

APPENDIX Q

DRAFT GENERAL CONFORMITY DETERMINATION

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**Draft General Conformity Determination
Phoenix Expansion Project**

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1.0 INTRODUCTION TO THE PROPOSED ACTION

On September 15, 2006, Transwestern Pipeline Company, LLC (Transwestern) filed an application with the Federal Energy Regulatory Commission (Commission or FERC) under section 7(c) of the Natural Gas Act and Parts 157 and 284 of the Commission's regulations to expand its existing natural gas transmission pipeline system in New Mexico and Arizona. The FERC is the federal agency responsible for evaluating applications filed for authorization to construct and operate interstate natural gas pipeline facilities. As such, the FERC is the lead federal agency for the preparation of the environmental impact statement (EIS) and the General Conformity Determination for the Phoenix Expansion Project.

Transwestern's proposed facilities and construction schedule are described in detail in section 2.0 of the EIS.

2.0 GENERAL CONFORMITY - REGULATORY BACKGROUND

The U.S. Environmental Protection Agency (EPA) promulgated the General Conformity Rule on November 30, 1993 in Volume 58 of the Federal Register (FR) page 63214 (58 FR 63214) to implement the conformity provision of Title I, section 176(c)(1) of the Clean Air Act (CAA). Section 176(c)(1) requires that the federal government not engage, support, or provide financial assistance for licensing or permitting, or approving any activity not conforming to an approved CAA implementation plan.

The General Conformity Rule is codified in Title 40 Code of Federal Regulations (CFR) Part 51, Subpart W and Part 93, Subpart B, Determining Conformity of General Federal Actions to State or Federal Implementation Plans. The General Conformity Rule applies to all federal actions except programs and projects requiring funding or approval from the U.S. Department of Transportation (DOT), the Federal Highway Administration, the Federal Transit Administration, or the Metropolitan Planning Organization. In lieu of a conformity analysis, these latter types of programs and projects must comply with the Transportation Conformity Rule promulgated by the DOT on November 24, 1993 (58 FR 62197).

2.1 GENERAL CONFORMITY REQUIREMENTS

Title I, section 176(c)(1), of the CAA defines conformity as the upholding of "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 attainment of such standards." Conforming activities or actions should not, through additional air pollutant emissions:

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

The General Conformity Rule establishes conformity in coordination with and as part of the National Environmental Policy Act process. The rule takes into account air pollutant emissions associated with actions that are federally funded, licensed, permitted, or approved, and ensures emissions do not contribute to air quality degradation, thus preventing the achievement of state and federal air quality goals. In short, General Conformity refers to the process of evaluating plans, programs, and projects to determine and demonstrate that they meet the requirements of the CAA and applicable State Implementation Plan (SIP).

2.2 GENERAL CONFORMITY APPLICABILITY

Pursuant to the General Conformity Rule, the lead federal agency, in this case the FERC, must make a General Conformity Determination for all federal actions in nonattainment or maintenance areas where the total of direct and indirect emissions of a nonattainment pollutant or its precursors exceeds levels established by the regulations.

The Phoenix Expansion Project would not be located in any nonattainment or maintenance areas within New Mexico. Portions of the Phoenix Lateral between mileposts (MPs) 101 and 134 and MPs 184 and 191 would be located in a serious particulate matter having an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment area within Maricopa County, Arizona (the Phoenix Planning Area), as well as a Subpart 1 ozone nonattainment area between MPs 91 and 211 in Maricopa County, Arizona (the Phoenix-Mesa Planning Area). Additionally, the area that would be crossed by the Phoenix Lateral between MPs 101 and 112 in Maricopa County, Arizona was formerly designated as a serious nonattainment area for carbon monoxide (CO) and is now considered a maintenance area. No other portions of the project would be located in nonattainment or maintenance areas. Relevant general conformity plans and regulations for the PM₁₀ nonattainment area include the Maricopa Association of Governments (MAG) 1999 Serious Area Particulate Plan for PM-10, revised in February 2000; Arizona Administrative Code Title 18, Chapter 2 adopted on July 11, 2000 addressing Agricultural Best Management Practices by a subsequent revision to the Arizona SIP; and Maricopa County's fugitive dust rule 310. The EPA approved Arizona's SIP for attaining the annual and 24-hour standards for PM₁₀ in the Phoenix area on July 25, 2002 (67 FR 48718). The most recent actions regarding the CO maintenance area include the MAG 1999 Serious Area Carbon Monoxide Plan submitted to the EPA on April 18, 2001, followed by the October 9, 2001 EPA determination that the plan was complete, and subsequent September 22, 2003 determination that the Phoenix area had attained compliance with the CO standards. The ozone nonattainment designation went into effect on June 15, 2004, and state and local agencies are working to bring the area into compliance. Plans have not yet been submitted by local authorities but are due to the EPA on June 15, 2007.

With regard to the proposed project, the relevant general conformity pollutant thresholds are:

- PM₁₀: 70 tons per year (tpy) for projects located in serious nonattainment areas;
- ozone precursors: 100 tpy of volatile organic compounds (VOC) or nitrogen oxides (NO_x) for projects located in ozone nonattainment areas that are not within an ozone transport region and are not classified as serious, severe, or extreme;
- CO: 100 tpy for projects located in a CO maintenance area;
- sulfur dioxide (SO₂): 100 tpy for projects located in any classification of nonattainment area; or
- if emissions of a nonattainment pollutant are regionally significant (i.e., emissions of a nonattainment pollutant equal or exceed 10 percent of the nonattainment area emissions of the nonattainment pollutant).

This Draft General Conformity Determination has been prepared pursuant to the CAA, section 176(c)(1) to assess whether the emissions that would result from the FERC's action in authorizing the Phoenix Expansion Project would be in conformity with the Arizona SIP.

3.0 ASSESSMENT OF THE PROJECT EMISSIONS

As detailed in sections 2.0 and 4.10 of the draft EIS, Transwestern is not proposing any new or expanded sources of operation emissions; therefore, the assessment of the project emissions focuses on those emissions that would be generated during construction of the proposed project in those areas subject to general conformity regulations. Transwestern has provided detailed construction emissions estimates for the Phoenix Expansion Project. The FERC staff compared these emissions to the general conformity pollutant thresholds identified in section 2.2 to determine the need for a general conformity determination.

3.1 CONSTRUCTION EMISSIONS

The estimated air emissions for the Phoenix Expansion Project were prepared using widely accepted methods. Specifically, the construction equipment emissions were estimated using emission factors for criteria pollutants for non-road equipment contained in EPA NONROAD2005. These emission factors were then multiplied for each engine type by the amount of power produced and by operating hours. Mobile source emissions from construction vehicles were estimated using a combination of the procedures contained in the Western Regional Air Partnership “Fugitive Dust Handbook” and EPA AP-42 emission factors. A General Conformity applicability review of the total estimated project emissions for each nonattainment or maintenance pollutant resulting from construction in areas listed as nonattainment or maintenance is provided in table 3.1-1. As discussed in section 2.2, the only portions of the project that would be constructed in nonattainment or maintenance areas would be in Maricopa County, Arizona. Although the Phoenix Expansion Project would be constructed in both 2007 and 2008, the portion of the project in the nonattainment or maintenance areas of Maricopa County would be constructed only in 2008.

TABLE 3.1-1				
Estimated Emissions of Criteria Pollutants from Construction of the Phoenix Expansion Project				
Area/Year ^a	PM ₁₀ (tons)	NO _x (tons)	CO (tons)	VOC (tons)
Nonattainment/Maintenance Areas of Maricopa County, Arizona				
2008 Construction Emissions Estimates				
Vehicular Emissions	0.1	6.5	0.8	5.9
Heavy Construction Equipment Emissions	2.2	97.9	3.3	1.0
Fugitive Particulate Emissions	54.7	0.0	0.0	0.0
Total Emissions for 2008	57.0	104.4	4.1	6.9
Conformity Applicability Threshold	70	100	100	100
Exceedance of Threshold	No	Yes	No	No
^a Project construction would not occur in Maricopa County in 2007. PM ₁₀ = Particulate matter having an aerodynamic diameter of 10 microns or less NO _x = Nitrogen oxides CO = Carbon monoxide VOC = Volatile organic compounds				

3.2 REGIONAL SIGNIFICANCE

The FERC staff also evaluated the construction emissions to determine if general conformity rules would apply based upon regional significance. A project would be subject to general conformity rules based upon regional significance if the total of the direct and indirect emissions of a pollutant, while not exceeding general conformity pollutant thresholds, would represent 10 percent or more of a

nonattainment or maintenance area's total emissions of a particular pollutant. The most recent available air emissions inventory data from reports prepared by the Maricopa County Environmental Services Department and the MAG were reviewed to determine the regional significance of the emissions estimated for the construction of the Phoenix Expansion Project. This information is included in table 3.2-1. Because no project construction would occur in nonattainment areas in Pinal County, a similar assessment was not needed for this county.

Source Category ^a	PM ₁₀ (tons)	NO _x (tons)	CO (tons)	VOC (tons)
Point Sources	1,037	3,191	1,617	3,870
Area Sources	33,591	5,146	5,542	37,718
Nonroad Mobile Sources	3,035	20,953	166,308	10,751
Onroad Mobile Sources	30,231	72,691	32,286,720	29,402
Biogenic Sources	0	1,604	0	7,223
Total	67,893	103,585	32,460,187	88,963
Project Construction Emissions - 2008	57.0	104.4	4.1	6.9
Percentage of Nonattainment Area Emissions	0.084	0.101	<0.001	0.008

^a Maricopa County emissions data taken from "2002 Periodic Emissions Inventory for Ozone Precursors for the Maricopa County, Arizona Nonattainment Area," "2002 Periodic Emissions Inventory for Carbon Monoxide for the Maricopa County, Arizona Nonattainment Area," and "2002 Periodic Emissions Inventory for PM₁₀ for the Maricopa County, Arizona Nonattainment Area."

PM₁₀ = Particulate matter having an aerodynamic diameter of 10 microns or less
 NO_x = Nitrogen oxides
 CO = Carbon monoxide
 VOC = Volatile organic compounds

3.3 CONCLUSIONS

Based on an evaluation of the direct and indirect emissions associated with construction of the project, the estimated emission rates of NO_x would exceed the 100 tpy applicability threshold in Maricopa County, Arizona by 4.4 tpy in 2008 (see table 3.1-1). As shown in table 3.2-1, the project emissions would represent less than 10 percent of the area emissions of a nonattainment or maintenance pollutant and would, therefore, not be subject to general conformity requirements based upon regional significance. Because no changes to operation emissions are being proposed for the Phoenix Expansion Project, a similar evaluation of operation emissions was not needed. Therefore, a General Conformity Determination is only required for construction of the project.

4.0 GENERAL CONFORMITY DETERMINATION

The 8-hour ozone nonattainment designation for the Phoenix-Mesa Planning Area went into effect on June 15, 2004. The MAG is responsible for developing the draft SIP applicable to Maricopa County that will address attainment with the federal 8-hour ozone standard. In a letter dated March 21, 2007, the MAG indicated a commitment to include the 2008 construction emissions from both ozone precursors (i.e., NO_x and VOC) for the applicable portions of the Phoenix Expansion Project as part of the emissions budgets in the draft SIP. This commitment letter is included as Attachment A.

As indicated in the March 21, 2007 letter, Transwestern provided estimated construction emissions for NO_x and VOC to the MAG. The MAG included these emissions in area-wide air emission modeling that was completed using a modeling protocol developed in support of the federal 8-hour ozone attainment demonstration in the Phoenix-Mesa Planning Area. In accordance with this protocol, the MAG identified past episodes of elevated ozone based upon meteorological data and ozone monitoring data (MAG, 2006). These past episodes were used to predict future ozone levels. The modeling demonstrated attainment of the federal 8-hour ozone standard during 2008. This standard is included in the draft 8-hour ozone plan developed by the MAG, which includes the estimated construction emissions generated by the Phoenix Expansion Project in the Phoenix-Mesa Planning Area. The draft 8-hour ozone plan will be available for a 30-day public review and comment period that will begin during the first week of April 2007. Upon approval by the MAG, the final 8-hour ozone plan will be provided to the Arizona Department of Environmental Quality (ADEQ) for transmission to the EPA for review and approval as a revision to the Arizona SIP. The draft SIP revision addressing the federal 8-hour ozone nonattainment designation is due to the EPA on June 15, 2007.

5.0 FINDING OF CONFORMITY

Because the MAG's March 21, 2007 letter included in Attachment A indicates that the project's construction emissions would be added to a draft SIP revision that has not undergone EPA review and approval, the ADEQ, as the agency responsible for the SIP, must issue a more detailed commitment letter to the EPA that addresses the requirements contained in Title 40 CFR Part 51.858(a)(5)(i)(B) and Title 40 CFR Part 93.158(a)(5)(i)(B) to enable the FERC to make a Final General Conformity Determination. Alternatively, once the draft SIP receives EPA approval, the FERC can issue a Final General Conformity Determination if, in accordance with Title 40 CFR Part 51.858(a)(5)(i)(A) and Title 40 CFR Part 93.158(a)(5)(i)(A), the ADEQ provides documentation demonstrating that the total of the direct and indirect emissions from the portion of the proposed action to which the general conformity review applies, together with all other emissions in the nonattainment area, would not exceed the emissions budgets specified in the approved SIP.

As discussed in section 4.10.1, the FERC staff has requested documentation addressing either the detailed commitment required by Title 40 CFR Part 51.858(a)(5)(i)(B) and Title 40 CFR Part 93.158(a)(5)(i)(B), or that the emissions do not exceed existing budgets in the approved SIP required by Title 40 CFR Part 51.858(a)(5)(i)(A) and Title 40 CFR Part 93.158(a)(5)(i)(A). Upon receipt of the requested information, the FERC staff will complete the analysis and issue a Final General Conformity Determination for the Phoenix Expansion Project.