Transcontinental Gas Pipe Line Company, LLC Atlantic Sunrise Project

Final General Conformity Determination

Docket No. CP15-138-000



Federal Energy Regulatory Commission Division of Gas – Environment and Engineering 888 First Street, NE, Washington, DC 20426

January 2017

TABLE OF CONTENTS

Atlantic Sunrise Project General Conformity Determination

			<u>Page</u>	
1.0	INTR	ODUCTION	1	
2.0	GENERAL CONFORMITY – REGULATORY BACKGROUND			
	2.1 2.2	General Conformity Requirements General Conformity Process		
3.0	GENE	ERAL CONFORMITY APPLICABILITY	5	
4.0	GENERAL CONFORMITY			
	4.1	Consistency with Relevant Pennsylvania State Implementation Plan Requirements and Mitigation Measures	9	
	4.2	Emission Offsets		
	4.3	Ongoing Compliance	11	
LIST	OF TA	ABLES		
Table	1	General Conformity Applicability Thresholds	5	
Table	2	Construction Project Emissions Summary (2017) for the Atlantic		
		Sunrise Project		
Table	3	Control Measures in the Pennsylvania State Implementation Plan	9	
ATT	ACHM	ENTS		
Attac	hment 1	Response to Comments on Draft General Conformity Determination	on	
Attac	hment 2	Pennsylvania Department of Environmental Protection Correspond	lence	

1.0 INTRODUCTION

In accordance with the National Environmental Policy Act of 1969, the Clean Air Act (CAA), and the Federal Energy Regulatory Commission's (FERC or Commission) regulations, the FERC staff has prepared this final General Conformity Determination to ensure that the Atlantic Sunrise Project (Project) conforms with the Pennsylvania State Implementation Plan (SIP) triggered by construction activities proposed by Transcontinental Gas Pipe Line Company, LLC (Transco). Pursuant to Title 40 Code of Federal Regulations (CFR) Parts 93.155 and 156, the draft General Conformity Determination prepared for the Project was issued for public comment on November 3, 2016. The public comment period ended on December 5, 2016. Attachment 1 summarizes the comments received during the public comment period and provides a written response to the comments.

Transco's Project would consist of pipeline installation and construction of new facilities and modification to existing facilities in Maryland, North Carolina, Pennsylvania, South Carolina, and Virginia. For further information on the environmental impacts of the Project, including air quality impacts, see the draft environmental impact statement (EIS) issued on May 5, 2016 and the final EIS issued on December 30, 2016¹. Construction and operation of the Project is contingent on Commission approval.

Pipeline Facilities

The Project would involve the construction and operation of about 199.4 miles of pipeline facilities, including:

• 185.9 miles of new, greenfield² natural gas pipeline in Columbia, Lancaster, Lebanon, Luzerne, Northumberland, Schuylkill, Susquehanna, and Wyoming Counties, Pennsylvania (58.7 miles of 30-inch-diameter and 127.3 miles of 42-inch-diameter pipeline);

The draft EIS can be viewed on FERC's website at https://www.ferc.gov/industries/gas/enviro/eis/2016/05-05-16-eis.asp, and the final EIS at https://www.ferc.gov/industries/gas/enviro/eis/2016/05-05-16-eis.asp, and the final EIS at https://www.ferc.gov/industries/gas/enviro/eis/2016/05-05-16-eis.asp, and the final EIS at https://www.ferc.gov/industries/gas/enviro/eis/2016/12-30-16-FEIS.asp.

A "greenfield" pipeline crosses land previously untouched by natural gas infrastructure rather than using existing rights-of-way.

- 11.0 miles of new pipeline looping³ in Clinton and Lycoming Counties, Pennsylvania (2.5 miles of 36-inch-diameter and 8.5 miles of 42-inch-diameter pipeline);
- 2.5 miles of 30-inch-diameter pipeline replacements in Prince William County, Virginia; and
- associated equipment and facilities.

Appurtenant Aboveground Facilities

Two new compressor stations (Compressor Stations 605 and 610) would be constructed and operated in Pennsylvania. Compressor Stations 517 and 520 in Pennsylvania and Compressor Station 190 in Maryland would have additional compression added to the stations along with other related modifications. Other modifications would take place at Compressor Stations 145, 150, 155, 160, 170, 185, and 190 across Maryland, North Carolina, and Virginia.

In Pennsylvania, two new meter stations and three new regulator stations would be constructed and operated. There would also be modifications at an existing meter station, and the construction and operation of additional ancillary facilities would occur in Pennsylvania.

In North Carolina and South Carolina, supplemental odorization, odor detection, and/or odor masking/deodorization equipment would be installed at 56 meter stations, regulator stations, and ancillary facilities.

The General Conformity analysis detailed herein, outlines whether portions of the Project are applicable to General Conformity. Where General Conformity is applicable, we have determined whether construction and operation would conform to the applicable state SIP.

2.0 GENERAL CONFORMITY – REGULATORY BACKGROUND

The U.S. Environmental Protection Agency (EPA) promulgated the General Conformity Rule on November 30, 1993, to implement the conformity provision of Title I, section 176(c)(1) of the CAA. Section 176(c)(1) states that "any department,

_

³ "Looping" is the practice of installing a pipeline in parallel to another pipeline to increase the capacity along an existing stretch of right-of-way, often beyond what can be achieved by one pipeline or pipeline expansion.

agency, or instrumentality of the federal government shall not engage in, support in any way or provide financial assistance for, license or permit, or approve, any activity that does not conform to an approved CAA implementation plan." The General Conformity Rule is codified in 40 CFR 93, Subpart B, "Determining Conformity of General Federal Actions to State or Federal Implementation Plans."

The General Conformity Rule applies to all federal actions occurring in nonattainment or maintenance areas. However, the General Conformity Rule excludes programs and projects that require funds or approval from the U.S. Department of Transportation, the Federal Highway Administration, the Federal Transit Administration, or the Metropolitan Planning Organization.

The CAA sets out specific permitting requirements for a group of 13 northeast states that make up the Ozone Transport Region (OTR)⁴. This also affects the applicability threshold for nonattainment areas; however, the General Conformity Rule only applies to areas specifically listed as nonattainment or maintenance in 40 CFR 81, Subpart C within the OTR. Of the states through which the Project would be constructed, Virginia, Maryland, and Pennsylvania are within the OTR.

2.1 General Conformity Requirements

Conformity under Title I, section 176(c)(1) of the CAA, means to conform to an implementation plan's purpose of eliminating or reducing the severity and number of violations of the National Ambient Air Quality Standards (NAAQS) and achieving expeditious attainment of such standards. A proposed action or activity cannot:

- cause or contribute to new violations of any NAAQS in any area;
- increase the frequency or severity of any existing violation of any NAAQS in the area; or
- delay timely attainment of any NAAQS, interim emission reductions, or other milestones in the area.

The General Conformity Rule applies to air pollutant emissions (direct and indirect) associated with federal actions as defined in 40 CFR 93.152 and ensures that the

_

OTR states are Virginia, the District of Columbia, Maryland, Delaware, New Jersey, Pennsylvania, New York, Connecticut, Rhode Island, Massachusetts, Vermont, New Hampshire, and Maine.

emissions do not contribute to air quality degradation or prevent the achievement of state and federal air quality goals. General Conformity, if applicable to the action, refers to the process to evaluate the action to determine and demonstrate that it satisfies the requirements of the approved state SIP. The purpose of the General Conformity Rule is to encourage federal agencies to consult with state and local air quality districts so that these regulatory entities are aware of the expected impacts of the federal action and ensure the action meets the state SIP.

2.2 General Conformity Process

The General Conformity process for a proposed action involves two distinct steps: applicability analysis and conformity determination.

- 1. The applicability analysis is an assessment of whether a proposed action is subject to the General Conformity Rule. If the General Conformity Rule is applicable for the proposed action, then a General Conformity Determination may be required.
- 2. A General Conformity Determination is an assessment of how the proposed action conforms to the applicable SIP.

An applicability analysis is required for any federal action that is in a nonattainment or maintenance area and the emissions associated with the project may have the potential to exceed the applicability threshold specified in 40 CFR 93.153(b)(1) and (2). If emissions exceed these rates, then a General Conformity Determination is required.

The General Conformity process does not include a review of new sources or existing source modifications that are subject to state or federal New Source Review permitting. Under the General Conformity Rule, these sources are presumed to comply with the SIP by completing the applicable air permitting process with the jurisdictional agency.

If a General Conformity Determination is required for the proposed action, then an evaluation must be performed to determine if the action conforms to the SIP. The Project is considered a federal action, and FERC is the lead agency responsible for making the General Conformity Determination. As required under General Conformity, an applicability analysis was performed for the Project to determine if the total direct and indirect emissions for criteria pollutants in nonattainment or maintenance areas would exceed the rates specified in 40 CFR 93.153(b)(1)and (2). The results are presented in section 3.0 below. The Project would exceed applicability thresholds within the Lancaster County 8-Hour Ozone (2008 NAAQS) nonattainment area, and the Lancaster County 24-hour PM_{2.5} (2006 NAAQS) maintenance area. A General Conformity Determination is presented in section 4.0.

3.0 GENERAL CONFORMITY APPLICABILITY

The General Conformity Rule applies only to actions in a nonattainment or maintenance area, and the applicability thresholds apply for those portions of the Project within each area. The General Conformity applicability thresholds are based on the attainment classification for each pollutant. Table 1 provides a summary of the applicable nonattainment and maintenance counties; the pollutants/precursor for which they are listed; and the applicability thresholds for each pollutant/precursor.

		TABLE 1						
General Conformity Applicability Thresholds								
Pollutant	Nonattainment/ Maintenance Area	Pollutant or Precursor	Applicability Threshold (tons/year)					
PM _{2.5}	Lancaster County, PA	PM _{2.5}	100					
		NO_X	100					
		SO ₂	100					
		VOC	100					
		Ammonia	100					
PM _{2.5}	Lebanon County, PA	PM _{2.5}	100					
		NO_X	100					
		SO_2	100					
		VOC	100					
		Ammonia	100					
Ozone	Lancaster County, PA	VOC	50 ¹					
		NO_X	100					
Ozone	Howard County, MD	VOC	50					
		NO_X	100					
Ozone	Prince William County, VA	VOC	50					
		NO_X	100					
Ozone	Gaston County, NC	VOC	100					
		NO_X	100					
Ozone	Lincoln County, NC	VOC	100					
		NO_X	100					
Ozone	Mecklenburg County, NC	VOC	100					
		NO_X	100					
Ozone	Iredell County, NC	VOC	100					
		NO_X	100					
Ozone	Rowan County, NC	VOC	100					
	-	NO_X	100					
Ozone	Carabus County, NC	VOC	100					
	•	NO_X	100					
Ozone	York County, SC	VOC	100					
	•	NO_X	100					

The project area contains nonattainment and maintenance areas for the following pollutants: particulate matter less than or equal to 2.5 micrometers⁵ in aerodynamic diameter (PM_{2.5}) and ozone.

PM_{2.5} is formed during the burning of materials or any dust-generating activities. Chemical reactions of oxides of nitrogen (NO_X), sulfur dioxide (SO₂), volatile organic compounds (VOC), and ammonia can also form PM_{2.5}.

Ozone is photochemically formed when precursor pollutants are mixed together in the presence of sunlight. NO_X , which is a combination of nitric oxide and nitrogen dioxide, reacts with VOC in the presence of sunlight. NO_X may also react with water and ammonia in the atmosphere to form nitric acid, which is a significant component of smog and acid rain. VOCs are organic compounds that have a high vapor pressure at ambient temperatures. VOCs are ubiquitous and some examples are alcohols, solvents, methane, and ammonia.

On September 16, 2016, Transco filed a revised construction schedule, which estimated that all the construction emissions for the Project would be in calendar year 2017. This updated information subsequently requires changes to the General Conformity analysis included in the draft EIS for the Project. With the updated schedule, direct and indirect construction emissions in the Lancaster County, Pennsylvania, Ozone nonattainment and PM_{2.5} maintenance areas are estimated to exceed the General Conformity threshold of 100 tons per year for NO_X, which is a precursor pollutant for both ozone and PM_{2.5}. Emissions sources that are subject to the General Conformity Applicability Analysis include the construction emissions that are all planned to occur in 2017 for the Project. This includes construction equipment, on-road vehicles, off-road construction vehicle traffic, earthmoving activities, and construction storage piles.

Transco filed revisions to the construction emission calculations on December 8 and December 22, 2016. The additional revisions were based on comments from the Pennsylvania Department of Environmental Protection (PADEP) on the emission calculation methodology and were updated to include fugitive dust emission calculations. The construction emission estimates filed on December 22, 2016 were not able to be incorporated into the final EIS; therefore, the construction emission estimates presented in the final EIS for Lancaster and Lebanon Counties, Pennsylvania are higher than the emission estimates provided in table 2.

⁵ Micrometer, or micron is equal to 1 x 10⁻⁶ meters.

The emissions from these sources were calculated using the EPA's MOVES 2014 modeling software and AP-42 emission factors⁶. These emissions are summarized in table 2.

	Emissions (tons/year) ¹			
Nonattainment Area	PM _{2.5}	NO _X	VOC	SO ₂
Lancaster County, PA	45.0	105.4	14.0	0.2
Lebanon County, PA	36.1	80.6	10.7	0.1
Howard County, MD	N/A	15.2	2.1	N/A
Prince William County, VA	N/A	33.2	4.1	N/A
Gaston County, NC	N/A	0.2	0.1	N/A
Lincoln County, NC	N/A	0.2	0.1	N/A
Mecklenburg County, NC	N/A	0.2	0.1	N/A
Iredell County, NC	N/A	0.2	0.1	N/A
Rowan County, NC	N/A	0.2	0.1	N/A
Carabus County, NC	N/A	0.2	0.1	N/A
York County, SC	N/A	0.2	0.1	N/A

The Project construction emissions in Lebanon County, Pennsylvania, would not exceed the applicability threshold for PM_{2.5} or any of its precursor pollutants under the current emission estimates; however, they are very close to the NOx applicability threshold that would trigger a general conformity determination. To ensure that the emissions do not exceed the threshold, we recommended in the draft and final EISs that Transco file a *Construction Emission Plan* for work within Lebanon County, Pennsylvania to track its construction schedule and activities for each component of the Project within the Lebanon County, Pennsylvania PM_{2.5} nonattainment area to ensure that actual emissions do not exceed the General Conformity threshold.

If a change in the construction schedule or Project results in emissions greater than 100 tons per year of NO_X , Transco should provide and document all mitigation measures under 40 CFR 93.158 it would implement to comply with the General Conformity Regulations. The General Conformity Rule provides for a reassessment if the final

7

.

Detailed information on calculation methodology for each emission source is available on the FERC website, http://www.ferc.gov, using the "eLibrary" link and the project docket number CP15-138-000. The majority of the methodology was filed by Transco on September 19, 2016 and December 8, 2016.

General Conformity Determination becomes outdated or if emissions are significantly greater than originally anticipated, pursuant to 40 CFR 93.157.

Based on the emission estimates in table 2, the NO_X emissions for Lancaster County in 2017 would exceed the General Conformity applicability threshold value in table 1 of 100 tons per year, as a precursor pollutant to ozone and $PM_{2.5}$. Because the emissions from the Project in Lancaster County, Pennsylvania would exceed the applicability threshold for NO_X , a General Conformity Determination must be completed to assess the conformance of the Project's emissions in Lancaster County, Pennsylvania to the approved requirements and emission budgets for the South Central Pennsylvania Intrastate Air Quality Control Region within the Pennsylvania SIP for 2017. These emissions are referred to within this determination as the "General Conformity Project emissions."

4.0 GENERAL CONFORMITY

Under 40 CFR 93, Subpart B, "Determining Conformity of General Federal Actions to State or Federal Implementation Plans," a federal action required to have a conformity determination for a specific pollutant would be determined to conform to the SIP if it meets one of several requirements in 40 CFR 93.158, "Criteria for Determining Conformity of General Federal Actions."

The General Conformity Determination is based on the 8-hour ozone, the 1997 annual PM_{2.5} standard, and 2006 24-hour PM_{2.5} standard and the corresponding attainment dates. For the Lancaster County, Pennsylvania Ozone Nonattainment Area, the most recently approved SIP revision is the 2012 Lancaster Ozone Nonattainment Area SIP Revision. These revisions were approved by the EPA on November 19, 2012. In this SIP revision, the emissions budgets for NO_X and VOC were updated in accordance with EPA guidance regarding mobile source emissions. For the Lancaster County, Pennsylvania PM_{2.5} Nonattainment Area, the most recently approved SIP revision is the 2014 Lancaster Nonattainment Area 1997 and 2006 Fine Particulate Matter National Ambient Air Quality Standards SIP Revisions, which requested redesignation of the nonattainment area to attainment. These revisions were approved by the EPA on July 16, 2015. In this SIP revision, the PADEP developed a maintenance plan with control measures including emission budgets for PM_{2.5}, NO_X, and SO₂, which included stationary point sources, highway vehicle sources, non-road sources, and stationary area sources.

All of the project construction emissions above the General Conformity applicability thresholds in Lancaster County, Pennsylvania are expected to occur in the South Central Pennsylvania Intrastate Air Quality Control Region. The criteria for determining conformity are provided in 40 CFR 93.158. An action would be determined to conform for a specific pollutant if it meets the requirements of 40 CFR 93.158(c) and any of the applicable requirements in 40 CFR 93.158(a)(1) through (5). Section 40 CFR 93.158(c) requires the total of direct and indirect emissions from the action be in

compliance with all relevant requirements and milestones contained in the applicable SIP. Section 40 CFR 93.158(a)(1) through (5) provide a number of pollutant- and state-specific options for demonstrating conformity. Transco has indicated that it would demonstrate compliance with the Pennsylvania SIP requirements, in accordance with 40 CFR 93.158(c), and the method is provided in section 4.2.

4.1 Consistency with Relevant Pennsylvania State Implementation Plan Requirements and Mitigation Measures

The NO_X emission control measures and regulations included in the Pennsylvania SIP that may potentially apply to the Project are listed in table 3.

TABLE 3									
Control Measures in the Pennsylvania State Implementation Plan									
Emission Control Measures	Туре	Potential Applicability to the Liquefaction Facilities and Related Activities							
EPA Non-road Diesel Engines Rule	Federal	Diesel-powered construction equipment greater than 50 horsepower							
Emissions Standards for Large Spark Ignition Engines	Federal	Industrial spark-ignition engines rated over 19 kilowatts							
Enhanced Inspections/Maintenance	Federal	Delivery and commuter vehicles							
Federal Tier 1 and 2 Vehicle Standards	Federal	Delivery and commuter vehicles							
National Low Emission Vehicle Standards	Federal	Delivery and commuter vehicles							
Heavy Duty Diesel Engine Rule	Federal	Construction and heavy duty on-road vehicles							
Diesel-Powered Motor Vehicle Idling Act (Act 124)	State	State standard that restricts most diesel-powered motor vehicles over 10,000 pounds from idling more than 5 minutes in any continuous 60-minute period							
Vehicle Inspections	State	Required annual inspections							

Several of the regulations identified in table 3 would indirectly affect the emissions from the proposed Project through implementation of new standards for manufacturers (such as reformulated fuel and engines). These regulations include the heavy duty non-road diesel engine rule. During construction of the proposed facilities, Transco would use construction equipment powered by diesel engines, which are subject to these federal programs. Implementation and compliance with these programs would be required by the manufacturers, not Transco. Therefore, it is assumed that the Project would be in compliance with these regulations. As such, the Project meets the requirements of 40 CFR 93.158(c) for complying with all relevant requirements and milestones contained in the Pennsylvania SIP.

As outlined in the draft and final EISs prepared for the Project, Transco has committed to implementing air emission mitigation measures during project construction, including the dust abatement methods described in its Fugitive Dust Control Plan and adherence to manufacturer's specifications and EPA standards for construction emissions from gasoline, on-road diesel, and off-road diesel equipment.

4.2 Emission Offsets

To demonstrate conformity with the South Central Pennsylvania Intrastate Air Quality Control Region SIP in Lancaster County, Transco developed an air mitigation plan that includes strategies to completely offset the proposed project NO_X emissions for the year (2017) they are predicted to exceed the applicable General Conformity thresholds. The air mitigation plan identifies reduction measures to generate emissions offsets that are contemporaneous with applicable project emissions. Emissions offsets, as defined in 40 CFR 93.152, are quantifiable reductions, consistent with the applicable SIP attainment and reasonable further progress demonstrations, surplus to reductions required by, and credited to, other applicable SIP provisions, enforceable at both the state and federal levels, and permanent within the timeframe specified by the program. If the Commission approves the Project, Transco will be required to offset 105.4 tons of NO_X for construction activities in Lancaster County, Pennsylvania during 2017, which will satisfy the criteria for determining conformity of general federal actions outlined in 40 CFR 93.158(a)(2).

Transco will purchase 106 tons of NO_X emission reduction credits (ERC) from Howard County, Maryland. Correspondence from the PADEP acknowledging their agreement with the emission calculations provided by Transco and verifying their acceptance of the amount and location of ERCs to be purchased or transferred is included in Attachment 2. Specifically, the PADEP letter references a technical memo that details the justification for acceptance of ERCs from Howard County, Maryland for Lancaster County⁷. Transco is in the process of purchasing the appropriate ERCs. The PADEP will provide notice of the ERC transfer by means of a 30-day public comment period, after which the PADEP will provide a state and federally enforceable document verifying the transfer. To ensure compliance with the SIP, we are recommending to the Commission that Transco not be authorized to commence construction in Lancaster County, Pennsylvania until the enforceable ERC transfer has been completed.

These ERCs will allow the Project to conform to the Pennsylvania SIP as allowed in 40 CFR 93.158(a)(2).

December 6, 2016 Memo entitled *Justification for Use of ERCs from Howard County Maryland* filed with the Commission on December 22, 2016.

4.3 Ongoing Compliance

FERC staff included recommendations in the final EIS prepared for the Project that require Transco to provide ongoing construction progress reports, which would allow FERC to track the progress of the activities subject to the General Conformity Determination as outlined in 40 CFR 93.157. If the Commission authorizes the Project, these recommendations would become conditions of the Certificate.

ATTACHMENT 1

RESPONSE TO COMMENTS ON DRAFT GENERAL CONFORMITY DETERMINATION

Federal Energy Regulatory Commission (FERC) staff prepared the draft General Conformity Determination (GCD) for the Transcontinental Gas Pipe Line Company, LLC (Transco) Atlantic Sunrise Project (Project). The draft GCD was issued for public comment on November 3, 2016. The public comment period ended on December 5, 2016. We received comments from the Clean Air Council, Lebanon Pipeline Awareness, Sierra Club Pennsylvania Chapter, Concerned Citizens of Lebanon County, Lancaster Against Pipelines (collectively referred to as "Joint Commentors"), Pennsylvania Department of Environmental Protection (PADEP), and Elise Kucirka Salahub. These comments are further discussed below, and primarily concern fugitive dust emissions, construction emission calculation methodology, General Conformity applicability for particulate matter less than or equal to 2.5 microns in aerodynamic diameter (PM_{2.5}), General Conformity applicability in other nonattainment areas within the project area, and General Conformity regulatory citations.

Fugitive Dust Calculations

Comments by the Joint Commentors and the landowner assert that fugitive dust emission calculations were not appropriately accounted for in the construction emission calculations provided by Transco. The Joint Commentors provided fugitive emission calculations and an associated analysis.

While Transco's construction emission calculations included some particulate matter less than or equal to 10 microns in diameter (PM₁₀) and PM_{2.5} emission estimates, the construction emissions did not include fugitive dust⁸ emission calculations. However, the draft and final environmental impact statement addressed potential impacts associated with fugitive dust emissions from the Project and included mitigation measures to be implemented by Transco to minimize fugitive dust emissions. On December 8, and December 22, 2016, Transco filed supplemental revised construction emission calculations, which included fugitive dust emissions from construction activities in particulate matter nonattainment and maintenance areas crossed by the Project (i.e.,

Fugitive dust is typically a mix of larger and smaller particles including PM_{2.5}, PM₁₀, and larger particles that settle out over a shorter distance. Smaller particles are considered "inhalable" and are of greater health concern.

Lancaster and Lebanon Counties, Pennsylvania). FERC staff also completed fugitive dust emission calculations for attainment areas crossed by the Project. We reviewed the fugitive dust emission estimates submitted by Transco and believe that they accurately estimate the potential fugitive dust emissions associated with project construction in nonattainment and maintenance areas. On December 29, 2016 the PADEP also provided concurrence with the construction emission estimates provided by Transco, including fugitive dust emission estimates.

The fugitive dust emission estimates from the December 8, 2016 and FERC staff calculations were included in the final EIS; however, the construction emission estimated dated December 22, 2016 were not received in time to be incorporated into the final EIS, but have been incorporated into the final GCD. We found that added fugitive dust emissions did not result in an exceedance of General Conformity applicability thresholds for $PM_{2.5}$.

Additional Construction Emission Calculation Detail

Comments by the PADEP stated that the level of detail provided in the construction emission calculations methodology included in the draft GCD was insufficient to facilitate the PADEP's review of the emission calculations. On December 8 and 22, 2016, Transco filed supplemental information regarding the draft GCD, including additional detail to support the construction emission calculations methodology. On December 29, 2016 the PADEP provided concurrence with the construction emission estimates provided by Transco on December 22, 2016.

General Conformity for PM_{2.5}

The Joint Commentors state that the draft GCD failed to make a determination for $PM_{2.5}$ in Lancaster and Lebanon Counties and ignored the combined emissions of $PM_{2.5}$ and oxides of nitrogen (NO_X). The Joint Commentors also state that NO_X emissions must be added to $PM_{2.5}$ emissions when making a determination of exceedance of the $PM_{2.5}$ applicability threshold. The Joint Commentors further request that a second public notice be prepared for the draft GCD to update this omission.

The final GCD has been revised to clarify that NO_X , as a precursor pollutant for both $PM_{2.5}$ and ozone, exceeds the General Conformity applicability threshold. However, $PM_{2.5}$ as an individual pollutant does not exceed the General Conformity applicability threshold of 100 tons per year (tpy) in either Lancaster or Lebanon Counties. Each pollutant to which a General Conformity applicability threshold has been established is

considered separately when making a determination regarding General Conformity applicability and is not combined⁹. For these reasons, only NO_X emissions in Lancaster County would exceed General Conformity applicability thresholds. Because the NO_X General Conformity applicability threshold is the same for both $PM_{2.5}$ and ozone, and the draft GCD examined NO_X emissions in Lancaster County, we find that an additional public comment period would not provide any new or additional information to inform the final GCD.

General Conformity Applicability in Howard County, Maryland and Prince William County, Virginia

The Joint Commentors state that construction emissions appear to be significant in Howard County, Maryland and Prince William County, Virginia and state that a 50-tpy threshold applies in these Counties. As shown in table 1 of the draft GCD, Howard County, Maryland and Prince William County, Virginia are both classified as ozone nonattainment areas. Volatile organic compounds (VOC) and NO_X are ozone precursor pollutants. The General Conformity applicability threshold for VOCs is 50 tpy in these counties; however, the General Conformity applicability threshold for NO_X is 100 tpy. As shown in table 2 of the draft GCD, the annual emissions of VOCs and NO_X in Howard County, Maryland and Prince William County, Virginia would be well below the General Conformity applicability thresholds.

Omission of Mitigation Measures

Joint Commentors state that the draft GCD omits mitigation measures related to emissions that would be generated in Lancaster County, which would be subject to General Conformity rules. The General Conformity rules at Title 40 Code of Federal Regulations (CFR) Part 93.160 outline actions to be taken for measures that are intended to mitigate air quality impacts and a process for implementation. Section 4.1 of the final GCD outlines various federal and state rules that would apply to the Project. In addition, the draft and final environmental impact statements prepared for the Project detail mitigation measures that would be implemented by Transco during construction, including the dust abatement methods described in its Fugitive Dust Control Plan and adherence to manufacture's specifications and U.S. Environmental Protection Agency standards for construction emissions from gasoline, on-road diesel, and off-road diesel equipment. Transco has committed to implementing these mitigation measures, which

General Conformity Guidance: Questions and Answers, Applicability No. 32 – EPA, July 13, 1994

would be required during construction of the Project. The final GCD has been updated to list these measures.

Regulatory Citations

The PADEP states that the draft GCD cites 40 CFR 51, which should be changed to 40 CFR 93.158. The PADEP also requests that the final GCD demonstrate how FERC followed the requirements contained in 40 CFR 93.155 to 93.160, 93.162, and 93.165, where applicable.

The citations in the final GCD are revised. Section 1.0 of the final GCD demonstrates how FERC staff followed the requirements contained in 40 CFR 93.155 and 93.156. Sections 3.0 and 4.3 of the final GCD demonstrate compliance with 40 CFR 93.157. Section 4.2 of the final GCD demonstrates compliance with 40 CFR 93.158. Section 3.0 and the associated emission calculations filed by Transco demonstrate compliance with 40 CFR 93.159 based on the use of the U.S. Environmental Protection Agency's MOVES 2014 modeling software and AP-42 emission factors. Section 4.1 of the final GCD outlines mitigation measures to be implemented by Transco during construction. Title 40 CFR 93.162 does not apply to the project emissions subject to review under General Conformity. Title 40 CFR 93.165 does not apply to the Project.

ATTACHMENT 2

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION CORRESPONDENCE



December 29, 2016 Sent by FERC eFiling

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

Re:

PA DEP submittal of additional comments for the Draft General Conformity Determination for the Transcontinental Gas Pipeline Company, LLC (Transco) Atlantic Sunrise Project (FERC Docket No. CP15-138-000)

Dear Secretary Bose:

This letter supplements and incorporates by reference the Pennsylvania Department of Environmental Protection's (Department) December 5, 2016, comment letter to FERC on FERC's Draft General Conformity Determination for the Transcontinental Gas Pipeline Company, LLC (Transco) Atlantic Sunrise Project (FERC Docket No. CP15-138-000).

In response to the Department's December 5 letter and further discussions with the applicant, the Department received from Transco, and reviewed, an "Air Quality Technical Report, Explanatory Information for General Conformity Evaluation, Atlantic Sunrise Project," (technical report). The technical report contains air emissions estimates for the proposed Atlantic Sunrise (ASR) pipeline project proposed to be built in Lancaster and Lebanon Counties, Pennsylvania.

Lancaster County is a nonattainment area for the 2008 National Ambient Air Quality Standard (NAAQS) for ozone and is a maintenance area for the 2006 24-hour fine particulate matter (PM_{2.5}) NAAQS. Lebanon County is a nonattainment area for the 2012 annual PM_{2.5} NAAQS and a maintenance area for the 2006 24-hour PM_{2.5} NAAQS. Therefore, both Lancaster and Lebanon Counties would be subject to a General Conformity determination if the emissions from a federal project exceed the emission rates (also called *de minimis* threshold rates) given in 40 C.F.R. § 93.153(b) of the General Conformity regulation. Pennsylvania adopted General Conformity requirements by reference in 25 Pa. Code Chapter 127, Subchapter J (relating to general conformity). Our review has been conducted in accordance with Section 176 of the Clean Air Act and its implementing regulations in 40 C.F.R. Part 93, Subpart B (relating to determining conformity of general Federal actions to state or Federal implementation plans) and the Department's General Conformity regulation.

Based on its review of all of the information provided to it, the Department believes that the pipeline project will exceed the *de minimis* threshold rates in 40 C.F.R. § 93.153(b) for NOx for both the ozone and PM_{2.5} NAAQS for Lancaster County, and does not exceed any other *de minimis* threshold rate.

The technical report sufficiently addresses the Department's previous comments regarding incomplete information and a request for explanation of methodology. The Department can now verify that the ASR project construction emissions were estimated properly for the purpose of verifying the offsetting of project emissions through the retirement of emissions reduction credits (ERCs). To this end, the Department concurs with Transco's estimate that 105.4 tons of oxides of nitrogen (NOx) are estimated to be emitted in Lancaster County, Pennsylvania for the duration of construction during the single

Bureau of Air Quality
Rachel Carson State Office Building | P.O. Box 8468 | Harrisburg, PA 17105-8468 | 717.787.9702 | www.dep.pa.gov

Kimberly D. Bose

- 2 -

December 29, 2016

calendar year of 2017. As previously indicated in discussions with FERC, the Department believes that the retirement of the necessary amount of ERCs (in this case, 106 tons of ERCs) from a suitably equivalent or higher-designated nearby nonattainment area that can demonstrate impact on Lancaster County is sufficient to meet the General Conformity emissions offset requirements.

Both FERC and the Department are in receipt of documentation from Transco and the U.S. EPA on the suitability of the use of ERCs generated from a source or sources in Howard County, Maryland. Part of the documentation, a December 6, 2016, memorandum titled, *Justification for the Use of ERCs from Howard County, Maryland*, shows through a HYSPLIT analysis, atmospheric ozone modeling performed by the Virginia Department of Environmental Quality, and a qualitative analysis on secondary PM_{2.5} formation that ERC obtained in Howard County, Maryland is appropriate to offset construction emissions for the ASR project. The Department concurs that is appropriate to use of NOx ERCs generated by sources in Howard County, Maryland to offset the ASR project construction emissions that will be produced in Lancaster County, Pennsylvania.

The Department concurs with the overall project construction emissions estimated in the technical report and with the assessment that these estimates satisfy the General Conformity applicability determination requirements for the estimation of reasonably foreseeable direct and indirect project construction emissions under 40 C.F.R. § 93.153(b).

It is important to note that the project emissions estimates provided by the applicant now differ from those included in FERC's previous Draft General Conformity Analysis. However, FERC's ultimate conclusion that only the General Conformity *de minimis* threshold rate of 100 tons per year NOx would be exceeded in Lancaster County has not changed.

The Department will continue to work with Transco and the U.S. EPA in order to provide an enforceable document by which the purchase or acquisition and subsequent retirement of 106 tons of NOx ERCs can be memorialized to comply with applicable General Conformity requirements. Consistent with the public notification requirements in 25 Pa. Code, Chapter 127, this enforceable document would require a thirty-day public notice and comment period in the Commonwealth.

If you have any questions or need additional clarification, please feel free to contact Chris Trostle, Mobile Sources Section Chief, or me. Mr. Trostle can be contacted at dtrostle@pa.gov or by phone at 717.772.3926. My e-mail is kramamurth@pa.gov.

Sincerely,

Krishnan Ramamurthy Acting Director Bureau of Air Quality

cc: Patrick McDonnell
Ann Roda
George Hartenstein
Kirit Dalal
Chris Trostle

20170118-4003 FERC PDF (Unofficial) 01/18/2017	
Document Content(s)	
Atlantic Sunrise_Final_GCD_1-17-17.DOCX1-2	20