# RESPONSE TO PUBLIC COMMENTS BY THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION ON THE PROPOSED CONVEYANCE OF STATE-OWNED LANDS TO TENNESSEE GAS PIPELINE COMPANY, LLC

Pursuant to *N.J.S.A.* 13:1D-51 *et seq.*, no lands acquired or developed by the State of New Jersey with Green Acres funds or developed by the State of New Jersey in any other manner and administered by the New Jersey Department of Environmental Protection ("NJDEP") may be conveyed unless NJDEP complies with the procedural requirements set forth in *N.J.S.A.* 13:1D-52. Under *N.J.S.A.* 13:1D-51, the following definitions apply:

"Convey" is defined as "to sell, exchange, lease for a term of 25 years or more, grant, or agree to sell, exchange, lease for a term of 25 years or more, or grant, in an amount greater than one acre."

"Land" or "lands" is defined as "real property, including improvements thereof or thereon, rights-of-way, water, riparian and other rights, easements, and privileges, and all other rights or interests of any kind or description in, relating to, or connected with real property."

In July 2011, through release of the "Report on Proposed Conveyance of Lands to Tennessee Gas Pipeline Company, L.L.C. ("Tennessee") by Department of Environmental Protection" ("July 2011 Report") as required by N.J.S.A. 13:1D-52a(1) and publication of notices in the New Jersey Register, DEP Bulletin and several newspapers as required by N.J.S.A. 13:1D-53, the NJDEP proposed to lease to Tennessee, an indirect wholly-owned subsidiary of El Paso Corporation, certain NJDEP lands to be used as right of way ("ROW") for the installation of a 30-inch outside diameter underground natural gas pipeline facility under the auspices of a project known as the Northeast Upgrade Project ("NEUP" or "the Project"). To the maximum extent practicable, Tennessee proposes to install the new pipeline 25 feet from the existing 24-inch outside diameter pipeline that is located within an existing ROW on NJDEP lands. As currently proposed, portions of the NEUP will traverse 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). In the event the NEUP is authorized by the Federal Energy Regulatory Commission ("FERC") and approved and/or permitted by all other Federal, State and local agencies with jurisdiction over the Project, Tennessee has requested to lease, for 25 years, the additional ROW that would be needed for the Project as it crosses NJDEP property. Due to the length of the lease, the proposal would qualify as a "conveyance" under N.J.S.A. 13:1D-51 *et seq*.

Pursuant to *N.J.S.A.* 13:1D-52a(4), the NJDEP was required to conduct at least two public hearings on the proposed conveyance. For the proposed conveyance of State lands to Tennessee, the NJDEP has conducted three public hearings. The first public hearing was held on

1

Effective October 1, 2011, Tennessee Gas Pipeline Company converted from being a corporation to a limited liability company. The company name is now Tennessee Gas Pipeline Company, L.L.C., a Delaware limited liability company.

August 17, 2011 at the Montague Municipal Building, 277 Clove Road, Montague, New Jersey. The second public hearing was held on August 18, 2011 at the Ringwood Municipal Building, 60 Margaret King Avenue, Ringwood, New Jersey. The third public hearing was held on September 7, 2011 at the Public Hearing Room at the NJDEP's offices at 401 East State Street, Trenton, New Jersey.

This Response to Public Comments document addresses the public comments received at the three public hearings and the written comments that have been submitted to NJDEP both before and after the public hearings. At the August 17, 2011 public hearing, 37 members of the public attended the hearing and 13 members of the public provided oral testimony. At the August 18, 2011 hearing, 34 members of the public attended the hearing and 20 members of the public provided oral testimony. At the September 7, 2011 public hearing, eight members of the public attended the hearing and five members of the public provided oral testimony. Judeth Piccinini Yeany, Esq., Chief of the Bureau of Legal Services and Stewardship of NJDEP's Green Acres Program, presided over all three hearings. Representatives of NJDEP and Tennessee also attended both hearings. Transcripts of these hearings have been posted on NJDEP's website at <a href="https://www.nj.gov/dep/greenacres/neup.html">www.nj.gov/dep/greenacres/neup.html</a>.

Exhibits referred to in this Response to Public Comments document and the written public comments submitted to the NJDEP both before and after the public hearings have been posted at <a href="https://www.nj.gov/dep/greenacres/neup.html">www.nj.gov/dep/greenacres/neup.html</a>.

The original public notices for the three public hearings set a deadline of September 1, 2011 for submission of written comments pertaining to the August 17 and 18, 2011 hearings and a deadline of September 21, 2011 for written comments pertaining to the September 7, 2011 hearing. By notice posted on September 16, 2011 at <a href="www.nj.gov/dep/greenacres/neup.html">www.nj.gov/dep/greenacres/neup.html</a>, the NJDEP extended the public comment period for all three hearings to September 30, 2011 in order to allow members of the public the opportunity to review the public hearing transcripts prior to submitting their final comments. In the notice, the NJDEP indicated that it would consider any comments submitted after September 30, 2011 in rendering a final decision on the proposed lease, but would not include responses to these comments in this Response to Public Comments document.

All comments received on or before September 30, 2011 have been categorized and summarized below. The responses provided in this Response to Public Comments document include responses made to the commenter(s) on the record at the public hearing. In general, these responses begin with the phrase "NJDEP responded" or "Tennessee responded." This document also includes supplemental responses prepared by either NJDEP or Tennessee that are intended to complete the record (for both the comments made at the public hearings and the written comments on the proposed conveyance). Duplicate comments have been combined, where appropriate. The number(s) in parentheses after each comment identify the respective commenter(s) listed who made the comment(s).

The following persons testified the August 17, 2011 public hearing:

1. Michael Cee, Vernon, NJ

- 2. Debra Brick, Sandyston, NJ
- 3. Bev Budz, Vernon, NJ
- 4. Terry Stark, Fredon, NJ
- 5. Chris Ingui, representing New York/New Jersey Trail Conference
- 6. James Guimes
- 7. Mike Helbing, Hardwick, NJ, representing Metro Trails
- 8. Martha Terhune, Frankford, NJ
- 9. Althea Quigley
- 10. Don Tripp, Lambertville, NJ
- 11. Alicia Batko, Montague, NJ
- 12. Pam Lewis, Watchung, NJ, representing Food and Water Watch
- 13. Margaret Wood, West Milford, NJ

The following persons testified at the August 18, 2011 public hearing:

- 14. Amanda Nesheiwat, Secaucus, NJ
- 15. Matt Smith, Wyckoff, NJ
- 16. Wilma Frey, representing New Jersey Conservation Foundation
- 17. Chief Duane Perry, Chief of the Ramapo Lenape
- 18. Earl Axelrod
- 19. Chief Vincent Mann, Ramapo Lenape
- 20. Rachel Wieland
- 21. Lehman Mann, Sr., representing Ramapo Lenape
- 22. Jackie Schramm, Director of Social Justice Ministry, Pompton Lakes, NJ
- 23. Judy Sullivan, Esq., Oakland, NJ
- 24. Chief Richard Degroat
- 25. Erica Van Auken, representing New Jersey Highlands Coalition
- 26. Linda Reik,
- 27. Amy Boyle Geisel, Esq., Ringwood, NJ
- 28. Keith Scherer, representing New York/New Jersey Trail Conference
- 29. Camille Gaines

[NOTE: Mike Cee (1), Bev Budz (3), Chris Ingui (5), and Margret Wood (13) also provided testimony at the August 18, 2011 hearing]

The following persons testified at the September 7, 2011 public hearing:

- 30. Kate Millsaps, representing New Jersey Chapter of Sierra Club
- 31. Robert Moss, representing New Jersey Chapter of Sierra Club
- 32. Jeff Tittel, Director, NJ Chapter of Sierra Club

[NOTE: Mike Cee (1) and Pam Lewis (12) also provided testimony at the September 7, 2011 hearing.]

The following persons submitted written comments on the proposed conveyance of State-owned lands related to the NEUP:

- 33. Howard T. Murray
- 34. Jean Public
- 35. Michelle Tuorto-Collins
- 36. Jessica Ciccarelli
- 37. David and Patricia Epstein, Ramsey, NJ
- 38. Georgia Van Giezen, Montague, NJ
- 39. Barbara Sachau, Flemington, NJ
- 40. Bill Grunfelder
- 41. Susan Kraham, Esq., Columbia University Environmental Law Clinic
- 42. Michael Bender
- 43. Scott Loveless
- 44. Sister Maryann Agnes, Our Lady of Hope Province
- 45. Lola Cheski
- 46. Robert W. Simpson, Wayne, NJ
- 47. Jerome Wagner
- 48. Renee Allessio, Hewitt, NJ
- 49. Michael Cheski
- 50. Alison E. Mitchell, New Jersey Conservation Foundation
- 51. Emille D. DeVito, Ph.D, New Jersey Conservation Foundation
- 52. Julia Somers, New Jersey Highlands Coalition
- 53. Sandy Batty, Association of New Jersey Environmental Commissions

[NOTE: Debra Brick (2), Beverly Budz (3), Alicia Batko (11), Margaret Wood (13), Wilma Frey (16), Judith Sullivan (23), Linda Reik (26), Amy Boyle Geisel (27), Camille Gaines (29) and Jeff Tittel (32) also provided written comments.]

Questions about this response to comments document may be directed to:

Kevin E. Koslosky Bureau of Legal Services and Stewardship Green Acres Program (609) 292-6579 Kevin.Koslosky@dep.state.nj.us

#### TABLE OF CONTENTS

General Comments	
Alternatives	
Environmental Impacts from Pipeline	
Environmental Impacts from Pipeline Construction	
Fracking – General	
Impact of Fracking – Local Impacts/Contamination/Global Warming	
Lease – General	
Lease – Terms and Conditions	
Mitigation/Compensation	
No Net Loss	
Pipeline Construction	
Pipeline Need	
Pipeline Safety	
300 Line	
Trails – General	
Trails – Appalachian Trail	

# I. GENERAL COMMENTS

**COMMENT:** Several commenters expressed their general opposition to the pipeline project and asserted that it is not in the long-term interest of the people and wildlife of the State of New Jersey. One commenter stated that the Project will destroy the environment that it crosses. Another commenter was especially opposed to the pipeline expansion through Ringwood State Park. Another expressed her hope that the State should not grant permits for the pipeline expansion. Another commenter cited to a passage in the July 2011 Report, which states that the "avoidance of state property by developing new pipeline corridors would result in the construction of longer loops and cause significantly more impacts to residential areas and areas of environmental concern." The commenter stated that this statement contradicts the purpose of the Green Acres program which is permanent protection and asked whether New Jersey can say "no" to the project. Another commenter stated that she is not in favor of the leasing of public land preserved for natural protection to Tennessee. (2, 16, 29, 31, 34, 44, 45, 50, 51, 52, 53)

**RESPONSE:** NJDEP acknowledges these comments. However, NJDEP must also acknowledge the constraints imposed by the Natural Gas Act on landowners whose property is determined by the FERC to be needed for a particular interstate natural gas transmission pipeline alignment. If the FERC determines, pursuant to Section 7 of the Natural Gas Act (15 U.S.C. 717f(c)), that there is a need for the Project and that the Project is in the public interest, and if the FERC issues a Certificate of Public Convenience and Necessity ("FERC Certificate"), and if the route endorsed by FERC in the FERC certificate includes State property, then NJDEP is more limited in its objections to the Project than it would be in evaluating another type of project.

After reviewing the proposed NEUP alignment and the proposed alternatives, NJDEP has concluded that avoiding State property entirely and constructing the pipeline outside the existing ROW would cause more overall disturbance and would cause significantly more impacts to residential areas and areas of environmental concern. Therefore, NJDEP believes that it is in the best interest of the people of the State of New Jersey to work with Tennessee to avoid and minimize environmental impacts to State property and to receive fair compensation for the lands needed by Tennessee for the NEUP.

On the issue of consistency of the project with Green Acres Program requirements, the Department notes that since the inception of the program in 1961, the statutory authority under which Green Acres has operated has allowed for the diversion or disposal of parkland under certain limited circumstances in exchange for suitable replacement land and/or other compensation.

**COMMENT:** The commenter questioned whether there is a sufficient reason to give Tennessee a long lease for any land in any State park. (39)

**RESPONSE:** As indicated in the July 2011 Report, if the Project is authorized by FERC, and once NJDEP is satisfied that Tennessee has made all reasonable efforts to avoid or minimize impacts to public open space lands, then the NJDEP anticipates entering into a 25-year lease with Tennessee for any remaining ROW and TWS that is needed for the NEUP as it crosses NJDEP property. The NJDEP will lease these areas to Tennessee rather than sell them. Currently, it is the NJDEP's policy to allow for long-term leases for private utility projects rather than conveying permanent rights to State property for these purposes. (See Interagency State Land Valuation Report ("Interagency Lease Report"), August Lease 2011 http://www.nj.gov/dep/docs/landlease110817.pdf, Page 10, Recommendation B-1.) However, subject to satisfaction of applicable statutory, regulatory requirements, and acceptable compensation, the NJDEP anticipates allowing the leases to be renewed at appropriate points in the future.

Since the useful life of an interstate natural gas transmission pipeline is considerably more than 25 years, the NJDEP does not consider the proposed lease to be a particularly "long" one. At the end of the initial 25-year period, any renewal of the lease will be subject to a full public review under the statutes and regulations that are in place at the time of the proposed renewal.

**COMMENT:** Several commenters stated that NJDEP should deny Tennessee's request for a proposed conveyance of State lands because Tennessee has not obtained a Certificate from the FERC, and may not have even submitted a complete application to that agency. (16, 50, 51, 52, 53)

**RESPONSE:** Tennessee filed its certificate application for the Project with the FERC on March 31, 2011. Tennessee anticipates that the FERC Certificate will be issued prior to having its application considered by the State House Commission. NJDEP will not proceed with State House Commission approval prior to issuance of a FERC Certificate.

**COMMENT:** The commenter stated that Tennessee does not care about New Jersey and is only interested in making money. She stated that corporate interests are trumping the interests of the people of New Jersey. (2)

**RESPONSE:** NJDEP is very concerned about the impacts of the NEUP on State property and has worked with Tennessee to avoid the use of State lands, where possible. Where such use cannot be avoided, NJDEP required Tennessee to minimize the impacts caused by the Project. Specifically, Tennessee has proposed to minimize the impacts of the project through 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;
- 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

Although Tennessee is a private company, the NEUP is proposed to transport natural gas to markets in the northeastern U.S., which the State of New Jersey considers to be a significant public benefit. In deciding whether this Project is in the public convenience and necessity, the FERC will balance the public benefits of the Project (bringing natural gas from production areas

to northeastern U.S. markets and alleviating transportation constraints in the northeast region) against potential adverse consequences, pursuant to the Natural Gas Act and the FERC's Certificate Policy Statement. Energy infrastructure projects such as the NEUP provide an essential service which is not otherwise provided by the government.

**COMMENT:** The commenter asked why Tennessee is completing the Project in segments instead of having one application for both the 300 Line and the NEUP. (48)

**RESPONSE:** The 300 Line Project and the NEUP are two separate projects on Tennessee's 300 Line system, which runs through Pennsylvania and northern New Jersey. For the 300 Line Project that was recently constructed and placed in service, the FERC evaluated the need for the incremental transportation capacity on Tennessee's pipeline system (as evidenced by the binding contracts in place for this incremental transportation capacity), evaluated the environmental impacts of the 300 Line Project, and determined that there was a public need for the 300 Line Project. Accordingly, the FERC issued a FERC Certificate for the 300 Line Project in 2010. For the NEUP, the FERC is conducting a similar analysis, and if it determines that the Project is in the public interest, it will issue a separate FERC Certificate specific to the NEUP. Tennessee notes that the need for the NEUP is supported by the existence of binding contracts for all of the incremental transportation capacity to be created by the Project.

**COMMENT:** The commenter asked whether Tennessee ever entered parks in other states, ripped them to shreds, bulldozed them, displaced creatures and contaminated water in order to build a pipeline. (12)

**RESPONSE:** At the public hearing, Tennessee stated that the El Paso Corporation has approximately 40,000 miles of interstate natural gas pipeline within the United States, has built pipelines in many different resource areas and has addressed many of the concerns that were raised at the public hearings. In building its other projects, Tennessee has provided resource protection, mitigation, and minimization of impacts. For the NEUP, Tennessee has submitted restoration and reclamation plans to the FERC and to the NJDEP for review and comment. If approved by the FERC, the State of New Jersey and other agencies, the NEUP will be built and maintained operationally under the terms and conditions of the FERC Certificate, the lease with NJDEP, and all permits issued for the Project.

**COMMENT:** The commenter stated that the July 2011 Report on the proposed conveyance is inadequate because the impacts of the NEUP are substantially under-represented. The commenter then listed a number of ways in which the July 2011 Report is inadequate including its analysis of impacts to areas adjacent to the access roads, impacts of construction on forest fragmentation, impacts on plants and endangered and non-game species, and impacts of construction noise and ground vibration on affected species. Another commenter stated that the July 2011 Report is deficient, pointing to a lack of information on historical and cultural sites that could be impacted by the NEUP. (16, 23)

**RESPONSE:** NJDEP prepared the July 2011 Report in accordance with the requirements of N.J.S.A. 13:1D-52(a)(1). This statute requires the report to identify the reasons for, and all advantages and disadvantages and benefits and detriments of the proposed conveyance. The

report must also assess the environmental and recreational impacts of the proposed conveyance, including the impacts on endangered species and nongame species and endangered plant species. The report must also have a section analyzing the environmental and economic value of the lands proposed to be conveyed. Rather than reproduce in the July 2011 Report all of the analyses done by Tennessee on the NEUP, NJDEP referenced the Environmental Report that was prepared and submitted to the FERC as part of Tennessee's application for a FERC Certificate submitted on March 31, 2011 in Docket No. CP11-161-000. The Environmental Report is available on the FERC's website at <a href="http://elibrary.FERC.gov">http://elibrary.FERC.gov</a>. Taking into account the information in the Environmental Report, the NJDEP believes that the July 2011 Report satisfies all of the statutory requirements.

As for the commenters' concerns about specific deficiencies in the July 2011 Report, these issues were addressed by the FERC as part of the FERC process. Specifically, the FERC issued data requests to Tennessee, reviewed the data responses submitted by Tennessee, and prepared and issued an Environmental Assessment ("EA") on November 21, 2011, which was available for review and comment on FERC's website at <a href="http://elibrary.FERC.gov">http://elibrary.FERC.gov</a> (in Docket No. CP11-161-000). Among other things, the EA discusses access roads, forest fragmentation, endangered plant species, threatened and endangered animal species, construction noise, ground vibration and species impacts and historical/cultural resources. For further information on the specific impacts of concern to the commenters, see Environmental Impacts from Pipeline Construction, below.

**COMMENT:** Two commenters asserted that Tennessee and the State of New Jersey should do a better job of trying to educate and reach out to communities that will be impacted by the Project, especially when there is no benefit to the State of New Jersey. Another commenter expressed concern over whether the public received adequate notice of the hearings and stated that the community has not had an opportunity to understand the NEUP Project. She further stated that although Tennessee may be compliant with statutory requirements, major conservation advocates were not aware of the Project, nor was the mayor of Oakland. (23, 27, 43)

**RESPONSE:** As a federally regulated project, the NEUP has been subjected to an extensive, continuing public process designed to inform all stakeholders about the pipeline project. To maximize public input early in the process, Tennessee participated in the FERC's National Environmental Policy Act ("NEPA") pre-filing process beginning in July 2010. During September 2010, Tennessee conducted four public open houses in the Project area to explain the environmental review process to interested stakeholders. The FERC published its Notice of Intent to Prepare an Environmental Assessment for the Project in October 2010 in the Federal Register, and mailed copies of this notice to over 1,500 parties, including conservation organizations, Native American groups, property owners affected by the Project, government officials, and local newspapers and libraries. During November 2010, the FERC staff conducted three public scoping meetings in the Project area (one of which was in Ringwood, New Jersey on November 1, 2010) to provide an opportunity to the general public and agencies to learn more about the Project and to participate in the environmental review process by identifying issues to be addressed in the EA. At these scoping meetings, the FERC solicited public comments on the environmental issues to be raised by the Project. Tennessee filed its Certificate application on

March 31, 2011, which included an Environmental Report that addressed comments and concerns raised during the pre-filing process. The FERC has reviewed the Environmental Report and solicited additional information from Tennessee on environmental issues since the application was filed. On November 21, 2011, the FERC issued the EA for the NEUP, and has invited all stakeholders to provide comments on the EA by December 21, 2011.

In addition to the public process in connection with the requested FERC approval during the prefiling and certificate processes, there has also been an extensive, ongoing public process associated with the proposed conveyance of the State lands needed for the Project. Specifically, the NJDEP held three public hearings (one in Montague, one in Ringwood and one in Trenton) on the proposed conveyances. Prior to the hearings, NJDEP published notice in the newspapers serving the affected communities for four weeks preceding the hearings. The July 2011 Report was made available on NJDEP's website, and at both the municipal buildings and public libraries in the affected municipalities prior to the public hearings. NJDEP and Tennessee also created information pages specific to the NEUP on their respective websites. (See <a href="https://www.nj.gov/dep/greenacres/neup.html">www.nj.gov/dep/greenacres/neup.html</a> and <a href="https://www.northeastupgradeproject.com">www.northeastupgradeproject.com</a>.) In response to public requests, NJDEP extended the public comment period to allow for review of the public hearing transcripts prior to the close of the public comment period.

The NJDEP and Tennessee also engaged in the process of evaluating the impacts of the NEUP on locally owned Green Acres encumbered parklands in the Borough of Ringwood and the Township of Mahwah through the Green Acres diversion application process at *N.J.A.C.* 7:36. The diversion process involves a total of five public hearings, three for the Bergen County diversion, and two for the Borough of Ringwood, and the nonprofit Passaic River Coalition (since joint hearings were held for these applications).

In addition, a study was done by the Bloustein School at Rutgers University that provides information on the benefits and needs addressed by the NEUP. This report may be found at <a href="http://www.northeastupgradeproject.com/getattachment/News-and-Events/2011/Economic-Analysis/Economic\_Report\_050911.pdf.aspx">http://www.northeastupgradeproject.com/getattachment/News-and-Events/2011/Economic-Analysis/Economic\_Report\_050911.pdf.aspx</a>.

While the NJDEP believes that both the State and federal governments have done a good job in ensuring that the public was informed about the NEUP and had an opportunity to participate in the public dialogue, it would welcome specific suggestions about how to improve its public outreach efforts in the future.

**COMMENT:** The commenter stated that the NEUP is corrupt, involving New Jersey political leaders who are involved in meetings that had no public comment. Another commenter alleged that the State may be living up to its reputation as the most corrupt state in the country because it is letting Tennessee exploit State land for nothing. (3, 39)

**RESPONSE:** NJDEP disagrees with these comments. The NEUP has been subject to extensive public review through the FERC process and through the State process for the proposed conveyance of State lands. Additional process will be afforded to the public through the various State land use permitting requirements to which the NEUP will be subject. NJDEP believes that it is conducting a thorough and transparent review of the NEUP, and, as set forth in the July 2011

Report and the Mitigation/Compensation section below, will be receiving fair compensation for the State lands impacted by the NEUP.

**COMMENT:** Although the commenter favors building the current project alongside an existing right-of-way, the commenter believes that New Jersey State Parks are "under assault" when it comes to building projects such as this and a proposed power line project. The commenter asked if it is possible to identify all of the State Parks that are affected by similar projects and how people can protect the parks from future projects. (42)

**RESPONSE:** NJDEP does not agree that its State Parks are "under assault." NJDEP's policy, on page 11 of its July 2011 Report (which can be found at stated http://www.nj.gov/dep/greenacres/pdf/tgp.neup.report.pdf) is to recognize that it is generally environmentally advantageous to remain within an existing ROW where such a ROW exists. Otherwise, new disturbance in previously undisturbed State and private property would occur. If a large infrastructure project is needed, as determined by either federal or State authorities, NJDEP's preference would be for that project to be built in (or alongside) an existing ROW so as to minimize the environmental impacts caused by such a project. Further detail on the NJDEP's concerning large linear infrastructure projects mav be found http://www.nj.gov/dep/docs/linear-infrastructure-guidance201112.pdf.

**COMMENT:** Two commenters alleged that Tennessee is seeking an expedited review of its application. They urged NJDEP and the affected programs reviewing Tennessee's permit applications to take the time they need to review Tennessee's proposal and not to make any determinations until substantial, detailed information on the proposal is received from Tennessee. (16, 27)

**RESPONSE:** NJDEP is not expediting its review of Tennessee's NEUP proposal. Tennessee requires several permits and approvals from NJDEP in order to construct the proposed Project. Each program within NJDEP will thoroughly evaluate each of Tennessee's permit applications, and will make a careful determination on the merits of each application in accordance with the time frames and public notice requirements set forth in the various permitting regulations and applicable statutes. NJDEP explained at the public hearings that Tennessee had not yet applied to NJDEP for permits and was still in the federal process for review. As discussed above, the FERC process has now progressed to the issuance of an environmental assessment (EA), but it remains to be seen whether the FERC will require an environmental impact statement (EIS) or issue the Certificate on the basis of the EA. On the permitting side, Tennessee has started the process of applying for land use permits from the NJDEP, but some of the applications are still incomplete and others are still under review.

**COMMENT:** One commenter proposed that NJDEP increase its permit fees so that NJDEP can hire more staff to review projects such as the NEUP. (26)

**RESPONSE:** NJDEP's regulatory permit fees are specific to the program conducting the permit reviews from which the fee was derived. Fee increases are achieved through rulemaking. There are no anticipated fee increases presently being considered by the Department to support additional staff and operations of NJDEP's regulatory programs.

The NJDEP appreciates the commenter's overall concern, but notes that the FERC process does represent a comprehensive review of a proposed interstate natural gas transmission pipeline project. By working with the FERC in a cooperative and interactive way, the NJDEP is able to maximize its staff resources while still protecting the overall public interest in the affected lands and natural resources in New Jersey.

**COMMENT:** The commenter stated that New Jersey should not grant permits for the pipeline expansion. (43)

**RESPONSE:** If an applicant submits a complete permit application for a specific project, NJDEP is obliged to review the application and to make a determination about whether the project complies with all applicable regulations. If a project complies, then NJDEP must issue the requested permit and may place reasonable conditions in the permit. This is the framework under which NJDEP will review the permit applications received for the NEUP.

**COMMENT:** One commenter stated that she was appalled at Tennessee's practices in not contacting the Ramapough Lenape Nation or informing a certain property owner prior to Tennessee conducting its natural resource and other surveys. Another commenter stated that he has not been contacted by Tennessee or the State or federal governments regarding the Ramapough Lenape Nation's cultural resources. (19, 26)

**RESPONSE:** Section 106 of the National Historic Preservation Act ("NHPA"), as amended, requires the FERC to take into account the effects of its undertakings on properties listed on or eligible for listing on the National Register of Historic Places. In May 2010, Tennessee initiated Section 106 consultations with the New Jersey State Historic Preservation Office ("SHPO"). In June 2010, Tennessee initiated consultation with Native American tribes that had a potential interest in the Project. The initial consultation materials consisted of an information packet and an invitation to participate in the review of the Project. This package was sent to the Ramapough Lenape Nation. During May 2011, follow up correspondence and telephone calls were made to the tribes, including the Ramapough Lenape Nation. In February 2011, the FERC sent initial consultation letters to the Native American tribes that were previously contacted by Tennessee. The Ramapough Lenape Nation requested a consultation meeting with Tennessee, SHPO and the FERC, which took place on October 6, 2011. At this meeting, concerns were expressed about the effects of blasting on cultural resources, including rock shelters and historic mines, and the possible historic significance of the Bear Swamp Road and Bear Swamp Bridge. Ramapough Lenape Nation requested further coordination with Tennessee to identify and avoid impacts on cultural resources, and Tennessee agreed to coordinate with the Tribe. Tennessee conducted a site visit on March 2, 2012 with the Tribe to identify cultural resources within the Project area for review as part of the Project. The site visit included representatives of the tribe, the FERC, the SHPO, representatives of Tennessee and others. Subsequent to the site visit, Tennessee submitted Phase I/II reports that are presently under SHPO review. This review will determine if there are cultural resource impacts that were not previously identified and if additional surveys are required. Tennessee has also encouraged the Tribe to provide specific comments to the FERC and to the SHPO regarding cultural resources survey reports. FERC, in consultation with the HPO, will determine the need for additional archaeological survey based upon the information provided.

**COMMENT:** The commenter asked if Tennessee has eminent domain power. (31)

**RESPONSE:** At the public hearing, NJDEP responded that the issuance of the FERC Certificate would give the company the power to exercise eminent domain under the Natural Gas Act. Although Tennessee would have the power to condemn private property owners, it is unclear whether it could bring a claim against the State. There are currently no reported condemnation cases against the State of New Jersey.

**COMMENT:** The commenter stated that if the State lands were purchased with federal Land and Water Conservation Funds ("LWCF"), then there is a prohibition that requires a review of properties that are being conveyed. As support for this position, the commenter cited <u>Earl Prucus v New York State Power Company</u> (1972). Tennessee needs to look at the deed restrictions on these properties and take an inventory of LWCF lands. (32)

**RESPONSE:** If a property is funded with Land and Water Conservation Funds, there is a conversion process under the National Park Service rules and regulations, which is similar to the diversion process under the Green Acres rules. The information required by the National Park Service is very similar to or identical to what the NJDEP's Green Acres Program requires applicants to submit for review under the diversion process rules. There is no prohibition against converting lands acquired with Land and Water Conservation Funds, provided the applicable regulations are followed.

Based on Tennessee's review, there are no parcels on Loop 323 that were funded by the LWCF. However, for Loop 325, the following parcels received LWCF funds: Block 1101, Lot 5, Borough of Ringwood, Passaic County, LWCF Project #34-00304, Shepard's Lake Recreation Area; Block 1, Lot 1, Township of Mahwah, Bergen County, LWCF Project #34-00365, Ringwood/Ramapo Greenway; and Block 1, Lots 67, 68 and 69, Township of Mahwah, Bergen County, LWCF Project #34-00125, Skylands Interregional Park.

The NJDEP has evaluated the Loop 325 lands listed above. The National Park Service has determined that the proposed use of these properties by Tennessee constitutes a conversion under the federal rules. NJDEP is preparing a conversion application package and anticipates submitting it to the National Park Service within the next several weeks.

The NJDEP could not find the specific case referred to by the commenter, but will review it if the commenter can provide a more accurate citation.

**COMMENT:** The commenter states that she opposes the project until a number of conditions are satisfied. These conditions include: (1) an increase in the amount of compensation paid to the State; (2) the terms of the lease outlining Tennessee's obligations, responsibilities, and liabilities should be negotiated; (3) Tennessee releases to the public all its impact and environmental studies; (4) the exact amount of lands being deeded to New Jersey in exchange for land conveyed are determined; (5) Tennessee should guarantee a reasonable number and term of local and statewide jobs; (6) Tennessee agrees to donate money to each community through which the project crosses; and (7) Tennessee agrees to the terms and conditions of the federal report issued by Energy Secretary Chu regarding hydraulic fracking. Another commenter raised a similar concern about jobs. (27, 38)

**RESPONSE:** NJDEP will address below each of the conditions raised by the commenter, however, where a more detailed response is provided elsewhere in this document, NJDEP will reference the appropriate section of this Response to Public Comments document:

(1) Tennessee should increase the amount of compensation paid to the State;

As stated at the public hearings, there are three components to the compensation (ground rent, replacement land, and mitigation measures.) The NJDEP believes that the proposed approach to compensation is fair and appropriate from an economic perspective and covers the majority of the anticipated impacts to State property. In August 2011, DEP adopted, after stakeholder and public input, a lease valuation policy which set consistent lease rates for ground rents. Application of the 2011 Lease Valuation Policy to the NEUP Project has resulted in a substantial increase in fee revenue to the State compared to the 300 Line Project, as discussed in Compensation/Mitigation on beginning on Page 40. In addition, at NJDEP's request, Tennessee was required to avoid/minimize impacts to State property to the extent practicable, which will have the effect of reducing both the final monetary compensation figure and the final replacement land acreage because a smaller amount of State property will be impacted by the NEUP. (See Mitigation/Compensation on Pages 40-42 for further details.)

(2) The terms of the lease outlining Tennessee's obligations, responsibilities, and liabilities should be negotiated;

NJDEP intends to enter into a lease for the NEUP that contains terms and conditions similar to the lease it entered into with Tennessee for the 300 Line Project. The 300 Line Project lease is posted on NJDEP's information page for the NEUP project at <a href="https://www.nj.gov/dep/greenacres/neup.html">www.nj.gov/dep/greenacres/neup.html</a>. The lease, which requires approval by the NJDEP Commissioner and the State House Commission, will be executed by NJDEP and Tennessee prior to Tennessee conducting any earth moving or construction work on NJDEP's lands. In negotiating the lease for the NEUP, the NJDEP will use the 300 Line lease as a template but will seek to incorporate issues raised in the public comments (and other "lessons learned" from the 300 Line Project) to the extent feasible and appropriate to protect the public interest in the affected State properties. (See Lease – Terms and Conditions on Page 37 below.)

(3) Tennessee should release to the public all its impact and environmental studies;

The FERC posted the Environmental Report for the Project, which consists of various Resource Reports, on its website at <a href="http://elibrary.FERC.gov">http://elibrary.FERC.gov</a>. The Environmental Report, which is required pursuant to NEPA and the FERC's regulations at 18 C.F.R. §380.12, includes all of the studies and reports associated with the environmental impacts of the NEUP. The Environmental Report, which is an exhibit to the certificate application for the Project, was also available at public libraries throughout the Project area. In addition, the FERC issued the EA for the NEUP on November 21, 2011, which was made available for review and comment on FERC's website at <a href="http://elibrary.FERC.gov">http://elibrary.FERC.gov</a> (in Docket No. CP11-161-000). (See Environmental Impacts from Pipeline Construction, below.)

(4) Tennessee should identify the exact amount of lands being deeded to New Jersey in exchange for the land proposed to be conveyed;

Given the proposed route of the Project and taking into account the avoidance and minimization of impacts measures undertaken by Tennessee as described in this document, Tennessee has proposed to occupy 17.760 acres of State land for the ROW for the new 30-inch pipeline. 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.

In addition to the 4:1 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 resource values inherent in mature forests 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. (See Mitigation/Compensation, Pages 40-42.)

(5) Tennessee should guarantee a reasonable number and term of local and statewide jobs;

See Mitigation/Compensation, Page 41, below.

(6) Tennessee should agree to donate money to each community through which the project crosses; and

See Mitigation/Compensation, Page 41.

(7) Tennessee should agree to the terms and conditions of the federal report issued by Energy Secretary Chu regarding hydraulic fracking.

See Fracking – General, Page 31.

**COMMENT:** The commenter asked if the resource reports are put together by Tennessee. (19)

**RESPONSE:** The resource reports are prepared by Tennessee's consultants at Tennessee's direction as part of its application for a FERC Certificate.

**COMMENT:** During the public comment period for the NEUP, including the three public hearings, several commenters submitted written exhibits, photographs and a ten minute DVD which contained a video of Commenter #32's comments made at the September 7, 2011 public hearing into the record. (1, 3, 13, 32, 42, 49)

**RESPONSE:** All exhibits provided by commenters at the public hearings and during the public comment period have been compiled and posted on NJDEP's information page for the NEUP project at <a href="www.nj.gov/dep/greenacres/neup.html">www.nj.gov/dep/greenacres/neup.html</a>. A viewing of the DVD submitted as part of the public record may be arranged through the Green Acres Program by contacting Kevin Koslosky at (609) 984-0500.

**COMMENT:** One commenter submitted extensive comments on the NEUP prepared by Susan Kraham, Esq. of the Columbia University School of Law, Environmental Law Clinic, on behalf of the New Jersey Highlands Coalition, the New Jersey Chapter of the Sierra Club, the Delaware Riverkeeper Network, and Save the Park. These comprehensive comments, which are addressed to the FERC, discuss the scope of the Environmental Assessment ("EA") to be prepared by the FERC for the NEUP, and among other things, urge the FERC to prepare an Environmental Impact Statement ("EIS") rather than an EA. (32)

**RESPONSE:** NJDEP has reviewed Ms. Kraham's comments. They are filed with the FERC, so the FERC is responsible for considering them during its review of the NEUP. Although the NJDEP is an intervenor in the FERC process, it is also separately reviewing the NEUP as it affects State property and regulated natural resources. The Highlands Council conducted a separate review of the NEUP under its statutory and regulatory authority. 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.

Ultimately, however, the FERC will decide whether to issue a Certificate for the NEUP and whether such issuance should be based on an EA or an EIS (as asserted by Ms. Kraham.) An EA has been prepared for the Project and was issued on November 21, 2011, and the FERC will consider the EA and comments received on the EA as part of the certificate review process. Concurrently, the NJDEP will review the resource-specific impacts of the NEUP within the parameters of its permitting rules and statutes.

**COMMENT:** One commenter asked where she could get a copy of the transcript of the August 17, 2011 public hearing. Another commenter asked, at the third public hearing on September 7, 2011, when the transcripts will be available to the public and when the NJDEP expects to post the transcripts to its website. (1, 3)

**RESPONSE:** At the public hearing, the NJDEP responded that the transcript would be available on Green Acres' website, <a href="www.nj.gov/dep/greenacres">www.nj.gov/dep/greenacres</a>. There were some unforeseen delays in posting the transcripts of the public hearings on NJDEP's website due to power outages caused by Hurricane Irene. However, in September 2011, the transcripts were posted on NJDEP's information page for the NEUP at <a href="www.nj.gov/dep/greenacres/neup.html">www.nj.gov/dep/greenacres/neup.html</a>.

**COMMENT:** The commenter asked who hired the court reporter transcribing this public hearing. (1)

**RESPONSE:** Due to funding constraints at the State level, NJDEP asked Tennessee to hire the court reporter to transcribe the public hearings.

**COMMENT:** Two commenters expressed concern that the transcript of the public hearings would be altered or would not be accurate because the court reporter was hired by Tennessee, and not by the State. Another unidentified commenter expressed concern that Tennessee may change what the court reporter wrote. Another commenter, who attended the Montague public hearing on August 17, 2011, stated that the court reporter did not report verbatim what was said at the hearing. She asserted that her recorded comments were not in her usual manner of speaking. (1, 3, 11)

**RESPONSE:** At the public hearing, the NJDEP responded that the court reporters are a regulated industry and have standards they must uphold. Tennessee also stated that the transcript will come from the court reporter as a .pdf file, which cannot be altered.

**COMMENT:** The commenter asked if September 21, 2011 is the end of the comment period. (1)

**RESPONSE:** At the public hearing, the NJDEP responded that it needed a cut-off date so that the comments could be summarized and given to the Commissioner and the chair of the State House Commission in accordance with *N.J.S.A.* 13:1D-51 *et seq.* Since interested stakeholders expressed a need for additional time to submit comments and review the public hearing transcripts, the NJDEP later extended the comment period to September 30, 2011.

**COMMENT:** One commenter asked if the NJDEP could note on its website that those persons needing additional time to comment should notify NJDEP. (1)

**RESPONSE:** The NJDEP posted a notice on the NEUP information page on September 16, 2011 extending the deadline for public comments to September 30, 2011. The notice also indicated that comments received after September 30, 2011 would be taken into account by the NJDEP but would not be included in this response to comments document.

**COMMENT:** At the third public hearing, a commenter stated that there were a number of people who wanted to attend the meeting but could not get there because the hearing was held during the day. (1)

**RESPONSE:** For conveyances of over five acres, the Ogden Rooney process requires two public hearings—one in the municipality in which the parkland proposed for conveyances is located, and one in the City of Trenton. The NJDEP responded that it tries to have the Trenton meeting during the day (usually late afternoon) due to concerns about safety, limits on availability of meeting space and because concerned non-profit groups are usually the ones who attend. The NJDEP schedules the local hearing, such as the hearings held in Montague and Ringwood, at night so those who work during the day can attend.

COMMENT: The commenter expressed concern with the way the August 17, 2011 public hearing in Montague was conducted. Specifically, he states that he was tricked into giving his personal information and that Tennessee employees were posing as government officials. The commenter demanded an investigation. The commenter maintains that no information was supplied by NJDEP and that he could not talk to any of the presenters or "hosts" until after the meeting was completed. He stated that Judeth Yeany was not available for the duration of the meeting and that Ms. Yeany's contact information was not provided. The commenter thought it was disgraceful that that Ms. Yeany "sold the idea" that NJDEP is powerless, thus discouraging members of the public that their concerns were meaningless. He also found it unacceptable that Tennessee was hosting the meeting and not the NJDEP. The commenter also expressed concern that the maximum occupancy of the meeting room had been reached and that there were many people who could not fit into the room. He called the meeting a sham and requested that NJDEP hold another public meeting. (33)

**RESPONSE:** For projects such as the NEUP that trigger the "Ogden Rooney" process, it is the NJDEP's practice to include the project sponsor in the public hearing to address any technical issues that arise at the hearing. As part of this participation, the NJDEP usually requests that the project sponsor explain the project to the public, in part to avoid any implication that the NJDEP is "selling" the project. The NJDEP regrets that the presence of Tennessee representatives at the hearing may have created confusion about the respective roles or NJDEP and Tennessee employees. However, on the whole, the NJDEP believes that the public hearing was conducted in a manner that allowed all members of the public present at the hearing to express their concerns about the proposed lease of State property.

### II. ALTERNATIVES

**COMMENT:** The commenter asked why Tennessee cannot leave the State parks alone and build the pipeline through either of the two other alternatives presented. Several other commenters stated that the public park and forest lands that Tennessee wishes to traverse are not replaceable and Tennessee should find other corridors for its pipeline. (12, 16, 49, 50, 51, 52, 53)

**RESPONSE:** At the public hearings, Tennessee referred to Slides 35 through 39 of its presentation in responding to this comment. (This presentation may be found at <a href="http://www.nj.gov/dep/greenacres/pdf/aug">http://www.nj.gov/dep/greenacres/pdf/aug</a> 17 and 18 2011 public hearing on state lease for <a href="neup.pdf">neup.pdf</a>.) As explained in the slides, Tennessee looked at alternatives that avoided the State parks. However, Tennessee concluded that the alternatives would result in greater amounts of disturbance to environmentally sensitive areas and to residential areas than expanding the existing pipeline corridor. In general, the alternatives analyzed affected a greater amount of total acreage, and resulted in more disturbance to natural resources such as wetlands, streams and forests, than staying parallel to the existing pipeline. In selecting the proposed route, Tennessee proposed what it believes to be the best balance of resource impacts and the best answer to minimize the impacts of the Project. However, as stated at the public hearings, the FERC will make the final determination on the pipeline route as part of its consideration of the company's FERC Certificate application. If the commenters have a different alternative (other than the "no build" alternative), then they should submit that alternative to the FERC for its consideration.

NJDEP's consistent policy position has been that utility corridor projects should remain in existing ROWs if such a ROW exists. This position was articulated in the July 2011 Report, as well in submittals made by NDEP to the FERC on May 2, 2011 and July 18, 2011. This position has further been memorialized in the NJDEP December 2011 Large Linear Infrastructure Project www.nj.gov/dep/docs/linear-infrastructure-Document. available Guidance at guidance201112.pdf, and represents the NJDEP's view that it is generally environmentally advantageous to stay within an existing ROW because environmental impacts would tend to be minimized in areas of pre-existing disturbance. NJDEP believes that staying within an existing pipeline corridor would likely avoid the construction of potentially longer loops that could result in more overall impacts to the environment and residential areas. Consequently, NJDEP supports Tennessee's efforts to construct the NEUP within an existing pipeline corridor if the overall NEUP project is authorized by the FERC.

**COMMENT:** The commenter stated that the alternatives analysis should be reworked. By way of example, the commenter stated that the southern alternative going through Stokes State Forest, from NJDEP's point of view, would have the same status as the route through High Point State Park and that the alternative would not solve the problem of avoiding protected land. (31)

**RESPONSE:** Slide 35, to which the commenter appears to refer, was prepared for the purpose of analyzing alternatives to using State parkland as part of the proposed lease request, and not for the purposes of analyzing alternatives for the FERC Certificate application. As the commenter observes, in the vicinity of High Point State Park, there are no feasible alternative routes that would both avoid other State parkland and not involve much greater rerouting distances (with associated impacts on other protected resources.) The full alternatives analysis prepared for the FERC application may be found at <a href="http://elibrary.FERC.gov">http://elibrary.FERC.gov</a> (in Docket No. CP11-161-000).

**COMMENT:** The commenter expressed concern regarding the impacts to Bear Swamp Road from increased travel by trucks. The same commenter asked whether there are any alternatives to using Bear Swamp Road. (23)

**RESPONSE**: Tennessee presently uses Bear Swamp Road to access its existing pipeline. During construction of the NEUP, Tennessee intends to use Bear Swamp Road to access the pipeline construction site only through the use of light duty vehicles and equipment. Tennessee will access the Project area with heavy construction equipment from the Ringwood State Park side of the Project area. There will be no tree cutting to widen Bear Swamp Road.

**COMMENT:** The commenter asked if Tennessee will have to establish other routes to reach the pipeline. (11)

**RESPONSE:** Tennessee will use only existing public roads and identified existing access roads during construction of the Project. Tennessee has no plans to build new roads for access to the Project for construction, operation, or maintenance of the pipeline.

# III. ENVIRONMENTAL IMPACTS FROM PIPELINE

**COMMENT:** One commenter expressed his strenuous opposition to the NEUP because of: (1) the destructive impact of the project on wilderness areas of the State; (2) the social investment the project represents in the carbon economy; and (3) the need to move away from a carbon economy to one based on renewable resources. Three other commenters voiced their opposition to the NEUP because they feel it will promote the use of fossil fuels and their effect on climate change. Other commenters stated that the funds and resources being devoted to the NEUP should be redirected to developing clean energy such as wind and solar. (15, 44, 47, 48)

**RESPONSE:** NJDEP acknowledges that there will be impacts from the proposed NEUP. NJDEP has been working closely with Tennessee to avoid the use of State land for the Project and minimize the impacts of any new permanent ROW and workspace for the Project on undeveloped State land. See avoidance/minimization details on Page 7.

As a cleaner and more cost-effective alternative to coal or oil, natural gas plays a significant role in New Jerseys energy future. Governor Christie's Energy Master Plan encourages the development of in-state, natural gas-fired electrical power not only to reduce New Jerseyans' energy costs, but also to protect our environment by eliminating the need for power from coal states and by accelerating the decommissioning of older, dirtier, and less efficient coal and oil-fired electrical generation plants in New Jersey. Natural gas is a much cleaner form of energy than coal or oil, emitting much less sulfur dioxide, fine particulates, volatile organic compounds (VOCs), and greenhouse gases than those energy sources.

**COMMENT:** Transco was fined over two million dollars a few years ago for PCBs that leaked out of its pipeline and compressor station. (11)

**RESPONSE:** Tennessee is aware of the general issue of polychlorinated biphenyls ("PCBs") leaking from pipelines, but is unaware of the specific Transco incident referred to by the

commenter. As part of its FERC Certificate application, Tennessee prepared and submitted Resource Report #12, which addresses PCB Contamination. The FERC requires this Report to be prepared for applications involving the replacement, abandonment by removal or abandonment in place of pipeline facilities determined to have PCBs at concentrations in excess of 50 parts per million ("ppm") in pipeline liquids. If PCBs exceed this 50 ppm threshold, then the PCBs would have to be disposed of in accordance with the Toxic Substances Control Act. If soils at compressor stations are contaminated with PCBs, then Tennessee would have to describe its remediation efforts. Tennessee performed testing of its entire pipeline system, including its compressor stations, and the results of this testing showed that its system does not have PCB concentrations greater than 50 ppm. Since the Project does not involve, nor does Tennessee anticipate the replacement or abandonment of, any existing pipeline known or expected to have PCBs in excess of 50 ppm, Tennessee did not provide the information required for this resource report.

**COMMENT:** The commenter expressed concern about the effect of Tennessee's operations on the Rampough Lenape Nation's unmarked burial site at Long Pond Ironworks State Park. (19)

**RESPONSE:** Section 106 of the National Historic Preservation Act of 1966 requires Federal agencies to take into account the effects of their undertakings on historic properties, and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment. (See http://www.achp.gov/106summary.html for more information.) As part of the Section 106 consultation process that is part of the FERC Certificate application, Tennessee conducted a cultural resources survey for the "area of potential effects" (APE) for the Project, which includes pipeline ROW, access roads, temporary work space, aboveground facilities, pipe yards and other ancillary facilities. Tennessee surveyed 96% of the Project area in New Jersey – 606 acres of pipeline corridor; 98 acres for access roads; and 44 acres for pipe and contractor yards. The 4% that was not surveyed were properties on which landowner approval could not be obtained. The archeological surveys were conducted in a 300-foot wide corridor for the pipeline ROW and a 50-foot wide corridor for access roads.

SHPO is currently in consultation with the FERC, and other interested parties, regarding TGP's Northeast Upgrade Project pursuant to Section 106 of the National Historic Preservation Act. SHPO's official comments to FERC requested that TGP revise the project's (APE) through: 1) having TGP's cultural resource consultant (Gray & Pape) reach out to the Ramapouph to identify archaeological locations and geographic settings that they consider sensitive within the APE; and 2) revising the APE to take blasting into consideration for effects on historic and archaeological resources. The future, revised Phase I archaeological survey will provide the revised APE and summary of all historic and archaeological sites within the APE. The revised Phase I report will identify if any burial(s) location in Long Pond Ironworks State Park is within the APE and provide an assessment of affects. These surveys are currently under review by SHPO.

### IV. ENVIRONMENTAL IMPACTS FROM PIPELINE CONSTRUCTION

**COMMENT:** One commenter, who spoke at both the Montague and Ringwood public hearings, was generally concerned about the impacts that the NEUP construction will have on lands over which the pipeline is travelling. Several other commenters expressed concern that it is impossible for Tennessee to evaluate accurately the impacts of the NEUP since Tennessee's plans for the NEUP are not complete at this time. (3, 16, 50, 51, 52, 53)

**RESPONSE:** Tennessee's plans for the NEUP are complete and are set forth in the FERC Certificate application that was filed with the FERC on March 31, 2011. Construction impacts on environmental resources are evaluated in the Environmental Report submitted with the FERC Certificate application and reviewed by the FERC as part of its overall review of the NEUP. The Environmental Report is available on the FERC's website at <a href="http://elibrary.FERC.gov">http://elibrary.FERC.gov</a> under Docket No. CP11-161-000. In addition, as discussed above, the NJDEP will review the resource-specific impacts of the NEUP within the parameters of its permitting rules and statutes.

**COMMENT:** One commenter expressed her view that the pipeline is a detriment to the environment and the health and safety of the people who live near it. Another commenter stated that the lease will not just cause a disturbance over its 25 year period but forever. The commenter asked those present to understand the long-term consequences of the pipeline project. (14, 24, 37)

**RESPONSE:** NJDEP and Tennessee understand that pipeline construction has significant short-term impacts on the environment and on landowners in the vicinity of the Project. Tennessee has designed the Project to minimize these impacts by constructing the pipeline loops, to the extent practicable, in existing, maintained rights-of-way, thereby limiting new disturbances to the environment. However, there is no evidence that a properly maintained pipeline will present any continuing detriment to the environment or public health and safety. In the long term, the temporary work space used during construction will be restored to FERC and NJDEP standards, will remain undisturbed and will be allowed to revert to its original condition. In approving interstate natural gas pipeline projects, the FERC balances the need for energy infrastructure (that is, the public benefits of a project) against the impacts to landowners and the environment (as well as existing customers of the pipeline and other pipeline companies.)

**COMMENT:** The commenters stated that there must be a thorough evaluation of the project's impact on the Monksville Reservoir and North Jersey District Water Supply Commission's Wanaque Reservoir System, prior to any decision to lease, especially in light of the impacts that could be caused by siltation. Another commenter expressed concern that the area supplies water for two million people and questioned how Tennessee can construct a pipeline through a reservoir and a watershed without causing drinking water impacts. (16, 32, 50, 51, 52, 53)

**RESPONSE:** As part of the FERC Certificate process, the FERC prepared and issued an Environmental Assessment on November 21, 2011. The EA has been posted on the FERC website, and addresses, among other things, the impacts to the Monksville Reservoir and the NJDWSC property. The EA confirms Tennessee's site-specific plan to cross the Monksville Reservoir via a horizontal directional drill ("HDD") as this method of crossing is designed to minimize environmental impacts. Tennessee has conducted a site-specific geotechnical study

and engineering review that indicates that conditions are favorable for a successful HDD crossing of the Monksville Reservoir. After analyzing the effects of withdrawing water from the Monksville Reservoir for hydrostatic testing, the benefits of the HDD method on the bed and banks of the reservoir, and the contingencies in the event of HDD failure, the FERC concludes in the EA that the impacts on water bodies, including the Monksville Reservoir, will be minor and temporary. If the commenters believe that the information in the EA is incomplete or if the commenters disagree with the FERC's analysis, then the commenters can participate in the FERC process by submitting comments on the EA. See Section 2.2.2 of the EA at <a href="http://elibrary.FERC.gov">http://elibrary.FERC.gov</a> (in Docket No. CP11-161-000).

The Monksville Reservoir is located on a portion of Long Pond Ironworks State Park, Block 4601, Lot 8, located in the Township of West Milford and an adjacent parcel, Block 310, Lot 1, located in the Borough of Ringwood and owned by the NJDEP. Under a 1969 agreement with the NJDEP, the NJDWSC developed a reservoir and owns the water rights, but the reservoir is a recreational facility open to the public on the State Park. The HDD will begin, travel under the reservoir and surface on Block 4601, Lot 8 only. The HDD will minimize the impacts to the State Park and reservoir to the greatest extent possible. Several miles to the east of the reservoir, the NJDWSC owns two adjacent parcels, Block 508, Lots 1 and 5, that are in the watershed of the Wanaque Reservoir. However, Tennessee's Project does not cross the Wanaque Reservoir.

**COMMENT:** The commenter stated that Shimers Brook and Big Flat Brook are classified as C-1 waters in High Point State Park, and that any damage to these streams from the Project cannot be repaired. Tennessee needs to have a plan in place to prevent any damage caused by the soil coming into these water bodies. (11)

**RESPONSE:** NJDEP and Tennessee are aware of the environmental sensitivity of these streams as C-1 water bodies. Activities in Category One waters are under the regulatory review of the Department pursuant to the Flood Hazard Area Control Act Rules at N.J.A.C. 7:13. Any permit approvals issued under these rules would be subject to conditions such as specifying the approved methods of construction and imposing timing restrictions to minimize impacts to biota at critical life stages. Permit conditions will also include an Erosion and Soil Sedimentation Plan approved by the Sussex County Soil Conservation District which is being developed in consultation with NJDEP and Tennessee. Tennessee has proposed a dry crossing method in its Flood Hazard Area Individual Permit application. NJDEP in its continuing efforts to minimize the environmental impacts of the project is evaluating alternative construction techniques, especially in these sensitive environmental areas, specifically the use of horizontal directional drilling (HDD). Tennessee continues to examine the suitability of successfully conducting HDD through geotechnical borings of the area.

**COMMENT:** The commenters stated that there must be a thorough evaluation by the State Historic Preservation Office and appropriate federal agencies of the NEUP's impact on the national Historic Landmarks within the project area, especially since the NEUP will be going through a number of national historic landmarks, including Ringwood Manor, the view shed from Skylands Manor, and Long Pond Ironworks State Park. (16, 32, 50, 51, 52, 53)

**RESPONSE:** At the public hearings, the NJDEP responded that cultural and historic resource surveys are part of the FERC process, and that these issues are covered in Tennessee's resource

reports. The NJDEP encouraged the commenters to submit comments to the FERC if they disagreed with the analysis in the reports.

SHPO is currently in consultation with the Federal Energy Regulatory Commission (FERC), and other interested parties, regarding Tennessee Gas Pipeline Company's Northeast Upgrade Project pursuant to Section 106 of the National Historic Preservation Act. In December, SHPO provided FERC with comment on the deficiencies within the identification level cultural resource survey reporting. SHPO requested that FERC and the Tennessee Gas Pipeline Company address the historic and archaeological resources identified by members of the public and the Ramapough Lenape Nation that were not included, and not yet acted upon, in identification level survey efforts to date. In response, Tennessee has provided NJDEP with Revised Phase 1A and Phase II Cultural Resource Reports, which are currently under review. Upon SHPO's completion of this review, the NJDEP will be in a position to assist FERC in assessing project effects on historic properties within the proposed undertaking's area of potential effects (APE). If historic and archaeological resources are adversely affected by the project, FERC, through consultation with SHPO and the interested parties, must work to avoid, minimize, and/or mitigate those effects. A copy of the above referenced letter, dated December 29, 2011, is attached to this Response to Comments document.

**COMMENT:** One commenter asked for a description of Tennessee's invasive plant species control, monitoring and treatment plan. Another commenter asked how Tennessee will prevent invasive species from being brought from one area and taken to another area during construction. The commenter was concerned that materials used during construction, especially in water or wetlands crossings, are contaminated, and that such contamination would spread as a result of the construction. (3, 5)

**RESPONSE:** Tennessee prepared and submitted an invasive species management plan ("ISMP") to the FERC as part of its Environmental Report for the FERC Certificate Application, which may be found at <a href="http://elibrary.ferc.gov:0/idmws/common/OpenNat.asp?fileID=12612913">http://elibrary.ferc.gov:0/idmws/common/OpenNat.asp?fileID=12612913</a> (Resource Report #3). Tennessee also prepared and submitted to the NJDEP two site-specific Draft State ISMPs as part of its No Net Loss Reforestation Plans for Loops 323 and 325. For Loop 323. the **ISMP** may be found at http://www.state.nj.us/dep/parksandforests/forest/community/pdf\_files/Reforestation%20Plan%2 For Loop 325, the ISMP may be found at 0Loop%20323%20NNL.pdf (Exhibit E). http://www.state.nj.us/dep/parksandforests/forest/community/pdf\_files/Reforestation%20Plan%2 OLoop%20325%20NNL.pdf (Exhibit E). NJDEP does not consider these ISMP's to be final as additional survey data is pending. NJDEP will continue discussions with Tennessee concerning any required additional control measures based on the survey data. Currently, the draft ISMPs are specific to revegetation of the ROW as a result of the construction of the pipeline looping and above ground facilities in New Jersey. During construction, in areas identified and approved by NJDEP based on complete NJDEP required survey data, Tennessee will have wash stations for the equipment to make sure that invasive species are not transported from park to park. In addition, Tennessee's Project pipeline construction contract will specify that timber mats used must be certified by Tennessee's environmental inspector to be in good condition and must be cleaned prior to entering the Project area. Following construction, Tennessee will spray those areas containing invasive species with herbicides, as appropriate. Tennessee will also conduct monitoring of the new ROW areas and will actively remove invasive species found. Once the construction and restoration is complete, Tennessee's operation and maintenance crews will continue implementing the ISMP throughout the term of the 25-year lease.

Based on field observations related to the 300 Line Project construction and the concerns raised by the commenters and other members of the public, particularly allegations about lapses in washdown procedures, the NJDEP has advised Tennessee that it will be paying strict attention to ensuring that these commitments have been fully complied with. Additionally, these requirements will be captured in a NJDEP-approved ISMP and Construction Work Plan that will be incorporated into the Lease Agreement and Right of Entry Agreement.

**COMMENT:** The commenter asked whether Tennessee considered the impacts of taking down trees on wildlife and endangered species, which use these trees as habitat. The commenter also specifically asked where the animals will go after the trees come down, but before the forests are successfully reforested. (9)

**RESPONSE:** Tennessee prepared Resource Report #3 as part of the Environmental Report submitted with the application for a FERC Certificate, which included an analysis of all wildlife, including rare, threatened or endangered species, and the potential impacts to the habitat from the Project. This Report may be found at <a href="http://elibrary.ferc.gov:0/idmws/common/OpenNat.asp?fileID=12612913">http://elibrary.ferc.gov:0/idmws/common/OpenNat.asp?fileID=12612913</a>. NJDEP also incorporated these analyses into the July 2011 Report, which may be found at <a href="http://www.nj.gov/dep/greenacres/pdf/tgp.neup.report.pdf">http://www.nj.gov/dep/greenacres/pdf/tgp.neup.report.pdf</a>

Although Tennessee cannot avoid removing trees for the construction of this Project, the impacts to wildlife species will be minimized by co-locating the proposed pipeline loop adjacent to the existing maintained ROW. As previously discussed, at NJDEP's direction, Tennessee has also reduced the scope of the project area to minimize environmental impacts. In order to protect threatened and endangered species the NJDEP formally required, as a part of the FERC process, specific species surveys and protocols that must be submitted to the Department as part of the Division of Land Use Regulation's permitting review and its lease requirements. The final surveys will dictate permit approvals and conditions, including timing restrictions to protect biota at critical life stages and other protection measures to minimize impacts to threatened and endangered species.

**COMMENT:** The commenter questioned why Tennessee stated that no federal or state listed threatened or endangered species were found in the field surveys for this Project since it crosses two Natural Heritage Priority Sites, which, by definition, are areas essential to protecting rare plant species and ecological communities. Given the unique environmental conditions in the area needed for the NEUP, the commenter questioned the competency of the individuals conducting the bog turtle surveys. (11)

**RESPONSE:** Natural Heritage Priority Sites are planning designations that are made by the NJDEP based on information about habitat for rare and endangered species and ecological communities. The Sites are a tool for prioritizing the protection of areas that contribute to natural diversity and a predictor of where rare and endangered species may be located, but not a guarantee that a particular species will be found in a particular location.

Tennessee conducted field surveys in the three Natural Heritage Priority Sites that will be crossed by the NEUP, specifically the Sawmill Pond Swamp Natural Heritage Priority Site (Loop 323), the Mashipacong Bogs Natural Heritage Priority Site (Loop 323) and the Ursus Majus Natural Heritage Priority Site (Loop 325). The results of the field surveys can be found in Table 2.3.1-5 in the EA, which is available on the FERC website at <a href="http://elibrary.FERC.gov">http://elibrary.FERC.gov</a> (in Docket No. CP11-161-000). According to Tennessee's field survey results, no federal or State threatened or endangered species were identified where the proposed work space crosses the Natural Heritage Priority Sites. However, three plant species that are protected under the Highlands Water Protection and Planning Act were identified in the Sawmill Pond Swamp Natural Heritage Priority Site.

Presently, the NJDEP has identified the need for additional rare plant surveys that meet its protocols. Additional surveys will be conducted by Tennessee in the Spring of 2012 and if necessary, also in the Fall of 2012, and will be reviewed as part of NJDEP's land use permitting process. If any federal or state listed threatened and endangered species plant species are discovered during the additional required surveys, appropriate avoidance and mitigation measures will be coordinated between NJDEP and Tennessee.

As for the commenter's question about the competency of the individuals conducting bog turtle surveys, the protocols submitted to USFWS and/or NJDEP by Tennessee required the surveyors to meet species-specific qualifications. The surveyors were selected only if they met these qualifications. For the bog turtle surveys conducted, Tennessee submitted survey protocols to both USFWS and NJDEP because this species is on both the federal and State Endangered or Threatened Species lists.

None of the Natural Heritage Priority Sites to be crossed by the NEUP has been designated as such due to the presence of bog turtles. In fact, no bog turtles have been found along Tennessee's current alignment for the NEUP.

**COMMENT:** The commenter asked about the presence of Indiana bats and the field survey process. (23)

**RESPONSE:** Tennessee hired qualified surveyors from the certified list maintained by USFWS for the Indiana bat surveys. The surveyors first conducted a GIS desktop analysis and then conducted field assessments to identify hibernacula sites. The surveyors also designed a presence/absence mist net survey protocol for Summer 2010 field surveys, in accordance with the protocol approved by the USF&W. The surveyors prepared and submitted Summer Mist Net Survey Study Plans in late July 2010, and conducted the mist netting between July 29 and August 15, 2010. The survey area covered the original alignment, but did not cover Tennessee's preferred route around the Delaware Water Gap National Recreational Area ("DWGNRA") or its associated access roads. Preliminary results of the mist net survey showed that no Indiana bats were captured. However, follow up mist net surveys for the proposed route around the DWGNRA were conducted in June and July 2011. The results of these survey reports are still pending.

In the EA, the FERC recommended that Tennessee adopt a seasonal restriction for clearing trees from April 1 to September 30 along the eastern 2.5 miles of Loop 325. More information on the FERC's recommendation on how to minimize impacts to the Indiana bat from construction of the NEUP can be found in Section 2.3.3.2 of the EA at <a href="http://elibrary.FERC.gov">http://elibrary.FERC.gov</a> (in Docket No. CP11-161-000).

NJDEP is recommending that a seasonal restriction on tree clearing for suitable roost trees greater than 5-inch-diameter breast height from April 1 to September 30 be imposed along the entire length of Loops 323 and 325. This recommendation is based on NJDEP's Endangered and NonGame Species Program's policy that negative survey results alone do not serve as adequate proof that the target species does not exist on a project site. In most cases ENSP requires a detailed description of the habitat present on a project site that shows that no suitable habitat for the target species exists. Survey efforts often are not successful at identifying species that may be present on a site. Mist net sampling often fails to detect bat species that are present due to foraging habits and other variables. Demonstrating that no suitable habitat exists in combination with negative mist net survey results provide a better indication that the target species is not likely to be present in an area. Given the situation with bat populations in the Northeast resulting from high mortality associated with White-nose Syndrome, many species, including Indiana bats, occur at lower densities now than they did just a few years ago.

**COMMENT:** The commenter asked whether the acreage in the July 2011 Report is for permanent or temporary clearance. (23)

**RESPONSE:** The July 2011 Report included acreage for both permanent and temporary impacts. As indicated in the Report, the acreage numbers used were based on Tennessee's FERC Certificate Application filing. However, in the Report and in the three public hearings, the NJDEP stated that it had asked Tennessee to evaluate measures to avoid the use of State land for the NEUP where feasible, and to minimize the impact of the NEUP on State land where avoidance is not feasible. This analysis was required for both the area to be leased and the proposed temporary work space. As a result of this avoidance/minimization analysis, the NJDEP and Tennessee anticipate that the final acreage figures for the proposed lease will be substantially lower than those in the FERC Certificate Application filing and in the July 2011 Report.

**COMMENT:** The commenter stated that the pipeline right-of-way and temporary work space will require the deforestation and fragmentation of critical forest resources, a permanent loss of ecological services, the loss of forest activity and threatened and endangered species. (16, 25, 50, 51, 52, 53)

**RESPONSE:** As discussed above, it is the NJDEP's view that utility infrastructure projects should stay within existing ROWs if such a ROW exists. In general, the use or expansion of existing ROWs will minimize the environmental impacts of these projects by locating them in areas of pre-existing disturbance and avoiding the construction of potentially longer loops that could result in more overall impacts to the environment and residential areas. Consequently, NJDEP supports Tennessee's efforts to construct the NEUP within an existing pipeline corridor if the overall NEUP project is authorized by the FERC. See NJDEP's Large Linear Infrastructure Project Guidance Document, available at www.nj.gov/dep/docs/linear-infrastructure-guidance201112.pdf, for further guidance on this subject.

The commenter's concerns can only be avoided entirely if the Project is not built. Ultimately, the FERC will decide whether the Project is needed and endorse a route that reflects a balance of competing considerations (environmental, societal and economic.) However, the issuance of the Certificate does not preempt NJDEP's land use permitting process for the Project, under which the environmental impacts of the Project will be reviewed in detail. Through the permitting process, NJDEP will seek to minimize the environmental impacts of the Project and require appropriate mitigation measures to address the impacts that cannot be avoided.

If a previously unknown critical environmental issue is identified after the issuance of the Certificate and/or the start of construction for the Project, such issues may still be brought to the FERC's attention and can result in modifications of the approved Project.

**COMMENT:** The commenter questioned why the mitigation plan is different than what happens at the construction site. (49)

**RESPONSE:** All construction conducted at a site must be done in accordance with all environmental plans and procedures, permit conditions, and mitigation plan requirements. The FERC, its inspectors and Tennessee's environmental inspectors will be on site to ensure that all construction activities will comply with all plans and procedures. Additionally, NJDEP's Coastal and Land Use and Northern Water Enforcement will also conduct inspections during and after construction to ensure that all permit conditions have been met. If the NEUP is approved and construction on the Project commences, complaints about the construction process may be reported by the public to the Department by calling 1-877-WARN-DEP.

**COMMENT:** The commenter asked about measures taken to mitigate impacts of work done around Bear Swamp Lake. (17)

**RESPONSE:** Tennessee stated at the public hearing that it does not anticipate that there will be any impacts on Bear Swamp Lake or Bear Swamp Creek from construction of the NEUP. The Project does not involve any crossing of Bear Swamp Lake or Bear Swamp Creek. Generally, silt fencing will be installed, where appropriate, between Bear Swamp Road and Bear Swamp Lake and Creek in order to prevent soil erosion that could be exacerbated by the use of the road. However, most of Bear Swamp Road is paved, therefore, increased soil erosion due to traffic on the road is not expected to be an issue.

**COMMENT:** The commenter stated that there has been acceleration in the deterioration of the Bear Swamp Lake over time through siltation. (17)

**RESPONSE:** Tennessee stated at the public hearing that it has not done any hydraulic studies of Bear Swamp Lake, but that it does not appear that the siltation is due to pipeline construction. Since the construction/impact area for Tennessee's 300 Line Project is not anywhere near Bear Swamp Lake or Bear Swamp Creek, there does not appear to be any connection between the 300 Line Project and the siltation issue. Since the original construction of the existing pipeline occurred in 1955 and the area where the existing pipeline is located has long since become revegetated, there is no reason to suspect that any Tennessee facility has had a recent impact on lake siltation. Rather, it is more likely that lake siltation in this area is occurring naturally.

At the August 18, 2011 public hearing, the NJDEP stated that it would follow up on the comment. The NJDEP's Bureau of Water Monitoring then provided the following information about the lake:

Bear Swamp Lake is one of NJDEP Water Monitoring and Standards Network lakes. Overall, Bear Swamp Lake is in good condition. Bear Swamp Lake has been sampled, seasonally, in 2006 and 2011. 2006 results, and 2011 preliminary results, show that Surface Water Quality Standards (SWQS) have been met. The only exception occurred for the 2006 summer measurement for Dissolved Oxygen (DO). The DO result of 0.11 mg/l was below the SWQS threshold of 4.0 mg/l. However, a single result does not meet the requirement for violation of the SWQS; two discreet results are required. Chlorophyll 'a', a measure of algal concentration, was also elevated at the time this low DO was measured. Extreme DO swings, from super-saturation to sudden drops, are common when algal concentrations are high. The combination of shallow depth (< 1 meter), summer temperatures, and the amount of algae present, likely contributed to the DO drop.

Although the lake is in a eutrophic state in the summer season, as characterized by high Chlorophyll 'a', it recovers to a mesotrophic state in the fall and maintains that state throughout the spring. A mesotrophic state is characterized by low nutrient and algae concentrations, and clear water. Preliminary results for 2011 show that the lake has maintained this condition. Bear Swamp Lake is in a remote, forested, area. The limited land use pressure likely contributes greatly to the stability of its good ecological water quality.

Raw sampling data can be found at our web site: <a href="http://www.state.nj.us/dep/wms//bfbm/rawdata/240\_Rnd1.pdf">http://www.state.nj.us/dep/wms//bfbm/rawdata/240\_Rnd1.pdf</a>

**COMMENT:** The commenter asks NJDEP to take note of the recent flooding and landslide reports in North Jersey. She states that the disturbance of the land will have unforeseen and dire consequences and that Tennessee and the FERC will not be able to predict such events. NJDEP should not approve the project because of these concerns. (38)

**RESPONSE:** NJDEP recognizes that there were flooding and landslide events that took place in the vicinity of TGP's 300 Line Project area. While a mudslide occurred on the site of pipeline construction for Tennessee's recently completed 300 Line Project, mudslides also occurred at sites unrelated to pipeline construction, due to the extraordinary rain events during the Summer of 2011.

Sediment losses do and will occur during construction until a site is permanently stabilized. If a 50-year storm occurs during construction, temporary erosion measures will fail. Tennessee's control plans for the NEUP will include contingency plans for storm events to minimize sedimentation runoff during these events. NJDEP will be actively involved in the development of these plans and its Compliance and Enforcement Program will actively monitor the implementation of these plans during and after construction.

**COMMENT:** The commenter asked what will be done about old growth trees. (27)

**RESPONSE:** As discussed in the July 2011 Report, the NEUP is subject to the requirements of the No Net Loss Act (N.J.S.A. 13:1L-14.1 et seq.), which governs deforestation and reforestation by State agencies. In calculating the required mitigation, the Act takes into account whether the affected forest is mature or emergent. Tennessee's Reforestation Plan includes reforestation both within the temporary work space areas and elsewhere on the affected State parks. Establishment of these tree plantings will ensure tree canopy cover that will start providing overall benefits immediately. These benefits will increase over time as the canopy of the newly planted trees grow and increase in size.

**COMMENT:** The commenter asked what type of access roads Tennessee is proposing to use at High Point State Park and whether Tennessee proposes to use hiking trails as access roads. (30) **RESPONSE:** Tennessee is not taking hiking trails and then widening them to be used as access roads. All access roads are existing roads. There are a number of cases in which an access road is co-located with a hiking trail. For example, the Monks Trail follows an access road around the Monksville Reservoir. It is a wider path used by vehicles for maintenance by the park, and will provide access to the proposed horizontal directional drill (HDD) entry hole site on the east side of the Monksville Reservoir.

**COMMENT:** The commenter stated that Abraham Hewitt gave the original lands to the State for the State's permanent protection. According to the commenter, Mr. Hewitt's Last Will and Testament states that waters through those properties shall always be drinkable and swimmable. The commenter stated that the pipeline will pollute those streams and cause siltation. (32)

**RESPONSE:** Subsequent to the public hearings, the NJDEP reviewed the deeds for the properties donated to the State of New Jersey by Mr. Hewitt. These properties are now located within Ringwood State Park. Several of the deeds reserved specific rights to the Hewitt family pertaining to drinking water since various family members retained life rights on the properties. However, the NJDEP did not find any general requirements or language in the deeds requiring all waters to be drinkable and swimmable, or any other deed language that would strictly prohibit the proposed lease.

**COMMENT:** The commenter expressed concern over the impacts the pipeline will have on New Jersey's black bear population. She also expressed concern about the impacts of the project on black bear habitat in the surrounding areas of Vernon, Wantage, and parts of Pennsylvania. The commenter stated that she has a petition signed by over 15,000 New Jersey residents who oppose the pipeline. (36)

**RESPONSE:** The NJDEP does not expect the NEUP to have any significant impact on the State's black bear population or areas of black bear habitat. The New Jersey black bear population is overabundant and the density of 3 bears per mile square is one of the highest densities reported in the United States. The DEP Comprehensive Black Bear Management Policy has a population goal of reducing the current density to 1 bear per 2.5 miles square. Although it is unlikely that any short term disturbance to vegetation along the proposed pipeline will have any effect on bears, any effect which would result in a reduction of local bear densities would support the Department's bear management goals. Once revegetated, the pipeline corridor will be maintained in early successional native vegetation which will produce soft mast (berries), a food source for bears and other resident wildlife.

**COMMENT:** The commenter expressed concern over a lack of independent third party monitoring related to historical and cultural sites that could be impacted by NEUP. (23)

**RESPONSE:** SHPO is the State agency which will provide oversight for potential Project impacts to historical and cultural sites. The SHPO will require the appropriate clearances for work in the vicinity of the identified cultural and historic resources. The FERC will supervise a third party monitor, part of whose responsibility will be to ensure compliance with all requirements related to cultural and historic resources during construction.

## V. <u>FRACKING – GENERAL</u>

**COMMENT:** Numerous general comments were made about the hydraulic fracturing or "fracking" method of extracting natural gas from the Marcellus Shale region. The following comments were received:

- Two commenters asked where the gas that will be transported through the NEUP pipeline facilities is coming from and whether any gas that will transported through the 300 Line pipeline under construction will come from the "fracking" process in Pennsylvania. In a follow up written comment, one of the commenters stated that the gas traveling through the pipelines will come from fracking in Pennsylvania. (2, 27)
- The commenter expressed concern over fracking and the fact that, although New Jersey has come out against the practice, this project will have the effect of promoting fracking in Pennsylvania and New York. (38)
- In the context of fracking, a commenter made a statement that this project is about how much money people at the top are going to make at the expense of the little people. (4)
- The commenter stated her belief that natural gas is a step in the wrong direction and that the natural gas being transported is extracted through hydraulic fracturing. (14)
- One commenter expressed concern over hydraulic fracturing in the Marcellus Shale and the fact that some of the ultimate consumers may not be Americans. Another commenter suggested a national moratorium on the practice of hydraulic fracturing. (46, 48)
- The commenter expressed concern over the transporting of gas extracted through fracking, and encouraged those present to attend a showing of the movie *Gas Land* (22)

- The commenter asked the State to reject any gas produced by fracking from being produced in the State or delivered through or sold within the State of New Jersey. (46)
- The commenter stated that she is disheartened that members of the Christie administration defend fracking. (30)
- The commenter stated that Tennessee is promoting the "fracking" process through the expansion of its pipeline. Another commenter was concerned that the pipeline, which may transport gas that has been "fracked" is not in the long term best interest of the people and wildlife of the state. (2, 12)

**RESPONSE:** NJDEP acknowledges all of the comments expressing concern over the practice of "fracking" to extract natural gas from the Marcellus Shale formation. As an initial matter, it should be noted that Tennessee is a transporter of natural gas in interstate commerce, and is not involved in the drilling or production of the natural gas that will be transported through its pipeline facilities. Tennessee's Project does not involve fracking, and in particular, there is no fracking on State lands in connection with the Project.

However, as a cleaner and more cost-effective alternative to coal or oil, natural gas plays a significant role in New Jersey's energy future. Governor Christie's Energy Master Plan, which was released in final form in December 2011, encourages the development of in-state, natural gas-fired electrical power. This policy is aimed not only at reducing New Jerseyans' energy costs, but also at protecting our environment by eliminating the need for power from coal states and accelerating the decommissioning of older, dirtier, and less efficient coal and oil-fired electrical generation plants in New Jersey. Natural gas is a much cleaner form of energy than coal or oil, emitting much less sulfur dioxide, fine particulates, volatile organic compounds (VOCs), and greenhouse gases than those energy sources. The environmental impacts of hydraulic fracking are under evaluation by the State of New Jersey as a result of Governor Christie conditionally vetoing legislation that would ban fracking in New Jersey. Although there is virtually no Marcellus shale formation in New Jersey, Governor Christie imposed a one year moratorium on hydraulic fracturing to further evaluate the potential environmental impacts of fracking in New Jersey as well as evaluate the findings of still outstanding and ongoing federal studies. During this moratorium, NJDEP is working with the DRBC to enact regional regulations to strictly regulate hydraulic fracturing that would take place in the Delaware River Basin, and which could affect our water supply and natural resources in that basin. We are currently working with DRBC members--NY, DE, Pa. and the federal government--to come up with acceptable regulations. Additional detail about this effort is contained in an April 15, 2011 press release from the **NJDEP** that may be accessed at http://www.nj.gov/dep/newsrel/2011/11\_0051.htm.

The natural gas that will be transported along Tennessee's system, including through the transportation capacity to be created by the NEUP, comes from various sources along Tennessee's system. Tennessee transports natural gas from many supply areas, including South Texas, offshore Gulf of Mexico, several locations in the central United States through interconnections with other pipelines, as well as from the Marcellus Shale area. The two Project

shippers, both with production in the Marcellus Shale supply area, have fully subscribed all of the transportation capacity to be created by the Project in order to move natural gas to the northeast United States markets. Tennessee is not involved in the drilling or production of the natural gas. It acts only as the transporter of the natural gas along its pipeline system. It is a major supplier to local distribution companies, which provide natural gas to many communities including those in New Jersey and Pennsylvania.

In the cumulative impacts section of the EA, the FERC considered the impacts of the NEUP as well as other recently completed, ongoing and planned projects in the Project area on the development of natural gas from the Marcellus Shale region. The FERC noted that regulations are being implemented by the Pennsylvania Department of Environmental Protection ("PADEP") and the Susquehanna River Basin Commission ("SRBC") to reduce the environmental impacts associated with Marcellus Shale development. Regulations are also currently under consideration by the Delaware River Basin Commission ("DRBC"). If the FERC issues a FERC Certificate for the NEUP, such approval will take into consideration the cumulative impacts analysis in the EA. This analysis includes the FERC's conclusion that, based on the implementation of specialized construction techniques, the relatively short construction timeframe, and carefully developed resource protection and mitigation plans designed to minimize and control environmental impacts, the Project will contribute only small cumulative effects to the development of the Marcellus Shale. See Section 2.10.1 of the EA, which is available at the FERC's website at <a href="http://elibrary.FERC.gov">http://elibrary.FERC.gov</a> (in Docket No. CP11-161-000).

**COMMENT**: The commenter asked whether the HDD process was a type of hydraulic fracking. (19)

**RESPONSE:** Tennessee responded that the HDD technique is not the same as hydraulic fracturing. HDD is a trenchless construction method that is used to avoid and/or minimize environmental impacts, and is completely unrelated to hydraulic fracturing. For information on when an HDD method is appropriate, see Resource Report #1, which is available at the FERC's website at <a href="http://elibrary.FERC.gov">http://elibrary.FERC.gov</a> (in Docket No. CP11-161-000).

# VI. IMPACT OF FRACKING – ENVIRONMENTAL IMPACTS/CONTAMINATION/GLOBAL WARMING

**COMMENT:** The commenter expressed his concern over the issue of hydraulic fracturing and states that there is really no right to own "mineral rights." As humans we have the duty to respect and protect the earth, water, and air that we and other species rely on. There are too many unanswered questions surrounding the practice of hydraulic fracturing and its impacts on humans and the natural environment. The practices should be prohibited from occurring in New Jersey. (46)

**RESPONSE:** NJDEP agrees with the commenter that there are many unanswered questions concerning the impacts of hydraulic fracturing or "fracking" on the natural environment. However, based on current science and technology, the NJDEP does not favor a complete legislative prohibition of fracking at this time. In his August 25, 2011 conditional veto of Senate Bill No. 2576, which would have permanently prohibited "fracking," Governor Christie

expressed his concern for the environment and for safe drinking water, but concluded that the science is not clear as to whether fracking can be done in a manner that adequately protects the environment. Accordingly, rather than enact a permanent statutory ban on fracking, the Governor determined that the more prudent course of action would be to impose a one-year moratorium on fracking to allow the U.S. Department of Energy and U.S. Environmental Protection Agency ("U.S. EPA") to continue with their studies of fracking, and then to give the NJDEP an opportunity to conduct an independent evaluation of the issue.

As discussed on the U.S. EPA's web site at http://www.epa.gov/hfstudy/, at the direction of Congress the U.S. EPA has undertaken a study of the potential impacts of hydraulic fracturing on drinking water and ground water. As part of this study, the agency released a final work plan in November 2011 and expects to issue its first report of results in late 2012, with a final report to be issued in 2014. The primary focus of the U.S. EPA study is drinking water impacts. However, the agency's draft study plan has already identified other areas that merit further research, including potential impacts on air, ecosystems, occupational risks and other topics. See <a href="http://wcmsprd-dev-staging4.epa.gov/hfstudy/HFStudyPlanDraft\_SAB\_020711.pdf">http://wcmsprd-dev-staging4.epa.gov/hfstudy/HFStudyPlanDraft\_SAB\_020711.pdf</a>. NJDEP staff are actively following the progress of the U.S. EPA study.

On a parallel track, the Shale Gas Subcommittee of the Secretary of Energy Advisory Board is also analyzing the environmental impacts of hyrdraulic fracturing. The Subcommittee's charge is to identify measures that can be taken to reduce the environmental impact and improve the safety of shale gas production. The Subcommittee issued its second (and final) report on November 10, 2011. The first report contained 20 recommended measures; the second report prioritizes the recommended measures and makes suggestions for implementing the measures. The reports may be accessed at <a href="http://energy.gov/downloads/90-day-interim-report-shale-gas-production-secretary-energy-advisory-board">http://energy.gov/downloads/90-day-second-report-shale-gas-production-secretary-energy-advisory-board</a>. NJDEP staff are currently reviewing the Subcommittee's recommendations.

**COMMENT:** Several commenters expressed concern about the impacts of fracking on air emissions and regional air pollution, as follows:

- One commenter stated that EPA recently ruled that every fracking well releases 23 tons of volatile organic compounds into the air, which contributes to smog.
- Another commenter was concerned about the impact of fracking on air pollution coming from Pennsylvania. (2, 11, 12, 13)
- One commenter submitted a paper for the record, entitled "Natural Gas Operations from a Public Health Perspective" [note: the correct name of the article is "Methane and the Greenhouse-Gas Footprint of Natural Gas from Shale Formations]. She then read excerpts from this paper into the record, and concluded that methane, a powerful greenhouse gas, escapes into the atmosphere during the fracking process. The commenter questioned how the methane toxicity will be monitored to ensure that it does not kill people. The same commenter expressed concern about the impact of

fracked gas on global warming, and stated that NJDEP should not approve the pipeline because of the contribution of fracked natural gas to global warming. (13)

**RESPONSE:** In the cumulative impacts analysis section of the EA, the FERC acknowledged that the operation of the Project, the Marcellus Shale drilling activities, and other projects would contribute cumulatively to increasing existing air emissions. The FERC anticipates that the Marcellus Shale development activities will result in increased long-term emissions of criteria pollutants, hazardous air pollutants ("HAPs") and greenhouse gas emissions. These emissions are outside the scope of the FERC's analysis of the NEUP, but are regulated by PADEP, the SRBC and any regulations that will be adopted by the DRBC. See Section 2.10.5.6 of EA, which is available at http://elibrary.FERC.gov (in Docket No. CP11-161-000). Pp. 2-133.

**COMMENT:** Several commenters expressed concern about the impacts of fracking on water quality through the following statements:

- "Fracking" or "hydro fracking" causes contamination in the water, which is a huge issue. Even though Tennessee is the transporter of the natural gas, not the producer, NJDEP needs to be aware of this issue. (2)
- Two other commenters expressed concern over fracking and the leakage of toxic substances into water bodies, and the possible contamination of the water supply. (4, 12, 15)
- Another commenter expressed her concern over the environmental and health effects of fracking and natural gas production and distribution. Specifically, she expressed concerns that there will be leakage of the toxic fracking fluids into the pipelines. The commenter stated that the pipeline will leak 3% of its contents, including fracking fluid and brine, along the length of its pipeline, and that such leakage will not be recovered. The fracking fluids contain toxic chemicals like benzene, and there is a risk that toxic chemicals may enter waterways. (13)

**RESPONSE:** Both NJDEP and Tennessee are aware of water quality concerns regarding fracking. As stated above, Tennessee acts as the transporter of the natural gas, and is not involved in the drilling or production of the natural gas that will be transported through this pipeline.

The Marcellus Shale formation is located beneath 93 million acres of land in Pennsylvania, southern New York, eastern Ohio, and northern West Virginia, but does not extend beneath the New Jersey portions of the Project. In the EA, the FERC looked at the concerns raised regarding the potential impacts that natural gas wells in the Marcellus Shale region may have on groundwater quality due to the migration and use of chemical additives in the fracking water to stimulate gas flow. The FERC also looked at concerns raised regarding the impact of Marcellus Shale gas development on surface water resources.

In the EA, the FERC concluded that development of Marcellus Shale gas supplies will be regulated by PADEP's recently adopted rules on drilling, casing, cementing, testing, monitoring

and plugging of oil and gas wells, and protection of water supplies. These rules, known as "Chapter 78." may found http://www.pacode.com/secure/data/025/chapter78/subchapDtoc.html. As for the discharge of contaminated flowback water from fracking operations into surface waters, the PADEP has adopted regulations (known as "Chapter 95") that are designed to address treatment facilities and that eliminate potential cumulative impacts from the discharge of contaminated wastewater from operations. The rules may found be http://www.pacode.com/secure/data/025/chapter95/s95.10.html. Well drillers are also implementing recycling measures intended to reduce the volume of flowback water needing treatment and disposal.

In addition, the FERC acknowledged in the EA Tennessee's commitment to comply with any stipulations of the DRBC, SRBC, PADEP and NJDEP in the application process for water withdrawals. As a result of its analysis, the FERC concluded that the PADEP and SRBC regulations will protect surface and groundwater resources from potential impacts associated with the development of Marcellus Shale gas. The FERC went on to conclude that, considering the large geographic and time scale for the development of natural gas supplies in the Marcellus Shale region, the NEUP (and other projects currently under review by the FERC) are not expected to contribute in any significant way to cumulative impacts on water resources that may be associated with development of Marcellus Shale.

The detailed analysis on fracking can be found in Section 2.10.5.2 of the EA. which is available at <a href="http://elibrary.FERC.gov">http://elibrary.FERC.gov</a> (in Docket No. CP11-161-000) pp. 2-129- 2-130.

#### VII. <u>LEASE – GENERAL COMMENTS</u>

**COMMENT:** The commenter asked whether the leasing of State-owned lands to Tennessee for purposes of NEUP is a "done deal." Another commenter stated that the conveyance of State lands is a foregone conclusion. (8, 35)

**RESPONSE:** The NJDEP stated at the public hearing that the approval of the lease of State lands by Tennessee in connection with the NEUP is not a "done deal." However, over the past year, the NJDEP has been in comprehensive and extensive negotiations with Tennessee in connection with the proposed lease, as outlined in the Ogden Rooney report and consistent with applicable statutory/regulatory mitigation requirements.

**COMMENT:** The commenter asked whether the rent charged to Tennessee for the leased area will go to the general fund of the Treasurer, State of New Jersey, or will it go back to the State parks specifically affected by the pipeline project. The commenter recognized the need for the pipeline, but did not believe that the revenues from the Project should go to Trenton. (6)

**RESPONSE:** NJDEP staff responded that they will propose to NJDEP Commissioner Martin to allocate the rent received from the NEUP back to the State Park Service in accordance with the recommendations of the Interagency Lease Report (www.nj.gov/dep/docs/landlease110817.pdf). However, the Division of Law, the Commissioner of the NJDEP and the State House Commission must approve that approach.

**COMMENT:** The commenter acknowledged the cutbacks of staff and facilities in the State parks, and urged that the lease proceeds should come back to the parks that are affected by the NEUP. (11)

**RESPONSE:** NJDEP agrees that park funding has been a topic of discussion for the past few years. If NJDEP has to accept a project like NEUP because of the federal regulatory scheme, it would like to see the revenue generated from such a project used to support a sustainable State park strategy.

# VIII. <u>LEASE – TERMS AND CONDITIONS</u>

**COMMENT:** Several commenters raised questions about insurance, bonding and/or penalties for potential noncompliance with the terms and conditions of the proposed lease, as follows:

- One commenter asked what type of insurance Tennessee has in place to deal with potential catastrophic events. (11)
- In a similar vein, another commenter asked whether the proposed lease compensation included a component such that, if something goes wrong during or after construction in the form of an accident or explosion and half the mountain burns down, the public would be additionally compensated. By including a compensation component in the lease addressing negligence, the commenter wished to avoid years of protracted litigation similar to that which happened in the Exxon Valdez oil spill litigation that took twenty-five years to settle. (10)
- One commenter maintained that Tennessee should be required to post a 25 or 50-year maintenance bond or place adequate sums into escrow to ensure full performance of all lease terms.
- Another commenter stated that companies such as Tennessee are not properly fined for pollution caused by their carelessness, and should post a bond in order to cover cleanup costs.
- Another commenter expressed his concern that money is not being put aside as a bond to protect the watershed in the event there is an explosion or a leak. (11, 15, 27, 34)

**RESPONSE:** At the public hearing, the NJDEP responded that it already does require insurance as a term of its leases, but that it would be open to suggestion or comment on the type of insurance that could be procured and the appropriate levels of coverage.

NJDEP stated that in the past it has not required a bond for its leases but that NJDEP is open to suggestions regarding ways to protect the public interest. NJDEP is aware that the Highlands Council signed a Performance Agreement (including a Performance Bond with Tennessee in the

amount of the cost of the proposed mitigation) for the 300 Line Project and that Tennessee has agreed to post a similar bond for NEUP.

At the August 17, 2011 public hearing, the NJDEP also responded that if there are incidents during construction, such as the mud slide that occurred in Vernon during construction of the 300 Line, the NJDEP's enforcement program would be involved and would evaluate the consequences. After appropriate investigation, the enforcement options would be evaluated against the permit approvals secured for this Project, including the many conditions associated with each of the land use permits issued. In addition, NJDEP would have available to it the same rights as any other property owner to claim damages to its property and pursue all legal remedies available to it.

Subsequent to the public hearings, Tennessee agreed to post a bond and to provide insurance coverage as agreed upon by Tennessee and the NJDEP to address these concerns.

**COMMENT:** The commenter asked whether there would be a provision in the lease to address repairs or improvements that are needed for existing roads. The commenter does not want road maintenance to be taken out of the rental payments to be paid to the State. (10)

**RESPONSE:** Tennessee stated that it is inspecting the roads needed for the Project to determine the condition of the roads and the use that can be accommodated on those roads. Tennessee anticipates that the use of the roads will be authorized through a right of entry agreement provided by NJDEP. The right of entry agreement, and NJDEP Construction Work Plan will require Tennessee to repair any damage to the roads caused by Tennessee and will be separate from the proposed lease payments.

**COMMENT:** The commenter asked what happens if Tennessee does not abide by some of the terms of the lease. (27)

**RESPONSE:** NJDEP stated that the Commissioner and the State House Commission would have to impose certain conditions on Tennessee within the lease as a condition to approval of the lease. If the Tennessee does not comply with the conditions within the lease, DEP would have the right to pursue legal action against the company.

**COMMENT:** The commenter believes substantial terms of the proposed lease have not been determined, including the definition of "mitigation measures." (27)

**RESPONSE:** All terms and conditions of the lease for the "permanent" ROW and the right of entry agreement for the temporary work space and access roads will be determined prior to Tennessee commencing construction on the State lands. All of Tennessee's mitigation commitments will be made prior to approval of the transaction by NJDEP's Commissioner and the State House Commission. The anticipated "mitigation measures" for this project include land replacement, tree replacement under the provisions of the No Net Loss Act, restoration of temporary work space (including access roads), invasive species monitoring and control, monetary compensation (where appropriate) and trail crossing plans. All finalized details of mitigation for impacts to State lands will be detailed in a Construction Work Plan that will be annexed to the lease agreement and right of entry agreement. A summary of the various

mitigation commitments that have been made by Tennessee for the Project, including those required as a condition of other NJDEP permits and State-level approvals (such as the Highlands Commission) is attached to this response to comments document.

**COMMENT:** The commenter proposed the creation of a citizen's advisory group that will have the power to monitor, and if necessary, halt Tennessee's practices in the field. (26)

**RESPONSE:** The FERC is the federal agency authorized by Congress under the Natural Gas Act to approve the construction of interstate natural gas pipeline projects such as the NEUP. Only FERC can issue a FERC Certificate authorizing the construction of an interstate natural gas project pursuant to the Natural Gas Act, and FERC (or through its third party field monitors) has the authority to issue a stop work order if it determines that there is a violation of the terms and conditions of the Certificate. Tennessee's independent Environmental Inspection staff also has the authority to stop a task if it believes that an activity does not comply with federal or state environmental regulations. In addition, as discussed above, neither the issuance of a Certificate nor the commencement of construction preempt the NJDEP's power to enforce its regulations (as they apply to the Project) or pursue legal remedies for any violations of the lease, unless such actions are preempted by the FERC certificate. If the NEUP is approved and construction on the Project commences, complaints about the construction process may be reported by the public to the Department by calling 1-877-WARN-DEP, directly to the FERC or to TGP at 877-366-2650.

# IX. <u>MITIGATION/COMPENSATION</u>

**COMMENT:** Several commenters expressed their general concerns that the State of New Jersey is not being adequately compensated for the State lands proposed to be conveyed to Tennessee for the NEUP, as follows: (2, 3, 16, 23, 27, 34, 38, 39, 48, 50, 51, 52, 53)

- One commenter stated that there is no convenience or necessity for Tennessee to be allowed to use State lands at little to no cost.
- One commenter opined that the valuation of land is distressing to her.
- Two commenters stated that the amount of compensation for the proposed lease is nothing compared to the profits Tennessee will make, especially since they felt that NJDEP is "giving away irreplaceable land for nothing."
- One commenter stated that the NJDEP is giving away the State's most precious lands with little consideration for the people who use those lands.
- One commenter was concerned that Tennessee is being charged a relatively small amount of money that will not be sufficient to cover the cost of Tennessee's negligence within the parks.
- One commenter stated that the State of New Jersey will not be adequately compensated by Tennessee or adequately protected should Tennessee fail to fulfill its lease obligations.

- Other commenters questioned whether \$7.8 million is enough compensation for "a lifetime of devastation", and stated that the amount of money charged to Tennessee for the use of State lands is insufficient to cover the costs of the Project's impacts to State parkland.
- One commenter stated she heard that other parks and other states have negotiated better land exchanges, better mitigation efforts, better restoration, better route direction, and better respect and avoidance of important cultural sites.
- Finally, several commenters stated that a standard per acre fee is not appropriate to apply to public land leases, as values may vary substantially from place to place. (2, 3, 16, 23, 27, 34, 38, 39, 48, 50, 51, 52, 53)

**RESPONSE:** The NJDEP does not agree with these comments. First, on the issue of whether it is necessary for Tennessee to use State property for the Project, the NJDEP reiterates that FERC, not the NJDEP, will determine whether the Project is in the public convenience and necessity. As discussed above, the NJDEP's State Historic Preservation Office is actively involved in the Section 106 review of the cultural and historic resource impacts of the Project. Through these efforts, the NJDEP believes that if a Certificate is issued, the approved route will reflect a proper consideration of the inherent significance and natural resource values of the State lands along the route. If it does not, the NJDEP will consider its options for rehearing and appeal.

The NJDEP, like the commenters, would like to avoid all pipeline construction on State lands. However, the NJDEP acknowledges that Tennessee has an existing pipeline that in some locations predated the establishment of the adjacent State parks and thus already impacts State-owned lands. If the FERC, on the basis of demonstrated need for natural gas transportation and taking into account a variety of environmental, economic and social considerations, approves the Project along a route which crosses State-owned land, then the NJDEP believes that in most cases expansion of an existing utility ROW will have less of an overall environmental impact than creation of a new utility corridor.

For the NEUP, the NJDEP is applying the "lessons learned" from the recently constructed 300 Line Project and has substantially revamped its approach to compensation for this type of project. First, as discussed above, the NJDEP has required Tennessee to demonstrate that it has taken all feasible measures to avoid permanent and temporary impacts to protected parkland and other environmentally sensitive lands. Where these impacts cannot be avoided, the NJDEP is requiring Tennessee to minimize these impacts. For the State lands that will be impacted by the NEUP, Tennessee will then be required to compensate the State with a combination of ground rent, replacement land, and mitigation for environmental impacts. See Compensation/Mitigation on Page 40. NJDEP believes that the approach to compensation will address all impacts to State property in a fair and appropriate manner.

As discussed in the July 2011 Report and at the public hearings, the proposed compensation for the lease has three components: (1) ground rent, (2) replacement lands and (3) mitigation measures. Under the first component, the NJDEP is requiring Tennessee to tender: (1) an annual rental payment in the amount of \$0.15 per square foot based on the actual acreage leased

for the new pipeline right of way (subject to an escalation of 2.5% per year) and (2) annual rental payment for temporary work space in the amount of \$0.15 per square foot based on the actual acreage needed (based on a proposed two-year construction schedule). The second component consists of: (1) replacement lands at a 4:1 ratio (based on size) for any NJDEP lands to be occupied by the new "permanent" pipeline ROW; (2) replacement lands at a 1:1 ratio (based on size) for any NJDEP lands to be occupied as temporary work space; (3) replacement lands at a 4:1 ratio (based on size) for any NJDEP lands to be blasted (including temporary work space). The third component consists of (1) all mitigation that is required by the various State permits and approvals needed for the NEUP Project, including mitigation required under the No Net Loss Reforestation Act, Highlands Water Protection and Planning Act, and Freshwater Wetlands Protection Act and (2) site-specific mitigation measures to be negotiated between the NJDEP and Tennessee and memorialized in a Construction Work Plan that will then be tied to the State House Commission approval, the lease, Right of Entry Agreements and the Land Use permits. Tennessee has also committed to "giving back" ten feet of its existing 50-foot wide permanent easement that it currently holds, which would result in fewer impacts to undisturbed State lands.

If issued, the FERC Certificate will require restoration of temporary work space occupied for the Project. However, because the NJDEP anticipates that the areas from which trees are to be removed may take decades to fully regenerate, it has required Tennessee to provide replacement land at a 1:1 ratio for all temporary work space areas. Similarly, the NJDEP's requirement to provide replacement land for the new "permanent" ROW at a 4:1 ratio reflects its determination that although the Project will be authorized under a 25-year lease, the ROW corridor will not be allowed to revert to its natural state as long as the pipeline is in the ground.

Mitigation for environmental impacts will also be required in accordance with NJDEP's land use permitting regulations, other regulatory requirements set forth in the No Net Loss Reforestation Act and the Highlands Water Protection and Planning Act and will address concerns raised by NJDEP's land managers and other professional staff about the "on the ground" impacts of the Project. Although a majority of the pipeline ROW runs through areas of the State parks that are not generally accessible to the public, the NJDEP is particularly concerned about possible impacts of the Project on park users and trails users. Among other measures, Tennessee has developed a draft trails crossing plan to outline measures that will be taken to minimize the impacts of construction on trails users. Additionally, Tennessee has made a financial commitment to the New York/New Jersey Trails Conservancy ("the Conservancy") to support the Conservancy's Trail Stewardship Program in the New Jersey trails and parklands traversed by the NEUP. Beyond these measures, the NJDEP anticipates that the scenic impacts of the project and other impacts of the project on Highlands resources will be addressed by the Highlands Council.

The NJDEP estimates that the various compensation and mitigation requirements associated with the use of state-owned property for the NEUP will total more than \$12 million (even including the 10 foot "give back" and other measures that will reduce the final acreage leased to Tennessee compared to the acreage in the original certificate application filed with for the Project.) (See attached Northeast Upgrade Project Mitigation Commitments Table). The NJDEP also notes that at the conclusion of the lease, the NJDEP and Tennessee will renegotiate the ground rent for the continued operation of the pipeline on state-owned lands. The lease payments will continue to be paid as long as the pipeline occupies State property.

Although the price of land for sale on the open market does vary by location, it also varies and fluctuates due to many other attributes and local characteristics. In developing an approach for valuing land owned by the State and particularly land preserved for all the citizens of New Jersey for its environmental and/or recreational attributes, the State sought to create a simplified approach that accounts for the value of the land being preserved on behalf of all New Jerseyans, thus producing a social benefit not only an individual benefit. In addition, the recommendations in the Interagency State Land Lease Valuation Report suggest for areas of the State where land values are significantly higher that an appraisal or other valuation techniques also be used.

The analysis underlying the Interagency Lease Report, upon which the proposed \$0.15 per square foot ground rent payment is based, included a review of how other states approach valuation for linear corridor projects (such as natural gas pipelines.) The rationale for the proposed lease payment of \$0.15 per square foot is discussed in more detail in the response to the next comment. The decision by the NJDEP to require replacement land for the corridor is in addition to the ground rent and is intended to address the natural resource impacts of the NEUP on the lands needed for the new ROW. Neither the NJDEP nor Tennessee is aware of any other States that approach compensation for this type of project in a dramatically different fashion. However, if the commenter wishes to provide additional information on this point, it may be sent to the attention of the contacts listed at the beginning of this response to comments document.

The issue of the appropriate remedy for negligent performance under the lease and/or noncompliance with the lease has already been addressed in detail above. However, the NJDEP notes that it cannot presume that such negligence or noncompliance will occur. To address these concerns, Tennessee has agreed to post a bond and to provide insurance coverage as agreed upon by Tennessee and the NJDEP.

**COMMENT:** The commenter asked where the fifteen cent per square foot value came from. Specifically, the commenter wanted to know the square foot value for residential property. The commenter's concern is that a residential property is usually owned and used by a few people, but that the parks being used for the pipeline project are used by millions of people. Since people may not wish to go to the parks with a scar on the property, the commenter believes that the mitigation and compensation to be provided to the State should be much higher than the fifteen cents per square foot. This commenter also stated that \$8.6 million over 25 years comes out to \$344,000 a year. Based on the 28 acres required, that amount equates to \$12,300 a year per acre. Per month, the amount per acre is \$1,025, less than the rent for commenter's one bedroom apartment. The commenter stated that since millions of people use the parks, the sum of compensation should reflect that. (5)

**RESPONSE:** At the August 17, 2011 public hearing, NJDEP responded that it would be releasing to the public its methodology for determining the value of leases for linear projects such as NEUP, but that the calculations were based on commercial property values, not open space property values. This methodology was released to the public on August 18, 2011 in the Interagency Lease Report," which may be found at <a href="http://www.nj.gov/dep/docs/landlease110817.pdf">http://www.nj.gov/dep/docs/landlease110817.pdf</a>. NJDEP acknowledged at the hearings that, because it is hard to quantify the impacts on the lands from the pipeline construction project on state-owned lands in monetary terms, NJDEP would also be requiring replacement lands. As a result, the total acreage of parkland that will be available to the public will increase. The

replacement lands must be in a location that is suitable for public use and must be as ecologically valuable as the lands that were impacted by the Project. In addition, compensation to the NJDEP for the impacts to State lands will be in the form of mitigation for environmental impacts in accordance with the NJDEP's land use permitting program, No Net Loss Reforestation Act and the Highlands Water Protection and Planning Act and to address concerns raised by NJDEP's land managers and other professional staff about the "on the ground" impacts of the project.

Residential property comes in many shapes and sizes, and its value varies tremendously from location to location based on various demographic characteristics and other physical and locational attributes. The U.S. Census Bureau and the New Jersey Department of the Treasury, among other organizations, keep statistics on some aspects of residential property value, such as median and average home prices by state, county and municipality.

In the context of the proposed application, the value of the lease is based on an annual rate of \$0.15 per square foot. This rate is not meant to represent or reflect residential property values. Rather it represents a fair return to the citizens of New Jersey for the private use of land that is held in trust for the public and in most cases was purchased with public funds. These lands are typically preserved for their environmental and recreational attributes, such as water quality protection, wildlife and wildlife habitat protection, active and passive recreation, and contribution to cleaner air.

As set forth in the report, the \$0.15 per square foot value was based on a survey by the Lease Task Force of prevailing rental rates for linear corridors. This rate is considered to be a commercial value, not a residential value. Based on the commonly accepted appraisal assumption that lease rates are based on 10 percent of full fair market value for a property, then the \$0.15 per square foot value is equivalent to a fee land value of \$65,000 per acre (i.e. \$0.15/s.f. X 43,560 s.f./acre X 10 = \$65,340 (rounded to \$65,000.) As indicated in the Lease Report, if the NJDEP believes that the property to be leased is worth more than \$65,000 per acre, it can require an appraisal as a basis for establishing a higher rental rate. However, given the location and environmental constraints of most of the land in the Project area, the NJDEP did not believe an appraisal was warranted in this case.

The NJDEP appreciates the commenter's creative analysis of the proposed ground rent, but notes that values for improved properties (such as apartments) are generally substantially higher than values for unimproved land (such as the area proposed to be leased.) The market for residential property for sale or rent is very different then the market for undeveloped and in this case preserved land. Prices for developed property, such as a residential rental property, include the cost to build, operate and maintain the associated infrastructure. As a result, developed land typically carries a much higher value than undeveloped land, even in the same market area. Therefore, the NJDEP is not sure that the example used by the commenter is a true "apples to apples" comparison. However, the NJDEP is aware that this comment and others are rooted in a concern that the State (and the public) will not be getting a fair return for the use of the land. In addition, many commenters have expressed the opinion that the methodology for valuation for the proposed lease should take the number of park users and/or the profits to be made by Tennessee into account.

On the issue of basing valuation on the number of park users, the NJDEP believes it is more appropriate to focus on a methodology that values all State parklands on an equal footing (subject to upward adjustment in areas of particularly high property values.) Otherwise, valuations for less used/less popular properties could be reduced. In addition, a valuation methodology based on number of affected users would not meet the Lease Task Force objective of developing a streamlined and easily predictable lease valuation process.

On the issue of basing valuation on Tennessee's anticipated revenue or profits from the Project, the NJDEP notes that the Lease Task Force considered this option (among others) but rejected it in favor of a flat rate rental approach. Among other concerns, the NJDEP and other agencies have not felt that accurate revenue and profit information would be readily forthcoming, particularly from privately held companies. In addition, a valuation methodology based on revenue/profit would not meet the Lease Task Force objective of developing a streamlined and easily predictable lease valuation process. The NJDEP also notes that when revenue or profit based approaches to valuation have been discussed in part stakeholders, representatives of affected industries have alleged that such an approach would be unconstitutional (as a violation of the Interstate Commerce Clause of the U.S. Constitution.)

**COMMENT:** Several commenters stated that the Interagency Lease Report was not provided any formal public review or comment period prior to its application to the NEUP. (16, 50, 51, 52, 53)

**RESPONSE**: A stakeholder process was employed by the interagency panel that prepared the Interagency Lease Report. Information pertaining to the dates of the stakeholder meetings and the attendees is available on the Department's website at <a href="http://www.nj.gov/dep/workgroups/past.html">http://www.nj.gov/dep/workgroups/past.html</a> (see February 2011 entry under "State Land Leases Stakeholder Review" and September 2010 entry under "Tideland Leasing Program Stakeholder Meeting.") The report itself is a list of recommendations to State agencies and does not constitute any action or decision by any agency.

As discussed above, the proposed rental calculation found in the July 2011 Report is consistent with the recommendation in the Interagency Lease Report for linear projects such as this one. The Task Force recommendation was specifically intended to address fair and appropriate compensation to the State for situations like the use/rental of State land by a private entity like Tennessee. As discussed in the Lease Report, the use of a flat rate calculation eliminates the need for costly and time-consuming appraisals that are too often inaccurate when applied to preserved land. In addition, a lease rate based on square footage provides a strong incentive for project sponsors to minimize the environmental footprint of its project (as the NJDEP has requested Tennessee to do for the NEUP).

As indicated in the August 18, 2011 Press Release accompanying the release of the Interagency Lease Report, it is the NJDEP's intention to implement the Report's recommendations immediately, including as they apply to the NEUP. See <a href="http://www.nj.gov/dep/newsrel/2011/11\_0100.htm">http://www.nj.gov/dep/newsrel/2011/11\_0100.htm</a>.

**COMMENT:** The commenter asked whether the seven to eight million dollar figure as compensation to the State for a proposed lease of State-owned lands was a fixed number at this

point. The commenter also asked if \$8.6 Million (which included rental for temporary work space) is the maximum amount the State will receive for the lease or would the State possibly receive more. Finally, the commenter asked if Tennessee finds the amount to be fair and whether Tennessee would be willing to pay more than \$8.6 Million for a 25-year lease. (5)

**RESPONSE:** NJDEP responded that this amount was not a fixed number, but that the formula to be used to calculate this amount was essentially fixed. The exact amount of the lease portion of the compensation would be dependent on the final acreage that Tennessee sought to lease, after applying all feasible avoidance and minimization measures to the Project and determining actual surveyed acreage. (Final compensation is detailed in Compensation/Mitigation on Page 41 NJDEP stated that, given that Tennessee was attempting to minimize its impacts to Stateowned lands, it was not likely that the final number would exceed \$8.6 million in ground rent.

**COMMENT:** The commenter asked what sum was paid for the 1954 lease. (5)

**RESPONSE:** NJDEP stated at the public hearing that it did not know the number but could get a copy of the easement. The NJDEP's records indicate that compensation for the 1954 term easement was a total of \$20,021.00.

**COMMENT:** The commenter expressed concern that preserving an additional 120 acres of land in Montague, New Jersey and removing them from the tax rolls will have a negative impact on the tax base in this community. (11)

**RESPONSE:** By requiring replacement land as a component of compensation, the NJDEP's goal is not to remove valuable ratables from the tax base of a municipality. Rather, requiring replacement land is intended to compensate the public for the physical loss of the parkland to be used by Tennessee as "permanent" ROW. It is the NJDEP's general policy to require replacement land to be acquired in close proximity to the impacted park(s), if possible. At the public hearing, NJDEP gave the example that, if 120 acres needed to be preserved as replacement land in accordance with the 4 to 1 replacement land ratio, the entire 120 acres would generally (but not necessarily) be split among the four State parks affected by the NEUP (e.g., High Point State Park, Long Pond Iron Works State Park, Ramapo Mountain State Forest, and Ringwood State Park). In the case of the NEUP, however, the NJDEP has identified a single, ecologically valuable property that may satisfy Tennessee's replacement land requirements. Negotiations for the purchase of a portion of this property, which is not located in Montague, are ongoing.

As for the commenter's concern, Montague will not lose any ratables if replacement land is purchased elsewhere, but will benefit from the payment of increased *ad valorem* taxes by Tennessee as a result of the additional pipeline facilities being located in Montague. An estimated breakdown of the increased *ad valorem* taxes is attached as Exhibit F to the July 2011 Report, which is available at www.nj.gov/dep/greenacres.

On the general issue of loss of property tax revenue in whichever municipality the replacement land is located, the NJDEP notes that in many communities, the cost associated with future services that would be needed if a property is developed exceeds the tax collected from the property in either its unimproved or improved state. This analysis holds true whether the property is developed for residential or commercial purposes. See, for example, the report entitled *Chasing Their Tails: Municipal Ratables Chase Doesn't Necessarily Pay* at http://www.njfuture.org/research-publications/research-reports/ratables-chase-doesnt-pay/.

**COMMENT:** The commenter wants to know what Tennessee plans to do with the timber removed from the State forests during construction of the project. (1)

**RESPONSE:** NJDEP and Tennessee have agreed to a value of \$200,000 for the timber removed for construction of Loops 323 and 325 of the NEUP. The Department made this specific mitigation request to Tennessee based on the expertise of the Division of Parks and Forestry State Forestry Service's staff valuation of the timber value. In addition, as part of its construction plans for the NJDEP lands, Tennessee will consider including a beneficial reuse component for the timber, provided that storage of the timber in the right-of-way will not negatively impact Tennessee's ability to construct the pipeline safely. These construction plans are still under negotiation by Tennessee with the NJDEP; the final version of the plans will be incorporated as a component of the lease with the NJDEP.

**COMMENT:** One commenter asked how NJDEP will determine an appropriate amount of replacement land as compensation to the State. Another commenter stated that the provision of replacement land by Tennessee at a 4 to 1 ratio is not sufficient and that the State should receive greater compensation. (8, 11)

**RESPONSE:** NJDEP responded by stating that once it determines the final amount of State lands to be leased to Tennessee, NJDEP will require Tennessee to locate four times that acreage, purchase it and then turn it over to the State. For example, if Tennessee were to lease 30 acres of State-owned lands for 25 years, it would have to compensate the State with 120 acres elsewhere, which would then be incorporated into the State park system. The 4:1 ratio is modeled after, but more stringent than, the analogous requirements for diversion of locally-owned parkland at *N.J.A.C.* 7:36. See *N.J.A.C.* 7:36-26.10(g), Table 1 at http://www.nj.gov/dep/greenacres/pdf/regs.pdf.

**COMMENT:** One commenter asked how the State is being compensated for the temporary workspace. Specifically, she stated that Tennessee should be required to pay more for the damage to the temporary workspace. Another commenter suggested that Tennessee compensate for land used as temporary workspace through replacement land at a 4 to 1 ratio. Several other commenters stated that NJDEP should require replacement land for impacts to temporary work space, but did not specify a replacement land ratio. (3, 16, 25, 50, 51, 52, 53)

**RESPONSE:** The NJDEP will require Tennessee to compensate the State for the use of temporary work space by paying a monetary rental value of \$0.15 per square foot based on the actual amount of temporary work space needed during construction of the NEUP project. It is anticipated that the rental will be paid for a two year period.

In addition, since both the NJDEP and Tennessee recognize that it may take a long time for the temporary work space to revert to its original condition, the NJDEP is requiring Tennessee to

compensate the State with replacement lands for the temporary work space at a 1 to 1 replacement land ratio. NJDEP intends to execute a right of entry agreement with Tennessee, rather than a lease, for the temporary work space. The compensation requirements, as well as other terms and conditions, will be included in the right of entry agreement.

Although the short term construction impacts from the Project on the temporary work space areas will be significant, they will remain undisturbed after the two-year construction period (unlike the new "permanent" ROW.) Therefore, the NJDEP believes that requiring 1 to 1 replacement instead of 4 to 1 replacement is reasonable and appropriate.

**COMMENT:** The commenter stated that any temporary conveyance that involves permanent alterations on the land should be considered for diversion purposes the same as a permanent conveyance. Several other commenters stated that the definition of "temporary" needs to be revised to address the serious long-term and permanent impacts of access roads and construction sites that are used for limited periods of time. (16, 31, 50, 51, 52, 53)

**RESPONSE:** NJDEP responded at the public hearing that the Green Acres diversion rules apply to local lands and not State-owned property, but that it tries to apply those same general compensation principles to State-owned property as appropriate. Under the local Green Acres rules (*N.J.A.C.* 7:36), the NJDEP can authorize the use of Green Acres-encumbered parkland for up to two years for other than a recreation and conservation purpose if such land is needed for a project that will serve a beneficial public purpose. As discussed in the July 2011 Report, the NJDEP has generally considered pipeline projects and other utility projects to have a public purpose associated with them even if they are to be constructed by a private entity. The Green Acres rules do not prohibit the temporary use of parkland for projects that will have an adverse impact on the parkland, but in such cases the applicant is required to obtain the NJDEP's approval for a mitigation plan to address the anticipated impacts. See *N.J.A.C.* 7:36-25.14 at http://www.nj.gov/dep/greenacres/pdf/regs.pdf.

As discussed above, the NJDEP is requiring replacement land for the temporary workspace associated with the NEUP on state-owned land, and is requiring other mitigation measures to be implemented. Therefore, the NJDEP believes the essential elements of the local Green Acres diversion process have been applied to the NEUP (and are likely to be applied to similar projects on State property in the future.) However, the NJDEP will consider the commenters concerns in any future amendments to the Green Acres rules.

**COMMENT:** One commenter asked what Tennessee must do to mitigate the effects of construction on the temporary workspace. Another commenter asked about Tennessee's legal obligation to restore the land after the trenching is completed. (3, 27)

**RESPONSE:** If a FERC Certificate is issued for the Project, Tennessee would be required under that certificate order to restore the temporary workspace to, as close as possible, its original condition. After construction is completed, Tennessee will reclaim, reseed, and reforest the temporary work space. As stated on page 1-21 of the EA, "after construction, [Tennessee] would conduct follow-up inspections of all disturbed upland areas after the first and second growing seasons to determine the success of restoration and would monitor the success of wetland revegetation annually for the first 3 years (or as required by permit) after construction, or longer, until wetland revegetation is successful. To ensure the restoration of all areas affected

by the Project, [the FERC] would continue to conduct oversight inspection and monitoring following construction. If it is determined that any of the proposed monitoring timeframes are not adequate to assess the success of restoration, [Tennessee] would be required to extend its post-construction monitoring programs." The EA is available for review at the FERC's website at <a href="http://elibrary.FERC.gov">http://elibrary.FERC.gov</a> (in Docket No. CP11-161-000).

**COMMENT:** The commenter asked if Tennessee will pay to replace or repair roadways damaged by construction vehicles. (11)

**RESPONSE:** Tennessee will require its contractor to acquire any road use permits or bonds that are needed for the use of public roads during construction. The contractor will be required to make repairs to specific locations on roadways that are damaged by construction equipment during the course of the pipeline construction.

**COMMENT:** The commenter asked whether the \$7,500 per acre cap that was used to value the replacement land for Tennessee's previous 300 Line Project would remain in place if no replacement land is identified for the NEUP Project. The commenter urged NJDEP not to use this cap. (30)

**RESPONSE:** NJDEP responded that it has not committed to any \$7,500 per acre cap for the NEUP. NJDEP has identified a specific property as suitable replacement land, and does not intend to agree to a \$7,500 per acre cap for the purchase of the property.

**COMMENT:** One commenter asked if Tennessee could explain the 10 foot give back proposal that was described in the July 2011 Report. She further stated that Tennessee's "give back" of 10 feet is a way to reduce Tennessee's obligation to pay for permanent impact, is without merit, and therefore, should be rejected. Another commenter stated that the Sierra Club would prefer that Tennessee provide higher value land than giving back areas of land that are already mowed and treated with herbicides. Finally, several commenters concluded that the "give back" proposal should be rejected because it does not take into account serious impacts of the construction on important natural and cultural resource values that are outside of and beyond the construction site itself. (5, 16, 30, 50, 51, 52, 53)

**RESPONSE:** Tennessee's existing 24-inch pipeline is generally located within the center of an existing easement (typically 50 feet in width). As part of its efforts to identify opportunities to minimize the impacts of the NEUP on State property, Tennessee has agreed to reduce the existing easement by ten feet. The "give back" would be from the permanent acreage that is currently maintained for the 24-inch pipeline, on the side of the existing ROW located away from the NEUP construction. NJDEP is accepting of this offer, based on feedback from its land managers that allowing this ten foot strip to revegetate would have ecological benefits. With NJDEP's acceptance of this 10 foot "give back," the total acreage of the area of ROW to be vacated (approximately 5 acres) would not reduce Tennessee's total acreage for purposes of the 4:1 replacement calculation. Rather, the NJDEP would allow Tennessee to apply the acreage against the total replacement land owed. For example, if Tennessee uses 30 acres of state-owned land for the new ROW for the NEUP and gives back 5 acres, then it would "owe" 115 acres of replacement land instead of 120 acres.

**COMMENT:** The commenter stated that the lands impacted by the NEUP are not replaceable and that the area should be off limits to this type of development. He questioned whether there are replacement lands in New Jersey that are of equal value. (32)

**RESPONSE:** NJDEP has identified ecologically valuable replacement land within the Highlands region that possesses many of the environmental attributes that will be impacted by the NEUP. If Tennessee is able to acquire this property, it will satisfy the NJDEP's requirements for size and environmental quality that is needed to compensate the State for the impacts to the State lands.

**COMMENT:** One commenter stated that he was upset that the Smith bill, (S.2467), which would have required valuation of State lands to be based on the revenue generation of the land, was held up and that the NJDEP has not issued rules to fix the problems related to mitigation and lease values. Several other commenters opined that NJDEP should wait until legislation concerning the valuation of conveyances of state-owned lands is enacted before approving of the lease (16, 32, 50, 51, 52, 53)

**RESPONSE:** The bill to which the commenters are referring did not advance in the 2010-2011 legislative session but was reintroduced by Senator Smith and two co-sponsors as S. 826 in the 2012-2013 legislative session. S. 826 was heard in the Senate Environment and Energy Committee on January 30, 2012 and was released by the Committee. At the hearing on the bill, NJDEP representatives testified against the bill and asserted that the Legislature should allow State agencies to implement the recommendations of the Interagency Lease Report instead. A record of those proceedings may be found at <a href="http://www.njleg.state.nj.us">http://www.njleg.state.nj.us</a> (click on "Archived Proceedings" at the top center of the page, select the Committee and then select the hearing date.)

**COMMENT:** The commenter stated that Tennessee should guarantee a certain number of local/statewide jobs that are both temporary and permanent. The commenter asked whether Tennessee is making any kind of investment in the communities that will bear the brunt of Tennessee's expansion efforts, maintaining that Tennessee should share some of its profits with those affected areas of New Jersey. (27)

**RESPONSE:** Tennessee cannot guarantee that a specific number of local and statewide jobs will be created by construction of the NEUP. However, Tennessee estimates that the construction spread for the NEUP in New Jersey will consist of approximately 400 personnel at its peak, and that approximately half of the workers will be local hires. Modifications to the two existing compressor and meter station facilities in New Jersey will generally require approximately 20 to 40 construction workers. In addition, Tennessee has and will continue to work with local environmental consultants and other professionals in connection with the NEUP.

With respect to investing in the communities affected by the NEUP, Tennessee is not making any specific investments in these communities, but will be paying an estimated \$2 million in *ad valoreum* tax dollars to Montague, Wantage, West Milford, Mahwah and Ringwood as a result of the additional pipeline facilities being located in these towns. A breakdown of the estimated taxes to be paid to these communities can be found in Exhibit F of the July 2011 Report at <a href="http://www.nj.gov/dep/greenacres/pdf/tgp.neup.report.pdf">http://www.nj.gov/dep/greenacres/pdf/tgp.neup.report.pdf</a>.

**COMMENT:** The commenter requested that Tennessee consider purchasing the Van Allen House from the Municipality and donating it to the Ramapough Conservancy. (23)

**RESPONSE:** During the consultation process, Tennessee did not identify any impacts to tribal lands or to cultural and historic sites of the Ramapough Lenape Tribe. Should impacts be identified as a result of any continuing consultation with the Ramapough Lenape Tribe, Tennessee and its consultant will consult with the New Jersey State Historic Preservation Office and the FERC to apply the appropriate protection measures, as provided in the Cultural Resource Management Plan and the Unanticipated Discovery Plan. Tennessee has no plans to purchase the Van Allen House and donate it to the Ramapough Conservancy.

# X. NO NET LOSS

**COMMENT:** One commenter asked how long it will take to achieve full reforestation of the areas where trees have been cleared. Another commenter expressed concern over Tennessee's use of the temporary workspace, since the forest will not be the same after construction is completed. (3, 11)

**RESPONSE:** Tennessee stated that when a tree is removed, it cannot be replanted with a tree of the same size and location. Under its No Net Loss Reforestation Plans, Tennessee will plant trees on State-owned lands identified by the NJDEP, however, the trees will not come back instantly. Therefore, although not required by the No Net Loss Reforestation Act as a mitigation measure, Tennessee is proposing to acquire additional forested lands to compensate for the loss of forested lands. Specifically, Tennessee intends to offset the Project's impacts in forested temporary work space by compensating NJDEP with replacement lands that have similar forest resources at a 1 to 1 land replacement ratio. The purpose of the No Net Loss Reforestation Act is to help conserve forested land in New Jersey. A primary goal of the program is to have tree canopy cover replaced so that benefits can be received from that cover such as improved air and water quality. By providing a 1 to 1 replacement ratio of forested lands of similar and like characteristics to the temporary work space, benefits will be achieved at a greater rate due to the existence of canopy cover on and the permanent protection of the replacement lands.

**COMMENT:** The commenter stated that he appreciates that Tennessee's proposed reforestation efforts include a survivability plan whereby Tennessee would replace any trees that died within a certain amount of time. (5)

**RESPONSE:** Tennessee's Reforestation Plans for Loops 323 and 325 were prepared in accordance with the No Net Loss Reforestation Act and the New Jersey Forest Service's No Net Loss Reforestation Program Guidelines (January 2002; rev. September 2007) (the "Guidelines"). Under these Guidelines, Tennessee will conduct tree maintenance for a minimum of three growing seasons. Tennessee will monitor the trees planted for a minimum of three years until a successful growth rate is achieved. Additionally, NJDEP's State Forestry Services (Forestry Services) will oversee the implementation of the NJDEP approved Reforestation Plan to ensure compliance with the No Net Loss Reforestation Act which provides for a two year survival of reforestation plantings (80% survival for seedlings, 90% survival for whips, and 95% survival

for B&B specimens). Forestry Services will inspect during initial plantings and inspect annually for two years or until successful reforestation as prescribed by statute has been achieved. If areas do not meet the minimum survival rate, Tennessee will replace the dead trees.

**COMMENT:** The commenter stated that no one knew about the No Net Loss hearings for the 300 Line Project, and asked if DEP could set up an E-mail list similar to the Barnegat Bay list so that people will receive e-mail notifications. (30)

**RESPONSE:** NJDEP believes that the No Net Loss public hearings were adequately advertised for the NEUP. Notice of the public hearings was published in the New Jersey Herald on July 18, 19, 20, 21 and 22, 2011 and in the New Jersey Sunday Herald on August 1, 2011. The notice was published in the Bergen Record on July 22, 2011 and on August 1, 2011. In addition, the notice was published in the Star Ledger on July 20, 21, 22, and 23, 2011 and on August 1, 2011. The public notice announcing the public hearings was also sent to each municipal official in Mahwah, Montague, Ringwood, Wantage and West Milford. NJDEP conducted two public hearings for the NEUP - one to present the No Net Loss Reforestation Plan for Loop 323 in Montague, and one to present the No Net Loss Reforestation Plan for Loop 325 in Ringwood. were posted on the NJDEP's Community Forestry webpage http://www.state.nj.us/dep/parksandforests/forest/community/pdf\_files/Reforestation%20Plan%20Loop% 20325%20NNL.pdf and http://www.state.nj.us/dep/parksandforests/forest/community/pdf\_files/Reforestation%20Plan%20Loop% 20323%20NNL.pdf. While NJDEP believes that the public outreach for the No Net Loss public hearings for NEUP was sufficient, it stated that it would consider the commenter's suggestion to have an e-mail list similar to the one used to alert the public on Barnegat Bay matters.

Historically, NJDEP has not prescribed the form of public notice for public hearings concerning proposed Deforestation and Reforestation Plans on State-owned lands. The public meeting notice for the 300 Line Reforestation Plan was advertised in the Star Ledger and New Jersey Herald for seven days. Newspaper advertisement of public meetings is the standard media of noticing used by State agencies regulated under the No Net Loss Reforestation Act. However,, in response to comments that the 300 line public notice was not widely distributed, NJDEP expanded the public notice to include the NJDEP's Bulletin, in addition to newspaper noticing as discussed above. The DEP Bulleting has a diverse distribution that is broadly viewed by a diverse group of interests. In addition, the Loop 323 and 325 Reforestation Plans as prepared by Tennessee were posted on NJDEP's Community Forestry website for public viewing and comment. Given the infrequency of Reforestation Plans associated with NJDEP-managed lands, NJDEP considers these medias as appropriate and sufficient.

#### XI. PIPELINE CONSTRUCTION

**COMMENT:** One commenter made a general comment that gas companies could be doing a better job making the construction of their pipelines and the transportation of natural gas safer and better for the environment. (26)

**RESPONSE:** Tennessee has designed the proposed Project, and will construct, operate and maintain the Project in accordance with the United States Department of Transportation natural gas pipeline safety standards at 49 C.F.R. Part 192. An electronic copy of these rules may be

found at <a href="http://www.gpoaccess.gov/cfr/index.html">http://www.gpoaccess.gov/cfr/index.html</a>. These regulations are intended to ensure adequate protection from the public from natural gas pipeline failures. Part 192 specifies material selection and qualification, design requirements, and protection from internal, external and atmospheric corrosion. Resource Report #11, which was submitted to the FERC as part of its Environmental Report as an exhibit to the FERC Certificate application for the Project, details Tennessee's efforts to ensure that the natural gas pipeline will be properly constructed so that the natural gas will be safely transported along Tennessee's pipeline system. More information on how Tennessee complies with these federal safety standards can be found in Resource Report #11 on the FERC website at <a href="http://elibrary.FERC.gov">http://elibrary.FERC.gov</a> (in Docket No. CP11-161-000).

**COMMENT:** The commenter asked if there are times when Tennessee will need to expand the width of deforestation along the right-of-way to a width greater than 75 or 100 feet. (1)

**RESPONSE:** Additional work space is usually needed in certain areas such as road crossings, major wetland areas, and areas with steep side slopes. However, all workspaces used by Tennessee must be approved by the FERC and other appropriate State agencies, and Tennessee may only work within these authorized work spaces.

**COMMENT:** The commenter asked what the pipeline is made of. (4)

**RESPONSE:** Tennessee responded that the pipeline is made of carbon steel.

**COMMENT:** The commenter asked why Tennessee needs an additional 100 feet right-of-way when it already has an existing 50-foot right-of-way for the existing pipeline. (1)

**RESPONSE:** Tennessee does not need and therefore is not seeking an additional 100 foot right-of-way. Across State lands, Tennessee has agreed to reduce the permanent easement area to be leased from 25 feet to 15 feet. The commenter appears to be referring to the typical workspace corridor for 30-inch pipeline construction projects, which is 100 feet. In the case of the NEUP, of the 100 feet, 35 feet will overlap into the existing pipeline corridor, thereby reducing impacts to previously undisturbed land. Across State parkland, Tennessee has shifted the 100-foot work corridor to extend the construction footprint over its existing pipeline by 10 feet, resulting in the use of 35 feet of the existing corridor. This approach will further reduce the amount of temporary work space on previously undisturbed lands. At the NJDEP's request, Tennessee is looking at additional ways to minimize the width of the work corridor. For example, Tennessee has agreed to reduce the width of the work corridor to 75 feet where construction will take place in riparian zones, which will match the width of the work corridor required for wetlands.

**COMMENT:** The commenter asked for confirmation that, during construction, the flow of a stream is never interrupted. Another commenter asked about the dam and pump method of stream crossing. The commenter also asked what method of stream crossing Tennessee would use. (4, 23)

**RESPONSE:** Tennessee employs both "wet" and "dry" crossing techniques during pipeline construction. The decision of whether to employ a wet or dry crossing is made on a case by case basis. If it is determined that stream cannot be crossed "dry," Tennessee will prepare site specific plans and a permit application for review by the NJDEP's land use regulation program.

When Tennessee has to cross a stream during construction (e.g., a "wet" crossing), it will determine whether the flow of the stream is at a level where Tennessee can put in dams on either side of the work space and pump the water around the entire work space. In other situations, Tennessee may install a flume pipe, which allows the water to run through a pipe without disrupting the flow of the stream during construction. The method of stream crossing used will depend on the size and location of the stream.

**COMMENT:** The commenter asked whether permits have been issued allowing the pipeline to be built and if the pipeline is currently being constructed. (21)

**RESPONSE:** NJDEP stated that no permits have been issued to Tennessee for the NEUP, and no construction is taking place on the proposed Project. However, Tennessee has recently completed construction of its 300 Line Project and placed that Project in in service as of November 1, 2011. All required permits, including a FERC Certificate, were obtained for the 300 Line Project.

**COMMENT:** The commenter asked to whom at the FERC does Tennessee report. (23)

**RESPONSE:** As an interstate natural gas pipeline company, Tennessee is regulated by the FERC. When Tennessee submits an application or filing under the FERC's regulations, that application or filing is assigned to FERC personnel in the appropriate offices for review. For FERC Certificate applications, a project manager is assigned in the environmental group, along with other FERC personnel who review the commercial and engineering portions of a project.

The November 21, 2011 Notice of Availability for the EA contained the following additional contact information for the Project:

Additional information about the Project is available from the Commission's Office of External Affairs, at (866) 208-FERC, or on the FERC website (www.ferc.gov) using the eLibrary link. Click on the eLibrary link, click on "General Search," and enter the docket number excluding the last three digits in the Docket Number field (i.e., CP11- 161). Be sure you have selected an appropriate date range. For assistance, please contact FERC Online Support at FercOnlineSupport@ferc.gov or toll free at (866) 208-3676, or for TTY, contact (202) 502-8659. The eLibrary link also provides access to the texts of formal documents issued by the Commission, such as orders, notices, and rulemakings.

A full copy of the Notice may be found at http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=12821764#.

**COMMENT:** Several commenters asked about the extent to which Tennessee will have to do blasting as part of its pipeline construction, as follows:

• One commenter asked if Tennessee will have to resort to blasting. She asked who Tennessee uses to do blasting surveys. This commenter also asked where information gathered regarding blasting would be available. (27)

- Two commenters expressed concern about the proximity of blasting in the vicinity of the mines in Ringwood. Another commenter asked about the extent of blasting. (18, 19)
- The commenter expressed concern over the impact blasting would have on nearby toxic sites and stated that Tennessee should be looking to help the upper Ringwood community as part of the mitigation for construction on State lands. (32)

**RESPONSE:** Tennessee acknowledged at the public hearings that it may have to use explosives to clear some of the grade rock during construction, especially in areas of extensive rock. A rock study is being done to determine the estimated amount of rock in the area that will need to be Tennessee hired Geo Engineers as its geo-technical and engineering consultant. MACTEC was hired to perform table top and field investigations used to estimate the quantity of trench and grade rock. As part of its FERC Certificate application submittal, Tennessee developed Blasting Plan Specifications that establish procedures and safety measures that its contractor will follow while conducting blasting activities along the pipeline ROW during construction. Among other things, the Blasting Plan Specifications require: the use of qualified, licensed personnel to conduct the blasting; installation of blasting mats in congested areas, in shallow water bodies or near structures that could be damaged by fly-rock; and the control of excessive vibration by limiting the size of charges and using charge delays. Tennessee will require its Project contractor to hire a certified blasting subcontractor, who will develop blasting plans in accordance with Tennessee's Blasting Plan Specifications and who will execute all blasting activities. Tennessee will also hire a separate, third party blasting consultant to review and approve all blasting plans, and will then hire another third party contractor to perform preblasting surveys and to conduct seismic monitoring during blasting operations.

As part of its blasting operations, the FERC will require Tennessee to inspect structures within approximately 200 feet of blast areas and at the request of affected landowners. Tennessee will also be required to monitor ground vibrations at the nearest structure or well within 200 feet of the construction work area and either repair any blasting-related damage or compensate the affected landowner for the damage. The Blasting Plan Specifications can be found in Volume II—Appendix D to Resource Report #6 (Geological Resources) and the FERC blasting analysis can be found in Section 2.1.1.4 of the EA, both of which are available on FERC's website at <a href="http://elibrary.FERC.gov">http://elibrary.FERC.gov</a> (in Docket No. CP11-161-000).

**COMMENT:** The commenter expressed concern over the hours that construction will be going on during the night. Another commenter asked whether lights would be used for nighttime construction. (26, 27)

**RESPONSE:** Tennessee plans to work six days per week and 10 hours per day. However, there are some activities that will extend beyond daylight hours. Tennessee routinely uses light plants for night-time construction activity.

**COMMENT:** The commenter asked whether Tennessee has examples of any of the work that is being done in the area so that people can observe what the actual pipeline construction will look like. (17)

**RESPONSE:** Pipeline construction activity could have been observed on the 300 Line Project when it was actively under construction. However, this work has now been completed.

**COMMENT:** The commenter asked if the pipe and trenching process to be used on the NEUP is the same used for the 300 Line Project. (27)

**RESPONSE:** Tennessee will be using the same size pipe and trenching process as used for the 300 Line Project.

**COMMENT:** The commenter asked whether the pipeline will be below frost level. (27)

**RESPONSE:** The frost level has no bearing on the required depth of a natural gas pipeline. Rather, the required depth of the natural gas pipeline is dictated by the federal pipeline safety regulations at 49 C.F.R. Part 192. For this Project, as described in Resource Reports ## 1 and 11 of the Environmental Report, Tennessee is proposing a typical buried pipeline depth of at least three feet. The Resource Reports are available on the FERC's website at <a href="http://elibrary.FERC.gov">http://elibrary.FERC.gov</a> (in Docket No. CP11-161-000).

**COMMENT:** The commenter asked how much topsoil is taken off during the trenching process. (27)

**RESPONSE:** The amount of topsoil that is taken off depends on how much topsoil there is to begin with. If the project site is all topsoil, then removal of 6 to 12 inches of topsoil would be typical, but where cuts are made due to topography the depth could be greater. Where topsoil is not segregated from the subsoil, the soil is put back as closely as possible to the original contours.

**COMMENT:** Two commenters were concerned about the meter station in Mahwah. Specifically, one commenter asked what other companies share the site of the meter station with Tennessee. Another commenter asked about abandonment of meter and compressor stations. (17, 23)

**RESPONSE:** Tennessee shares the site where the meter station is located with Algonquin and Spectra. Spectra owns in fee the property on which the meter station is located. The Mahwah meter station is not going to be abandoned; rather Tennessee proposes to upgrade its existing, bidirectional meter station. Through installation of two new taps, and installation of three ultrasonic meters and two gas filter-separators, Tennessee proposes to increase the meter capacity to 1,009,625 Dth/d. The existing capacity of the meter station is 257,072 Dth/d. No compressor stations will be abandoned as part of the NEUP.

**COMMENT:** The commenter had several questions about Tennessee's use of the horizontal directional drilling ("HDD") for the NEUP. Specifically, she wanted to know where the HDD

will be used, and why Tennessee uses bentonite clay in the drilling process. Two other commenters asked if the drilling mud contains heavy metals, and what is done with the drilling mud after it is used. One of the commenters also asked how the federal government will be monitoring Tennessee's drilling activity. (13, 19, 27)

**RESPONSE:** Tennessee responded at the public hearings that it will be using HDD to cross the Monksville Reservoir, the Delaware River, and the Susquehanna River. It uses bentonite clay (a naturally occurring material) to assist in the drilling process. This method of drilling is safe for drilling drinking water wells. The drilling mud used in the HDD process does not contain any heavy metals. If, however, any contaminants come up from the ground as a result of the drilling, they are disposed of in accordance with applicable regulations. New Jersey does not allow the reclaimed materials generated as a result of the HDD to be applied to farmland as a fertilizer so it must be disposed of properly. There will be FERC monitors on-site on a full-time basis to monitor the drilling process.

As part of the analysis of avoidance and minimization opportunities that the NJDEP required for the NEUP, Tennessee analyzed other HDD sites but rejected them as not feasible. The NJDEP is reviewing this information and may require additional HDD's as part of its approvals for the Project. The drilling mud will be disposed of at an approved disposal facility.

**COMMENT:** A commenter asked what a turbidity curtain is. (27)

**RESPONSE:** A turbidity curtain is an environmental control device designed to prevent muddy water from migrating from the work space to areas downstream.

**COMMENT:** A commenter asked what rock windrows are. (27)

**RESPONSE:** A rock windrow is the linear placement of rock, and is a method used to place excess rock within temporary work spaces. Creating windrows is not NJDEP's preferred method for the placement of the excess rock. Rather, NJDEP prefers that the excess rock should be randomly scattered, with a density of 20% coverage, in a manner that is consistent with surface rock on adjacent property. This preferred method is known as "moonscaping."

**COMMENT:** The commenter stated that Tennessee should review its numbers on the Jungle Habitat property since 27 out of 35 acres paved seems too high. The commenter also stated that, as of ten years ago, when he last saw the Jungle Habitat property, the pavement was crumbling. The commenter concluded that the Jungle Habitat property is suitable for re-vegetation or recreational fields and is not a useless piece of land. (31)

**RESPONSE:** Tennessee responded at the public hearing that the overall parcel of Jungle Habitat is much larger than 35 acres, which is the amount that Tennessee was originally looking at for possible temporary work space for the NEUP. After studying the Jungle Habitat property and its need for temporary work space, Tennessee has concluded that it will not be seeking a right of entry for use of any part of the Jungle Habitat property.

# XII. PIPELINE NEED

**COMMENT:** Several commenters expressed concern over whether there was a need for the natural gas to be transported by the NEUP. The comments received fell into the following categories:

- One commenter asked where she can find data about the increased demand for natural gas; another commenter asked who prepared the projected need for the natural gas. (4, 8)
- One commenter expressed concern about the need for the NEUP, given that there are three pipelines currently coming through New Jersey. One is a Spectra project through Jersey City, one is the Transco project through Clinton, Union Township and Franklin, and there is Tennessee's project. (11)
- One commenter asked whether Tennessee has already contracted for the additional gas for the NEUP. (21)
- Another commenter expressed concern over the necessity of the Project, especially in light of the current status of fracking, suggesting that the pipeline may become dormant since a number of states have banned fracking. She also suggested that the county and State explore, along with the FERC, the need for the Project. (23)
- Several commenters expressed their views that the projected need for natural gas should not be that great because businesses, towns, counties, schools, and private homes are now turning to solar and wind power, geothermal energy and other alternative power sources. Other commenters stated that we should be conserving energy. Two commenters stated that they wish the State would say "no" to the NEUP because there is no need for the project because solar and geothermal power are getting more popular. Another commenter stated that NJDEP should deny Tennessee's proposal as the need for the additional gas is speculative. Other commenters expressed their preference that New Jersey should be investing in long-term renewable energy sources, such as wind and solar. One commenter expressed her opinion that using natural gas as a transition fuel as we move away from coal is a mistake. Another commenter opined that solar and wind power would become competitive if the heavy tax breaks and subsidies given to the gas industry were eliminated. Finally, a commenter stated that the people of New Jersey would be better served if NJDEP protected the Ramapo Forest and helped to develop sustainable energy sources such as solar and offshore wind. (3, 8, 13, 20, 26, 38, 46, 48)

**RESPONSE:** The anticipated need for the Project is set forth in the Public Convenience and Necessity section of the FERC Certificate application, filed with the FERC on March 31, 2011 in Docket No. CP11-161-000. The FERC evaluates the need for natural gas pipeline projects pursuant to its Statement of Policy on the Certificate of New Interstate Natural Gas Facilities.

See Certificate of New Interstate Natural Gas Pipeline Facilities, 88 FERC ¶61,227 (1999); Order Clarifying Statement of Policy, 90 FERC ¶61,128 (2000); Order Further Clarifying Statement of Policy, 92 FERC ¶61,094 (2000). In addition, the United States Energy Information Administration website (<a href="www.eia.gov">www.eia.gov</a>) provides significant data and information on natural gas and the increased demand, particularly in the Northeast region of the U.S.

As part of the FERC Certificate application, Tennessee must demonstrate to the FERC that there is a market need for new pipeline facilities. The FERC evaluates the public need for a project, and will begin by looking at the commercial need for the additional transportation capacity. For the NEUP, Tennessee has signed binding precedent agreements with two shippers for all of the additional transportation capacity to be created by the Project. Tennessee's position is that, without the construction of the NEUP, it would be unable to meet the shippers' expressed need for additional capacity on Tennessee's system using its existing facilities and that transportation capacity on the other pipelines in the region are constrained.

As noted on p. 12 of the July 2011 Report (referencing Resource Report 10 of the Environmental Report submitted by Tennessee as part of the certificate application for the Project):

The use of traditional fossil fuels to supply the energy needs of the northeastern U.S. is not the best practicable alternative to the use of cleaner-burning natural gas. As discussed in Resource Report 10 of the Environmental Report included with the FERC Certificate application, energy alternatives, including solar and wind, are not considered to be a feasible alternative energy source to natural gas in most locations due to technological and reliability considerations. (See http://elibrary.FERC.gov). In addition, although energy conservation is a valuable measure as part of an overall energy plan, energy conservation alone is not a solution to the current energy demand of consumers to be served by this Project. Therefore, Tennessee asserts that utilization of natural gas as the primary fuel for the customers to be served by the Project offers the best alternative in terms of supply availability with the lowest environmental impact among available alternative energy sources, particularly with regard to air quality impacts.

http://www.nj.gov/dep/greenacres/pdf/tgp.neup.report.pdf

On a parallel track to the NJDEP's review of the NEUP, the State of New Jersey has been developing an Energy Master Plan ("EMP"). See <a href="http://nj.gov/emp/">http://nj.gov/emp/</a>. In the final version of the plan, released in December 2011, New Jersey established an aggressive renewable portfolio standard (RPS) of 22.5% by 2021 (EMP, p. 1), and a goal of fulfilling 70% of its electric needs from "clean" energy sources by 2050 (provided that the definition of "clean energy" is broadened beyond renewables to include nuclear, natural gas and hydroelectric facilities) (EMP, p. 3). However, New Jersey recognizes that solar and wind are expensive and intermittent, therefore, the use of conventional or innovative technologies will be required to ensure grid reliability. (EMP, p. 4). Consequently, the EMP supports the expansion of existing natural gas pipeline network that serves gas utilities and power plants throughout New Jersey, provided the expansion is done safely, in compliance with environmental regulations, and in a way that safeguards the State's natural and cultural resources. (EMP,p. 6).

While power generated from renewable sources serves as an important part of the energy solution, according to the U.S. Energy Information Administration (<a href="www.eia.gov">www.eia.gov</a>), renewable energy is hindered by two factors: significant capital cost, and often remote geographic location, which introduces further cost implications due to the need for transmission lines to deliver power to large metropolitan areas. At present, natural gas is roughly half the cost/megawatt hour ("MWh") to build compared to wind, and less than a third of the cost of solar. Even with significant tax subsidies, it is unlikely that enough renewable energy could be developed to fill the need the NEUP is intended to address in a timeframe that would satisfy the requirements of Tennessee's customers.

**COMMENT:** The commenter asked what happens if the FERC does not approve the Project. (21)

**RESPONSE:** If the FERC determines that there is no need for a project, or that certain other federal regulatory requirements have not been met, it will not issue a FERC Certificate. Without a Certificate, construction of the NEUP cannot proceed.

**COMMENT:** The commenter stated that the pipeline is being built for Tennessee's benefit and questioned whether New Jersey residents will benefit from this Project. Another commenter stated that the gas will not being used anywhere along the corridor but will be used in other places. The commenter opined that this pipeline does not have to go through New Jersey's most important environmental and scenic treasures. (29, 32)

**RESPONSE:** The significant demand for interstate natural gas transportation capacity in the Northeast region of the United States is evidenced by the signing of binding precedent agreements with two shippers for all of the new capacity that will result from the NEUP. If the FERC agrees, and issues a FERC Certificate, then Tennessee will be able to deliver additional gas to its customers, which may include local distribution companies within New Jersey and surrounding areas. As described in the Mitigation/Compensation section above, the Project will have a direct benefit on New Jersey's economy by generating additional jobs during the construction phase and helping State and local units to raise revenue through additional taxes imposed on Tennessee. The Project has been designed to avoid sensitive environmental resources to the extent feasible, and where impacts cannot be avoided, Tennessee will provide mitigation to compensate the State for those resources.

**COMMENT:** The commenter stated that NJDEP should provide an analysis of the need of the Project, independent of the FERC's analysis, in order to determine whether it should enter into the lease with Tennessee. (31)

**RESPONSE:** The determination of the need for an interstate natural gas pipeline construction project, such as the NEUP, is made by the FERC in accordance with Section 7(c) of the Natural Gas Act, 15 U.S.C. §717f(c). Therefore, the NJDEP is participating in the FERC Certification application review process in order to have as much input as possible in the analysis and routing the of the Project. The NJDEP encourages the commenter to get involved in that process if he believes Tennessee has not adequately analyzed the public need for the Project. While NJDEP's Green Acres rules also require a finding of compelling public need to justify a diversion of local parkland, these rules do not apply to transactions involving State property. The NJDEP

acknowledges that there are competing public interests involved in determining the need for a project such as the NEUP. However, it is the issuance of a FERC Certificate that establishes the need for a particular pipeline project if it is an interstate natural gas pipeline project subject to the jurisdiction of the FERC.

# XIV. PIPELINE SAFETY

**COMMENT:** One commenter stated that pipelines exploded in 1992 in Edison, NJ; one pipeline recently blew up in Allentown, PA and then there was a recent major pipeline explosion in California. Another commenter asked whether any of Tennessee's gas pipelines have ever exploded. She expressed concern over the threat of a pipeline explosion due to the fact that there have been explosions of Tennessee's pipelines in the past and that the pipeline is over 50 years old. She also questioned whether the pipeline has been inspected and could be leaking gas. (2, 11)

**RESPONSE:** Tennessee acknowledges that there have been pipeline explosion incidents, some of which have involved pipelines owned by Tennessee. As described in the EA, the US Department of Transportation's ("USDOT") Pipeline and Hazardous Materials Safety Administration ("PHMSA") administers the national regulatory program to ensure the safe transportation of natural gas by pipeline. PHSMA develops safety regulations that ensure safety in the design, construction, testing, operation, maintenance and emergency response of pipeline facilities. These regulations are found at 49 CFR 190-199; Part 192 specifically addresses natural gas pipeline safety issues. Tennessee will follow all of these federal safety regulations during the construction, operation and maintenance of the NEUP. The existing 24-inch pipeline is included in Tennessee's pipeline integrity program, and has been internally inspected over the past couple of years. With minor repairs, the pipeline has been found to be safe for continued operation.

Information on the safety and reliability of the NEUP can be found in Resource Report # 11 of the Environment Report submitted with the FERC Certificate application and in Section 2.9 of the EA, both of which are available on the FERC website at <a href="http://www.ferc.gov/docs-filing/elibrary.asp">http://www.ferc.gov/docs-filing/elibrary.asp</a> by searching Docket No. CP-11-161-000.

**COMMENT:** The commenter asked whether the existing pipeline runs underneath the Monksville Reservoir. If so, the commenter asked for information about how the pipeline is monitored and inspected, and asked whether Tennessee takes water samples of the Monksville Reservoir to ensure that the pipeline is not leaking. (4)

**RESPONSE:** Tennessee confirmed at the public hearing that the existing 300 Line runs underneath the Monksville Reservoir. Tennessee monitors the pipeline 24 hours a day, seven days a week. It monitors the pressure – the gas flow coming into the pipeline and the gas flow going out of the pipeline. Tennessee also conducts periodic inspections of the surface of the pipeline both aerially and internally. In conducting internal inspections of the pipeline, Tennessee places an "intelligent tool" inside the pipeline to determine whether there are any anomalies within the pipeline. If anomalies are found, Tennessee would explore and repair them. The pipeline underneath the Monksville Reservoir has been in service since 1955, and

there have been no anomalies identified. Therefore, since this is a properly maintained pipeline, (referencing Resource Report 10 of the Environmental Report submitted by Tennessee as part of the certificate application for the Project) :there is no reason for Tennessee to take water samples of the Monksville Reservoir.

**COMMENT:** Two commenters asked whether anyone at Tennessee was aware of the earthquake epicenters inside the park near the pipeline, and what safety measures are in place if the pipeline ever ruptures. (11, 23)

Tennessee is aware of seismic activity within the Project area, and addressed **RESPONSE:** such activity in Resource Report #6 (Section 6.4), which can be found on the FERC website at http://www.ferc.gov/docs-filing/elibrary.asp by searching Docket No. CP-11-161-000. This Report explains the US Geological Survey's ("USGS's") methods for depicting the estimated probability that certain levels of ground shaking from an earthquake will occur within a given area over a period of time. Specifically, the USGS developed a series of maps, which takes into account the past seismic history of an area and the expected decrease in intensity with distance from the epicenter. For Loop 323 of the NEUP, the potential risks to construction or operation are not expected due to the lack of documented seismic activity in the area. For Loop 325 of the NEUP, there have been small magnitude events in Passaic County which the USGS does not consider to be substantial or to pose a potential risk to construction or operation due to the very limited and minimal seismic activity documented in the area. In addition, the New Jersey Geological Survey ("NJGS") has stated that, although there are faults crossed by Loop 325, movement of these faults has not been recorded in tens of thousands of years. Reliability and safety for the Project facilities is addressed by Tennessee in Resource Report 11. which can be found on the FERC website at http://www.ferc.gov/docs-filing/elibrary.asp by searching Docket No. CP11-161-000.

**COMMENT:** The commenter asked whether the existing pipeline will need to be fixed. Another commenter expressed a concern that the pipes are not sturdy enough and may blow up, posing a danger to those that are near them. (28, 34)

**RESPONSE:** The existing pipeline is a carbon steel pipe that is regularly maintained, protected and inspected. As long as the pipeline is maintained properly it has an indefinite life span. Tennessee has installed pipelines which, absent damage caused by outside forces or changes in class location requirements, are original installation (such as the parts of the 300-1 Pipeline installed in 1955 that are to be looped as part of the NEUP). With proper cathodic protection installed and maintained (to prevent rusting), the carbon steel pipe will not deteriorate over time.

**COMMENT:** The commenter asked that Tennessee come up with a comprehensive plan to protect and to provide suitable housing for the Ramapough Lenape people in upper Ringwood in the event of an incident involving the pipeline, and asked that there be a moratorium until such a plan is developed. (17)

**RESPONSE:** Due to the low probability of a catastrophic pipeline failure at any specific location on Tennessee's pipeline system, there is no justification for developing the type of plan sought by the commenter. Tennessee is unaware of any requirement by any agency to plan for the temporary housing of any population as a contingency for a potential pipeline incident.

Tennessee, however, does have an Emergency Plan, as required by 49 C.F.R. §192.615, which is discussed in Resource Report # 11 (Section 11.2.10) of the Environmental Report for the Project. The Emergency Plan provides written procedures to minimize the hazards from a natural gas pipeline emergency, and specifically includes procedures for receiving, identifying and classifying emergency events; establishing and maintaining communications with local fire, police, and public officials; making personnel, equipment, tools and materials available at the scene; protecting people first and then property from actual or potential hazards; and providing for emergency shutdown of the system and safe restoration of service. Details on the Emergency Plan can be found on the FERC website at <a href="http://www.ferc.gov/docs-filing/elibrary.asp">http://www.ferc.gov/docs-filing/elibrary.asp</a> by searching Docket No. CP-11-161-000.

**COMMENT:** Two commenters expressed concerns over safety issues, including a threat to the pipeline from blasting and/or terrorism. (46, 48)

**RESPONSE:** As discussed in the Pipeline Construction section above, Tennessee developed Blasting Plan Specifications that establish procedures and safety measures that its contractor will follow while conducting blasting activities along the pipeline ROW during construction. The Blasting Plan Specifications can be found in Volume II—Appendix D to Resource Report # 6 (Geological Resources) and the FERC blasting analysis can be found in Section 2.1.1.4 of the EA, both of which are available on FERC's webpage at <a href="http://elibrary.FERC.gov">http://elibrary.FERC.gov</a> (Docket No. CP11-161-000). In addition, El Paso Corporation ("El Paso") has established security standards and guidelines for all El Paso facilities, including Tennessee's pipeline system. Among other things, El Paso monitors the threat the threat conditions under the Homeland Security National Terrorism Advisory System, and depending on the threat level, will take appropriate steps to secure its facilities.

# XV. <u>300 LINE PROJECT</u>

**COMMENT:** On the construction of the 300 Line in Wawayanda State Park, the commenter asked whether construction began before the lease with NJDEP was signed. (10)

**RESPONSE:** At the August 17, 2011 public hearing, the NJDEP responded that construction began on the 300 Line Project in accordance with a right of entry agreement between NJDEP and Tennessee. The lease for the new ROW and the right of entry agreement for the temporary and additional temporary work space on the State lands were issued prior to the start of construction. The lease became effective on November 29, 2010, and the right of entry agreement and the Interim Management Agreement for the Bearfort Natural Area became effective on November 30, 2010.

**COMMENT:** The commenter expressed concern about the 300 Line Project, which was recently constructed through her community of West Milford, New Jersey. She placed pictures into the record of what she described as "devastation" caused by the project. (13)

**RESPONSE:** Tennessee disagrees with the commenter's characterization of the impacts. While there are definitely short-term impacts on the environment as a result of the construction of the 300 Line Project, the temporary work space used during construction will ultimately revert to its

original condition as a result of Tennessee's restoration efforts and natural revegetation. Tennessee has received favorable input from some in the community concerning the success of its post construction restoration work. NJDEP has also seen recent photographs of the condition of the 300 Line Project ROW post-restoration, and has been satisfied with the conditions observed. Tennessee will continue to monitor the restoration for a minimum of three years or until it is deemed to be successful, as required by federal and State requirements.

**COMMENT:** The commenter stated that the public had no input into the 300 Line Project that was constructed by Tennessee. (45)

**RESPONSE:** The 24-year lease for the 300 Line Project did not trigger the State public participation requirements of *N.J.S.A.* 13:1D-51 et seq. (also known as the "Ogden Rooney" statute.) However, the public did have opportunities to participate in the FERC pre-filing and FERC Certificate application process for the 300 Line Project. Specifically, the FERC processes included open houses and FERC scoping meetings to which the public was invited, as well as public comment periods on the draft Environmental Report, the FERC Certificate application and the EA. On the State level, the public had an opportunity to participate in public hearings on the No Net Loss Reforestation Act, the actions by the Highlands Council and the release of conservation restrictions.

Based on "lessons learned" from the 300 Line project, the NJDEP decided to require a 25-year lease for the NEUP so that *N.J.S.A.* 13:1D-51 would apply and the public would be afforded a full opportunity to participate in the public process required by that statute. The State public process for the NEUP is in addition to the public's opportunity to participate in the FERC prefiling and FERC Certificate application processes, as well as public meetings for diversions of locally-owned Green Acres properties, No Net Loss Reforestation Act process, and Highlands Council actions.

**COMMENT:** One commenter expressed her view that it was disgraceful what happened to Wawayanda State Park during construction of the 300 Line. Another commenter stated that, during her inspection of the pipeline in Wawayanda State Park, she observed that Tennessee had cleared trees, making the work space corridor 200 feet. Even though the area had been replanted, the commenter stated that 150 feet of wetlands had been taken out, trees were removed and the forests look terrible; only one third of this area was mitigated. The commenter stated that Tennessee should compensate New Jersey for the entire 200 feet wide, 7 mile long area that was cleared from Wawayanda State Park. (3, 45)

**RESPONSE:** Tennessee responded that, when an interstate natural gas pipeline company applies for a FERC Certificate, the company must submit alignment sheets that show the area of proposed work space. Once a FERC Certificate is granted, the company cannot deviate from the approved work space. Tennessee reviewed the area questioned by the commenter and confirmed that it did not deviate from its approved construction footprint authorized by the FERC. Construction of the proposed 30-inch-diameter natural gas pipeline loops typically required a 100-foot-wide construction right-of-way in upland areas, which would generally consist of 25 feet of existing, permanently maintained right-of-way, 25 feet of new permanent right-of-way,

and 50 feet of temporary construction workspace. In wetlands, TGP reduced the construction right-of-way to 75 feet. (See 300 Line FERC EA, p. 1-28, Section 1.8.)

In addition, during construction, the FERC, Tennessee's independent Environmental Inspection staff, and State and local inspectors conduct inspections of the Project area to ensure, among other things, that the contractor is not working outside of the approved work space limits. NJDEP Division of Parks and Forestry staff specifically conducted on-site inspections of the 300 Line project area to ensure Tennessee's compliance with the approved lease and Right of Entry boundaries and found no instances where Tennessee was outside of their approved boundaries.

**COMMENT:** Several comments had significant concerns about a mudslide that occurred in Vernon Township in mid-August 2011 during construction of the 300 Line. One commenter submitted photographs of the impacts of the 300 Line through Vernon Township to illustrate her comment. The commenters alleged that these photographs show lack of soil retention, leaking oil into wetlands, and garbage from the work site. Other commenters asked why Tennessee did not know about the incident in Vernon, New Jersey. Another commenter expressed concern that Tennessee did not adequately prepare for the rainstorm that hit the State and that the rains caused significant runoff. She stated that the mitigation methods used by Tennessee did not hold back the mudslide in Vernon. She encouraged those present to attend the next safety course offered by Tennessee and walk the site while the pipeline is being constructed. Another commenter concluded that Tennessee has little regard for the environment, as shown by Tennessee's inability to adequately prepare for the heavy rainfall that occurred in the area. Finally, one of the commenters asked whether Tennessee is planning on repairing the situation in Vernon caused by the mudslide. (2, 3, 8)

**RESPONSE**: NJDEP and Tennessee were both aware of the mudslide activity in Vernon. Tennessee stated at the public hearings that it worked to resolve the situation in Vernon immediately. Tennessee described that the mudslide occurred during construction of the 300 Line Project on a very steep hill adjacent to the Mountain Creek ski resort. After the mud slid down the hill after a significant rainfall event, Tennessee's contractors quickly cleaned up the mud that ran across the streets and stabilized the situation. At the time of the August 17, 2011 public hearing, Tennessee explained that its plan was to review what happened, complete the construction that was in process, and conduct the restoration work. To ensure that the restoration was done properly, Tennessee engaged additional engineering support to ensure that, once the construction was completed, the hillside would be restored back to its original condition. The construction and restoration has been completed in accordance with Tennessee's plans.

Additionally, NJDEP's Enforcement staff conducted on-site inspections within several critical areas along the pipeline before and after the significant storm events that contributed to the mudslides and other flooding events. Based on pre-and post-storm events, NJDEP found overall that Tennessee was in compliance with the preventive measures in its Soil and Sedimentation Control Plan (Control Plans) as approved by the NJDEP and the County Soil Conservation Districts. However, NJDEP did direct Tennessee to increase its erosion controls measures in critical areas. Tennessee complied with this request. The control measures withheld remarkably well for the extraordinary amount of rainfall in 2011 beginning in the March-April timeframe and continuing through September. There were multiple events of 2 plus inches of rain in 24

hours that contributed to these events (e.g. 5/18, 6/6-7, 8/13-14, 8/18-19, 8/27 Hurricane Irene, 9/9 Tropical Storm Lee.)

**COMMENT:** Several commenters expressed concerns regarding an incident in which runoff from a heavy rainstorm carried dirt from a Tennessee construction site and deposited it in Lake Look Over. One of these commenters asked what Tennessee did to prepare for Hurricane Irene. Another commenter stated that she heard that the chairman of the Lake Look Over Property Owners Association had stated that the lake started to have sediment in it around March. The commenter expressed concern that it could take over a year to pump out the siltation. Another commenter asked who is responsible for the incident and how NJDEP is handling the situation. (11, 12, 18)

**RESPONSE:** NJDEP inspected the erosion controls along this area of the alignment and found Tennessee compliant with the applicable State and County approved Soil Erosion Control Plans. It is NJDEP's position that the lake would have had incurred about the same amount of silt regardless of the 300 Line construction due to natural erosion that comes with storms of that magnitude.

However, Tennessee, through consultation with NJDEP, increased the number of environmental controls, including turbidity curtains, along its construction alignment to respond to the increased siltation.

**COMMENT:** The commenter stated that while she would like Tennessee to find another alternative for the NEUP, she hopes Tennessee will work hard so there are no further impacts from the 300 Line project. (12)

**RESPONSE:** Construction of the 300 Line Project has been completed and the areas impacted have been restored, or will be restored, in accordance with the Environmental Mitigation section of the Construction Work Plan for the 300 Line Project. There will be no further impacts from the 300 Line Project.

**COMMENT:** The commenter asked whether NJDEP has taken a look at whether there was any flow of mud that drained into Terrace Pond. (32)

**RESPONSE:** NJDEP's Enforcement staff did not identify any siltation issues in Terrace Pond.

**COMMENT:** The commenter states that there has been little mitigation or replanting at the site of the 300 Line Project since it has begun in West Milford. (27)

**RESPONSE:** In accordance with the No Net Loss Reforestation Act, Tennessee provided monetary compensation for the permanent impacts to State-owned forested lands. For the areas of temporary work space, Tennessee stabilized the affected areas in accordance with its FERC-approved Winterization Plan, which describes the stabilization and planting/restoration measurers that will be taken until the weather allows for final plantings to be implemented. The Winterization Plan for the 300 Line Project was submitted to the FERC on October 7, 2011 and was supplemented on October 20, 2011 in Docket No. CP09-444-000, which is available on the FERC website at <a href="http://elibrary.FERC.gov">http://elibrary.FERC.gov</a>. Spring plantings are underway and will be continued in the Fall of 2012.

**COMMENT:** The commenter states that she opposes the conveyance of State-owned lands to Tennessee and believes that the \$45,000 that Tennessee is paying for the lease is an insult to the taxpayers of this State. (35)

**RESPONSE:** The \$45,000 amount referred to by the commenter relates to the 300 Line Project, and not to the NEUP Project. The \$45,000 figure represents the appraised value of the 300 Line lease. The amount of monetary compensation provided to the State by Tennessee for the 300 Line Project was quadrupled by the State House Commission, and Tennessee actually paid \$180,000 for the State lands leased for the 300 Line Project. The compensation provided under the 300 Line Project, which was consistent with the compensation policies that existed at the time of lease negotiation and approval, should not be confused with the compensation that Tennessee will be required to pay for the State lands proposed to be leased for the NEUP Project.

As described above, for the NEUP, the NJDEP is requiring Tennessee to tender the following compensation to the State of New Jersey: (1) annual rental payment in the amount of \$0.15 per square foot based on the actual acreage leased for the new pipeline right of way (subject to an escalation of 2.5% per year); (2) annual rental payment for temporary work space in the amount of \$0.15 per square foot based on the actual acreage needed (based on a proposed two-year construction schedule); (3) replacement lands at 4:1 (based on size) for any NJDEP lands to be occupied by the new "permanent" pipeline ROW; (4) replacement lands at 1:1 (based on size) for any NJDEP lands to be occupied as temporary work space; and (5) replacement lands at 4:1 for any NJDEP lands to be blasted (including temporary work space). In addition, Tennessee proposes to provide all mitigation that is required by the various State permits and approvals needed for the NEUP Project. This includes mitigation required under the No Net Loss Reforestation Act, Highlands Water Protection and Planning Act, and Freshwater Wetlands Protection Act. Tennessee has also proposed "giving back" ten feet of its existing 50-foot wide permanent easement that it currently holds, which would result in fewer impacts to undisturbed State lands.

In total, Tennessee estimates that the compensation and mitigation measures to be offered to the State for the NEUP will exceed \$12 million, as follows:

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

# XVI. TRAILS – GENERAL

**COMMENT:** Two commenters expressed concern about keeping all recreational trails open year round during construction of the NEUP. The commenter expressed concerns that, during construction of the 300 Line Project, there were two trail crossings in Wawayanda State Park that caused the trails to be closed for over six months. The trail closure prevented both hiking and maintenance of those trails. The commenter stated that his organization would appreciate if Tennessee could commit to keeping trails open during construction of the NEUP by whatever means necessary. (5, 6, 10, 28)

**RESPONSE:** The NJDEP's and Tennessee's goal is to keep trails open and passable to the maximum extent possible during the construction of the NEUP. However, there will be times when a trail will have to be temporarily closed for public safety reasons. Such closures would occur during construction activities such as the digging of the trench across a recreational trail, blasting activities, the laying of the pipe into the trench, and the backfilling of the trench. At all other times, Tennessee intends to keep the trails open and passable either by a "shoe fly" (temporary trail modification that avoids the immediate construction activities), temporary bridge or a mat crossing, so that the public can safely cross over the pipeline ditch. When a closure is necessary for the reasons described above, Tennessee will ensure that there will be appropriate signage and that the trails management organization affected by the closure will be notified so that it can update its website. Tennessee has developed a General Trails Crossing Plan that is under NJDEP final review.

**COMMENT:** One commenter asked for an example of what a limited time frame would be for closing a trail. (10)

**RESPONSE:** At the public hearing, Tennessee gave an example of the proposed Appalachian Trail ("AT") Crossing, where Tennessee has a plan to minimize the amount of time the AT would be closed off to hikers to approximately two to three days. In that case, Tennessee plans to have a separate crew for that area, and plans to provide for an alternate trail (the Iris Trail) to go around the AT. For other trails, the goal would be to keep access open on either side of the trail, so that the trail can be approached and crossed after the construction activity is completed in a couple of days via the crossing methods described above. However, where trenching requires blasting because of rock, the closure could be longer because Tennessee would have to drill, set the explosives, blast and then excavate. For safety reasons, Tennessee would exclude hikers during the time needed for blasting.

**COMMENT:** The commenter asked whether Tennessee will replace any structures (e.g., side hilling or erosion devices) that have to be removed from trails during construction in order to prevent runoff and erosion of trails. (5)

**RESPONSE:** Tennessee will take appropriate measures to prevent runoff and erosion of the trails. Specifically, once construction is completed, the ROW will be returned as close as practicable to its original condition (contoured, graded and reseeded). Tennessee will install water bars across the ROW to direct water off from the ROW into established vegetation. Depending on the site location of the intersection of the Project and any trail, Tennessee, its inspection staff and third party monitors will determine if additional erosion measures are required to protect the trails from construction and post-construction impacts.

**COMMENT:** The commenter requested that Tennessee place screen walls or fences across the right-of-way to prevent initial access to the right-of-way by unauthorized Off Road Vehicles ("ORV") and All Terrain Vehicles ("ATV"). The commenter is concerned that ORV/ATV use causes immense damage and destruction to the recreational trail system, and requested that Tennessee give the State some money, as part of its financial mitigation, to help to enforce this issue. (5)

**RESPONSE:** As authorized by NJDEP, Tennessee will use various techniques to discourage ORV/ATV access and use of the ROW, such as (1) installing water bars which help to discourage ORV/ATV access and help to direct water off of the ROW and into established vegetation, (2) strategically placing rocks across the ROW at key access locations, and (3) if needed and approved, installing moonscaping and fences/gates at key access points.

**COMMENT:** The commenter stated that, of the eighteen trails listed on Slide 32 of Tennessee's presentation at the public hearing, sixteen of them connect to the Appalachian Trail. Therefore, according to the commenter's analysis of the National Scenic Trails Act, these trails should also be protected under the Act. In addition, the commenter stated that Tennessee's list of trails on Slide 32 of Tennessee's presentation left out the Highlands Trail, which is also federally designated as the National Millennium Trail. (7)

**RESPONSE:** At the August 17, 2011 public hearing, Tennessee expressed appreciation to the commenter for bringing the Highlands (or National Millenium Trail) to its attention. However, for the reasons provided in the Trails – Appalachian Trail ("AT") section below, NJDEP and Tennessee disagrees with the commenter's conclusion that sixteen trails connecting to the AT should be protected under the National Scenic Trails Act

**COMMENT:** The commenter asked whether Tennessee is contemplating providing money or a grant to the trail conference to compensate it for the time that the trail conference has not been able to maintain the trails and for the time the public has not been able to use the trails. (7)

**RESPONSE:** At the August 17, 2011 public hearing, Tennessee responded that, if the commenter would like to make a request for financial support for a specific project, Tennessee would consider it because it wants to make sure that it is addressing the trails appropriately. Subsequent to the public meeting the New York/New Jersey Trails Conference (Trails Conference) proposed a Trail Stewardship Program to be funded from an endowment by Tennessee. Tennessee has committed to an endowment of \$150,000 to be used by the Trails Conference to support a trail stewardship program in the New Jersey trails and parklands that traverse the NEUP.

**COMMENT:** The commenter asked if the representatives from the New York/New Jersey Trail conference had anything to say regarding consultations and trail closings. (31)

**RESPONSE:** NJDEP responded that the New York/New Jersey Trail Conference representatives had similar comments to the other trail partners (e.g., the National Park Service, Appalachian Trail Conservancy). These comments have been considered by both the NJDEP and Tennessee in this Response to Comments document.

# XVII. TRAILS – APPALACHIAN TRAIL

**COMMENT:** The commenter expressed concerns about the impacts caused by the NEUP to the Appalachian Trail ("AT") and the loss of visitation on that trail. Another commenter stated that Tennessee should reduce the temporary workspace where the new pipeline crosses the Appalachian Trail. (11, 37)

**RESPONSE:** Tennessee developed a comprehensive Appalachian Trail Crossing Plan ("ATCP") and submitted it to NJDEP for review. NJDEP shared this ATCP with its trail partners (including the National Park Service, Appalachian Trail Conservancy and New York/New Jersey Trails Conference), and solicited their input. The purpose of the ATCP is to minimize adverse effects to the AT and to the environment, maintain the AT experience for hikers to the maximum extent possible, maintain the safety of hikers during construction, and facilitate coordination with stakeholders throughout the regulatory process. The ATCP includes a construction plan, which includes sections on notification to the trail partners, a plan for minimizing temporary workspace, safety procedures and access to the AT during site preparation and construction activities, and site-specific specialized construction methods that are designed to reduce the width of temporary work space needed and the amount of time the trench will be open. Restoration, revegetation and monitoring are also addressed in the ATCP. The draft

ATCP is available for review on the NJDEP's information page at www.nj.gov/dep/greenacres/neup.html.

**COMMENT:** The commenter stated that Section 3, Part 4 of the National Trails System Act provides that trails connecting to the Appalachian Trail are also protected, such that the Iris Trail should also be protected. (7)

**RESPONSE**: The segment of the Appalachian Trail in question is located on State property, not federal land, and is considered to be part of the New Jersey Trail System administered by the NJDEP. The National Trails System Act (the "Act") does not apply to New Jersey State trails. The Act, which was passed in 1968, established national scenic trails, including the Appalachian Trail. The Act requires official designation of connecting or side trails by the Secretary of the Interior following the submission of an application, as well as State permission if the trails are located on State lands. Neither the Iris Trail nor the Highlands Trail (also designated as a "Millennium Trail") is connected officially to the Appalachian Trail so as to enjoy the protection of the Act. In fact, there are no officially designated national connected trails anywhere along the Appalachian Trail.

In addition, the Iris Trail and the Millenium Trail are not federally owned as they are located on State lands within the Long Pond Ironworks State Park and the High Point State Park. The National Park Service ("NPS") does not have any written instrument governing the lands where these trails are located, therefore, they are not considered to be "federally-controlled lands." These lands are administered by the NJDEP pursuant to the New Jersey State Park Code. The NJDEP is also the administering agency for the Appalachian Trail in New Jersey. Since the lands on which the two trails are located are not federally-owned or controlled lands administered by the NPS, NPS right-of-way regulations are not applicable.

Finally, the New Jersey Trails System Act, which provides for the State designation of connected trails to the New Jersey Trail System, does not bring the two State trails within the scope of the National Trails System Act. The Appalachian Trail is considered to be part of the New Jersey Trails System, and as stated above, is administered by the NJDEP. The 1993 New Jersey Appalachian Trail Management Plan specifically recognizes that formal designation of connecting trails as components of the National Trails System must be approved by the Secretary of the Interior.

**COMMENT:** The commenter stated that there are discrepancies between Tennessee's proposed construction plan across the Appalachian Trail and the National Trails System Act. Specifically, the commenter pointed out that Tennessee's plan to reduce its right-of-way within 150-feet in each direction from the center of the Appalachian Trail is at odds with the requirement in the "Memorandum of Understanding for the Appalachian National Scenic Trail in the State of New Jersey" to have an Appalachian Trail Corridor of at least 1,000 feet (400 feet for the primary zone and 600 feet for the secondary zone). The commenter wanted to know why Tennessee did not include the Appalachian Trail Corridor requirement in its analysis. (7)

**RESPONSE:** Pursuant to the 1999 Memorandum of Understanding ("MOU"), the AT trail partners (National Park Service, US Fish and Wildlife Service, NJDEP, Appalachian Trail Conservancy and NY/NJ Trails Conference) agreed to establish an "Appalachian Trail Corridor"

surrounding the AT footpath that would be at least 1,000 feet wide. The Appalachian Trail Corridor is made up of a "Primary Zone" of 400 feet and a "Secondary Zone" of 600 feet, centered on the AT footpath. In the Primary Zone, which extends 200 feet on each side of the AT footpath, "[n]on Trail-related structures and new roads will be prohibited." At the public hearing, Tennessee acknowledged the existence of this arguably expired 1999 MOU and its restrictions that prohibit "structures" from being built within the 400 foot "Primary Zone" of the Appalachian Trail Corridor. However, Tennessee does not believe that the type of activity that it is proposing is expressly prohibited by the terms of the MOU since its existing pipeline and new pipeline are not "structures" pursuant to the provisions of the MOU.

In planning the installation of Loop 323, Tennessee has recognized the special status of the AT. In its Appalachian Trail Crossing Plan, Tennessee proposed to reduce the temporary work space by 150-feet on each side of the AT footpath (for a total of 300 feet) to 75 feet in width. In response to comments to this draft plan from NJDEP and the National Park Service, Tennessee is amending the special construction corridor to 200 feet on the west. Extending the special construction corridor from 150-feet to 200-feet on the east is not feasible because of the steep slope which will impede access and private ownership that borders the property. Outside of this 350-foot corridor on the west and 300-foot corridor on the east, Tennessee plans to use a variable width work space that will minimize impacts, yet allow for safe construction. Tennessee is also proposing specialized construction techniques to minimize the impacts caused by the installation of Loop 323, and has provisions in place to minimize disruption for hikers on the AT.

**COMMENT:** The commenter stated that the Appalachian Trail is a national scenic trail that is managed by the Appalachian Trail Conservancy. The Conservancy must be consulted with and the trails should not be entirely closed, even temporarily. The Iron Ridge Trail should be kept open by an overpass for foot traffic. Tennessee should also consider building foot bridges, if necessary, to allow for continued access to the trail. (31)

**RESPONSE:** NJDEP as the property owner is responsible for the management of the Appalachian Trail. NJDEP consulted with all the trail partners that were party to the 1999 Memorandum of Understanding. The Appalachian Trail Conservancy, the Trails Conference, the National Park Service, participated in a site visit with the Department and Tennessee to discuss issues of concern. During those discussions, the trail partners encouraged Tennessee to keep trails open as much as possible during construction but were aware that a certain stages of construction that it would be unsafe for hikers to access the trail. The Department, and its partners, indicated that this should be minimized to the best extent possible and that other measures such as temporary bridges, personal escorts and, most important that alternate access to the Iris Trail must be maintained at all times during construction. Additionally, there will be appropriate notification and signage provided in advance of any trail closures. These conditions have been proposed by Tennessee in a draft Appalachian Trail Crossing Plan and a General Trails Crossing Plan. The plan has not yet been finalized. NJDEP noted that New York/New Jersey Trail Conference representatives were present at two of the public hearings for the NEUP.



# State of New Jersey

MAIL CODE 501-04B

DEPARTMENT OF ENVIRONMENTAL PROTECTION

NATURAL & HISTORIC RESOURCES

HISTORIC PRESERVATION OFFICE

P.O. Box 420

BOB MARTIN Commissioner

KIM GUADAGNO

CHRIS CHRISTIE

Governor

P.O. Box 420 Trenton, NJ 08625-0420 Tel. (609) 984-0176 FAX (609) 984-0578

December 29, 2011

Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First Street NE, Room 1A Washington, DC 20426

Dear Ms. Bose:

As Deputy State Historic Preservation Officer for New Jersey, in accordance with 36 CFR Part 800: Protection of Historic Properties, as published with amendments in the Federal Register on July 6, 2004 (69 FR 40544-40555), I am providing consultation comments for the following proposed undertaking:

Sussex, Passaic, and Bergen Counties OEP/DG2E/Gas 1 Tennessee Gas Pipeline Company Northeast Upgrade Project, Loops 323 and 325 NJDEP-DLUR # 1914-11-0003.1 FERC Docket #CP11-161-000 Federal Energy Regulatory Commission

Summary: The submitted reporting and testing methodology is deficient for the identification of all archaeological resources within the project's area of potential effects. Revised methodology, testing and reporting is necessary. In addition, based on blasting, the project's area of potential effect needs to be revised and defined. Reporting on historic architecture and above ground historic properties will be provided under a separate letter.

Thank you for providing the opportunity for review and comment on the potential for the above-referenced undertaking to affect historic properties pursuant Section 106 of the National Historic Preservation Act, as amended. The comments below are in response to the following archaeological report received at the Historic Preservation Office (HPO) for review:

Petyk, Richard C., Dane Snyder, Nick Avery and Alisa Augenstein

August 1, 2011

Draft Phase IB Report, Results of a Cultural Resources Survey for the Proposed Northeast Upgrade Project in New Jersey. 4 Volumes. Prepared by Gray & Pape, Inc., Providence, Rhode Island.

# 800.4 Identifying Historic Properties

The proposed Tennessee Gas Pipeline Company's Northeast Upgrade Project will include two new pipe loops in New Jersey. Proposed Loop 323 construction between Mile Post (MP) 6.39 to 9.57 and Loop 323 Alternative 1 alignments will be new construction. Proposed Loop 323 construction between MP 9.57 to 16.4 will be collocated adjacent to the existing pipeline right-of-way (ROW). Two new pipe/storage yards and 34 access roads are proposed.

The archaeological area of potential effects (APE) is currently defined as a 300-foot wide corridor centered on the proposed pipeline center line or the center of the existing line for collocation construction. However, public comment has questioned whether the current APE delineation includes potential impacts from the use of blasting for the pipeline construction. Please clarify the APE delineation and where this takes into account possible effects from the use of construction methods such as blasting. In addition, through public comment the upgrades and APE for the access roads, such as access road (Bear Swamp Road) L5 AR 80, needs to be clarified and defined. The architectural and indirect affects APE for the pipeline ROW corridor was not clearly defined but was identified as 0.25 miles for above ground pipeline elements. The Phase IB report states Phase I survey of the 7.6 miles for Loop 325 is 100% complete. The Phase I survey states 9.23 miles (92%) of the 10.01 mile Loop 325 alignment is completed.

A number of deficiencies were identified upon review of the above referenced Phase IB report. The location of a historic structures and archaeological sites identified in the Phase IA report were not incorporated into the Phase IB report's resource sensitivity, testing methodology, and reporting. For example, the intersection of ALT B Field 1, ALT 2 Field 3, and L4 AR 30.01 is identified on Figure 15 as an area of Iow archaeological potential while the Phase IA shows this as the location of a 19<sup>th</sup> century structure. This exemplifies a larger issue of the Phase IB report. Resources that were identified in the Phase IA report have not been incorporated into the Phase IB report alignment segment sensitivity assessment, testing program, reporting or summary assessment for the present or absence of archaeological resources within the APE.

The archaeological predictive model underpinning the sensitivity assessment (Vol. I, p. 33) states that slopes greater than 15% have only a low potential for presence of archaeological deposits. However, this generalized assessment does not take into account the number of known Native American rock shelters found in the region and burial locations identified by the Ramapough Lenape Nation discussed below. In addition, the background history section provides ample evidence regarding the region's rich mining history dating back to the 18<sup>th</sup>-century but, again, is not factored into the archaeological assessment of the APE.

The broad brush approach of bisecting the project alignment into segments (fields) with either low, moderate or high archaeological sensitivity, while providing a useful administrative tool, failed to identify archaeologically sensitive micro- or niche environments within the larger field designation. Such environments include shelves and terraces adjacent to small upland wetlands that, while archaeologically sensitive, were not called out in the report for fields with a low or moderate archaeological sensitivity designation. Therefore, these archaeologically sensitive areas were either under represented in the testing strategy or not tested at all.

Stone structures are identified throughout the Phase IB report graphics (e.g., Figure 18) including areas designated as low archaeological potential within the project ROW. However, the Phase IB report does not discuss these potential archaeological resources, provide information, interpretation or provide an assessment of significance. Again, this is not an isolated case with additional examples identified throughout the Phase IB report. The lack of reporting and interpretation of stone structures identified on report graphics throughout the Phase IB report was identified to Gray & Pape during an August 31, 2011 meeting and they agreed to address this question.

In an August 31, 2011 meeting with Gray and Pape after the submission of the Phase IB report, the HPO noted that the shovel test density within areas of high archaeological sensitivity for the project on average fell below the minimum Phase I shovel test density in HPO guidelines due to the use of Observation Points (OP), or judgemental visual assessments (see Page 35). The current OP reporting does not allow for repeatable results and verification from reviewing the limited data in the Phase IB report tables. The HPO, through previous consultation with Gray & Pape, identified that unless detailed information, such as OP descriptions and photographs, to verify the report findings was provided, OPs would not be an acceptable form of Phase I survey. Ray Pasquariello (Gray & Pape) agreed to submit a disc containing approximately 2000 representative photographs of OP locations for HPO review and comment.

Report alignment graphics do not include locations of negative and positive shovel test pits (STP) or observation points (OP) to fully understand the archaeological testing strategy, methodology, location(s) and testing density for the identification of the presence or absence of archaeological resources within the project's APE. Therefore, the Phase IB report would have been enhanced and more easily understood with the use of labeled positive and negative STPs and OP locations on all figure alignment sheets.

In summary, until the deficiencies above are addressed in a revised phase IB report, it is unclear if additional archaeological resources requiring consideration still exist within the project's APE. Therefore, the issues above, and additional issued discussed below, need to be addressed in a revised Phase IB report.

### Sussex County (Loop 323)

#### Montague Township

Phase IB archaeological and geomorphological surveys for three alternate Delaware River crossing routes across the Mashipacong Island floodplain have identified archaeological sites 28-Sx-470, 28-Sx-471, 28-Sx-473, 28-Sx-474 and 28-Sx-475 within multiple soil horizons at depths of up to three feet (one meter) below ground surface.

The report states Phase IB survey for the First Alternate A (Report Figure 3)/Loops 323 Alternative 1 (Page 158) identified the Woodland period Native American site 28-Sx-470 characterized by a high density of lithic debitage exhibiting multiple stages of reduction, cores, Pre-Contact period ceramics, FCR, hammer stone, bifaces, projectile points, Levanna triangular projectile point, and a large, probable Woodland period subsurface hearth or cooking pit (the report is unclear if this is within Shovel Test Pit (STP) D1 or A5). While not discussed in the text, the Artifact Inventory in Volume 4 notes that a tooth (genus not discussed) was recovered from the B horizon in STP B15. The Phase IB report states that this alignment has been abandoned and,

therefore, no additional archaeological survey is necessary. The Phase IB report states that Phase II archaeological survey and geomorphological investigations will be required if this route alternative is renewed at a later date. The HPO concurs with this assessment. However, please clarify the repository that will house the collection, as well as, the number of artifacts recovered from Site 28-Sx-470.

The Phase IB report states that survey identified site 28-Sx-471 (Loci 1, 2 and 3) consisting of Early Archaic through Late Woodland periods (7500 B.C. to 1600 A.D.) Native American artifacts (ceramics, wide range of lithic debitage with multiple stages of reduction present, FCR, cores, ten net sinkers, and diagnostic projectile points (Palmer corner notched, Madison, Lavanna)) identified on the surface and to a depth of three feet below ground surface. Phase II archaeological survey is recommended. In addition, geomorphological investigations identified two buried potential cultural surfaces: 1) at 3.6 to 5.18 feet; and 2) 7.0-7.48 feet below ground surface. The Pleistocene cobbles were reached at 9.18 feet below ground surface. The Phase IB report recommends geomorphological investigations concurrent with Phase II archaeological survey. The HPO concurs with this assessment.

The Phase IB report states survey identified site 28-Sx-473 consisting of a single Native American Orient fishtail projectile point dating from the Late Archaic/Early Wooodland period. The Phase IB report states that the isolated find does not represent a potentially eligible archaeological site and recommends no additional archaeological survey. The HPO does not concur with this assessment at this time. Artifact isolation and any eligibility assessment shall be determined in the future once the adjacent, access-restrict Alternate 2 Fields 6 and 7 are subjected to Phase I archaeological survey for the presence or absence of archaeological deposits.

The Phase IB report states Phase I survey for a proposed access road alignment identified Site 28-Sx-475, a small Native American site, consists of three Pre-Contact period chert reduction flakes from the A horizon in two shovel tests spaced 150 feet apart. The Phase IB report recommends Phase II archaeological survey may be necessary depending on the results of deep geomorphological testing (Page 65). However, the recommendation section for the Phase IB report states no additional archaeological survey is required (Page 381). Please clarify in the revised Phase IB report the results of deep testing at site 28-Sx-475, or when such work will be conducted, and the need for additional archaeological survey.

The Phase IB report states Field 9 is located on the Delaware River's first, or T1, terrace above the floodplain. Phase I survey identified the Pre-Contact period Native American site 28-Sx-474 consisting of lithic debitage and a single piece of FCR from both the A and B horizons within four shovel tests pits (STPs). The Phase IB report states that site 28-Sx-474 is located 50 feet south of the proposed project workspace and will be avoided by project impacts. The Phase IB report states that if the preferred route shifts to include the site, Phase II archaeological survey will be necessary. The HPO does not yet have enough information regarding historic properties within Field 9 to provide comment at this time. Notes in Appendix B, Shovel Tests A16 and A17 note an "old foundation" to the west but no photographs, discussion in the report text, or assessment of project impacts are provided. This information needs to be addressed in the revised Phase IB report.

The Phase IB report states survey for Field 10, a high potential location for archaeological resources, contained 14 STPs (Figure 15, Pages 75-80). However, this is only approximately 43-percent of the testing density required to meet the HPO Phase I archaeological survey guidelines. The remainder of Field 10 included 25 OPs. In addition, due to confusing report structure, the HPO was unable to locate the OP information in Appendix B for Field 10 (it was not located after

Field 9). Therefore, the HPO cannot concur with the Phase IB report findings that no archaeological deposits exist within Field 10 at this time until the additional photographic documentation is submitted providing supporting evidence for the report assessment of site sensitivity and need to subsurface testing.

Field 323.06-7 (Figure 41) is located within the Shimer-Everett Farmhouse site. However, no discussion of the stone structures illustrated on Figure 41 was provided. *Therefore, the HPO cannot concur with the report recommendation for no further work at this location (Page 150).* Please provide this information in the revised Phase IB report.

The Phase IB report states survey for Segment 323.09-5 identified historic period archaeological site 28-Sx-467 (Figures 27 & 30; Table 29). Site 28-Sx-467 is identified as a 19<sup>th-century</sup>, high density artifact site with a stone foundation. The Phase IB report states the site is beyond the pipeline ROW and will be avoided by the project. The report states that if avoidance is not possible, Phase II survey will be necessary. The HPO concurs with this assessment through implementation of an HPO approved avoidance and protection plan for archaeological site 28-Sx-467.

The Phase IB report states survey for Segment 323.09-5 identified historic period archaeological site 28-Sx-467 (Figures 27 & 30; Table 29). Site 28-Sx-467 is identified as a 19<sup>th-century</sup>, high density artifact site with a stone foundation. The Phase IB report states the site is beyond the pipeline ROW and will be avoided by the project. The report states that if avoidance is not possible, Phase II survey will be necessary. The HPO concurs with this assessment through implementation of an HPO approved avoidance and protection plan for archaeological site 28-Sx-467.

# Wantage Township

The Phase IB report states the pedestrian survey for Access Road L4 AR 33.02 did not identify any historic properties and no further work was recommended. The HPO disagrees with this assessment. Plate 18 for the access road clearly identifies a stone foundation adjacent to the road yet no information on this resource or assessment of project effects is discussed. Please provide this information in the Revised Phase IB report.

The Phase IB report states survey for Segment 323.11-2 identified an isolated Pre-Contact period artifact (a flake) and recorded it as archaeological site 28-Sx-469 (Figure 29; Table 38). Two series of radial shovel tests failed to identify any additional Native American artifacts or evidence for features. The Phase IB report recommends that this site does not have the potential to contribute important information in prehistory and recommends no additional archaeological survey. The HPO concurs with this assessment. The HPO informed Gray & Pape that in the future, isolated artifact locations (unless Paleo Indian period), do not meet the draft New Jersey State Museum definition of an archaeological site or require a site registration form.

The Phase IB report states survey for Segment 323.12-3 identified an isolated Pre-Contact period Native American chert stage 2 biface fragment and recorded as archaeological site 28-Sx-468 (Figures 35 & 36). Radial shovel testing failed to identify any additional Native American artifacts of evidence for features. The Phase IB report recommends that this site does not have the potential to contribute important information in prehistory and recommends no additional archaeological survey. The HPO concurs with this assessment.

# Passaic County (Loop 325)

# West Milford Township

The Phase IB report states that the Jungle Habitat Pipeyard and Access Road L4 AR 90 contains a low potential for historic properties and recommends no additional cultural resources survey. The HPO concurs with this assessment.

The Phase IB report states no additional consideration of project effects on the two former railroad embankments (site 28-Pa-187) and former road alignment (site 28-Pa-188) is necessary. The HPO concurs with this assessment.

The Phase IB report states Access Roads L5 AR 01 and L5 AR 02 (located within the abandoned Tilcon quarry) will not affect historic properties. No additional work is recommended. The HPO concurs with this assessment.

# Ringwood Borough

The Phase IB report states that segments 325.01-5 and -6 have a low potential for the presence of archaeological resources based on slope and the presence of wetlands based on the visually inspection OPs conducted. The Phase IB report states that no resources were identified but provides no recommendations. The HPO disagrees with the Phase IB report sensitivity assessment and testing strategy for Fields -5 and -6. Any level, to gently rolling, upland shoulders bordering a wetland complex possesses high sensitivity for Native American archaeological resources requiring Phase IB shovel testing. In addition, the Phase IA report identified two historic structures adjacent to Field -6, but while the Phase IB report characterized this area as grassy lawns, no shovel testing was conducted. Therefore, Phase IB testing is required in Field -6 for both historic and Pre-Contact period archaeological resources.

The Phase IB report states that Access Road L5 AR 20 is a former railroad grade (site 28-Pa-188) that was previously reviewed and determined ineligible for listing on the National Register of Historic Places. Therefore, the report recommends no additional work. The HPO concurs with this assessment.

The Phase IB report states that survey for segment 325.02 Field 7 (Figures 51 & 52, Table 53 & 54; Page 189) identified historic period archaeological site 28-Pa-199. Site 28-Pa-199 is a nineteenth century domestic site (with a possible late 18th century component) characterized by a high density of artifacts with a stone foundation and stone wall. The Phase IB report states the project will be redesigned to reduce the workspace, a fence installed, and the site avoided by the project. The HPO concurs with this assessment through implementation of an HPO approved avoidance and protection plan for this archaeological site. If future project plans change and avoidance is no longer possible, Phase II survey will be necessary.

The Phase IB report states that Access Road L5 AR 21.1 is an existing, disturbed asphalt road alignment. The report states that OPs did not identify any historic properties and no additional work is recommended. Based on the photographic documentation (Plate 31) supporting report findings, the HPO concurs with this assessment.

The Phase IB report states that survey for Segment 325.03-2 crosses the 1873 Erie Railroad Ringwood Branch embankment. The Erie Railroad Ringwood railroad embankment was previously recorded as site 28-Pa-192. The Phase IB report further states that the location of the Erie Railroad Ringwood railroad embankment was previous misidentified at another location in

Gray & Pape's 2009 report for the 300 Line project. The above-referenced Phase IB report states, based on prior HPO comment that the Erie Railroad Ringwood railroad embankment was not eligible for listing on the National Register of Historic Places, that no additional consideration of the railroad embankment is necessary. The HPO concurs with this assessment.

A review of report Plate 37 for Access Road L5 AR 50 (Figure 56; Plate 37) illustrates a stone wall not discussed in text. While the Phase IB report states that Access Road L5 AR 50 will no longer be used by the project, it should be noted that the Phase IA report identified a number of historic structures along this alignment, but again this information is not discussed or incorporated into the Phase IB survey methodology or reporting. Please address these issues in the revised Phase IB report.

The Phase IB report states that survey for Segment 325.05-2 identified a mid-19<sup>th</sup> through 20<sup>th</sup> century archaeological site (28-Pa-189) containing a high density of historic artifacts, a foundation, stone walls, shaft feature and bottle dump (Figures 56, 58-59). Page 220 of Phase IB report states additional Phase II archaeological survey for site 28-Pa-189 is necessary. However, Page 341 of the report states that the site is beyond any planned workspace and access road L5 AR 50 has been cancelled. The report recommends that no additional archaeological survey is necessary unless L5 AR 50 is reactivated. Please clarify the status of access road L5 AR 50, the need for Phase II archaeological survey at site 28-Pa-189, and the need for any protective measures around Locus 2 within the project's right-of-way (Figures 56 & 58). In addition, please address why the stone walls and foundations (Rock Walls) in Figure 58, while discussed in the text, are not included within the site limits for site 28-Pa-189.

The Phase IB report states a single STP within Segment 325.05-3 identified two Pre-Contact period chert flakes and were recorded as archaeological site 28-Pa-190 (Figure 60). Radial STPs failed to identify any additional archaeological deposits or features. The Phase IB report recommends that this site does not have the potential to contribute important information in prehistory and recommends no additional archaeological survey. The HPO concurs with this assessment.

The Phase IB report states that survey for access road L5 AR 70 identified two low density loci of Pre-Contact period occupation and recorded them as archaeological site 28-Pa-191 (Figures 62 & 68). Radial testing confirmed two loci of lithic reduction (chert and argillite) activities 180 feet apart on a small bench overlooking a tributary of the Cupsaw Branch. While no diagnostic artifacts or features were identified, Gray & Pape recommends Phase II survey based on the lack of scientific investigation of upland Native American sites for this region of New Jersey. The HPO concurs with this assessment.

The Phase IB report states that survey for access road L5 AR 70 identified a low density historic artifact scatter, rectangular depression and stone wall recorded as archaeological site 28-Pa-195 (Figures 64-66). The Phase IB report states that this possible 19<sup>th</sup>-century historic site has the potential to contribute additional information in history. If the site cannot be avoided, the report recommends Phase II archaeological survey. The HPO concurs with this assessment through implementation of an HPO approved avoidance and protection plan for this archaeological site. If future project plans change and avoidance is no longer possible, Phase II survey will be necessary.

The Phase IB report states that survey for access road L5 AR 60 identified five cultural resources (Page 244). Radial STPs identified an isolated chert reduction flake along the access road and recorded as archaeological site 28-Pa-198 (Figures 68, 70 & 73). The HPO agrees with

the report recommendation for no additional archaeological survey. The second resource was identified on a terrace between the road and Duck Pond containing a 19<sup>th</sup> century historic artifact scatter with architectural elements (mortar, bricks, cut nail) suggesting a possible structure recorded as archaeological site 28-Pa-194 (Figures 71, 72 & 85). Gray & Pape recommends Phase II survey based on the potential for the site to contribute important information in history (Criterion D). The HPO concurs with this assessment.

The Phase IB report states Access Road L5 AR 71 will be designed to avoid the Skylands Gate House (Pages 229 & 391). However, it is not clear if vehicles will not proceed past the gatehouse or how vehicles will bypass the gatehouse to continue along access road L5 AR 70. Please clarify the proposed traffic patterns for access roads L5 AR 70 and 71 at the Skylands Gate House.

#### Bergen County (Loop 325)

# Mahwah Township

The Phase IB report states that survey for Segments 323.08-1 &-2 was assessed as low archaeological potential and field survey consisted of no STPs and only a visual reconnaissance (OPs) conducted. The Phase IB report recommends no additional survey based on the lack of cultural resources identified during visual reconnaissance. The HPO disagrees with this assessment. The banks of the Bear Swamp Brook Creek and adjoining wetland complex have high sensitivity for archaeological deposits requiring Phase IB testing to determine the presence or absence of archaeological deposits. Well drained and level terraces and hillside benches within 300 feet of the creek require Phase IB subsurface testing.

The Phase IB report states that survey for access road (Bear Swamp Road) L5 AR 80 identified Pre-Contact period archaeological site 28-Be-214 and historic period site 28-Be-215. Site 28-Be-214 was identified on a small bench overlooking Bear Swamp Lake and characterized as a low density Pre-Contact period artifact scatter (five pieces of chert debitage from three STPs [Figure 81 identifies 4 positive STPs]). Gray & Pape recommends Phase II survey to assess the potential for the site to contribute important information in prehistory (Criterion D). The HPO concurs with this assessment.

Site 28-Be-215 was identified on a small bench overlooking Bear Swamp Lake and characterized as a moderate density 19<sup>th</sup> century domestic site with historic artifact scatter and foundation (Figure 83). Gray & Pape recommends Phase II survey based on the potential for the site to contribute important information in history (Criterion D). The HPO concurs with this assessment.

The Phase IB report does not recommend any additional surveys for the remainder of access road (Bear Swamp Road) L5 AR 80. Based on the public comment discussed below, the HPO disagrees with this assessment.

Figure 79 illustrates the footprint of what appears to be three buildings (in green). However, these features are not discussed in the Phase IB report text. Please address this issue in the revised Phase IB report.

Figure 76 does not identify the one historic and four Pre-Contact period archaeological loci identified in PAL's 2010 Phase I survey at the Mahwah Meter Station. Through a FERC information request, the now HPO understands the scope of work for the new improvements at the

Mahwah Meter Station and Gray & Pape has stated that they will be conducting Phase II survey for the archaeological locus to be affected. The HPO looks forward to receiving and commenting on the Phase II work plan for the Mahwah Meter Station. The revised Phase IB report should include a revision of Figure 76 and a summary and activities for the proposed undertaking at the Mahwah Meter Station.

During an October 6, 2011 meeting with FERC, the HPO and interested parties, a number of questions regarding cultural resources not addressed in the Phase IB report were discussed. These issues include:

- A 1888 metal lenticular truss Cleveland Bridge on the lower portion of access road L5 AR 80 was not identified or discussed in the Phase IB report. Therefore, the HPO cannot concur with the report findings for access road (Bear Swamp Road) L5 AR 80 until the issues regarding the Cleveland Bridge and sensitivity for Native American resources (see below) are addressed in the revised Phase IB report.
- The Ramapough Lenape Nation noted ancestral burial locations utilized small level benches (eight feet or less) in areas with a slope greater than 15-percent slope currently identified as areas of low archaeological potential in the Phase IB report predictive model and testing strategy. In addition, the Ramapough Lenape Nation have concerns regarding the potential effects of new pipeline blasting on Native American archaeological resources. While the HPO understands consultation between Gray & Pape and the Ramapough Lenape Nation is on-going, this issue needs to be addressed in the revised Phase IB report.
- The Phase IA and Phase IB reports do not indicate that local experts (including archaeologists Ed Lenik and Bill Sandy), repositories or all historical societies/organizations were consulted as part of the background research for the undertaking. In consequence, not all known cultural resources have yet been incorporated into the Phase IB report for consideration on survey methodology and field testing strategy. While the HPO understands consultation with local experts and groups has been initiated by Gray & Pape, this issue needs to be incorporated into the revised Phase IB report.
- Public comment noted that the Phase IB report did not include the information on
  previously identified archaeological resources within close proximity of the project's APE
  as recorded in the back of the 1985 Bergen County Historic Sites Survey for the Township
  of Mahwah (HPO Green Binder Survey, Bergen County, Mahwah (-0233), Vol. 9 of 18).
  This information and ramifications on alignment archaeological sensitivity assessment
  needs to be addressed in the revised Phase IB report.
- During the meeting, archaeologist Ed Lenik stated that archaeological resources identified
  in his Phase I archaeological survey on the lands of the former Ramapo Land Company
  were not consulted or incorporated into the Phase IB report. The HPO does not have a
  copy of this report on file in our Office. The HPO is interested in receiving any
  information on this, or any additional information, provided by Mr. Lenik to the cultural
  resource consultant for this undertaking.

#### Report Editorial Comments

Page 61 references Table 13, but Table 13 is not included in the Phase IB report.

Page 68 of the report for Segment 323.03 Fields 9 and 10 references Table 14, but Table 14 is for Access Road L4 AR35. Page 68 should reference Table 16.

Figures 3 documents Alternate alignment 2 (Preferred Route) Field 5 complete for cultural resources survey while Page 45 states Fields 5 through 7 are un-surveyed through access restrictions. The survey status of Field 5 needs to be clarified.

Pipe Yard F adjacent to Compressor Station 325 (Sussex County, Wantage Township) was not identified in the Phase IB report (Figure 38) nor the results of any testing discussed.

The report states the location of Access Road L4 AR 50 is depicted on Figure 28 (Page 146). However, Access Road L4 AR 50 is illustrated on Figure 38.

Figure 40 omits shovel test locations within the APE while including shovel tests locations outside the APE. This location(s) of shovel tests needs to be clarified on Figure 40.

The Phase IB report states that hearth Feature 1 (28-Sx-470) was recovered from shovel test pit (STP) A5 (Page 164), but Page 161 (Figure 43) records the feature in STP D1. Please clarify which STP contained hearth Feature 1 or if multiple features were identified.

Page 202 of the report, while discussing site 28-Pa-192, states the site is located within Ringwood Township but should reference Ringwood Borough.

Report Section 7.11 discussing site 28PA189 (Page 339) references the land ownership table as Table 87, but should be referencing Table 89.

The photograph for site 28-Pa-191, Locus 2 (Page 228) is the same location (different angle) as the photograph for site 28-Pa-195 (Page 231). Please revise the Phase IB report with the correct photographs for the respective archaeological sites.

#### Additional Comments:

Thank you again for providing the opportunity to review and comment on the potential for the above-referenced undertaking to affect historic properties. The HPO looks forward to receiving revised Phase IB report addressing all the comments discussed above, a Phase IB survey report for the areas presently with denied access, and the Phase II archaeological survey report(s). Please submit copies of all submitted hard copy reports on a CD in PDF format for our electronic library. Please feel free to contact Vincent Maresca of my staff at (609) 633-2395 with any questions.

Sincerely,

Daniel D. Saunders Deputy State Historic Preservation Officer

c Patrick Ryan, NJDEP-DLUR
Donna Mahon, NJDEP-NHR
Scott Brubaker, NJDEP-OPCER
Ray Pasquariello, Gray & Pape
Richard Petyk, Gray & Pape
Gregory Lattanzi, NJSM
Ramapough Lenape Nation C/O Judith Joan Sullivan

# NORTHEAST UPGRADE PROJECT MITIGATION COMMITMENTS New Jersey

	Characteristic	Approx. Acreage Requiring Mitigation	Mitigation/Compensation/Activity	Offsite Land Compensation Acres	Compensation
NJDEP - LURP	Permanent Wetland incl.:		1:1 onsite (scrub-shrub, emergent, and open water)		
	Forested Wetlands	6.62	1:1 onsite, 1:1 offsite		
	Temporary Wetland	17.54	1:1 onsite		
Mitigation	Riparian Zone	16.60	1:1 onsite, 1:1 offsite	N/A	\$2,000,000.00
	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)	(971)	\$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

<sup>(1)</sup> Replacement lands negotiations are ongoing, total cost to purchase is pending final negotiations

<sup>\*</sup>Falls within the 147.00 acres of CHMA acreage.