APPENDIX L -6

AIDS TO NAVIGATION PLANS AND APPROVAL

(UNDER SEPARATE COVER)
June 16, 2017

Williams
Transcontinental Gas Pipeline Co. LLC
2800 Post Oak Blvd.
PO Box 1395
Houston TX 77251
Attn: L Shubring

Ms. Schubring:

I have reviewed the recently submitted revised ATON Plans for the Atlantic Sunrise Project – central Line North & South and unity Loop. The below listed plans are acceptable as submitted and have been approved. All signage & ATON must be installed prior to construction and inspected frequently to ensure it is visible to boaters at all times. Any changes to this plan must be submitted directly to this office for further review.

WW-T81-13001 Little Fishing Creek, Columbia County

I will share the approved ATON plan with the PA Fish & Boat Commission Division of Environmental Services to ensure they are aware of the project. Please advise the contractor that the project site may be inspected at any time by Bureau of Law Enforcement personnel for compliance with this plan. A copy of the approved plan along with this letter should be available for inspection if requested.

Please feel free to contact me if you have any questions concerning this project or the PA Fish & Boat Commission Aids to Navigation program in general.

Sincerely,

Thomas J Burrell, Captain
Bureau of Law Enforcement

Our Mission: To protect, conserve and enhance the Commonwealth's aquatic resources and provide fishing and boating opportunities.
June 2, 2017

Pennsylvania Fish & Boat Commission
Attn: Thomas J Burrell, Captain
Waterways Conservation Officer Manager
1601 Elmerton Avenue
Harrisburg, PA 17106

Re: Supplemental Application for Aids to Navigation Permit
Transcontinental Gas Pipe Line Company, LLC
Atlantic Sunrise Project – Central Penn Line South
Little Fishing Creek (WW-T81-13001)
Mount Pleasant Township, Columbia County

Dear Capitan Burrell:

Previously, Transcontinental Gas Pipe Line Company, LLC (Transco), submitted an application package for the use of Aids to Navigation (ATON) for the Atlantic Sunrise Project (Project), per the Pennsylvania Fish & Boat Code (PFBC) Chapter 113. The application package was approved by the PFBC on January 20, 2017; however, subsequent completion of field surveys for the Project and the incorporation of alignment and workspace changes have resulted in stream crossings that were not included within the PFBC approved application.

Upon coordinating with the PFBC regarding the additional stream crossings associated with the above-referenced Project revisions, the PFBC identified via email on May 9, 2017 that the installation of the Central Penn Line South via dam-and-pump across Little Fishing Creek (WW-T81-13001) would require an ATON. The enclosed supplemental application represents the additional ATON permit for the crossing of WW-T81-13001 within Mount Pleasant Township, Columbia County.
Enclosed are the ATON documents as well as a check in the amount of $10.00 to cover the application fee (based upon the addition of this single ATON permit). If you have questions or concerns regarding this submission, please do not hesitate to contact me at Lynda.Schubring@Williams.com or (832) 814-9047.

Sincerely,

Transcontinental Gas Pipeline Company

Lynda Schubring
Environmental Project Manager

CC: Laura Rudolf, Transco
Lynda Schubring, Transco
John Zimmer, TRC

Attachment
Transcontinental Gas Pipe Line Company, LLC

AIDS TO NAVIGATION PLAN
Little Fishing Creek (WW-T81-13001)

ATLANTIC SUNRISE PROJECT
Mount Pleasant Township
Columbia County, Pennsylvania

Submitted to:
Pennsylvania Fish and Boat Commission
P.O. Box 67000
Harrisburg PA 17106

June 2017
### TABLE OF CONTENTS

ATTACHMENT A –
- Project Narrative

ATTACHMENT B –
- Project Crossing Location Map

ATTACHMENT C –
- Photographs

ATTACHMENT D –
- Plan View of Proposed Crossing

ATTACHMENT E –
- Signage Examples
Introduction

The Atlantic Sunrise Project (Project) is a proposed expansion of the existing Transcontinental Gas Pipe Line Company, LLC (Transco) natural gas transmission system. This proposed expansion will enable Transco to provide 1.7 million dekatherms per day of incremental firm transportation of natural gas from the Marcellus Shale production areas in northern Pennsylvania to its existing market areas, extending to as far south as the Station 85 in Choctaw County, Alabama. The Project includes modifications to the existing Transco Mainline system to reverse the direction of flow, enabling new north-to-south capabilities (bi-directional flow) to transport this new source of natural gas to existing markets.

Per Chapter 113.1 of the Pennsylvania Administrative Code (Title 58 Recreation), the Pennsylvania Fish and Boat Commission regulates the placement of aids to navigation (ATON) within waters not marked by the United States Coast Guard. The Pennsylvania Fish and Boat Commission requires, “persons, including clubs, individuals, State agencies, municipalities and other groups, wishing to establish an aid shall apply for permission from the Commission.” To that end, Transco is submitting this application for the placement of aids to navigation within Little Fishing Creek (WW-T81-13001) associated with the construction of the Project.

The Project will cross WW-T81-13001 at milepost 107.03 in Mount Pleasant Township, Columbia County. Attachment B includes a United States Geologic Survey 7.5-Minute topographic map depicting the location of the Project’s crossing. WW-T81-13001 is approximately 62 feet wide at the proposed crossing location. Photographs of the proposed crossing are shown in Attachment C. Construction activities include the installation of a 42-inch steel natural gas pipeline with a minimum of five feet of cover over the pipeline, below the streambed, unless in shallow bedrock.

Construction Schedule

Construction of the Project is anticipated to begin in third quarter 2017 and end by third quarter 2018. Construction is proposed to be completed during the regular construction season, with no expected winter construction. A final construction schedule for the Project has not been determined at this time. The Pennsylvania Fish and Boat Commission will be notified 60 days prior to the start of construction activities at the crossing of WW-T81-13001.
Construction Methods
Transco proposes to utilize a dry-crossing construction method (Dam-and-Pump or Cofferdam) at the WW-T81-13001 crossing. Dry-crossing construction methods are described as follows:

**Dam-and-Pump**
The dam-and-pump construction method is employed to temporarily divert stream flow around the construction area and discharge the water downstream. This method allows downstream flow to be maintained at all times, while also creating a dry work area. Multiple discharge pumps may be required to keep the area dry and maintain adequate flow, to avoid flooding upstream. Pumps and hoses will be sized to accommodate flow, in accordance with the applicable regulations. After the pump or pumps are installed, damming structures such as concrete jersey barriers, water bladders, port-a-dams, steel plates, and/or sand bags, are installed upstream and downstream of the proposed pipeline trench. At the time of construction, the stream will be evaluated and depending on the stream's depth, flow velocity, channel width, streambed material, and flow type, one of the above damming structures will be used.

Once the dam-and-pump and damming structures are in place, the trench will be excavated, and the pipe installed in the dry ditch. Following the installation of the pipeline, the trench will be backfilled with natural streambed material to pre-existing elevations and the dam-and-pump will be removed to allow natural flow to resume within the stream channel.

**Cofferdam**
The cofferdam construction method involves the installation of temporary dam that extends from one stream bank to approximately the center of the stream channel, which allows for the diversion of stream flow to the opposite half of the stream channel; thereby, maintaining downstream flow at all times. Prior to excavation, sand bags, sand bag/plastic sheeting diversion structures, or the equivalent, will be used to develop an effective seal, and to divert stream flow through to the opposite side of the stream channel.

During excavation, equipment will only work within the dry area behind the cofferdam, while regular flow is maintained outside of this area within the remaining portion of the stream channel. The pipeline will be place approximately half way across the stream, and the trench will be backfilled to pre-existing elevations with natural streambed material. The coffer dam will remain
in place and be maintained until restoration of the waterbody is complete for that portion of the installation. Following restoration, the cofferdam will be removed and installed from the opposite bank for the remaining half of the pipeline installation, which will follow the above-referenced procedures.

**Signage**

Proposed signage will be placed in accordance with U.S. Coast Guard and Pennsylvania Fish and Boat Commission specifications and will consist of rectangular information signs showing the location of the submerged pipeline and the portage area. Signage will be placed at least two weeks prior to the commencement of the crossing and will remain in place for the duration of construction.

A plan view of the proposed signage locations are shown in Attachment E. Signs will be worded as follows:

1. **WARNING – PIPELINE CONSTRUCTION USE EXTREME CAUTION WHEN BOATING IN THIS AREA.**
2. **PORTAGE 200 FEET AHEAD**
3. **PORTAGE – ALL BOATS EXIT**
4. **PORTAGE – ALL BOATS RE-ENTER HERE**
5. **BOATS KEEP OUT**

Examples of sign templates and sign specifications are shown in Attachment E.
Atlantic Sunrise Project – PFBC Aids to Navigation Plan
Transcontinental Gas Pipeline Company, LLC
Waterbody Crossing: WW-T81-13001

ATTACHMENT C
PHOTOGRAPHS
Date Collected: 02/17/2017  Direction: W  Position: Upstream

Date Collected: 02/17/2017  Direction: E  Position: Downstream
Date Collected: 02/17/2017  Direction: N  Position: Across
ATTACHMENT D

PLAN VIEW OF PROPOSED CROSSING
Atlantic Sunrise Project – PFBC Aids to Navigation Plan
Transcontinental Gas Pipeline Company, LLC
Waterbody Crossing: WW-T81-13001

ATTACHMENT E
SIGNAGE EXAMPLES
WARNING

PIPELINE CONSTRUCTION

USE EXTREME CAUTION WHEN BOATING IN THIS AREA
PORTAGE

200 FEET AHEAD
PORTAGE
ALL BOATS EXIT HERE
PORTAGE

ALL BOATS RE-ENTER HERE
BOATS KEEP OUT