

Transcontinental Gas Pipe Line Company, LLC

Pennsylvania Department of Environmental Protection Erosion and Sediment Control General Permit 2 Notice of Intent

Phase 1 and Phase 2
CPL North, CPL South, and Associated Facilities
Atlantic Sunrise Project
Columbia, Lancaster, Lebanon, Luzerne,
Northumberland, Schuylkill, Susquehanna, and
Wyoming Counties

August 2015

Revised July 2017

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SECTION E OF NOI: SITE RESTORATION (SR) PLAN BMPS

SUMMARY TABLE FOR SUPPORTING CALCULATION AND MEASUREMENT DATA AND SUMMARY DESCRIPTION OF SITE RESTORATION BMPS

WYOMING COUNTY

3. SUMMARY TABLE FOR SUPPORTING CALCULATION AND MEASUREMENT DATA See Attachment D in the Instructions on how to Complete This Section

| · | | | |
|--|------------------|-------------------|------------|
| Watershed Name: South Branch Tunkhannock Creek-POI A&B | | | |
| Design storm frequency <u>2-yr</u> Rainfall amount <u>2.54</u> inches | Pre-construction | Post Construction | Net Change |
| Impervious area (acres) | 0 | 4.89 | 4.89 |
| Volume of stormwater runoff (acrefeet) without planned stormwater BMPs | 2.08 | 2.74 | 0.66 |
| Volume of stormwater runoff (acrefeet) with planned stormwater BMPs | | 2.06 | -0.02 |
| Stormwater discharge rate for the design frequency storm | | | |
| 1) 2-Year/24-Hour | 64.64 | 61.32 | -3.32 |
| 2) 10-Year/24-Hour | 139.39 | 131.90 | -7.49 |
| 3) 50-year/24-Hour | 254.47 | 239.62 | -14.85 |
| 4) 100-year/24-Hour | 320.23 | 301.18 | -19.05 |

4. SUMMARY DESCRIPTION OF POST CONSTRUCTION STORMWATER BMPs

In the lists below, check the BMPs identified in the Post Construction Stormwater Management Plan. The primary function(s) of the BMP listed in the functions column (infiltration/recharge; detention/retention; water quality). Additional functions may be added if applicable to that BMP. List the stormwater volume and area of runoff to be treated by each BMP type when calculations are required. If any BMP in the Site Restoration Plan is not listed below, describe it in the space provided after "Other".

| ВМР | Function(s) | Volume of stormwater treated | Acres treated |
|--|----------------------------|------------------------------|---------------|
| Bio-infiltration areas | Infiltration/Recharge | | |
| ☐ Infiltration Trench | | <u>=</u> | <u>-</u> |
| ☐ Infiltration Bed | | <u>=</u> | <u>-</u> |
| ☐ Infiltrated Basin | | <u>11,636</u> | <u>24.80</u> |
| Natural Area Conservation | Infiltration/Recharge | | |
| ☐ Streamside Buffer Zone | | <u>=</u> | <u>-</u> |
| ☐ Wetland Buffer Zone | | <u>=</u> | <u>-</u> |
| ☐ Sensitive Area Buffer Zone | | <u>=</u> | |
| ☐ Pre-Construction Drainage Pattern Intact | | = | = |
| Stormwater Retention | Detention/Retention | | |
| ☐ Constructed Wetlands | | <u>=</u> | <u>-</u> |
| ☐ Wet Ponds | | <u>=</u> | <u>-</u> |
| ☐ Retention Basin | | <u>=</u> | <u>-</u> |
| Sediment and Pollutant Removal | Water Quality Treatment | | |
| | | <u>=</u> | <u>-</u> |
| ☐ Compost Filter Sock | | <u>=</u> | <u>=</u> |
| □ Detention Basins | | <u>_</u> | <u>24.80</u> |

| Access Road Design | Infiltration/Recharge | | |
|---|--|----------------------------------|----------------------------|
| ☐ Road Crowning | | <u>=</u> | <u>=</u> |
| ☐ Ditches | | | |
| ☐ Turnouts | | | <u> </u> |
| ☐ Culverts | | - - | - - |
| Roadside Vegetated Filter | | - | _ |
| Strips | | = | Ξ |
| Stormwater Energy Dissipaters | Infiltration/Recharge | | |
| _ | minitiation// toonargo | | |
| Level Spreaders | | = | = |
| Riprap Aprons | | = | |
| Upslope Diversions | | Ξ | = |
| Soil Amendment | | <u>4,041</u> | <u>2.22</u> |
| 5. Off-site Discharge Analysis. | | | |
| Does the activity propose any off-sit | te discharges to areas othe | er than surface waters? | es 🛛 No |
| | • | | |
| If yes, it is the applicant's responsib | • | | _ |
| The Applicant must provide a den | | &S and PCSM Plans that the | discharge will not cause |
| erosion, damage, or nuisance to off | -site properties. | | |
| | | | |
| | | | |
| | | | |
| | | | |
| 6. Thermal Impact Analysis. | | | |
| • | | | |
| Explain how thermal impacts associated with this project were avoided, minimized, or mitigated. | | | |
| Thermal impacts associated with CPL North, CPL South, and Associated Facilities will be avoided to the maximum extent practicable. The following provisions related to thermal impacts are included in the E&SC Plan within Section 2 of the ESCGP-2 NOI: | | | |
| | •The minimum permanent changes in land cover, necessary to construct the required facilities are being proposed. | | |
| • Runoff from the permanent impervious areas will be collected as part of the PCSM/SR Plan sphalt wherever practical. | | | |
| Runon from the permanent impervious areas will be collected as part of the PCSM/SR Plan sprialt wherever practical. PCSM/SR BMPs incorporate the use of infiltration and water quality facilities such as basins, rain gardens, soil amendments and landscape restoration. | | | |
| •The removal of vegetation, especially tree cover, will be limited to only that necessary for construction. | | | |
| The removal of vegetation, especially free cover, will be limited to only that necessary for construction. The amount of impervious surfaces will be limited to only that necessary to support the construction of CPL North, | | | |
| CPL South, and associated facilities | | | construction of CPL North, |
| or E count, and accordated racinities | dianor operation of the pr | peinte. | |
| | | | |
| | | | |
| | | | |
| 7. Critical PCSM Plan stages. | | | |
| Identify and list critical stages of implementation of the PCSM Plan for which a licensed professional or designee shall | | | |
| be present on site. | | | |
| Installation of sediment basin #1 and associated improvements. | | | |
| Installation of rain gardens #1, #2 | | | |
| Converstion of sediment basin #1 to | o infiltration basin #1 and ir | nstallation of associated improv | rements. |
| Installation of Soil Amendments | | | |
| | | | |

2) 10-Year/24-Hour

3) 50-year/24-Hour

4) 100-year/24-Hour

3. SUMMARY TABLE FOR SUPPORTING CALCULATION AND MEASUREMENT DATA See Attachment D in the Instructions on how to Complete This Section

| Watershed Name: South Branch Tunkhannock Creek-POI C | | | |
|--|------------------|-------------------|------------|
| Design storm frequency <u>2-yr</u> Rainfall amount <u>2.54</u> inches | Pre-construction | Post Construction | Net Change |
| Impervious area (acres) | 0 | 4.0 | 4.0 |
| Volume of stormwater runoff (acrefeet) without planned stormwater BMPs | 1.08 | 1.29 | 0.21 |
| Volume of stormwater runoff (acrefeet) with planned stormwater BMPs | | 1.08 | 0 |
| Stormwater discharge rate for the design frequency storm | | | |
| 1) 2-Year/24-Hour | 127.17 | 124.09 | -3.08 |

269.68

495.05

624.36

-6.68

-12.27

-15.54

4. SUMMARY DESCRIPTION OF POST CONSTRUCTION STORMWATER BMPs

276.36

507.32

639.80

In the lists below, check the BMPs identified in the Post Construction Stormwater Management Plan. The primary function(s) of the BMP listed in the functions column (infiltration/recharge; detention/retention; water quality). Additional functions may be added if applicable to that BMP. List the stormwater volume and area of runoff to be treated by each BMP type when calculations are required. If any BMP in the Site Restoration Plan is not listed below, describe it in the space provided after "Other".

| ВМР | Function(s) | Volume of stormwater treated | Acres treated |
|--|----------------------------|------------------------------|---------------|
| Bio-infiltration areas | Infiltration/Recharge | | |
| ☐ Infiltration Trench | | <u> </u> | <u>-</u> |
| ☐ Infiltration Bed | | = | <u>-</u> |
| ☐ Infiltrated Basin | | | |
| Natural Area Conservation | Infiltration/Recharge | | |
| ☐ Streamside Buffer Zone | | = | <u>-</u> |
| ☐ Wetland Buffer Zone | | = | <u>=</u> |
| ☐ Sensitive Area Buffer Zone | | <u>=</u> | |
| ☐ Pre-Construction Drainage Pattern Intact | | = | = |
| Stormwater Retention | Detention/Retention | | |
| ☐ Constructed Wetlands | | <u>-</u> | <u>=</u> |
| ☐ Wet Ponds | | <u>-</u> | <u>-</u> |
| ☐ Retention Basin | | Ξ. | - |
| Sediment and Pollutant Removal | Water Quality Treatment | | |
| | | <u>-</u> | <u>-</u> |
| ☐ Compost Filter Sock | | <u>-</u> | = |
| □ Detention Basins | | <u>-</u> | <u>6.01</u> |

| Access Dood Destant | Lefther Co. 10 | | |
|---|---|------------------------------------|----------------------------|
| Access Road Design | Infiltration/Recharge | | |
| ☐ Road Crowning | | <u>=</u> | Ξ |
| Ditches | | | |
| ☐ Turnouts | | = | = |
| ☐ Culverts | | = | Ξ |
| Roadside Vegetated Filter | | | |
| Strips | | = | = |
| Stormwater Energy Dissipaters | Infiltration/Recharge | | |
| □ Level Spreaders | | _ | <u>6.01</u> |
| ☐ Riprap Aprons | | - - | |
| ☐ Upslope Diversions | | - - | |
| Soil Amendment/Landscape | | - | - |
| Restoration | | <u>9,211 cf</u> | <u>6.85</u> |
| 5. Off-site Discharge Analysis. | | | |
| Does the activity propose any off-sit | a discharges to areas other | er than surface waters? 🛛 🗡 | es 🗆 No |
| ,, , | · · | _ | _ |
| If yes, it is the applicant's responsib | ility to ensure that they have | ve legal authority for any off-sit | e discharge. |
| The Applicant must provide a den erosion, damage, or nuisance to off | | &S and PCSM Plans that the | discharge will not cause |
| Level spreaders are proposed to expected erosion, damage, or nuisa | | flows to pre development of | onditions, resulting in no |
| | | | |
| C. Thermal Insurant Analysis | | | |
| 6. Thermal Impact Analysis. | | | |
| Explain how thermal impacts associated with this project were avoided, minimized, or mitigated. | | | |
| Thermal impacts associated with CPL North, CPL South, and Associated Facilities will be avoided to the maximum extent practicable. The following provisions related to thermal impacts are included in the E&SC Plan within Section 2 of the ESCGP-2 NOI: | | | |
| •The minimum permanent changes | in land cover, necessary to | construct the required facilitie | s are being proposed. |
| | • | · | • |
| Runoff from the permanent impervious areas will be collected as part of the PCSM/SR Plan sphalt wherever practical. PCSM/SR BMPs incorporate the use of infiltration and water quality facilities such as basins, rain gardens, soil amendments and landscape restoration. | | | |
| •The removal of vegetation, especially tree cover, will be limited to only that necessary for construction. | | | |
| •The amount of impervious surfaces will be limited to only that necessary to support the construction of CPL North, | | | |
| CPL South, and associated facilities and/or operation of the pipeline. | | | |
| | | | |
| | | | |
| | | | |
| 7. Cuitical DCCM Plans at a sea | | | |
| 7. Critical PCSM Plan stages. | | | |
| Identify and list critical stages of implementation of the PCSM Plan for which a licensed professional or designee shall be present on site. | | | |
| Installation of sediment trap #1 and | associated improvements. | | |
| Installation of rain gardens #4 and a | Installation of rain gardens #4 and associated improvments | | |
| Converstion of sediment trap #1 to r | rain garden #3 and installa | tion of associated improvemen | ts. |
| Installation of soil amendment and la | Installation of soil amendment and landscape restoration areas. | | |
| | | | |

SECTION 1.5.1 PNDI CORRESPONDENCE SUMMARY

Note: This Attachment has been replaced in its entirety

OVERVIEW OF THREATENED AND ENDANGERED SPECIES

Transco has consulted with the U.S. Fish and Wildlife Service (USFWS), Pennsylvania Fish & Boat Commission (PFBC), Pennsylvania Game Commission (PGC), and Pennsylvania Department of Conservation and Natural Resources (DCNR) regarding federal and state-listed threatened and endangered species in the area. A summary of the correspondence/clearance status with each agency is provided in **Table 1.5.1** and summarized below. Copies of the agency correspondence related to threatened and endangered species are provided in **Sections 1.5.2 through 1.2.5.**

Table 1.5.1 Summary of Clearance Status

| Agency | Project Review Letter Dates | Clearance Letter Dates |
|----------------|------------------------------|---------------------------------|
| | | April 2, 2015; May 28, 2015; |
| BOND | | August 5, 2015; February 23, |
| DCNR | May 28, 2014; July 14, 2014 | 2016; May 24, 2016; August |
| | | 31, 2016; May 24, 2017; May |
| | | 25, 2017 |
| PGC | April 13, 2014; December 19, | June 2, 2016; September 19, |
| FGC | 2014 | 2016; July 28, 2017 |
| | | January 28, 2016; May 31, |
| PFBC | April 17, 2014 | 2016; September 2, 2016; |
| | | April 17, 2017 (contact report) |
| USFWS | April 28, 2014 | December 21, 2016; July 18, |
| April 26, 2014 | | 2017 |

DCNR

Transco completed surveys for state-listed plant species throughout the entire Project area. DCNR has issued several clearance letters for the Project following submittal of survey reports by Transco. Project clearance letters were issued by DCNR on April 02, 2015, May 28, 2015, August 05, 2015, February 23, 2016, May 24, 2016, August 31, 2016, May 24, 2017, and May 25, 2017. The most recent clearance letters issued on May 24 and 25, 2017 cover two reroutes that were not included in DCNR's previous review of the Project (CPL North Alternative 13 and Byron Reroute in Luzerne and Wyoming Counties).

The DCNR clearance letters included various measures to avoid impacting sensitive plant species. Transco will complete all of the avoidance measures as requested by DCNR in the clearance letters, which are included within **Section 1.5.2**.

PFBC

PFBC requested, and Transco completed, surveys for timber rattlesnake in Clinton, Northumberland, Schuylkill, and Lebanon Counties. PFBC issued Project clearance letters on January 28, 2016, May 31, 2016, and September 2, 2016. The most recent clearance letter issued on September 2, 2016 covers two reroutes that were not included in PFBC's original review of the Project. Transco also corresponded with PFBC regarding two more recent reroutes that were not included in PFBC's previous review of the Project (CPL North Alternative

13 and Byron Reroute in Luzerne and Wyoming Counties). The PNDI review of the reroutes indicated no impacts, and PFBC informed Transco that a follow-up clearance letter from PFBC would not be necessary (please refer to the PFBC contact report in Section 1.5.3 dated April 17, 2017).

The PFBC clearance letters include various avoidance and minimization measures for portions of the project with documented timber rattlesnake populations. Transco will complete all of the timber rattlesnake avoidance and minimization measures as indicated in the PFBC clearance letters, which are included within **Section 1.5.3**.

PGC

PGC requested, and Transco completed, surveys for Allegheny woodrat and eastern small-footed bat in Schuylkill, Northumberland, Columbia, and Wyoming Counties. PGC issued Project clearance letters on June 2, 2016 and September 19, 2016. The most recent clearance letter issued on July 28, 2017 covers two reroutes that were not included in PGC's original review of the Project (CPL North Alternative 13 and Byron Reroute in Luzerne and Wyoming Counties). The July 28, 2017 clearance letter also addresses a new bat hibernaculum identified in Northumberland County.

A combined mitigation plan for Allegheny woodrat and eastern small-footed bat (ESFB) was submitted to and approved by the PGC, as documented in the above-referenced Project clearance letters. Additional mitigation measures for the ESFB at a documented hibernaculum in Northumberland County are included in the PGC's July 28, 2017 clearance letter. Transco will complete all of the ESFB mitigation measures as indicated in the PGC clearance letters, which are included within **Section 1.5.4**.

USFWS

Transco prepared a biological assessment (BA) addressing the following federally listed threatened and endangered species identified by the USFWS as potentially occurring in the Project area: Indiana bat (IBAT), northern long-eared bat (NLEB), bog turtle, and northeastern bulrush. Surveys for the IBAT and NLEB were requested and completed in Northumberland County. The BA was developed in close coordination with the USFWS Pennsylvania Field Office. The BA concluded that the Project may affect, but is not likely to adversely affect each of these species. Based on these effects determinations, formal Section 7 consultation was not necessary for the Project. FERC concurred with Transco's effects determinations and submitted their consultation request to FERC on July 19, 2016. The USFWS issued their Project review letter to FERC on December 21, 2016. As stated in the letter, the USFWS concurred with FERC's and Transco's determination that the Project is not likely to adversely affect the Indiana bat, bog turtle, and northeastern bulrush. The USFWS did not concur with FERC's and Transco's determination that the Project is not likely to adversely affect the northern long-eared bat. However, with Transco's proposed avoidance and minimization measures, any incidental take that may occur to the species is not prohibited under the 4(d) rule issued by the USFWS for NLEB on January 14, 2016.

Transco submitted a revised BA to the USFWS on June 8, 2017, which included additional bat mist-net and portal acoustic survey data, and an Indiana Bat Conservation Plan. The new survey data was collected for two adopted route alternatives, CPL North Alternative 13 and the Byron Reroute in Luzerne and Wyoming Counties, as well as an area in Northumberland County identified as potential bat hibernacula. Based on these survey results, and as stated in their letter

dated July 18, 2017 (**Section 1.5.5**), the USFWS concluded that IBAT's are either not present along the adopted route alternatives, or are present in such low densities that they were not detected. Consequently, the USFWS determined that tree-clearing along the adopted route alternatives is not likely to adversely affect the Indiana bat. The USFWS also concluded that with the implementation of the measures included in Transco's Indiana Bat Conservation Plan, the effects of the project are not likely to adversely affect the Indiana bat.

SECTION 1.5.2

PNDI CORRESPONDENCE

PENNSYLVANIA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES



BUREAU OF FORESTRY

May 24, 2017 PNDI Number: PNDI-621961

Greg Netti Ecology and Environment, Inc. 368 Pleasant View Drive Lancaster, NY 14086

Email: gnetti@ene.com (hard copy not to follow)

Re: Byron Route

Dallas Township, Luzerne County, PA

Dear Mr. Netti.

Thank you for the submission of the Pennsylvania Natural Diversity Inventory (PNDI) Environmental Review Environmental Review Receipt Number **PNDI-621961** for review. PA Department of Conservation and Natural Resources screened this project for potential impacts to species and resources of concern under DCNR's responsibility, which includes plants, terrestrial invertebrates, natural communities, and geologic features only.

No Impact Anticipated

PNDI records indicate species or resources under DCNR's jurisdiction located in the vicinity of the project. However, based on the information you submitted concerning the nature of the project, the immediate location, and our detailed resource information, DCNR has determined that no impact is likely. No further coordination with our agency is needed for this project.

DCNR recommends the following to help prevent the spread of invasive plant species and to encourage the use of native plants:

- Avoid using seed mixes that include invasive plant species if the project requires re-vegetating the area. Please also attempt to use weed-free straw or hay mixes when possible. A complete list of all Pennsylvania invasive plant species can be found here: http://www.dcnr.state.pa.us/cs/groups/public/documents/document/dcnr 20026634.pdf.
- The area of disturbance should be minimized to the fullest extent that would allow for this project; this will help to lessen the area of indirect disturbance and sedimentation to adjacent natural habitats.

This response represents the most up-to-date review of the PNDI data files and is valid for two (2) years only. If project plans change or more information on listed or proposed species becomes available, our determination may be reconsidered. Should the proposed work continue beyond the period covered by this letter, please resubmit the project to this agency as an "Update" (including an updated PNDI receipt, project narrative and accurate map). As a reminder, this finding applies to potential impacts under DCNR's jurisdiction only. Visit the PNHP website for directions on contacting the Commonwealth's other resource agencies for environmental review.

Should you have any questions or concerns, please contact Frederick Sechler, Jr., Ecological Information Specialist, by phone (717-705-2819) or via email (c-freechle@pa.gov).

Sincerely,

Greg Podniesinski, Section Chief

Natural Heritage Section, DCNR Bureau of Forestry

Bry Podniesinski



BUREAU OF FORESTRY

May 25, 2017 PNDI Number: PNDI-628359

Greg Netti Ecology and Environment, Inc. 368 Pleasant View Drive Lancaster, NY 14086

Email: gnetti@ene.com (hard copy not to follow)

Re: ASR CPL North Alternative 13 Dallas, Monroe, and Northumberland Townships, Luzerne and Wyoming Counties, PA

Dear Mr. Netti,

Thank you for the submission of the Pennsylvania Natural Diversity Inventory (PNDI) Environmental Review Environmental Review Receipt Number PNDI-628359 for review. PA Department of Conservation and Natural Resources screened this project for potential impacts to species and resources of concern under DCNR's responsibility, which includes plants, terrestrial invertebrates, natural communities, and geologic features only.

No Impact Anticipated

PNDI records indicate species or resources under DCNR's jurisdiction located in the vicinity of the project. However, based on the information you submitted concerning the nature of the project, the immediate location, and our detailed resource information, DCNR has determined that no impact is likely. No further coordination with our agency is needed for this project.

DCNR recommends the following to help prevent the spread of invasive plant species and to encourage the use of native plants:

- Avoid using seed mixes that include invasive plant species if the project requires re-vegetating the area. Please also attempt to use weed-free straw or hay mixes when possible. A complete list of all Pennsylvania invasive plant species can be found here: http://www.dcnr.state.pa.us/cs/groups/public/documents/document/dcnr 20026634.pdf.
- The area of disturbance should be minimized to the fullest extent that would allow for this project; this will help to lessen the area of indirect disturbance and sedimentation to adjacent natural habitats.

This response represents the most up-to-date review of the PNDI data files and is valid for two (2) years only. If project plans change or more information on listed or proposed species becomes available, our determination may be reconsidered. Should the proposed work continue beyond the period covered by this letter, please resubmit the project to this agency as an "Update" (including an updated PNDI receipt, project narrative and accurate map). As a reminder, this finding applies to potential impacts under DCNR's jurisdiction only. Visit the PNHP website for directions on contacting the Commonwealth's other resource agencies for environmental review.

Should you have any questions or concerns, please contact Frederick Sechler, Jr., Ecological Information Specialist, by phone (717-705-2819) or via email (c-freechle@pa.gov).

Sincerely,

Greg Podniesinski, Section Chief

Natural Heritage Section, DCNR Bureau of Forestry

Bry Podniesinski

SECTION 1.5.3 PNDI CORRESPONDENCE PENNSYLVANIA FISH & BOAT COMMISSION



Telephone Call Summary Sheet

By: Ryan Nelson, (WHM Date:

Consulting, Inc.)

Talked With: Darlene Nichols Project Number: WHM#-EEI-020,023

Of: PFBC Project Name: Atlantic Sunrise Project

Telephone Number: 814-359-5194 Subject: PNDI Submission for Alt 13 and

MOC 154 (Byron Reroute)

04/17/17

A message was left with Greg Netti to call Darlene at the PFBC regarding the PNDI submission for Alt 13 and MOC 154 (Byron Reroute). Ryan Nelson of WHM returned the call on 4/17.

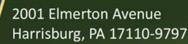
Darlene questioned the submission package, as this could all be done online. She indicated that since there were no impacts, the online PNDI receipt could just be finalized and used as the response from the PFBC. This should be done in lieu of the PFBC writing a letter of clearance for these route modifications.

Based on her direction, the PNDI receipts were finalized and no further consultation with the PFBC occurred.

SECTION 1.5.4 PNDI CORRESPONDENCE PENNSYLVANIA GAME COMMISSION

COMMONWEALTH OF PENNSYLVANIA

PENNSYLVANIA GAME COMMISSION



Wildlife Habitat Management 717-787-6818

July 28, 2017 **PGC ID Number: 201403110501 Revision**

Justin Zoladz
Ecology and Environment, Inc.
Buffalo Corporate Center
368 Pleasant View Drive
Lancaster, NY 14086
JZoladz@ene.com

Re: Transcontinental Gas Pipe Line Company, LLC–Atlantic Sunrise Expansion Project-*Revision* State Game Lands Nos. 84, 132, and 206 Large Project PNDI Review

Clinton, Lycoming, Susquehanna, Wyoming, Luzerne, Columbia, Northumberland, Schuylkill, Lebanon, and Lancaster Counties, PA

Dear Mr. Zoladz,

Thank you for submitting your revised Pennsylvania Natural Diversity Inventory (PNDI) Large Project Environmental Review request. The Pennsylvania Game Commission (PGC) screened this project for potential impacts to species and resources of concern under PGC responsibility, which includes birds and mammals only. This letter is an update to the letter issued on September 19, 2016 based on additional information provided to the PGC.

Potential Impact Anticipated

PNDI records indicate species or resources of concern are located in the vicinity of the project. The PGC has received and thoroughly reviewed the information that you provided to this office as well as PNDI data, and has determined that potential impacts to threatened, endangered, and species of special concern may be associated with your project. Therefore, additional measures are necessary to avoid potential impacts to the species listed below:

| Scientific Name | Common Name | PA Status | Federal Status |
|------------------------|--------------------------|-----------------|----------------|
| Myotis sodalis | Indiana Bat | ENDANGERED | ENDANGERED |
| Myotis septentrionalis | Northern Long-eared Bat | THREATENED | THREATENED |
| Neotoma magister | Allegheny Woodrat | THREATENED | N/A |
| Myotis leibii | Eastern Small-footed Bat | THREATENED | N/A |
| N/A | Winter Bat Colony | SPECIAL CONCERN | N/A |

Next Steps

Indiana and Northern Long-eared Bats

Indiana and northern long-eared bats are a federally listed species under the jurisdiction of the U.S. Fish and Wildlife Service. As a result, our agency defers comments on potential impacts to Indiana and northern long-eared bats to the U.S. Fish and Wildlife Service.

Allegheny Woodrat

Allegheny woodrat habitat surveys were conducted on the project area in 2015 and 2016 to identify and delineate suitable woodrat habitat. Two areas surveyed contained suitable habitat with evidence of previous woodrat occupation with the vicinity of the proposed project area. Mitigation for impacts to these two areas will consist of revegetation plantings and replacement travel corridors following the details described in the mitigation plan approved by the PGC on May 27, 2016.

Eastern Small-footed Bat and Winter Bat Colony

<u>Summer Roost Habitat</u>: Eastern small-footed bat habitat assessments were conducted on the project area in 2015 and 2016 to identify and delineate suitable woodrat habitat. Rocky areas deemed suitable for eastern small-footed bat day roosts were identified within the project area. Mitigation for impacts to these two areas will consist of construction and monitoring of alternate roost structures following the details described in the mitigation plan approved by the PGC on May 27, 2016.

<u>Hibernacula</u>: Surveys conducted in spring 2017 identified 12 potential bat hibernacula, at three different locations that had not been previously identified. Acoustics surveys were conducted at these portals in the spring of 2017. A total of 287 potential bat calls were recorded within the cluster of 8 portals (M21 – M28) in Northumberland County located in proximity to MP and associated with Vein Number. No calls were recorded at the other 4 portals surveyed. Of the 287 bat calls recorded at the 8 portal bat hibernaculum complex, 105 were of a minimum frequency level of \geq 35 kilohertz (kHz), indicating they originated form one of the five *Myotis* species, including eastern small-footed bats. As such, the following avoidance and minimization measures, mitigation, and monitoring are to be implemented:

Avoidance:

- O No blasting year round within 0.25 mile of the subsurface limits of the M21-M28 portal complex (MP to MP).
- o No tree clearing between April 1st and November 15th within a 0.25-mile radius surrounding the M21 M28 portal complex.
- o Construction activities involving ground disturbance within 0.25-mile radius of the portal complex will be restricted between November 15th and March 31st.

• Minimization:

o All work between MP will be completed within a two week period to minimize impacts on the hibernacula.

- o Tree clearing within 250 feet of portals M21-M28 is to be minimized to the greatest extent possible.
- The bypass access road is to be utilized to move construction equipment around strip mine trench and away from portals M21 and M22.
- o The strip mine trench is to be backfilled and the prefabricated pipeline is be installed within the fill material eliminating the need to excavate directly above the portion of Vein Number 5 where it is closest to the surface.
- o Bat gates will be installed over portal M21 and M22 prior to construction (see Mitigation below) which will block any large materials from entering the portals during construction and help maintain the structural integrity of the portals, prevent human entry, and leave a permanent marking denoting the importance of the site port-construction.
- o Construction fencing will be installed to block smaller material from entering the portals and to ensure a buffer is maintained between the portals and construction activities.
- Three trees identified as important to maintaining the slope adjacent to the M22 portal (a mature chestnut oak, bigtooth aspen, and black birch) will be preserved.
- o Non-mechanized equipment (e.g., hand-fell) will be used to removal trees within 250 feet of the M21 and M22 portals in a manner that will prevent structural damage to the portals.
- o Erosion control measures will be installed to stabilize and protect the slopes adjacent to the portals.
- o All construction activities within 250 feet of the portals will be monitored.
- Mitigation: Bat friendly gates will be installed on portals M21 and M22 prior to the start of construction, between August 15th and September 30th, and under the direction of a qualified bat surveyor. Bat gate final design plans are to be submitted to the PGC for review and approval prior to installation. In addition, the PGC will be given access to the gates for future monitoring activities.

• Monitoring:

- o Fall bat trapping survey will be completed in 2017 (year construction is to occur) and 2018 (post-construction).
- o Spring bat acoustics will be completed in 2018 (post-construction).
- Meteorological conditions will be monitored within the portal to confirm the hibernaculum is continuing to function as suitable habitat following construction.
- o All survey reports will be submitted to the PGC no later than 120 days after each survey has been completed.

State Game Lands

Portions of the proposed project are located on State Game Lands Nos. 84, 132, and 206. Please contact Mr. Michael Beahm, Northeast Land Management Supervisor, at 570-675-1143 to discuss and coordinate the project on SGL 84 and 206, and Mr. Dave Mitchell, Southeast Region Land Management Supervisor, at 610-926-3136 to discuss and coordinate the project on SGL 132.

Conservation Measures

National Wetland Inventory Mapping (NWI) and/or aerial photos suggest that wetlands are located within the requested review throughout the proposed project. The PGC is requesting that the final project avoid, or at least minimize to the greatest practical extent, any adverse impacts to these resources and their associated wildlife habitat.

In addition, portions of the project are located in areas where the abundance and species richness of various area-sensitive forest bird species are among the highest in the state. Area-sensitive forest bird species are those species that require a large expanse of relatively contiguous (unfragmented) forest to maintain their populations. The species found in these areas are listed as species of greatest conservation need in Pennsylvania's Wildlife Action Plan (WAP). The WAP was designed to proactively manage and safeguard the state's declining fish and wildlife resources, and sets a framework to conserve Pennsylvania's diverse wildlife, maintain their role in ecological processes, and protect and enhance species of conservation concern (not just imperiled species). Although these area-sensitive forest bird species are not currently listed as threatened or endangered, and do not produce potential conflicts for projects reviewed using the on-line PNDI Environmental Review Tool, their populations and requisite habitat are either in decline, or are vulnerable to decline in the state.

As a result, the PGC is recommending the following conservation measures be implemented, to the greatest extent practicable, to minimize impacts to these area-sensitive forest bird species and minimize additional fragmentation of forested tracts throughout the project area:

- Co-locate the pipeline and associated facilities with existing roads and other disturbed areas.
- Minimize the width of the temporary construction right-of-way (ROW), and avoid grubbing where possible to encourage the re-establishment of woody vegetation.
- Minimize the width of the permanent, maintained ROW to only that which is absolutely necessary to maintain the integrity of the pipeline.
- Maximize the rotation of mowing and/or clearing along that maintained ROW to allow for the establishment of more beneficial wildlife habitat.
- Perform initial tree clearing for the project between August 15th and April 15th.
- Use the following seed mixes, or similar herbaceous seed mixes that will minimize competition with volunteer woody plant species, while offering additional wildlife habitat and food sources along the reclaimed ROW:

| Steep Slopes | Other Areas |
|--|--|
| 1 bushel/acre Annual Cereal Grain (oats in spring, grain rye or wheat in fall) | 1 bushel/acre Annual Cereal Grain (oats in spring, grain rye or wheat in fall) |
| 10 lbs/acre Timothy | 5 lbs/acre Timothy |
| 3 lbs/acre Birdsfoot Trefoil | 5 lbs/acre Birdsfoot Trefoil |
| 4 lbs/acre Little Bluestem | 4 lbs/acre Little Bluestem |
| 3 lbs/acre Alsike Clover | 2 lbs/acre Indiangrass |
| 3 lbs/acre Ladino Clover | 1 lb/acre Side-oats Grama |
| Straw Mulch, NO HAY | 1 lb/acre Switchgrass |
| | 1/4 lb/acre Black-eyed Susan |
| | 1/4 lb/acre Lance-leaved Coreopsis |
| | Straw Mulch, NO HAY |

• Perform any future mowing and/or clearing along the maintained ROW between August 15th and April 15th.

This response represents the most up-to-date summary of the PNDI data files and is <u>valid for two</u> (2) years from the date of this letter. An absence of recorded information does not necessarily imply actual conditions on site. Should project plans change or additional information on listed or proposed species become available, this determination may be reconsidered.

Should the proposed work continue beyond the period covered by this letter, please resubmit the project to this agency as an "Update" (including an updated PNDI receipt, project narrative and accurate map). If the proposed work has not changed and no additional information concerning listed species is found, the project will be cleared for PNDI requirements under this agency for two additional years.

This finding applies to impacts to birds and mammals only. To complete your review of state and federally-listed threatened and endangered species and species of special concern, please be sure that the U.S. Fish and Wildlife Service, the PA Department of Conservation and Natural Resources, and/or the PA Fish and Boat Commission have been contacted regarding this project as directed by the online PNDI ER Tool found at www.naturalheritage.state.pa.us.

Sincerely,

Tracey Librandi Mumma

Tracey Librardi Munma

Division of Environmental Planning & Habitat Protection

Bureau of Wildlife Habitat Management Phone: 717-787-4250, Extension 3614

Fax: 717-787-6957 E-mail:tlibrandi@pa.gov

A PNHP Partner



TLM/tlm

cc: Pamela Shellenberger, U.S. Fish and Wildlife Service

Glick

Dingman

Ross

Beahm

Figured

Wenner

Metz

Mitchell

Morgan

Laroche

Brauning

Diauiii

Turner

Havens

SECTION 1.5.5 PNDI CORRESPONDENCE UNITED STATES FISH AND WILDLIFE SERVICE



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Pennsylvania Field Office 110 Radnor Road, Suite 101 State College, Pennsylvania 16801-4850

July 18, 2017

Alisa M. Lykens, Chief Division of Gas – Environment and Engineering Federal Energy Regulatory Commission 888 1st St NE Washington, D.C. 20426

Re: USFWS Project #2014-0324

Transcontinental (Transco) Gas Pipe Line Company, LLC – Atlantic Sunrise Project

Dear Ms. Lykens:

This is in response to the revised Biological Assessment (BA) Addendum #3 that we received on June 8, 2017, and which was revised by FERC and Transco on June 29, 2017, for the above-referenced project located in Susquehanna, Wyoming, Luzerne, Columbia, Northumberland, Schuylkill, Lebanon, and Lancaster Counties, Pennsylvania. The following comments are provided pursuant to the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) to ensure the protection of endangered and threatened species.

Our letter of December 22, 2016, concurred with FERC and Transco's conclusion that the proposed project may affect, but was not likely to adversely affect, the following federally listed endangered or threatened species: Indiana bat (*Myotis sodalis*), bog turtle (*Clemmys muhlenbergii*), and northeastern bulrush (*Scirpus ancistrochaetus*). Because the project is also within the range of the northern long-eared bat (*M. septentrionalis*) a species that is listed as threatened, our December 2016 letter considered avoidance and minimization measures proposed for tree removal that may result in incidental take ¹ of this species. We concluded that in accordance with special provisions that provide for the conservation of threatened species (e.g., a section 4(d) rule) incidental take of northern long-eared bats is not prohibited and FERC may fulfill their project-specific Section 7 responsibilities by using the Service's streamlined

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¹ As defined in the Act, take means "... to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." "Harm" in the definition of take means an act which kills or injures wildlife. Such act may include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering (50 CFR part 17.3). "Harass" means an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering.

consultation framework described in that letter and available at: https://www.fws.gov/midwest/endangered/mammals/nleb/s7.html.

The BA Addendum #3 is a follow-up to the information that was submitted to our office for the December 2016 letter, based on additional Bat Mist-Net Surveys, Portal Acoustic Surveys and the development of an Indiana Bat Conservation Plan.

Bat Mist-Net Surveys

Transco identified two route modifications that were outside the limits of the previous survey corridors for threatened and endangered species. These route modifications were referred as Central Penn Line (CPL) North MOC 0154 (Byron Reroute) and CPL North Alternative 13. Due to proposed forest clearing associated with construction of the pipeline, additional mist-net surveys were recommended to determine whether Indiana bats are present along the Byron Reroute and the portion of the CPL North Alternative 13, in Luzerne County.

The bat surveys were conducted at one site each along the Byron Reroute and CPL North Alternative 13 on May 27, 28, and 29, 2017, in accordance with the Fish and Wildlife Service's Indiana bat summer survey guidelines. Maps showing the mist-net sites are provided in Attachment A and the report for the surveys are provided in Attachment B of the BA. According to the survey report, no bats were captured at either of the sites. Based on these survey results, we conclude that Indiana bats are either not present in the project area, or are present in such low densities that they were not detected. In addition, the project is not within an area that is known to be occupied by an Indiana bat maternity colony, or within the fall swarming habitat associated with any known Indiana bat hibernacula. Consequently, we have determined that tree-clearing for this project is not likely to adversely affect the Indiana bat.

Portal Acoustic Surveys

Transco identified multiple potential bat hibernacula portals in late December 2016 and January 2017. These are located at three separate locations along the proposed CPL South pipeline route: two in Northumberland County and one in Schuylkill County. Each location is associated with historic coal mining, or collieries. Transco subsequently developed a plan to complete acoustic surveys within the portals to determine whether they serve as entryways to bat hibernacula.

The United States Fish and Wildlife Service (Service) approved the survey protocols via email on March 5, 2017. Transco completed the acoustic surveys from March 21 to May 1, 2017. The acoustic survey report (Attachment C of the BA) describes 287 bat pass recordings in a series of portals associated within an area identified as "Vein Number 5 of the Hickory Swamp Colliery". Of the 287 bat passes, 105 passes possessed a minimum frequency level of \geq 35 kilohertz (kHz), indicating they originated from one of five *Myotis* species, including Indiana bat. At this time, Transco proposes to proceed on the assumption that Indiana bats are among the bat species that utilize this hibernaculum. Transco proposes to initiate additional harp trapping survey in fall 2017 in order to identify the bat species that are present in the hibernacula.

Indiana Bat Conservation Plan

The proposed project will affect approximately 171.3 acres of forest habitat in the vicinity of the "Vein Number 5 of the Hickory Swamp Colliery" hibernacula. To minimize adverse effects on Indiana bats (and incidentally northern long-eared bats that may also be present) Transco proposes to implement the measures outlined in their June 2017 Indiana Bat Conservation Plan (Plan) as outlined in Attachment D of the BA. To avoid direct take of the bats the Plan includes a commitment to remove trees between November 15 and March 31 (a period when the bats are hibernating and not roosting in trees) and mine portal protection measures. The Plan also details specific measures that will be implemented to reduce the short-term and long-term effects of the project on Indiana bats. We conclude that with the implementation of these measures, the effects of the project are not likely to adversely affect the Indiana bat.

Please contact Pamela Shellenberger of my staff at 814-234-4090 if you have any questions or require further assistance.

Sincerely,

Lora Z. Lattanzi Field Office Supervisor

cc: (electronic)

G. Netti – Ecology and Environmental, Inc.

J. Dean – Williams

SECTION 2.1

EROSION AND SEDIMENT CONTROL PLAN NARRATIVES AND DRAWINGS - COLUMBIA COUNTY

(NARRATIVES AND DRAWINGS PROVIDED UNDER SEPARATE COVER)

SECTION 2.1.1

EROSION AND SEDIMENT CONTROL PLAN NARRATIVE – ATLANTIC SUNRISE PROJECT – PROPOSED CENTRAL PENN LINE NORTH

(NARRATIVE AND DRAWINGS PROVIDED UNDER SEPARATE COVER)

SECTION 2.1.2

EROSION AND SEDIMENT CONTROL PLAN NARRATIVE – ATLANTIC SUNRISE PROJECT – PROPOSED CENTRAL PENN LINE SOUTH

(NARRATIVE AND DRAWINGS PROVIDED UNDER SEPARATE COVER)

EROSION AND SEDIMENT CONTROL AND POST CONSTRUCTION STORMWATER
MANAGEMENT/SITE RESTORATION PLAN NARRATIVE –
ATLANTIC SUNRISE PROJECT – TEMPORARY AND PERMANENT ACCESS ROADS

EROSION AND SEDIMENT CONTROL PLAN NARRATIVE – ATLANTIC SUNRISE PROJECT – COMPRESSOR STATION 610

EROSION AND SEDIMENT CONTROL PLAN NARRATIVE – ATLANTIC SUNRISE PROJECT – WEST DIAMOND REGULATOR STATION

EROSION AND SEDIMENT CONTROL PLAN NARRATIVES AND DRAWINGS – LANCASTER COUNTY

EROSION AND SEDIMENT CONTROL PLAN NARRATIVE – ATLANTIC SUNRISE PROJECT – PROPOSED CENTRAL PENN LINE SOUTH

EROSION AND SEDIMENT CONTROL AND POST CONSTRUCTION STROMWATER
MANAGEMENT /SITE RESTORATION PLAN NARRATIVE –
ATLANTIC SUNRISE PROJECT – TEMPORARY AND PERMANENT ACCESS ROADS

EROSION AND SEDIMENT CONTROL PLAN NARRATIVES AND DRAWINGS – LEBANON COUNTY

EROSION AND SEDIMENT CONTROL PLAN NARRATIVE – ATLANTIC SUNRISE PROJECT – PROPOSED CENTRAL PENN LINE SOUTH

EROSION AND SEDIMENT CONTROL PLAN AND POST CONSTRUCTION STORMWATER
MANAGEMENT/SITE RESTORATION PLAN NARRATIVE –
ATLANTIC SUNRISE PROJECT – TEMPORARY AND PERMANENT ACCESS ROADS

EROSION AND SEDIMENT CONTROL PLAN NARRATIVES AND DRAWINGS – LUZERNE COUNTY

EROSION AND SEDIMENT CONTROL PLAN – ATLANTIC SUNRISE PROJECT – PROPOSED CENTRAL PENN LINE NORTH

EROSION AND SEDIMENT CONTROL AND POST CONSTRUCTION STORMWATER
MANAGEMENT/SITE RESTORATION PLAN NARRATIVE –
ATLANTIC SUNRISE PROJECT – TEMPORARY AND PERMANENT ACCESS ROADS

EROSION AND SEDIMENT CONTROL PLAN NARRATIVE – ATLANTIC SUNRISE PROJECT – NORTH DIAMOND REGULATOR STATION

EROSION AND SEDIMENT CONTROL PLAN NARRATIVES AND DRAWINGS - NORTHUMBERLAND COUNTY

EROSION AND SEDIMENT CONTROL PLAN NARRATIVE – ATLANTIC SUNRISE PROJECT – PROPOSED CENTRAL PENN LINE SOUTH

EROSION AND SEDIMENT CONTROL AND POST CONTRUCTION STORMWATER
MANAGEMENT/SITE RESTORATION PLAN NARRATIVE –
ATLANTIC SUNRISE PROJECT – TEMPORARY AND PERMANENT ACCESS ROADS

EROSION AND SEDIMENT CONTROL PLAN NARRATIVES AND DRAWINGS – SCHUYLKILL COUNTY

EROSION AND SEDIMENT CONTROL PLAN NARRATIVE – ATLANTIC SUNRISE PROJECT – PROPOSED CENTRAL PENN LINE SOUTH

EROSION AND SEDIMENT CONTROL AND POST CONSTRUCTION STORMWATER
MANAGEMENT/SITE RESTORATION PLAN NARRATIVE –
ATLANTIC SUNRISE PROJECT – TEMPORARY AND PERMANENT ACCESS ROADS

EROSION AND SEDIMENT CONTROL PLAN NARRATIVES AND DRAWINGS – SUSQUEHANNA COUNTY

EROSION AND SEDIMENT CONTROL PLAN NARRATIVE – ATLANTIC SUNRISE PROJECT – CENTRAL PENN LINE NORTH

EROSION AND SEDIMENT CONTROL AND POST CONSTRUCTION STORMWATER
MANAGEMENT/SITE RESTORATION PLAN NARRATIVE –
ATLANTIC SUNRISE PROJECT – TEMPORARY AND PERMANENT ACCESS ROADS

EROSION AND SEDIMENT CONTROL PLAN NARRATIVE AND DRAWINGS – WYOMING COUNTY

EROSION AND SEDIMENT CONTROL NARRATIVE – ATLANTIC SUNRISE PROJECT – CENTRAL PENN LINE NORTH

EROSION AND SEDIMENT CONTROL AND POST CONSTRUCTION STORMWATER
MANAGEMENT/SITE RESTORATION PLAN – ATLANTIC SUNRISE PROJECT –
TEMPORARY AND PERMANENT ACCESS ROADS

EROSION AND SEDIMENT CONTROL PLAN NARRATIVE – ATLANTIC SUNRISE PROJECT – COMPRESSOR STATION 605

SECTION 3

POST CONSTRUCTION STORMWATER MANAGEMENT/SITE RESTORATION PLAN NARRATIVES AND DRAWINGS

SECTION 3.1

POST CONSTRUCTION STORMWATER MANAGEMENT/SITE RESTORATION PLAN NARRATIVES AND DRAWINGS – COLUMBIA COUNTY

SECTION 3.1.1

POST CONSTRUCITON STORMWATER MANAGEMENT/SITE RESTORATION PLAN NARRATIVE – ATLANTIC SUNRISE PROJECT – COMPRESSOR STATION 610

SECTION 3.1.2

POST CONSTRUCITON STORMWATER MANAGEMENT/SITE RESTORATIONPLAN NARRATIVE – ATLANTIC SUNRISE PROJECT – WEST DIAMOND REGULATOR STATION

SECTION 3.2

POST CONSTRUCITON STORMWATER MANAGEMENT/SITE RESTORATION PLAN NARRATIVES AND DRAWINGS – LANCASTER COUNTY

POST CONSTRUCTION STORMWATER MANAGEMENT/SITE RESTORATION PLAN NARRATIVE – ATLANTIC SUNRISE PROJECT – RIVER ROAD REGULATOR STATION

SECTION 3.5

POST CONSTRUCITON STORMWATER MANAGEMENT/SITE RESTORATION PLAN NARRATIVE AND DRAWINGS – NORTHUMBERLAND COUNTY

SECTION 3.5.1

POST CONSTRUCITON STORMWATER MANAGEMENT/SITE RESTORATION PLAN NARRATIVE – ATLANTIC SUNRISE PROJECT – COMPRESSOR STATION 605