



**Office of  
Energy Projects**

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**Transcontinental Gas Pipe Line Company, LLC**

**Docket No. CP18-260-000**

# **North Padre Island Lateral Abandonment Project**

## **Environmental Assessment**

Washington, DC 20426

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## TECHNICAL ABBREVIATIONS AND ACRONYMS

BSEE	Bureau of Safety and Environmental Enforcement
BOEM	Bureau of Ocean Energy Management
CAA	Clean Air Act
Certificate	Certificate of Public Convenience and Necessity
CFR	Code of Federal Regulations
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CO <sub>2e</sub>	carbon dioxide equivalents
Commission	Federal Energy Regulatory Commission
EA	environmental assessment
EFH	Essential Fish Habitat
EI	Environmental Inspector
ESA	Endangered Species Act
FERC	Federal Energy Regulatory Commission
GHG	greenhouse gases
GWP	global warming potential
HAP	hazardous air pollutants
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NGA	Natural Gas Act
NMFS	National Marine Fisheries Service
NPI 956 Platform	North Padre Island Block 956 “B” Platform
NTL	Notice to Lessees and Operators
OEP	Office of Energy Projects
PCB	polychlorinated biphenyls
Plan	FERC’s <i>Upland Erosion Control, Revegetation, and Maintenance Plan</i>
PM <sub>10</sub>	particulate matter with an aerodynamic diameter less than or equal to 10 microns
PM <sub>2.5</sub>	particulate matter with an aerodynamic diameter less than or equal to 2.5 microns
Procedures	FERC’s <i>Wetland and Waterbody Construction and Mitigation Procedures</i>
Project	North Padre Island Lateral Abandonment Project
SHPO	State Historic Preservation Officer
SO <sub>2</sub>	sulfur dioxide
Transco	Transcontinental Gas Pipe Line Company, LLC
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
VOC	volatile organic compounds

## **A. PROPOSED ACTION**

### **1.0 Introduction**

The staff of the Federal Energy Regulatory Commission (Commission or FERC) has prepared this environmental assessment (EA) to analyze the environmental effects of the natural gas pipeline facilities proposed for abandonment by Transcontinental Gas Pipe Line Company, LLC (Transco) in offshore waters.

We<sup>1</sup> prepared this EA in compliance with the requirements of the National Environmental Policy Act of 1969 (NEPA) (Title 40 of the Code of Federal Regulations, Parts 1500-1508 [40 CFR 1500-1508]), and with the Commission's implementing regulations under 18 CFR 380.

On April 23, 2018, Transco filed an application with the Commission in Docket No. CP18-260-000 under section 7(b) of the Natural Gas Act (NGA) to abandon approximately 21.6 miles of the 24-inch-diameter pipeline lateral extending from and including the North Padre Island Block 956 "B" Platform (NPI 956 Platform), to approximately 3.5 miles from shore, off Texas, including all appurtenant and auxiliary facilities in the Gulf of Mexico, Lease Blocks NPI 902, 919, 920, 921, 923, 924, 938, 946, 947, and 956. Transco's proposed project is referred to as the North Padre Island Lateral Abandonment Project (Project).

### **2.0 Project Purpose and Need**

Transco states the purpose of the Project is to abandon facilities that are no longer needed to provide interstate natural gas transportation service. The facilities have been idle since July 2015. There have been no recent transportation service requests for these pipelines and they are not expected to be used in the future.

Section 7(b) of the NGA specifies that no natural gas company shall abandon any portion of its facilities subject to the Commission's jurisdiction without the Commission first finding that the abandonment would not negatively affect the present or future public convenience and necessity. The Commission bases its decisions on technical competence, financing, rates, market demand, gas supply, environmental impact, long-term feasibility, and other issues concerning a proposed project.

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<sup>1</sup> "We," "us," and "our" refers to environmental staff of the Commission's Office of Energy Projects.

### **3.0 Proposed Facilities**

Transco proposes to abandon in-place approximately 21.6 miles of its 24-inch-diameter pipeline lateral, and abandon by removal, the NPI 956 Platform and all appurtenant facilities. Project activities would start at the existing NPI 956 Platform and continue to a point 3.5 miles off the Texas coastline. General location of the Project is shown in figure 1.

### **4.0 Non-jurisdictional Facilities**

Non-jurisdictional facilities are those facilities that are related to the Project for the purpose of delivering, receiving, or using the proposed natural gas volumes, and include facilities to be built and owned by other companies, that are not subject to the FERC jurisdiction. There are no non-jurisdictional facilities associated with this Project.

### **5.0 Permits, Approvals, and Regulatory Consultations**

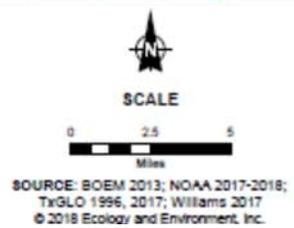
Transco would need to obtain all necessary permits, licenses, clearances, and approvals related to abandonment of the proposed Project. Table 1 lists the federal, state, and local permits and approvals Transco would obtain for this Project. Transco would be responsible for obtaining and abiding by all permits and approvals required for construction and operation of the Project regardless if they appear in this table. Transco would utilize an environmental inspector (EI) during construction. On February 24, 2017, Transco received approval from the Bureau of Safety and Environmental Enforcement (BSEE) for their site clearance verification plan for the removal of the NPI 956 Platform.

### **6.0 Construction, Operation, and Maintenance Procedures**

Project activities are anticipated to begin immediately after Project approval and last approximately 2 weeks. Transco anticipates utilizing two self-propelled dive support vessels (one with dynamic positioning equipment and the other with a 4-point anchor system) during the pipeline abandonment activities, and one self-propelled heavy lift vessel with dynamic positioning equipment is expected to be utilized during Platform 956 abandonment with a total of approximately 30 crew members to perform Project activities. Project access would be provided by boat on existing waterways.



- Point of Abandonment
- Major Shipping Fairway
- NPI Lateral - State Regulated
- NPI Lateral - Federally Regulated
- Pipeline-Inactive
- Pipeline-Natural Gas
- Federal-State Boundary/Coastal Zone Boundary
- Lease Block
- NPI 956 Platform



**Figure 1-1**  
**General Location of**  
**Project Facilities**  
 North Padre Island  
 Lateral Abandonment  
 Project

**Figure 1**  
**General Location Facilities**

<b>Table 1: Permits and Approvals</b>		
<b>Administrating Agency</b>	<b>Permit/Approval/Review</b>	<b>Status</b>
<b>Federal</b>		
Federal Energy Regulatory Commission	Certificate of Public Convenience and Necessity - Section 7(b) of the NGA	Application submitted in April 2018
BSEE	Federal Authorization for NPI 956 Platform Removal	Approval Received February 24, 2017
BSEE	Federal Right-of-way Relinquishment and Pipeline Decommissioning Authorization	Authorization Received March 9, 2017
BSEE	Platform Decommissioning Authorization and Site Clearance Verification	Authorization Received February 24, 2017
U.S. Army Corps of Engineers (USACE)	Section 10, Rivers and Harbors Act	Permit Received July 20, 2017
National Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries)	Endangered Species Act (ESA) Section 7 Consultation	NMFS correspondence from March 23, 2017 authorized USACE permit
<b>State</b>		
Texas General Land Office	State Right-of-Way Relinquishment and Pipeline Decommissioning Authorization	Consultation Conducted by USACE Permit Process  Permit Received July 20, 2017
Texas Historical Commission	Section 106 Consultation	No effects comments received February 15, 2018
Texas Parks and Wildlife	Agreement to Abandon Platform in Block A42	Agreement Received March 18, 2018

Prior to abandonment, a subsea end connector, flange, and valve would be installed at the end of the NPI Lateral located 3.5 miles from shore for the purposes of maintaining the remaining pipeline extending shoreward by using temporary pig<sup>2</sup> traps in the future, as needed. The NPI Lateral would be flushed of all detectable hydrocarbons and disconnected subsea from the NPI 956 Platform. Divers would ensure that all valves are in the appropriate position prior to flushing the lateral with filtered seawater from a pig launcher located on the NPI 956 Platform. Once the lateral has been filled with seawater, the pressure would be released at the platform and any fluid released would be collected and taken back to shore for proper disposal. The NPI Lateral ends would be filled with filtered seawater, plugged and buried 3 feet below the seafloor, covered with sandbags, and abandoned in place. To disconnect the 24-inch NPI lateral from the NPI 956 Platform, divers would jet out the tube turn, cut out the tube turn (including 25 feet of pipe), and install a temporary plug/seal at the end of the pipe. Metering facilities, the tube turn, and associated piping at the NPI 956 Platform would be removed and taken to shore. Transco would close the valves at the connection of the NPI 956 Platform and seaward upstream pipeline, Segment 6009, which has been abandoned in place by its owner/operator. The NPI 956 Platform, itself, would be mechanically cut at or below 15 feet below the mudline per Outer Continental Shelf Lands Act requirements. The NPI 956 Platform would be taken to NPI Block A-42 and reefed at an existing reef site, per the BSEE permit.

The entire Project would be within open water; therefore, the FERC's *Upland Erosion Control, Revegetation, and Maintenance Plan* and *Wetland and Waterbody construction and Mitigation Procedures* would not be applicable for this Project. Transco would utilize a pollution dome in the event of any inadvertent releases of materials. A pollution dome works as a containment system using a subsea collector that collects any leakage and pumps it to an approved container for proper disposal.

Transco states that polychlorinated biphenyls (PCB) contamination greater than 50 parts per million is not present at existing Project facilities. However, if piping with PCB concentrations greater than 50 parts per million is encountered during the abandonment work, Transco would dispose of all piping and all related media in accordance with the EPA Toxic Substance Control Act pursuant to the Commission's regulations. Therefore, the Project would not impact any PCB contamination.

## **7.0 Land Requirements**

As the NPI Lateral would be abandoned in place, there would be no new land requirements for the pipeline segment of the Project. During construction, 0.06 acre of seafloor would be disturbed for removal activities. Repurposing of the NPI 956 Platform

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<sup>2</sup> A "pig" is a tool that the pipeline company inserts into and pushes through the pipeline for cleaning the pipeline, conducting internal inspections, or other purposes.

as a reef would require seafloor area within an existing artificial reef location. The Project would be confined to existing offshore right-of-way and no extra workspaces, access roads, or contractor yards would be required. After completion of abandonment activities, the site and right-of-way would revert back to the Department of the Interior.

## **B. ENVIRONMENTAL ANALYSIS**

This analysis describes the condition of the existing natural and human environment and the potential impacts on it resulting from abandonment of the pipeline lateral and NPI 956 Platform. Due to the nature and location of abandonment activities in the Gulf of Mexico and the duration of construction, review of the proposed Project indicates it would neither affect nor have conflict with:

- geology and mineral resources (no mines, quarries, or pits);
- soils;
- groundwater;
- wetlands;
- state-designated special use waters (outstanding state resource waters, exceptional and reference reach waters);
- vegetation;
- federally-owned lands;
- hazardous waste sites;
- national or state wild or scenic rivers, national trails, nature preserves, wilderness areas, registered natural landmarks, tribal reservations, or coastal zone management areas; and
- noise sensitive areas.

### **1.0 Surface Water Resources**

#### Surface Water Resources

The abandonment would occur entirely under the marine waters of the Gulf of Mexico. Project activities within these waters would be limited to the decks of existing platforms, pipe removal locations, and jetting. These activities would be temporary and no activities are anticipated to have a negative long term affect water quality.

Temporary impacts on surface waters may occur near the ocean floor from the 0.06 acre of excavation disturbance. These impacts include temporary sedimentation, and plumes of turbidity from divers. However, ocean currents would quickly disperse any suspended sediments from the Project area, therefore minimizing sedimentation impacts on surface water. Additionally, a sediment containment device would be used to collect water and sediments, and these materials would be sent to a barge for disposal.

The proposed abandoned pipe would be pigged with filtered seawater to flush the pipeline of hydrocarbons. Fluid releases would be captured in an approved container and transported for proper disposal, and pollution prevention equipment would be installed over the work area. Furthermore, the U. S. Army Corps of Engineers (USACE) issued a Section 10 Rivers and Harbors permit for the proposed decommissioning activities on

July 20, 2017. Therefore, we do not anticipate the Project would adversely impact local water quality.

## **2.0 Fisheries and Wildlife**

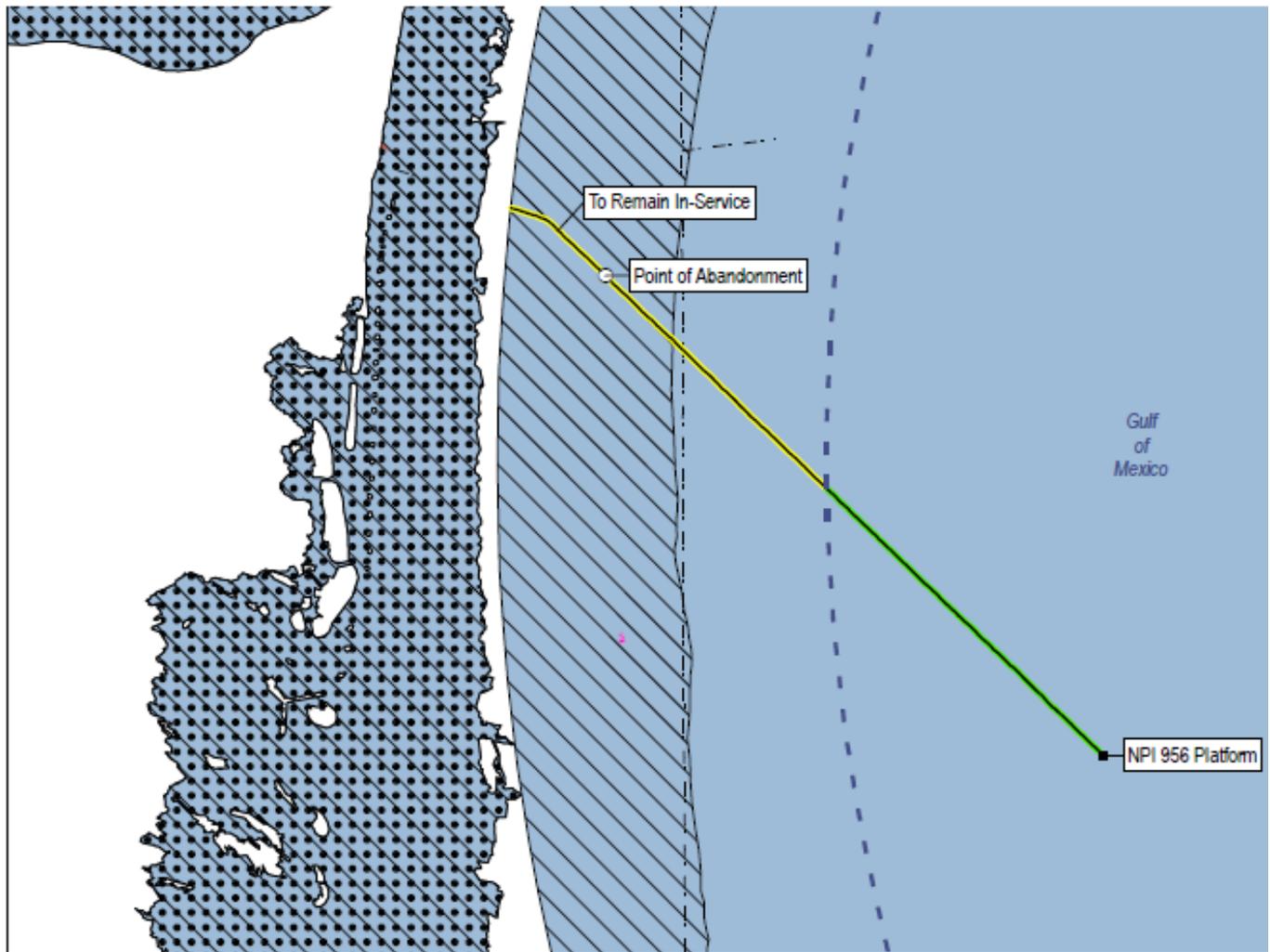
### Fisheries

Due to the wide variation of habitat requirements for all life history stages, essential fish habitat (EFH) for the Gulf of Mexico includes all estuarine and marine waters and substrates from the shoreline to the seaward limit of the Exclusive Economic Zone. Therefore, Transco would follow the Fishery Management Plans provided by the Gulf of Mexico Fishery Management Council under the Magnuson-Stevens Fishery Conservation and Management Act. The Project would cross stone crab, reef fish, and coastal migratory pelagic (open water) and shrimp habitats. Figure 2 depicts the location of each EFHs affected by the Project.

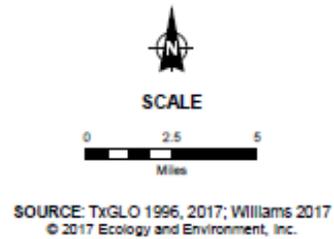
Migratory fish species may also be present in the vicinity of abandonment activities. These species include tuna, billfish, swordfish, and sharks, and they fall under the National Oceanic and Atmospheric Administration Fisheries management.

Underwater sounds from cutting and jetting may temporarily disturb and displace marine species from regular feeding habitats. Abandonment activities may also temporarily suspend bottom sediments that would decrease available seafloor oxygen, thus potentially affecting fish feeding behavior.

Pipeline and platform abandonment activities potentially affecting offshore fisheries and EFH are noise and lights due to vessel presence, accidental release of hydrocarbons, increased turbidity, vessel collision, and removal of a structure acting as a reef. There are documented migratory pelagic species, reef fish, and shrimp in proximity of the NPI Lateral and NPI 956 Platform.



- |                                     |  |
|-------------------------------------|--|
| ○ Point of Abandonment              | Essential Fish Habitat                             |
| — NPI Lateral - State Regulated     | ■ Coral Reef                                       |
| — NPI Lateral - Federally Regulated | ▨ Stone Crab                                       |
| — Pipeline-Inactive                 | ▣ Red Drum   |
| - - - Pipeline-Natural Gas          | ■ Reef Fish, Coastal Migratory Pelagic, and Shrimp |
| - - - Coastal Zone Boundary         |  |



**Figure 2**  
**Essential Fish Habitat**

Transco would utilize two self-propelled dive support vessels (one with dynamic positioning equipment and the other with a 4-point anchor system) during the pipeline abandonment activities. Each vessel is expected to make one trip to its respective construction location, perform the necessary abandonment activities, and then return to port. Therefore, each vessel would make a single round trip equaling two round trips for pipeline abandonment. Two additional self-propelled tug boats would assist the heavy lift vessel with deployment of a material barge which would be used to transport the deck, vent boom, helideck and equipment to a scrap yard onshore. As planned, the heavy lift vessel would leave port, remove all topside deck structures and place them aboard the material barge. The materials would be secured to the material barge, and the tugs would take the material barge to the scrap yard. The two tugs would make one round trip from and back to port. After the jacket/piles are cut, the heavy lift vessel would then lift, secure the jacket/piles to the heavy lift vessel, and tow the jacket/piles section to North Padre Island A-42 to be placed as an artificial reef. The heavy lift vessel would then return to port thus making one round trip.

Fish may be attracted to the removal vessels (barges, tug boats, etc.) as a floating structure operating in the environment. Vessels would likely maintain exterior lighting for working at night and for navigational and aviation safety in accordance with applicable federal safety regulations. This artificial lighting may also attract and directly or indirectly impact natural resources. Furthermore, pelagic fishes may be attracted to fixed and drifting surface structures. The feeding of predator species could be enhanced by attracting and concentrating smaller fish species.

A public notice was issued March 21, 2017 by USACE that stated the Project would not have a substantial adverse impact on EFHs or federally managed fisheries in the Gulf of Mexico. The National Marine Fisheries Service (NMFS) concurred with this public notice in an e-mail March 23, 2017 stating that any adverse effects that might occur on marine fishery resources would be minimal. Therefore, consultation for EFH is complete.

Because of the limited extent and duration of construction (about 2 weeks), the proposed construction methods, and the implementation of the proposed avoidance and minimization measures (such as abandoning the pipeline in-place instead of removing it), we conclude that the Project would not cause any short- or long-term effects on fisheries or EFHs, and any impacts would not be significant. As noted above, EFH consultation for the Project is complete.

### Wildlife

Wildlife species near the Project may be affected by abandonment-related activities or noise. The Project area habitat types may provide foraging and cover habitat

for several species of marine birds, sea turtles and marine mammals. Transco provided its US Department of Interior (USDOI), Bureau of Ocean Energy Management (BOEM) site-specific EA in December, 2016 to discuss impacts on wildlife and federally-listed species. The BOEM EA tiers from multiple NEPA documents<sup>3</sup> which focus on the eastern, central and western planning areas in the Gulf of Mexico.

The NPI 956 Platform would be abandoned using the State of Texas' Rigs to Reef Program, and would be permanently relocated to the existing PN-A-42 reef site on the seafloor in the North Padre Island Block A-42 to provide permanent artificial habitat, granted by the Texas Parks and Wildlife in February, 2018.

Abandonment and relocation of the platform would result in short- and long-term impacts on wildlife including displacement, stress, injury, and mortality of some mammals, reptiles, birds, and amphibians that would be unable to leave the work areas. Transco would minimize or avoid direct impacts on wildlife during construction by adopting the BSEE recommendations of implementing the BOEM Notice to Lessees and Operators (NTL) No. 2012-G01 Vessel Strike and Avoidance Reporting. Specifically, it requires vessel operators and crews to maintain a vigilant watch for marine mammals and sea turtles instead of a wildlife observer. The NTL also requires that vessel crews report sightings of any injured or dead protected species (marine mammals and sea turtles) immediately.

Although some wildlife species would be affected by the Project, most of the impacts on wildlife would be short-term and limited to the abandonment period. Additionally, all on-site personnel would receive training in the event that wildlife are found near the Project area or in the excavated areas during construction. Furthermore, areas adjacent to the Project site provide similar abundant habitats for displaced wildlife during abandonment of the Project facilities. Based on the proposed avoidance, minimization, and restoration measures, we conclude the abandonment of the Project would not have a significant impact on local wildlife populations or habitat.

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<sup>3</sup> Structure-Removal Operations on the Gulf of Mexico Outer Continental Shelf: Final Programmatic Environmental Assessment (PEA) (USDOI, Minerals Management Service, 2005);

Final Supplemental Environmental Impact Statement for Gulf of Mexico OCS, Oil and Gas Lease Sales: 2016 and 2017; Central Planning Area Lease Sales 241 and 247; Eastern Planning Area Lease Sale 226 (Supplemental Environmental Impact Statement [SEIS]) (USDOI, BOEM, 2015); and

Final Supplemental Environmental Impact Statement for the Gulf of Mexico OCS Oil and Gas Lease Sale: 2016; Western Planning Area Lease Sale 248 (SEIS) (USDOI, BOEM, 2016).

## Marine Birds

Seabirds live far from land most of the year, and only return to coastlines during breeding season. Four categories of seabirds have been documented in the Gulf of Mexico: summer migrants, summer residents that breed in the Gulf of Mexico, winter residents, and permanent resident species.

Pipeline abandonment activities potentially affecting coastal and marine birds include vessel presence, vessel traffic, vessel collision with birds, marine debris, accidental release of hydrocarbons, and platform removal. Marine and pelagic birds may use vessels for resting, feeding, or shelter. Artificial lighting may also attract marine birds. Vessel traffic may disturb feeding, resting, or nesting behavior. Temporary impacts may occur due to vessel presence but would be minimized by the short duration of activities at each site and the use of pollution prevention measures to capture possible releases of hydrocarbons. Due to the limited scope of the Project that would occur entirely offshore, and Transco's proposed minimization methods, we conclude that impacts on marine birds would be negligible.

## Marine Mammals

All marine mammals are protected species under the Marine Mammal Protection Act. There are no specific critical habitats designated offshore of the Gulf of Mexico for threatened and endangered species of marine mammals. The Gulf of Mexico contains a broad range of habitat for marine mammals. The marine mammals that may potentially occur within the abandonment area are the

- dwarf and pygmy sperm whale;
- Cuvier's beaked whale;
- Blainvilles', Gervais', and Sowerby's beaked whales;
- Atlantic spotted dolphin;
- bottlenose dolphin;
- clymene dolphin;
- false killer whale;
- Fraser's dolphin;
- killer whale;
- melon-headed whale;
- pantropical spotted dolphin;
- pygmy killer whale;
- short-finned pilot whale;
- Risso's dolphin;
- rough-toothed dolphin;

- spinner dolphin;
- striped dolphin;
- Bryde's whale; and
- minke whale.

Transco would implement the BSEE NTL discussed above, which requires vessel operators and crews to maintain a vigilant watch for marine mammals and sea turtles. Additionally, the NTL requires that vessel crews report sightings of any injured or dead protected species (marine mammals and sea turtles) immediately, and boat spill clean-up and containment measures. Given these measures and the limited scope of the Project, we conclude that impacts on marine mammals would be minimal, if any.

### Federally Threatened and Endangered Species

Section 7 of the Endangered Species Act (ESA), as amended, requires the lead federal agency to ensure that any action authorized, funded, or carried out by that agency does not jeopardize the continued existence of a federally listed endangered or threatened species, or result in the destruction or adverse modification of any designated critical habitat of a federally listed species. The agency is required to consult with the U.S. Wildlife and Fisheries Service (USFWS) and/or NMFS to determine whether any federally listed endangered or threatened species or any of their designated critical habitats are found near the proposed Project, and to determine the proposed action's potential effects on those species or critical habitats. ESA listed species assessed for the Project are discussed below.

#### Marine Mammals

Endangered marine mammals potentially occurring within the Project are the:

- west Indian manatee;
- sperm whale;
- blue whale;
- fin whale;
- humpback whale;
  
- North Atlantic whale; and
- sei whale.

There are no specific critical habitats designated offshore the Gulf of Mexico for threatened and endangered species of marine mammals. The USACE received

correspondence from NMFS in an e-mail dated March 23, 2017, stating that any adverse effects on these species would be minimal.

### *Whales*

The whale species listed above are all deep-water migratory species. The injury or death of whale species could be possible if a work vessel's propeller or hull hit a large individual near the surface. However, the listed whale species typically remain near the bottom of deep channels, limiting the likelihood of a vessel strike. Because the work vessels would remain within established navigational channels, would use low transit speeds, avoid underwater substrate disturbance, and transiting would be conducted within a limited construction window, the potential for striking and injuring or killing whales is low. Therefore, we conclude that the proposed Project *may affect, but is not likely to adversely affect* the sperm whale, blue whale, fin whale, humpback, North Atlantic and sei whale.

### *West Indian Manatee*

Manatees are marine mammals that have been identified within St. Bernard and Plaquemines Parishes. The West Indian manatee is a marine mammal most commonly found in coastal estuaries and rivers of the U.S. This species feeds on submerged aquatic vegetation in freshwater, estuarine, and marine habitats. The West Indian manatee and its subspecies (the Antillean manatee [*Trichechus manatus manatus*] and the Florida manatee [*Trichechus manatus latirostris*]) are listed as endangered under the ESA and depleted under the Marine Mammal Protection Act; however, it was recently proposed for reclassification as threatened (81 Federal Register [FR] 1000, January 8, 2016). It is a slow-moving animal, which tends to prefer shallower coastal habitats. The deep-water transit routes proposed of the Project, as well as implementation of the BSEE NTL for vessel strike and avoidance reporting, would minimize any potential impacts on this species. Therefore, we conclude the Project *may affect, but is not likely to adversely affect* the West Indian Manatee.

### *Atlantic sturgeon (Gulf of Mexico subspecies)*

The federally threatened Atlantic sturgeon (Gulf of Mexico subspecies) was identified as potentially occurring near the Project. The project would not cross any final critical habitat designated by NMFS.

The Gulf of Mexico subspecies of Atlantic sturgeon can be found along the entire southeastern U.S. coast in both freshwater and marine environments. Larval, young of the year, and juvenile Atlantic sturgeon congregate within freshwater rivers and streams such as the Mississippi River and its tributaries. Adults may move out into estuarine and marine environments to feed, although they migrate back to freshwater rivers to spawn.

The injury or death of an Atlantic sturgeon could be possible if a work vessel's propeller or hull hit a large individual near the surface. However, sturgeon typically remain near the bottom of deep channels, limiting the likelihood of a vessel strike. Because the work vessels would remain within established navigational channels, would use low transit speeds, avoid underwater substrate disturbance, and transiting would be conducted within a limited construction window, the potential for striking and injuring or killing an Atlantic sturgeon is low. Therefore, we conclude that the proposed Project *may affect, but is not likely to adversely affect* the Gulf of Mexico subspecies of Atlantic sturgeon.

### Smalltooth sawfish

The federally endangered smalltooth sawfish was identified as potentially occurring near the Project. The project would not cross any critical habitat designated by NMFS. Smalltooth sawfish live in tropical seas and estuaries of the Atlantic Ocean. They are most at home in shallow, coastal waters, and sometimes enter the lower reaches of freshwater river systems. Juveniles live in estuaries and the smaller habitats within them, such as shallow portions of bays, lagoons, and rivers. Larger juveniles and adults can be found in estuaries, off beaches, and along deep-water reefs.

The injury or death of a smalltooth sawfish would be possible if a work vessel's propeller or hull hit a large individual near the surface. However, smalltooth sawfish typically remain near the ocean floor, limiting the likelihood of a vessel strike. Because the work vessels would remain within established navigational channels, would use low transit speeds, avoid underwater substrate disturbance, and transiting would be conducted within a limited construction window, the potential for striking and injuring or killing a smalltooth sawfish is low. Therefore, we conclude that the proposed Project *may affect, but is not likely to adversely affect* the Gulf of Mexico subspecies of smalltooth sawfish.

### Sea Turtles

We combined the mitigation and effects determinations for the five sea turtle species below because of the species' similar habitat usage, behavior, and potential affects by the proposed Project.

#### *Loggerhead sea turtle*

The loggerhead sea turtle is listed as threatened under the ESA is most commonly found over the continental shelves around the world, and may be found within the Project area. Sightings have been confirmed in St. Bernard Parish. Loggerheads can move large distances between foraging areas, breeding areas, and nesting locations (Plotkin, 2003).

Loggerhead turtles forage on both hard and soft benthic substrates, feeding on a variety of prey, including benthic and pelagic invertebrates, seaweed, fish, and algal mats (Lutz and Musick, 2003; NMFS and USFWS, 2008).

#### *Green sea turtle*

The green sea turtle is found throughout the world's oceans where temperatures remain above 68°F (20°C), and often feed in coastal waters. The Florida breeding population has been listed as federally endangered. Green sea turtles return regularly to the same nesting and feeding sites, which can lead to common migratory routes (Luschi and Papi, 2003). As one of the more coastal species of sea turtle, green sea turtles forage primarily on benthic organisms. Food sources include seagrasses and algae as well as animals such as mollusks, crustaceans, bryozoans, sponges, jellyfish, polychaetes, echinoderms, fish, and fish eggs (Bjorndal, 1997; NMFS and USFWS, 1991).

#### *Leatherback sea turtle*

The leatherback sea turtle, listed as endangered under the ESA, is the largest and most pelagic of the sea turtles. Leatherback sea turtles can feed on a variety of foods, including benthic invertebrates, fish, seaweed, jellyfish, and tunicates (Bjorndal, 1997; NMFS and USFWS, 1992).

#### *Hawksbill sea turtle*

The hawksbill sea turtle, listed as endangered under the ESA, is widely distributed throughout the tropical waters of the world's oceans. They have been shown to migrate significant distances between foraging and nesting sites (Plotkin, 2003). Hawksbill turtles also return to the same nesting beaches to reproduce. Hawksbill sea turtles can nest on average three to five times per season (NMFS, 2014b). Juvenile hawksbill sea turtles feed mostly on algal mats floating in the open water until the adult stage when they diversify to feeding off hard bottom substrates, coral reefs, seagrass beds, and mangroves.

#### *Kemp's ridley sea turtle*

The Kemp's ridley sea turtle ranges in the Atlantic Ocean as far north as New Jersey; however, they are primarily found in the Gulf of Mexico near Louisiana and Florida. This species mates offshore and females migrate to the Gulf of Mexico to lay eggs. Almost all of the known egg laying occurs at a 16-mile-stretch of beach in Tamaulipas, Mexico. Padre Island, Texas, is another identified nesting beach. Like the other sea turtle species, the Kemp's ridley sea turtle feeds on benthic invertebrates, seaweed, jellyfish, or small fish (Lutz and Musick, 2003).

### *Sea Turtle Effects Determination*

Project activities would occur entirely offshore, and therefore the Project would have no effect on sea turtle nesting habitat. All of the sea turtle species can be injured or killed if struck by a vessel, particularly if struck by an engaged propeller. Increased vessel traffic could result in a higher number of collisions between ships and sea turtles, which would increase the occurrence of sea turtle injuries or fatalities. Although adult sea turtles can be visible at the surface during the day and in clear weather, they are difficult to spot from a moving vessel when resting below the water surface or during nighttime or periods of inclement weather. Sea turtles spend most of their lives submerged and thus are difficult to see by vessel operators. Using existing piers and navigation channels for vessel transit would limit construction vessel traffic to within the Project area, thereby reducing strike potential. Vessel crew members would maintain a vigilant watch for marine animals and sea turtles during day and night time hours.

Because Transco would implement the BSEE NTL discussed above, which requires vessel operators and crews to maintain a vigilant watch for sea turtles, as well as keeping vessel speeds at a minimum and establishing a minimum distance between the vessel and any turtle in the area, as well as the short construction period, the chance for injuring or killing any of the five ESA-listed turtle species would be low. Therefore, we conclude that the proposed Project *may affect, but is not likely to adversely affect* the loggerhead, green, leatherback, hawksbill, or Kemp's ridley sea turtles.

### ESA Consultation Status

The USACE received correspondence from NMFS in an e-mail dated March 23, 2017, that indicated it had no objections to the USACE permit. However, in order to complete FERC's ESA consultation requirements, we must receive concurrence from NMFS with our determinations of effect for the six whale species, manatee, Atlantic sturgeon, smalltooth sawfish, and five turtle species. Because consultation is not yet complete, **we recommend that:**

**Transco should not begin abandonment of the Project until:**

**a. the staff completes ESA consultation with the NMFS; and**

**b. Transco has received written notification from the Director of the Office of Energy Projects (OEP) that abandonment activities and/or use of mitigation may begin.**

### **3.0 Cultural Resources**

Transco contacted the Texas State Historic Preservation Office (SHPO) regarding the Project, providing a project description and mapping. In a letter dated February 15, 2018, the SHPO indicated that the Project would “not pose adverse effects to historic properties.” We agree with the SHPO.

Transco provided a plan to address the unanticipated discovery of historic properties and human remains during construction. We requested minor revisions to the plan. Transco provided a revised plan which we find acceptable.

Since the pipeline would be abandoned in-place, and the repurposing of the platform would utilize only portions of the seafloor previously affected by the pipeline and platform, no tribal consultation was undertaken.

### **4.0 Land Use, Recreation, and Visual Resources**

The proposed Project would be entirely within existing right-of-way located between a point 3.5 miles offshore and the NPI 956 Platform, located 25.1 miles offshore in the Gulf of Mexico. No changes in land use would occur as a result of the Project. The Project would not impact federally-owned lands, and would not be located within 0.25 mile of any National Park Service units, Indian reservations, National Forests, National Wildlife Refuges, National Wilderness Areas, or registered National Landmarks. Additionally, the Project would not be located within 0.25 mile of any state parks, forests, or wildlife management areas and would not cross hazardous waste sites. The Project would not impact any natural, recreational, or scenic areas.

The Project would be located within the Texas Coastal Zone. The Project has already obtained its USACE Section 10 Rivers and Harbors Permit, and through that process, a Texas Coastal Zone Consistency Determination has been analyzed and determined consistent with the Coastal Zone Management Act.

The Project does not include new aboveground facilities and would not create any new visual impacts. However, Transco would remove the platform, which would return the Project area more to its natural visual landscape. Therefore, we conclude that the Project would not have significant impacts on land use, recreation, or visual resources.

### **5.0 Air Quality and Noise**

#### Air Quality

Project abandonment activities would temporarily impact air quality in the Project area. However, the Project would not result in any new sources of operational air emissions and would therefore not impact air quality after abandonment.

Ambient air quality is protected by the Clean Air Act (CAA) of 1970, as amended in 1977 and 1990. The Environmental Protection Agency (EPA) oversees the implementation of the CAA and establishes National Ambient Air Quality Standards (NAAQS) to protect human health and welfare.<sup>4</sup> NAAQS have been developed for seven “criteria air pollutants”, including nitrogen dioxide, carbon monoxide (CO), ozone, sulfur dioxide (SO<sub>2</sub>), particulate matter less than or equal to 2.5 microns in aerodynamic diameter (PM<sub>2.5</sub>), particulate matter less than or equal to 10 microns in aerodynamic diameter (PM<sub>10</sub>), and lead, and include levels for short-term (acute) and long-term (chronic) exposures. The NAAQS include two standards, primary and secondary. Primary standards establish limits that are considered to be protective of human health and welfare, including sensitive populations such as children, the elderly, and asthmatics. Secondary standards set limits to protect public welfare, including protection against reduced visibility and damage to crops, vegetation, animals, and buildings (EPA 2017). Additional pollutants, such as volatile organic compounds (VOC) and hazardous air pollutants (HAP), are emitted during fossil fuel combustion. These pollutants are regulated through various components of the CAA that are discussed further below.

The EPA, and state and local agencies have established a network of ambient air quality monitoring stations to measure concentrations of criteria pollutants across the U.S. The data are then averaged over a specific time period and used by regulatory agencies to determine compliance with the NAAQS and to determine if an area is in attainment (criteria pollutant concentrations are below the NAAQS), nonattainment (criteria pollutant concentrations exceed the NAAQS) or maintenance (area was formerly nonattainment and is currently in attainment). The Project area would be completely in offshore waters of Texas, which are unclassified under the NAAQS. The nearest coastal counties, Kenedy and Kleberg Counties, Texas, are designated as attainment or unclassified, and thus treated as attainment, for all criteria pollutants.

Greenhouse gases occur in the atmosphere both naturally and as a result of human activities, such as the burning of fossil fuels. GHGs are gases that absorb infrared radiation in the atmosphere, and an increase in emissions of these gases has been determined by the EPA to endanger public health and welfare by contributing to human-induced global climate change. The most common GHGs emitted during fossil fuel combustion and natural gas transportation are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). Emissions of GHGs are typically expressed in terms of CO<sub>2</sub> equivalents (CO<sub>2</sub>e), where the potential of each gas to increase heating in the atmosphere is expressed as a multiple of the heating potential of CO<sub>2</sub> over a specific timeframe, or its global warming potential (GWP). The 100-year GWP of CO<sub>2</sub> is 1, CH<sub>4</sub> is 25 and N<sub>2</sub>O is 298.

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<sup>4</sup> The current NAAQS are listed on EPA's website at <https://www.epa.gov/criteria-air-pollutants/naaqs-table>.

## *Regulatory Requirements*

Due to the temporary nature of Project activities in an area classified as attainment, there are no applicable federal or state air quality permits that are necessary for the Project.

## *Construction Emissions Impacts and Mitigation*

Project abandonment would result in temporary, localized emissions that would last the duration of construction activities of approximately 2 weeks. Transco anticipates utilizing two self-propelled dive support vessels during the pipeline abandonment activities, and one self-propelled heavy lift vessel with dynamic positioning equipment is expected to be utilized during Platform 956 abandonment, totaling approximately 30 crew equipped to perform all construction activities. Support vessels and equipment would generate exhaust emissions through the use of diesel or gasoline engines in order to complete the field work and support the field crew onboard the vessels. Because all Project activities would occur offshore and work would primarily be completed under water, fugitive dust emissions would not be generated.

Emissions from abandonment activities are not expected to result in a violation or degradation of ambient air quality standards. Transco would minimize construction exhaust emissions by limiting engine speeds to a minimum required to safely accomplish abandonment activities. Transco would also minimize emissions through the use of low sulfur diesel fuel products, specifications of which are controlled by federal and state air pollution control regulations.

Emissions would occur over the duration of construction activity and would be emitted at different times throughout the Project area. Emissions from abandonment activities would be relatively minor and would result in short-term, localized impacts in the immediate vicinity of construction work areas. Given the temporary nature of the Project, we conclude air quality impacts from the Project would not result in significant impacts on local or regional air quality. No operational emissions would be associated with the Project.

## Noise

Abandonment activities would affect the local noise environment in the Project area. The ambient sound level of a region, which is defined by the total noise generated within the specific environment, is usually comprised of sounds emanating from both natural and artificial sources. At any location, both the magnitude and frequency of environmental noise may vary considerably over the course of the day and throughout the week, in part due to changing weather conditions and the impacts of seasonal vegetative cover. There are no noise sensitive areas associated with the Project. Noise from

abandonment activities would be temporary and intermittent and therefore, we conclude, would not have a significant impact on noise quality.

## **6.0 Reliability and Safety**

The transportation of natural gas by pipeline involves some risk to the public in the event of an accident and subsequent release of gas. The greatest hazard is a fire or explosion following a major pipeline rupture. Methane, the primary component of natural gas, is colorless, odorless, and tasteless. It is not toxic, but is classified as a simple asphyxiate, possessing a slight inhalation hazard. If breathed in high concentration, oxygen deficiency can result in serious injury or death.

The Department of Transportation pipeline standards are published in 49 CFR 190-199. Part 192 of 49 CFR specifically addresses natural gas pipeline safety issues and prescribes the minimum standards for operating and maintaining pipeline facilities. Part 192 also requires a pipeline operator to establish a written emergency plan that includes procedures to minimize the hazards in a natural gas pipeline emergency.

Project activities would represent a minimum increase in risk to the public during abandonment activities. However, we are confident that through adherence to the applicable Department of Transportation and Occupational Safety and Health Administration requirements, the Project facilities would be abandoned safely.

## **7.0 Cumulative Impacts**

In accordance with NEPA, we considered the cumulative impacts of the Project and other projects or actions in the area. Cumulative impacts represent the incremental effects of the proposed action when added to other past, present, or reasonably foreseeable future actions. Cumulative impacts can result in individually minor actions becoming collectively significant impacts on environmental resources if they take place in the same general area over a given period of time.

The purpose of this analysis is to identify and describe cumulative impacts that would potentially result from implementation of the Project. The cumulative impact analysis generally follows the methodology set forth in relevant guidance from the Council on Environmental Quality and the EPA. Under these guidelines, inclusion of other actions within the analysis is based on identifying commonalities of impacts from other actions to potential impacts that would result from the Project. An action must meet the following criteria to be included in the cumulative impacts analysis:

- impact a resource area potentially affected by the Project;
- cause this impact within all, or part, of the Project area; and
- cause this impact within all, or part, of the time span for the potential impact of the Project.

The EA analyzed the Project impacts on surface water resources, fisheries, wildlife, cultural resources, land use, recreation, visual resources, reliability and safety, air quality, and noise. As described in section B of this EA, the Project-related abandonment activities would not impact geological or mineral resources, soils, wetlands, groundwater, vegetation, and state designated special use waters, recreational land use, or operational air quality. Therefore, impacts on these resources would not be realized and are not evaluated for cumulative impacts. We identified no projects proposed for construction that could potentially have cumulative impacts on Project-affected resources. Based on the nature and short duration of abandonment activities, we conclude that the Project would not contribute to cumulative impacts in the area.

## C. ALTERNATIVES

In accordance with NEPA and Commission policy, we evaluated alternatives to the Project to determine whether they would be reasonable and environmentally preferable to the proposed action. These alternatives included the no-action alternative and an abandonment by removal alternative for the pipeline. Due to the proposed Project involving the abandonment of existing facilities, no site alternatives or system alternatives were identified. The evaluation criteria used for developing and reviewing alternatives were:

- ability to meet the Project's stated objective;
- technical and economic feasibility and practicality; and
- significant environmental advantage over the proposed action.

Under the No-Action Alternative, Transco would not abandon the NPI 956 Platform or the pipeline lateral and none of the environmental impacts identified in this EA would occur. The No-Action Alternative would not accomplish the Project objective of abandoning the facilities that are idle and no longer needed, which would cause Transco to continue maintaining these facilities or they could fall into a state of disrepair. We have dismissed this as a reasonable alternative as it could not meet the Project's objectives.

We evaluated the alternative of abandonment by removal rather than abandonment in place of the pipeline lateral. The removal of approximately 21.6 miles of pipeline within open water would result in significantly greater environmental impacts than the proposed action without any significant environmental advantages over the proposed Project. Therefore, we do not recommend this alternative.

Based on the limited environmental impact associated with the Project, we did not identify any unresolved resource conflicts which would present a need to examine further alternatives. Additionally, no comments were received regarding resources that would be impacted by the Project. Therefore, because the impacts associated with the proposed Project are not significant, we did not evaluate additional alternatives. We conclude that the proposed action is the preferred alternative to meet the Project objectives.

## D. CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis in this EA, we have determined that if Transco abandons the facilities in accordance with its application and supplements, and the staff's recommended mitigation measures, approval of this proposal would not constitute a major federal action significantly affecting the quality of the human environment. We recommend that the Commission Order (Order) contain a finding of no significant impact and include the mitigation measures listed below as conditions to any authorization the Commission may issue.

1. Transco shall follow the construction procedures and mitigation measures described in its application and as identified in the EA, unless modified by the Order. Transco must:
  - a. request any modification to these procedures, measures, or conditions in a filing with the Secretary of the Commission (Secretary);
  - b. justify each modification relative to site-specific conditions;
  - c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and
  - d. receive approval in writing from the Director of OEP **before using that modification.**
  
2. The Director of OEP, or the Director's designee, has delegated authority to address any requests for approvals or authorizations necessary to carry out the conditions of the Order, and take whatever steps are necessary to ensure the protection of environmental resources during activities associated with abandonment of the project. This authority shall allow:
  - a. the modification of conditions of the Order;
  - b. stop-work authority; and
  - c. the imposition of any additional measures deemed necessary to ensure continued compliance with the intent of the conditions of the Order as well as the avoidance or mitigation of unforeseen adverse environmental impact resulting from project abandonment activities.
  
3. **Prior to any construction**, Transco shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, environmental inspectors (EIs), and contractor personnel will be informed of the EI's authority and have been or will be trained on the implementation of the environmental mitigation measures appropriate to their jobs **before** becoming involved with abandonment activities.

4. The authorized abandonment activities and locations shall be as shown in the EA, as supplemented by filed alignment sheets. **As soon as they are available, and before the start of construction**, Transco shall file with the Secretary any revised detailed survey alignment maps/sheets at a scale not smaller than 1:6,000 with station positions for all facilities approved for abandonment by the Order. All requests for modifications of environmental conditions of the Order or site-specific clearances must be written and must reference locations designated on these alignment maps/sheets.
5. Transco shall file with the Secretary detailed alignment maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all staging areas, storage yards, and other areas that would be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps/sheets/aerial photographs. Each area must be approved in writing by the Director of OEP **before construction in or near that area**.
6. Transco shall employ at least one EI for the Project. The EI shall be:
  - a. responsible for monitoring and ensuring compliance with all mitigation measures required by the Order and other grants, permits, certificates, or other authorizing documents;
  - b. responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract and any other authorizing document;
  - c. empowered to order correction of acts that violate the environmental conditions of the Order, and any other authorizing document;
  - d. responsible for documenting compliance with the environmental conditions of the Order, as well as any environmental conditions/permit requirements imposed by other federal, state, or local agencies; and
  - e. responsible for maintaining status reports.
7. Transco must receive written authorization from the Director of OEP **before commencing abandonment of any Project facilities**. To obtain such authorization, Transco must file with the Secretary documentation that it has received all applicable authorizations required under federal law (or evidence of waiver thereof).
8. Transco shall **not begin** abandonment of Project **until**:

- a. the staff completes ESA consultation with the NMFS; and
- b. Transco has received written notification from the Director of OEP that construction and/or use of mitigation may begin.

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