



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Pennsylvania Field Office
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State College, Pennsylvania 16801-4850

December 21, 2016

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
Atlantic Sunrise

Dear Ms. Lykens:

This regards the Transcontinental Gas Pipe Line Company, LLC (Transco) - Atlantic Sunrise Expansion and looping 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.

This letter supersedes our correspondence of December 14, 2016, based on omitted information.

Transco proposes to expand its current interstate natural gas pipeline system by connecting their existing natural gas facilities and gathering system in Susquehanna County, Pennsylvania to markets in the Mid-Atlantic and southern United States. The proposed project consists of 56 miles of 30-inch diameter pipeline at the northern portion of the project; 121 miles of 42-inch pipeline at the southern portion of the project; two new compressor stations in Pennsylvania; additional ancillary facilities, such as mainline valves (MLVs), cathodic protection, communication facilities, and internal inspection device (e.g., pig) launchers and receivers in Pennsylvania; two new meter stations and three new regulator stations with interconnecting piping in Pennsylvania; additional compression and related modifications of an existing compressor station in Pennsylvania. It also consists of the Unity Loop in Lycoming County and Chapman Loop in Clinton County.

Your letter to us of July 19, 2016, provided a copy of the draft Environmental Impact Statement (EIS), and requested that the May 2016 draft EIS serve as your Biological Assessment (BA) under Section 7 of the Endangered Species Act (ESA). In October 2016, we received an addendum (referred to as "Addendum No. 1") to the May 2016 BA from Transco. We also

accessed Transco's Applicant-prepared BA. (filed on May 18, 2016), at <http://www.ferc.gov>, by following the "eLibrary" link, to "Advanced Search" and entering 20160518-5016 in the "Accession Number" field. The following comments are based on the May 2016 BA and Addendum No. 1. A complete administrative record of this consultation is on file at the Service's Pennsylvania Field Office.

Federally Listed Species

The action area¹ is located within the range the northern long-eared bat (*Myotis septentrionalis*) and bog turtle (*Clemmys muhlenbergii*), species that are federally listed as threatened and the northeastern bulrush (*Scirpus ancistrochaetus*), a plant that is federally listed endangered plant. A portion of the action area is also located within the range of the Indiana bat (*Myotis sodalis*), a species that is federally listed as endangered.

Northern long-eared bat

The northern long-eared bat is one of the species of bats most impacted by the disease white-nose syndrome. Due to declines caused by white-nose syndrome and continued spread of the disease, the northern long-eared bat was listed as threatened under the Endangered Species Act on April 2, 2015. Due to the close proximity of portions of the project area to a known northern long-eared bat hibernaculum and maternity roosts, removal of trees and forested areas within the project area could result in the direct take of roosting northern long-eared bats, which could be injured or killed when trees are cut or construction alters hibernation habitat. Studies have found that forested areas near hibernacula (i.e., within 5 miles) and near maternity roosts (i.e., within 2 miles) provide important foraging and roosting habitat for Indiana bats, especially during the fall and spring, when bats are building up their fat reserves prior to and after hibernation.

In listing the northern long-eared bat as threatened, the Service developed a 4(d) rule² that specifically defines "take" prohibitions. Federal actions, such as FERC's authorization of the Atlantic Sunrise Expansion project, that result in incidental take that is not prohibited under the 4(d) rule, may affect individual northern long-eared bats and require consultation under section 7 of the Endangered Species Act (ESA). To meet this obligation, the Service provided an option to streamline section 7 consultations when federal actions may affect the northern long-eared bat, but not cause prohibited take. If prohibited take may occur (e.g., cutting or destroying a known, occupied maternity roost tree or other trees within a 150 foot radius from the maternity roost tree during the pup season from June 1 through July 31, or some activities within 0.25-mile of a known hibernaculum) standard section 7 consultation procedures apply, and the framework cannot be used.

¹ All areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action.

² Section 4(d) of the Endangered Species Act directs the Service to issue regulations deemed "necessary and advisable to provide for the conservation of threatened species."

Maternity habitat

As proposed, construction of the Atlantic Sunrise Expansion project will involve tree clearing within northern long-eared bat maternity habitat. Tree removal that may result in take of the species that is beyond 150 feet of the four known northern long-eared bat (NLEB) maternity roosts is not prohibited, consistent with the 4(d) rule for this species. FERC and Transco commit in the BA to implement the conservation measures described in the 4(d) rule by not clearing trees within 150 feet of these known maternity roosts from June 1 through July 31 to reduce the potential for direct mortality or injury of reproductive females and non-volant pups during the pup season. By implementing this seasonal tree cutting restriction any take of northern long-eared bat that occurs is not prohibited.

Hibernation habitat

The 4(d) rule prohibits all incidental take of northern long-eared bat that occurs within hibernacula because hibernation is a particularly critical and vulnerable time. Hibernacula and nearby forests play critical roles in the life cycle of the northern long-eared bat, even beyond the time when the bats are hibernating. In early spring and fall, hibernacula and surrounding forested areas are the focus of bat activity during "spring staging" and "fall swarming." During spring staging, bats gradually emerge from hibernation, exit the hibernacula to feed, but re-enter the same or alternate hibernacula to resume daily bouts of torpor until they migrate to summer areas. Fall swarming is a time of heightened activity in and around hibernacula. It is an especially critical time in the life cycle of the northern long-eared bat, because it is during this time that they mate and build up fat reserves, allowing them to survive hibernation.

Approximately 2,007 feet of the proposed pipeline right-of-way (ROW) is within the 0.25-mile radius of a known northern long-eared bat hibernaculum, and construction will require removal of approximately 3.9 acres of forest habitat. This hibernaculum is an abandoned mine that has five (5) known portals, all of which are gated but remain open for bat passage. Several recent bat surveys in 2011, 2014 and 2015, conducted at one or more of these mine portals failed to capture bats; however, the survey effort utilized is not adequate to infer species extirpation from suitable habitat. Further, *Myotis* species are known to switch hibernation sites, so this hibernaculum may be used intermittently, despite the lack of bat captures during surveys.

To avoid directly killing, injuring, or harassing northern long-eared bats engaged in spring staging, summer use, and fall swarming, Transco and FERC will not conduct tree clearing from April 1 to November 15 within 0.25 miles of this hibernaculum. Consistent with the 4(d) rule, any northern long-eared bats killed or injured during tree clearing beyond the 0.25 mile radius is not prohibited.

The proposed pipeline ROW and all related tree clearing at this site are at least 700 feet from the five known portal entrances. To avoid the risk of take of northern long-eared bats that may result from alteration of hibernation habitat, no blasting will be conducted within 0.25 miles of the hibernaculum. Further, no pipeline construction activities will take place during the hibernation period within 0.25 miles to avoid disturbing hibernating bats. Tree clearing within 0.25 miles of the hibernaculum that is proposed from November 16 to March 31 will be completed with non-

mechanized equipment as an additional measure to avoid disturbing bats during hibernation. The 3.9 acres of forested habitat that will be cleared represents about 1.5 percent of the total 250 acres of forested habitat within 0.25 miles of the hibernacula entrances; therefore, we conclude adequate foraging habitat in the vicinity of the hibernaculum will be available following project completion.

Based on above avoidance measures proposed within 0.25 miles of the known hibernaculum, particularly the distance of forest removal, blasting, and construction from the known mine entrances, and the relatively small area of forest removal, we do not anticipate that the proposed action will result in surficial micro-climatic changes in the hibernacula or structural changes to the hibernacula such that prohibited take occurs. To verify these assumptions regarding hibernation habitat, temperature, relative humidity and vibrations at the mine portals is being monitored pre-construction through project implementation.

FERC and Transco determined that this project is not likely to adversely affect the northern long-eared bat. We do not concur with this determination. Incidental take may occur; however, with implementation of the proposed avoidance and minimization measures, this take is not prohibited under the 4(d) rule. Federal agencies may fulfill their project-specific Section 7 responsibilities by using the Service's framework. The framework relies on a programmatic biological opinion that the Service prepared for the northern long-eared bat 4(d) rule. The framework is detailed on the Service's Midwest Endangered Species website (<https://www.fws.gov/Midwest/endangered/mammals/nleb/s7.html>). The framework also includes several voluntary conservation measures that the Service recommends agencies incorporate into projects when possible.

Indiana bat

Indiana bats have a similar life history and sensitivities to those describe above for northern long-eared bats. As an endangered species, however, there are no comparable 4(d) rule exemptions. The action area for the Atlantic Sunrise Expansion Project does not intersect with any known Indiana bat maternity colony habitat or fall swarming habitat associated with known Indiana bat hibernacula. In order to assess the effect of the project on Indiana bats that may result from forest clearing, a bat mist-net survey was completed during the maternity season (May 1 to August 15) in accordance with the Fish and Wildlife Service's Indiana bat summer survey guidelines between May 21 and August 14, 2014, and again between May 15 and August 15, 2015. According to the survey reports, no Indiana bats were captured. Based on these surveys, we conclude that Indiana bat maternity activity is not occurring in the action area. If present, Indiana bats occur as occasional transient individuals not likely to be detected with the survey effort extended. Consequently, the Service concurs with FERC's and Transco's determination that the proposed project is not likely to adversely affect this species.

Bog turtle

Bog turtles inhabit shallow, spring-fed fens, sphagnum bogs, swamps, marshy meadows, and pastures characterized by soft, muddy bottoms; clear, cool, slow-flowing water, often forming a network of rivulets; high humidity; and an open canopy. Bog turtles usually occur in small,

discrete populations occupying suitable wetland habitat dispersed along a watershed. The occupied "intermediate successional stage" wetland habitat is usually a mosaic of micro-habitats ranging from dry pockets, to areas that are saturated with water, to areas that are periodically flooded. Some wetlands occupied by bog turtles are located in agricultural areas and are subject to grazing by livestock.

Following the methods described under "Bog Turtle Habitat Survey" (Phase 1 survey) of the Guidelines for Bog Turtle Surveys (revised April 2006), according to Ecology and Environment, Inc.'s December 9, 2016 letter, 100 Phase 1 surveys occurred between 2014 and 2016. These surveys resulted in identification of 20 wetlands with the combination of soils, vegetation, and hydrology typical of habitat occupied by bog turtles. Phase 2 Presence/Absence surveys were conducted at 17 of these wetlands, while 3 other wetlands were ruled out from Phase 2 surveys based on site visits. Eight of the 17 wetlands had Phase 3 trapping surveys conducted, with one survey, [REDACTED], resulting in identification of a bog turtle population (Table 1 – summarized by Williams). All survey results have been reviewed by the Service; we concur with the survey methods and results.

Table 1
Summary of Bog Turtle Surveys
Atlantic Sunrise Project

Year	Phase I Wetlands Surveyed	Phase I Wetlands with potentially suitable habitat	Phase II Surveyed	Phase III Surveyed	Total Populations Found	Associated Report
2014	72	18	--	--	0	[REDACTED]
2015	--	--	16	7	1	[REDACTED]
2015	21	2	--	--	0	[REDACTED]
2016	--	--	1	1	0	[REDACTED]
2016	7	0	N/A	N/A	0	[REDACTED]
[REDACTED]						
[REDACTED]						
[REDACTED]						

As discussed above, the project action area encompasses a wetland complex [REDACTED] supporting a known bog turtle population, where wetland [REDACTED] contains the known population and wetland [REDACTED] is hydrologically connected. Approximately 0.12 acres of this wetland will be directly disturbed. While the disturbance area does not have all of the essential habitat characteristics of core bog turtle habitat, or a habitat where bog turtles can hibernate (i.e., mucky soils, spring-fed seeps, and vegetation), if any part of a wetland has these characteristics, the entire wetland is considered habitat for the species. Visual surveys for the turtles (Phase 2 surveys) and trapping (Phase 3 surveys) and subsequent

telemetry of some individual turtles have not documented bog turtles in the wetland complex closer than 570 feet from the proposed limit of disturbance.

Despite the telemetry results, which sampled only a portion of the population, construction that occurs during the species' active period (typically between April 1 and October 31), may kill or injure bog turtles dispersing through the wetland complex, particularly those present in or near the limit of disturbance. Therefore, Transco will implement several measures to ensure that bog turtles are not directly affected. Prior to site disturbance, Transco will install exclusion fencing, which will: (1) preclude turtles from entering the construction area, and (2) provide a visual limit to keep construction crews from entering more suitable habitat. Additionally, all activities in this wetland habitat between April 1 and October 31 will occur under the supervision of an on-site, Service-approved surveyor experienced with this species (i.e., a qualified bog turtle surveyor). See <https://www.fws.gov/northeast/pafo/> for the most recent list of surveyors. During the hibernation period (November 1 and March 31), bog turtles are expected to be limited to the immediate vicinity of spring-seeps which are not present in the proposed limit of disturbance. Therefore, construction entirely limited to this period is not likely to result in direct or indirect adverse effects.

By either implementing the species specific avoidance measures for project activities conducted during the turtle's active season (see full description in [REDACTED] or completing activities during the turtle's hibernation season, the Service concurs with FERC/Transco's determination that disturbance to Wetland [REDACTED] related to construction of the proposed natural gas pipeline construction project is not likely to adversely affect the bog turtle. Likewise, based on negative findings at other potential bog turtle wetlands, we concur that construction of the Atlantic Sunrise project is not likely to adversely affect this species in other portions of the proposed right-of-way.

Northeastern bulrush

The northeastern bulrush is typically found in ponds, wet depressions, shallow sinkholes, vernal pools, small emergent wetlands, or beaver-influenced wetlands. These wetlands are often located in forested areas and characterized by seasonally variable water levels.

According to Ecology and Environment, Inc.'s December 9, 2016 letter, 137 wetlands were surveyed for the northeastern bulrush between 2014 and 2016. Two surveys resulted in the presence of a known northeastern bulrush population. All survey results have been reviewed by the Service and we concur with the survey methods and results.

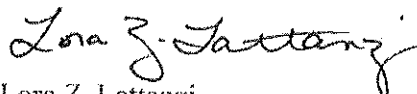
As discussed above, Transco documented two populations of northeastern bulrush within one wetland (referred to as [REDACTED]) in Luzerne County and two populations within one wetland (referred to as [REDACTED]) in Columbia County. Transco subsequently rerouted portions of the proposed pipeline to avoid direct impacts to these northeastern bulrush populations. No direct disturbance is now anticipated. Nonetheless, Transco proposes to avoid indirect adverse effects to this species by minimizing the pipeline ROW width, implementing practices to reduce the spread of invasive species, and developing a ROW maintenance plan to

ensure that the two documented northeastern bulrush populations on the existing Transco Leidy Line ROWs are not adversely affected by operation or maintenance of the pipeline. Based on these avoidance measures, the Service concurs with FERC and Transco's determination that the proposed Atlantic Sunrise Expansion Project is not likely to adversely affect the northeastern bulrush.

To avoid potential delays in reviewing your project, please use the above-referenced USFWS project tracking number in any future correspondence regarding this project.

Please contact Pamela Shellenberger of this office at (814) 234-4090 if you have any questions or require further assistance regarding this matter.

Sincerely,



Lora Z. Lattanzi
Field Office Supervisor