized by visitors to the replacement site as no new roads, facilities, or points of access are proposed for the replacement parcel.

The environmental resources observed on the replacement parcel are equal to if not greater than those observed on the conversion properties. Although no recreational facilities currently exist on the replacement parcel, its usefulness as such, due to its size and adjacency to the Lake Ames recreational area and Wildcat Ridge WMA, is equal to that of the conversion parcels. Given the replacement parcel's adjacency to two established recreational areas, the same populations that utilize the Wildcat Ridge WMA and the Lake Ames recreational area would conceivably also be served by the replacement parcel. The replacement parcel would function as an extension of the Wildcat Ridge WMA and be placed under LWCF encumbrances. No facilities or other improvements are being proposed for the replacement parcel.

3.11 Public Services

3.11.1 Existing Conditions

A wide range of public services and facilities are offered in Morris County, New Jersey, including hospitals, full-service law enforcement, paid and volunteer fire departments, and schools. As the acquisition of the replacement land consists solely of putting vacant forested land into conservation as part of the Wildcat Ridge WMA, there will be no increase in a need for additional public services due to an influx of non-local workers.

3.12 Socioeconomic

3.12.1 Existing Conditions

Currently no one is employed by, living on, or generating income from the replacement parcel. While there are residences to the northeast of the replacement property (Google Earth, 2012), no residences exist in the immediate area of the proposed replacement property and no residences would be displaced. The proposed acquisition of replacement land does not require any construction, improvements, or changes, other than ownership of the property, within the boundaries of the replacement parcel.

3.13 Visual Quality

3.13.1 Existing Conditions

The current visual quality of the replacement parcel is considered high quality, as it is dominated by canopy and understory habitat, as well as rocky outcrops, all of which appeared undisturbed during the June 21, 2012 field reconnaissance. As the acquisition of replacement land consists solely of putting vacant forested land into conservation as part of the Wildcat Ridge WMA, there will be no changes in the visual quality of the replacement parcel.

3.14 Water Resources

3.14.1 Existing Conditions

The replacement parcel is located within the Rockaway River Area Aquifer System, a sole source aquifer. The total population that depends on this aquifer is approximately 135,000, with an estimated potable water usage of 12 million gallons per day. Public water supply systems drawing from the unconsolidated Quaternary deposits supply an estimated 90,000 persons within this region. Within the Rockaway River drainage basin, individual wells drawing from the unconsolidated aquifer deposits, as well as bedrock aquifers, supply an estimated 30,000 persons with 2.7 million gallons per day. The Unconsolidated Quaternary Aquifer supplies greater than 75 % of the potable water in the designated area. The shallow nature of the aquifer and the permeability of the overlying soils make the aquifer readily susceptible to certain types of contamination (USEPA 2010).

Based on review of the United States Geological Survey (USGS) Boonton (1995) and Dover (1997) topographic mapping and the NJDEP i-MapNJ website (NJDEP 2012), no streams were identified on the property. Field reconnaissance revealed a small flow of surface water that moved in an eastern direction across the northern end of the replacement parcel, toward Hibernia Brook. It appeared to be hydraulically connected to the Lake Ames Dam, which is to the far west of the replacement parcel. As the surface water flow appeared to be associated with a wetland, there was no defined channel or bank present.

The proposed replacement parcel does not contain tidal waters, marine resources, or estuarine resources (NJDEP 2012).

3.15 Wetlands

3.15.1 Existing Conditions

Based on the National Wetlands Inventory map (FWS 2012) no wetlands are mapped within or adjacent to the proposed replacement parcel. Field reconnaissance revealed that an area on the northern portion of the replacement parcel contained hydrophytic vegetation, which is characteristic of wetlands. This area was located within the same corridor where the small flow of surface water connecting to Hibernia Brook was observed.

CHAPTER 4

Environmental Impacts

This chapter analyzes the degree to which the resources described in Chapter 3 will be impacted by using the 6.19 acre parcel as a replacement for the converted LWCF lands .

4.1 Air Quality

No existing buildings or other stationary sources of air pollution exist within or directly adjacent to the replacement parcel, nor will any infrastructure be built on the replacement property; therefore, no impacts to air quality are anticipated.

4.2 Cultural Resources

There are no known historic sites or resources located within the boundaries of the replacement parcel. Furthermore, there are no sensitive cultural resources within one-quarter-mile of the replacement parcel. Therefore, adverse impacts to cultural resources are not anticipated as a result of the acquisition of the replacement parcel.

4.3 Ecosystems

As a result of the acquisition of the replacement property, no impacts to threatened and endangered species or sensitive ecosystems/habitats will occur. The land will be acquired and dedicated to the Wildcat Ridge WMA for use as parkland. In addition, the acquisition of the replacement land will not create migratory pathways for, or result in, the introduction or promotion of invasive species.

4.4 Environmental Justice

As a result of the acquisition of the replacement land, no adverse human health or environmental effects/impacts on minority and/or low-income communities or Native American tribes will occur. Therefore, no impacts on environmental justice are anticipated as a result of the acquisition of replacement land.

4.5 Floodplains

As the replacement parcel is not located within the 100-year floodplain (FEMA 1986), no impacts to floodplains will occur as a result of the acquisition of replacement land.

4.6 Geology and Soils

As a result of the property being acquired by Wildcat Ridge WMA for conservation, excavations and/or other earth-moving activities are not proposed. The property will remain in its current condition; therefore, no impacts are anticipated to geology and/or soils as a result of the acquisition of replacement land.

4.7 Hazardous Waste

Based on the nature of the acquisition of replacement land, there is no potential for adverse effects resulting from hazardous substances.

4.8 Land Use

The change in land use from zone R5-Acre (Single Family Planned Residential Development District) to management by the Wildcat Ridge WMA as conservation land will not result in a negative impact to land use/ownership and will result in a benefit to community livability and recreation.

4.9 Noise

As the acquisition of replacement land consists solely of putting vacant forested land into conservation as part of the Wildcat Ridge WMA, there will be no noise generating activities (i.e., construction, operation, or maintenance of a project). Therefore, no changes in noise levels are anticipated by the proposed acquisition of this parcel.

4.10 Parks and Recreation

The replacement land that is intended to be added to the Wildcat Ridge WMA would offset the lands lost at the conversion parcels and therefore, impacts are considered negligible, if not beneficial. The acquisition of replacement land would provide an added benefit by providing nearby communities with additional access to Wildcat Ridge WMA.

4.11 Public Services

The replacement parcel is being dedicated to the Wildcat Ridge WMA as-is in its current condition. No construction or other improvements will be done on the property that would cause a need for increased public services; therefore, no impacts to public services would occur as a result of the acquisition of replacement land.

4.12 Socioeconomic

The proposed replacement land will have no disproportionately adverse effects on low income and/or minority communities, and no residences would be displaced. Therefore, no socioeconomic impacts will result from the acquisition of replacement land.

4.13 Visual Quality

No construction, disturbance, or permanent structures will be associated with the replacement property as a result of the conversion of the Section 6(f) lands. Therefore, visual quality will not be impacted.

4.14 Water Resources

Due to the nature of the acquisition of the replacement land, the proposed conversion would not have an adverse impact on stream flow characteristics, local hydrology, aquifers beneath the site, marine/tidal resources, or water quality on the replacement parcel.

4.15 Wetlands

Due to the nature of the acquisition of the replacement land, the proposed conversion would not have an adverse impact on wetlands on the replacement parcel.

4.16 Irreversible and Irretrievable Commitment of Resources

The proposed replacement land does not include the construction of any buildings, roads or any other improvements. The parcel shall remain in its current condition; therefore, the acquisition and transfer to NJDEP's Division of Fish and Wildlife is not anticipated to have any adverse impacts on the replacement land. Due to the fact that the replacement land will be dedicated parkland, in terms of alternative uses for the site, the proposed dedication is the best use, as it is rich with environmental resources and wildlife.

Since improvements are not being proposed, by placing this land under Section 6(f) protection, development pressures will be removed and the land will be preserved. Should circumstances change, the land will be available in its current state for later use by future generations.

CHAPTER 5

Coordination and Consultation

This chapter lists persons, organizations and agencies contacted for information and for identifying important issues, developing alternatives, or analyzing impacts in relation to the replacement parcel. A list of preparers and their qualifications is also included.

5.1 Consultation and Coordination with Other State and Federal Agencies and Native American Tribal Governments

The NJDEP NHP was consulted in regard to the presence of threatened and endangered species within the proposed replacement parcel in June 2012 (Attachment A). Due to the lack of environmental impacts and controversy associated with the proposed replacement land, no other state or federal agencies, or Native American tribal governments were consulted in preparation of this EA.

5.2 List of Preparers

Preparers of this EA are listed below:

- Sarah Anderson, Environmental Planner, CH2M HILL, Environmental Scientist for Energy Sector Projects
- Deborah Haines, Environmental Scientist, CH2M HILL, Environmental Scientist for Energy Sector Projects
- Nicole Maslanich, Environmental Scientist, CH2M HILL, Environmental Scientist for Energy Sector Projects

CHAPTER 6

References

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ENVIRONMENTAL ASSESSMENT

ATTACHMENT A

State of New Jersey

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Division of Parks and Forestry
Mail Code 501-04
ONLM -Natural Heritage Program
P.O. Box 420
Trenton, NJ 08625-0420
Tel. #609-984-1339
Fax. #609-984-1427

BOB MARTIN
Commissioner

June 18, 2012

Nicole Maslanich
CH2M Hill
1717 Arch Street, Suite 4400
Philadelphia, PA 19103

Re: NEUP-LWCF 6(f) (Block 20001, Lot 5)

Dear Ms. Maslanich:

Thank you for your data request regarding rare species information for the above referenced project site in Rockaway Township, Morris County.

Searches of the Natural Heritage Database and the Landscape Project (Version 3.1) are based on a representation of the boundaries of your project site in our Geographic Information System (GIS). We make every effort to accurately transfer your project bounds from the topographic map(s) submitted with the Request for Data into our Geographic Information System. We do not typically verify that your project bounds are accurate, or check them against other sources.

We have checked the Landscape Project habitat mapping and the Biotics Database for occurrences of any rare wildlife species or wildlife habitat on the referenced site. The Natural Heritage Database was searched for occurrences of rare plant species or ecological communities that may be on the project site. Please refer to Table 1 (attached) to determine if any rare plant species, ecological communities, or rare wildlife species or wildlife habitat are documented on site. A detailed report is provided for each category coded as 'Yes' in Table 1.

We have also checked the Landscape Project habitat mapping and Biotics Database for occurrences of rare wildlife species or wildlife habitat in the immediate vicinity (within ¼ mile) of the referenced site. Additionally, the Natural Heritage Database was checked for occurrences of rare plant species or ecological communities within ¼ mile of the site. Please refer to Table 2 (attached) to determine if any rare plant species, ecological communities, or rare wildlife species or wildlife habitat are documented within the immediate vicinity of the site. Detailed reports are provided for all categories coded as 'Yes' in Table 2. These reports may include species that have also been documented on the project site.

The Natural Heritage Program reviews its data periodically to identify priority sites for natural diversity in the State. Included as priority sites are some of the State's best habitats for rare and endangered species and ecological communities. Please refer to Tables 1 and 2 (attached) to determine if any priority sites are located on or in the vicinity of the site.

A list of rare plant species and ecological communities that have been documented from Morris County can be downloaded from http://www.state.nj.us/dep/parksandforests/natural/heritage/countylist.html. If suitable habitat is present at the project site, the species in that list have potential to be present.

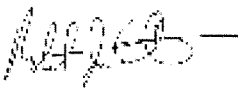
Status and rank codes used in the tables and lists are defined in EXPLANATION OF CODES USED IN NATURAL HERITAGE REPORTS, which can be downloaded from http://www.state.nj.us/dep/parksandforests/natural/heritage/nhpcodes_2010.pdf.

If you have questions concerning the wildlife records or wildlife species mentioned in this response, we recommend that you visit the interactive NJ-GeoWeb website at the following URL, http://www.state.nj.us/dep/gis/geowebsplash.htm or contact the Division of Fish and Wildlife, Endangered and Nongame Species Program at (609) 292-9400.

PLEASE SEE 'CAUTIONS AND RESTRICTIONS ON NHP DATA', which can be downloaded from http://www.state.nj.us/dep/parksandforests/natural/heritage/newcaution2008.pdf.

Thank you for consulting the Natural Heritage Program. The attached invoice details the payment due for processing this data request. Feel free to contact us again regarding any future data requests.

Sincerely,



Robert J. Cartica
Administrator

c: NHP File No. 12-4007485-1507

Mail Code 501-04
Department of Environmental Protection
Division of Parks and Forestry
Office of Natural Lands Management
PO Box 420 Trenton, New Jersey 08625-0420
(609) 984-1339 FAX (609) 984-1427

Invoice

Invoice

DATE	INVOICE #
June 18, 2012	1507

BILL TO
CH2M Hill 1717 Arch Street, Suite 4400 Philadelphia, PA 19103

Make check payable to
Office of Natural Lands Management
and forward with a copy of this statement to
Mail Code 501-04
Office of Natural Lands Management
PO Box 420
Trenton, New Jersey 08625-0420

P.O. NO.	TERMS	PROJECT

QUANTITY (hrs.)	DESCRIPTION	RATE (per hr.)	AMOUNT
1	Charge for Natural Heritage Database search for rare species and ecological communities locational Information. Project 12-4007485-1507	$70.00	$70.00
Nicole Maslanich NEUP-LWCF 6(f) (Block 20001, Lot 5)		**Total**	$70.00

Table 1: On Site Data Request Search Results (7 Possible Reports)

Rare Plants/Ecological Communities Possibly On Site:	No
Rare Plants/Ecological Communities On Site/Immediate Vicinity:	No
Natural Heritage Priority Sites On Site:	No
Landscape 3.1 Species Based Patches On Site:	Yes
Landscape 3.1 Vernal Pool Habitat On Site:	Yes
Landscape 3.1 Stream/Mussel Habitat On Site:	No
Other Animals Tracked by ENSP On Site:	No

Rare Wildlife Species or Wildlife Habitat on the Project Site Based on Search of Landscape Project 3.1 Species Based Patches

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection	State Protection	Grank	Srank
Aves								
	Barred Owl	Strix varia	Breeding Sighting	3	NA	State Threatened	G5	S2B,S2N
	Barred Owl	Strix varia	Non-breeding Sighting	3	NA	State Threatened	G5	S2B,S2N
	Blackburnian Warbler	Dendroica fusca	Breeding Sighting	2	NA	Special Concern	G5	S3B
	Black-throated Green Warbler	Dendroica virens	Breeding Sighting	2	NA	Special Concern	G5	S3B
	Blue-headed Vireo (Solitary Vireo)	Vireo solitarius	Breeding Sighting	2	NA	Special Concern	G5	S3B
	Canada Warbler	Wilsonia canadensis	Breeding Sighting	2	NA	Special Concern	G5	S3B
	Cerulean Warbler	Dendroica cerulea	Breeding Sighting	2	NA	Special Concern	G4	S3B,S3N
	Cooper's Hawk	Accipiter cooperii	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Cooper's Hawk	Accipiter cooperii	Nest	2	NA	Special Concern	G5	S3B,S4N
	Golden-winged Warbler	Vermivora chrysoptera	Breeding Sighting	4	NA	State Endangered	G4	S1B,S3N
	Hooded Warbler	Wilsonia citrina	Breeding Sighting	2	NA	Special Concern	G5	S3B
	Northern Goshawk	Accipiter gentilis	Nest	4	NA	State Endangered	G5	S1B,S3N

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection	State Protection	Grank	Srank
	Red-headed Woodpecker	Melanerpes erythrocephalus	Breeding Sighting	3	NA	State Threatened	G5	S2B,S2N
	Red-shouldered Hawk	Buteo lineatus	Breeding Sighting	4	NA	State Endangered	G5	S1B,S3N
	Red-shouldered Hawk	Buteo lineatus	Nest	4	NA	State Endangered	G5	S1B,S3N
	Veery	Catharus fuscescens	Breeding Sighting	2	NA	Special Concern	G5	S3B
	Winter Wren	Troglodytes troglodytes	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Wood Thrush	Hylocichla mustelina	Breeding Sighting	2	NA	Special Concern	G5	S3B
	Worm-eating Warbler	Helmitheros vermivorum	Breeding Sighting	2	NA	Special Concern	G5	S3B
Insecta								
	Arrowhead Spiketail	Cordulegaster obliqua	Breeding/Courtship	2	NA	Special Concern	G4	S3
	Arrowhead Spiketail	Cordulegaster obliqua	Occupied Habitat	2	NA	Special Concern	G4	S3
	Brush-tipped	Somatochlora walshii	Occupied Habitat	2	NA	Special Concern	G5	S3
	New England Bluet	Enallagma laterale	Foraging	2	NA	Special Concern	G3G4	S3
	New England Bluet	Enallagma laterale	Occupied Habitat	2	NA	Special Concern	G3G4	S3
	Ski-tailed Emerald	Somatochlora elongata	Territorial Display	2	NA	Special Concern	G5	S3
	Spatterdock Darner	Rhionaeschna mutata	Breeding/Courtship	2	NA	Special Concern	G4	S3
	Spatterdock Darner	Rhionaeschna mutata	Occupied Habitat	2	NA	Special Concern	G4	S3

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection	State Protection	Grank	Srank
	Williamson's Emerald	Somatochlora williamsoni	Territorial Display	2	NA	Special Concern	G5	S3
Mammalia								
	Bobcat	Lynx rufus	Capture Location	4	NA	State Endangered	G5	S1
	Bobcat	Lynx rufus	Live Individual Sighting	4	NA	State Endangered	G5	S1
	Bobcat	Lynx rufus	On Road	4	NA	State Endangered	G5	S1
	Bobcat	Lynx rufus	Physical evidence	4	NA	State Endangered	G5	S1
	Bobcat	Lynx rufus	Telemetry: Home Range	4	NA	State Endangered	G5	S1
	Indiana Bat	Myotis sodalis	Breeding Sighting	5	Federally Listed Endangered	State Endangered	G2	S1
	Indiana Bat	Myotis sodalis	Hibernaculum	5	Federally Listed Endangered	State Endangered	G2	S1
	Indiana Bat	Myotis sodalis	Non-breeding Sighting	5	Federally Listed Endangered	State Endangered	G2	S1
Reptilia								
	Northern Copperhead	Agkistrodon contortrix mokasen	Occupied Habitat	2	NA	Special Concern	G5T5	S3
	Timber Rattlesnake	Crotalus horridus horridus	Occupied Habitat	4	NA	State Endangered	G4T4	S1
	Wood Turtle	Glyptemys insculpta	Occupied Habitat	3	NA	State Threatened	G4	S2

Vernal Pool Habitat on the Project Site Based on Search of Landscape Project 3.1

Vernal Pool Habitat Type	Vernal Pool Habitat ID
Potential vernal habitat area	2588

Total number of records: 1

Table 2: Vicinity Data Request Search Results (6 possible reports)

Rare Plants/Ecological Communities within the Vicinity:	Yes
Natural Heritage Priority Sites within the Vicinity:	No
Landscape 3.1 Species Based Patches within the Vicinity:	Yes
Landscape 3.1 Vernal Pool Habitat within the Vicinity:	Yes
Landscape 3.1 Stream/Mussel Habitat within the Vicnity:	No
Other Animals Tracked by ENSP within the Vicnity:	No

Immediate Vicinity of the Project Site
Based on Search of Natural Heritage Database
Rare Plant Species and Ecological Communities Currently Recorded in the New Jersey Natural Heritage Database

Scientific Name	Common Name	Federal Protection	State Protection	Regional Status	Grank	Srank	Identified	Last Observed	Location
Vascular Plants									
Potamogeton robbinsii	Robbin's Pondweed		E	LP, HL	G5	S2	Y - Yes	2008-07-21	Located 0.25 mile northwest of intersection of Green Pond Road and Snake Hill Road, in the southern portion of Lake Ames, in Rockaway Township (Morris County).

Total number of records: 1

Rare Wildlife Species or Wildlife Habitat Within the Immediate Vicinity of the Project Site Based on Search of Landscape Project 3.1 Species Based Patches

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection	State Protection	Grank	Srank
Aves								
	Barred Owl	Strix varia	Breeding Sighting	3	NA	State Threatened	G5	S2B,S2N
	Barred Owl	Strix varia	Non-breeding Sighting	3	NA	State Threatened	G5	S2B,S2N
	Black-billed Cuckoo	Coccyzus erythropthalmus	Breeding Sighting	2	NA	Special Concern	G5	S3B
	Blackburnian Warbler	Dendroica fusca	Breeding Sighting	2	NA	Special Concern	G5	S3B
	Black-throated Green Warbler	Dendroica virens	Breeding Sighting	2	NA	Special Concern	G5	S3B
	Blue-headed Vireo (Solitary Vireo)	Vireo solitarius	Breeding Sighting	2	NA	Special Concern	G5	S3B
	Broad-winged Hawk	Buteo platypterus	Breeding Sighting	2	NA	Special Concern	G5	S3B
	Canada Warbler	Wilsonia canadensis	Breeding Sighting	2	NA	Special Concern	G5	S3B
	Cerulean Warbler	Dendroica cerulea	Breeding Sighting	2	NA	Special Concern	G4	S3B,S3N
	Cooper's Hawk	Accipiter cooperii	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Cooper's Hawk	Accipiter cooperii	Nest	2	NA	Special Concern	G5	S3B,S4N
	Golden-winged Warbler	Vermivora chrysoptera	Breeding Sighting	4	NA	State Endangered	G4	S1B,S3N
	Great Blue Heron	Ardea herodias	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Hooded Warbler	Wilsonia citrina	Breeding Sighting	2	NA	Special Concern	G5	S3B
	Kentucky Warbler	Oporornis formosus	Breeding Sighting	2	NA	Special Concern	G5	S3B,S3N
	Northern Goshawk	Accipiter gentilis	Breeding Sighting	4	NA	State Endangered	G5	S1B,S3N
	Northern Goshawk	Accipiter gentilis	Nest	4	NA	State Endangered	G5	S1B,S3N

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection	State Protection	Grank	Srank
	Red-headed Woodpecker	Melanerpes erythrocephalus	Breeding Sighting	3	NA	State Threatened	G5	S2B,S2N
	Red-shouldered Hawk	Buteo lineatus	Breeding Sighting	4	NA	State Endangered	G5	S1B,S3N
	Red-shouldered Hawk	Buteo lineatus	Nest	4	NA	State Endangered	G5	S1B,S3N
	Veery	Catharus fuscescens	Breeding Sighting	2	NA	Special Concern	G5	S3B
	Winter Wren	Troglodytes troglodytes	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Wood Thrush	Hylocichla mustelina	Breeding Sighting	2	NA	Special Concern	G5	S3B
	Worm-eating Warbler	Helmitheros vermivorum	Breeding Sighting	2	NA	Special Concern	G5	S3B
Insecta								
	Arrowhead Spiketail	Cordulegaster obliqua	Breeding/Courtship	2	NA	Special Concern	G4	S3
	Arrowhead Spiketail	Cordulegaster obliqua	Occupied Habitat	2	NA	Special Concern	G4	S3
	Brush-tipped Emerald	Somatochlora walshii	Occupied Habitat	2	NA	Special Concern	G5	S3
	New England Bluet	Enallagma laterale	Foraging	2	NA	Special Concern	G3G4	S3
	New England Bluet	Enallagma laterale	Occupied Habitat	2	NA	Special Concern	G3G4	S3
	Ski-tailed Emerald	Somatochlora elongata	Territorial Display	2	NA	Special Concern	G5	S3
	Spatterdock Darner	Rhionaeschna mutata	Breeding/Courtship	2	NA	Special Concern	G4	S3
	Spatterdock Darner	Rhionaeschna mutata	Occupied Habitat	2	NA	Special Concern	G4	S3
	Williamson's Emerald	Somatochlora williamsoni	Territorial Display	2	NA	Special Concern	G5	S3
Mamma								
	Bobcat	Lynx rufus	Capture Location	4	NA	State Endangered	G5	S1
	Bobcat	Lynx rufus	Live Individual Sighting	4	NA	State Endangered	G5	S1
	Bobcat	Lynx rufus	On Road	4	NA	State Endangered	G5	S1
	Bobcat	Lynx rufus	Physical evidence	4	NA	State Endangered	G5	S1

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection	State Protection	Grank	Srank
	Bobcat	Lynx rufus	Telemetry: Home Range	4	NA	State Endangered	G5	S1
	Indiana Bat	Myotis sodalis	Breeding Sighting	5	Federally Listed Endangered	State Endangered	G2	S1
	Indiana Bat	Myotis sodalis	Hibernaculum	5	Federally Listed Endangered	State Endangered	G2	S1
	Indiana Bat	Myotis sodalis	Non-breeding Sighting	5	Federally Listed Endangered	State Endangered	G2	S1
Reptilia								
	Northern Copperhead	Agkistrodon contortrix mokasen	Occupied Habitat	2	NA	Special Concern	G5T5	S3
	Timber Rattlesnake	Crotalus horridus horridus	Occupied Habitat	4	NA	State Endangered	G4T4	S1
	Wood Turtle	Glyptemys insculpta	Occupied Habitat	3	NA	State Threatened	G4	S2

Vernal Pool Habitat
In the Immediate Vicinity of Project Site
Based on Search of
Landscape Project 3.1

Vernal Pool Habitat Type	Vernal Pool Habitat ID
Potential vernal habitat area	2588

Total number of records: 1

ATTACHMENT G

United States Department of the Interior

FISH AND WILDLIFE SERVICE

New Jersey Field Office
927 North Main Street, Building D
Pleasantville, New Jersey 08232
Tel: 609-646-9310 Fax: 609-646-0352
http://www.fws.gov/northeast/njfieldoffice

IN REPLY REFER TO:
10-I-0259

Erica L. Bowyer, Project Manager
CH2M Hill
1717 Arch Street, Suite 400
Philadelphia, Pennsylvania 19127
Fax Number: (215) 563-3828

JUN 15 2012

Reference: Tennessee Gas Pipeline Company's Northeast Upgrade Project, Loops 323 (NJ portion only) and 325 Sussex, Passaic, and Bergen Counties, New Jersey

The U.S. Fish and Wildlife Service (Service) has reviewed the above-referenced proposed project pursuant to the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) (ESA) to ensure the protection of federally listed endangered and threatened species. The following comments do not address all Service concerns for fish and wildlife resources and do not preclude separate review and comment by the Service as afforded by other applicable environmental legislation.

A known occurrence or potential habitat for the following federally listed or candidate species is located on or near the project's impact area. However, the Service concurs that the proposed project is not likely to adversely affect federally listed or candidate species for the reasons listed below.

Species	Basis for Determination
Indiana bat (*Myotis sodalis*), endangered	(1) Your June 5, 2012 letter states that, of 195 acres of tree clearing, 127 acres will be temporary, and that the remaining 68 acres of permanent forest loss will be offset by 57.14 acres of offsite reforestation; (2) Your June 5, 2012 letter states that tree clearing will be seasonally restricted from April 1 to September 30 along the eastern 2.5 miles of Loop 323; and (3) Survey reports summarized in our January 24, 2012 letter.
Dwarf wedgemussel (*Alasmidonta heterodon*), endangered	Survey reports summarized in our January 24, 2012 letter.
Bog turtle (*Clemmys muhlenbergii*), threatened	(1) The April 18, 2012 Fencing and Monitoring Plan transmitted with your June 5, 2012 letter; and (2) Survey reports summarized in our January 24, 2012 letter.
Small whorled pogonia (*Isotria medeoloides*), threatened	Survey reports transmitted with and/or summarized in your June 5, 2012 letter.

Except for the above-mentioned species, no other federally listed or proposed threatened or endangered flora or fauna under Service jurisdiction are known to occur within the proposed project's impact area. Therefore, no further consultation pursuant to the ESA is required. If additional information on federally listed species becomes available, or if project plans change, this determination may be reconsidered.

Please refer to this office's web site at http://www.fws.gov/northeast/njfieldoffice/Endangered/ for further information including federally listed and candidate species lists, procedures for requesting ESA review, the National Bald Eagle Management Guidelines, and contacts for obtaining information from the New Jersey Natural Heritage and Endangered and Nongame Species Programs regarding State-listed and other species of concern.

Reviewing Biologist: Wendy Walsh
Wendy Walsh

Authorizing Supervisor: for Ron Popowski
Ron Popowski