

Federal Energy Regulatory Commission
Office of Energy Projects, Division of Gas-Environment & Engineering

ENVIRONMENTAL ASSESSMENT REPORT

Name of Applicant: Pine Prairie Energy Center, LLC (Pine Prairie)

Date Filed: June 15, 2016

Docket No: CP16-468-000
Prior Notice

Type: Sections 157.208 & 157.213 – Blanket-Type Construction of Facilities **Cost:** \$20,000,000

Facilities:

Pine Prairie proposes to construct two 5,750 horsepower electric motor drive compressors at its existing Pine Prairie Energy Center's gas handling facility in Evangeline Parish, Louisiana. The additional compression would be used to meet marketplace demands for high injection capability storage services. The footprint of construction would be limited to approximately 0.4 acre for the expansion of the existing compressor building and 0.025 acre to set a transformer, extend the motor control center, and install blowdown silencers.

Pine Prairie would construct the facilities over a period of approximately 8 months beginning immediately after its anticipated blanket approval date on or around August 26, 2016.

Environmental Impact -- Conclusions:

Categorical Exclusion

Deficiency Letter Required

Environmental Comments Required

EA/EIS Required

Environment Complete

No NOI Required

NOI Required

Environmental Considerations or Comments:

Environmental comments for the proposed facilities are attached.

Prepared by:
/s/ Kenneth Warn

Date:
8/17/2016

Approved by Branch Chief:
/s/ David Swearingen

Date:
8/26/2016

**Pine Prairie Energy Center, LLC (Pine Prairie)
Installation of Compressor Nos. 13 & 14 Project (Project)
Docket No. CP16-468-000**

ENVIRONMENTAL COMMENTS

Proposed Action

Pine Prairie proposes to construct two 5,750 horsepower electric motor drive compressors (identified as Compressor Nos. 13 & 14) at its existing Pine Prairie Energy Center's gas handling facility ("gas handling facility") in Evangeline Parish, Louisiana. The additional compression would be used to meet marketplace demands for high injection capability storage services.

Pine Prairie would construct the facilities over a period of approximately 8 months beginning after its anticipated blanket approval date on or around August 26, 2016.

Pine Prairie originally requested authorization to construct two natural gas-fired compressors within its application filed in Docket No. CP04-379-002, and was granted authorization in the Order issued in that docket on August 5, 2009. On June 11, 2011, the Commission issued an Order in Docket No. CP04-379-003 authorizing the substitution of electric motor-driven Compressor Units 13 & 14 in place of the natural gas-fired units. Pine Prairie's authorization to construct Compressor Nos. 13 & 14 subsequently lapsed on June 11, 2013, and Pine Prairie did not seek an extension of time.

Land Requirements and Access Roads

Construction of the Project would occur entirely within the existing boundaries of the gas handling facility. Project construction would disturb approximately 0.4 acre for the expansion of the existing compressor building and installing supports for outdoor piping, coolers, and related equipment, and 0.025 acre to set a transformer, extend the motor control center, and install blowdown silencers. Project access would be via an existing paved road (Ambrose Road) and the Pine Prairie Energy Center adjacent to the gas handling facility.

Construction and Operation Procedures

Pine Prairie would perform all construction activities in accordance with the FERC's *Upland Erosion Control, Revegetation, and Maintenance Plan* (FERC Plan) and applicable state and county requirements. Pine Prairie would assign one environmental inspector (EI) having duties consistent with those specified in Section II.B of the FERC Plan. Pine Prairie would utilize large mobile equipment (e.g., trucks, bulldozers, cranes, etc.) to construct the Project and would employ approximately 125 people throughout the

8-month-long construction period. Following construction, Pine Prairie would operate and maintain the Project in accordance with the U.S. Department of Transportation Minimum Federal Safety Standards specified in Title 49 Code of Federal Regulations Part 192 (49 CFR 192).

Environmental Analysis

Our review indicates that Project construction and operation would neither affect nor have conflict with:

- groundwater (extensive excavation would not occur);
- fisheries, waterbodies, wetlands, or floodplains (none are present within the Project area);
- vegetation, wildlife, and wildlife habitat (Project would be within a previously disturbed and graveled area with a small grassed area in the southeast corner of the site);
- land use (all Project work would be confined to the existing boundaries of the gas handling facility allocated for industrial use);
- federally designated lands such as federal or state parks, designated Wild and Scenic Rivers, wildlife refuges, wildlife management areas, national forests, wildlife management areas, wilderness areas, registered natural landmarks, or nature preserves;
- coastal zones; or
- privately owned conservation lands.

Geologic Hazards

As concluded in the environmental assessment (EA) issued under Docket No. CP04-379-002, no detected earthquakes have definitively been attributed to any specific mapped fault systems in Louisiana, nor have any active faults been detected as risks to the Project area. In addition, the EA concluded that the potential for soil liquefaction and landslides is extremely low in the Project area and there is no indication that karst conditions exist. Updated information included in the present Prior Notice application finds no evidence of active faulting or other geologic hazards that could put either the existing Pine Prairie Energy Center or proposed Project facilities at risk.

Soils

The EA issued under Docket No. CP04-379-002 concluded that none of the soils that would be affected by the Project are classified as prime farmland soils, hydric soils, or highly erodible soils. With Pine Prairie's compliance with the FERC Plan, and the limited need for Project access via an existing paved roadway and the adjacent Pine Prairie Energy Center, we conclude that Project impacts on soils would be minimal.

Threatened and Endangered Species

The federally endangered red-cockaded woodpecker (*Picoides boreali*) is known to occur in Evangeline Parish. Pine Prairie conducted field work in March 2016 for visible signs or evidence of the species, and subsequently prepared a *Threatened and Endangered Species Report* to assess potential impacts of Project construction in accordance with the Endangered Species Act (ESA). Pine Prairie concluded that the Project area does not provide habitat for the red-cockaded woodpecker. The areas surrounding the Project site include planted and mature planted pine but do not contain old growth or decaying pines that might provide habitat for the species. The roadways that would provide access to the Project, as well as surrounding areas, do not contain mature trees, which are required for nesting. Additionally, the U.S. Fish and Wildlife Service's (FWS) Louisiana Ecological Services Office indicated in an ESA Technical Assistance Form dated March 17, 2016, that the Project is not an activity that would affect federally listed threatened or endangered species or designated critical habitat. In conclusion, the proposed Project would have *no effect* on the red-cockaded woodpecker or other federal or state listed threatened and endangered species.

Cultural Resources

A cultural resources survey covering the proposed work area for the Project was previously completed under Docket No. CP04-379-002. No cultural resources were identified in the currently proposed work area, and the Louisiana State Historic Preservation Office concurred that no historic properties would be affected. Therefore, we have determined that the Project would not affect historic properties.

Air Quality

Air quality impacts associated with construction of the Project would include combustion emissions from fossil-fueled construction equipment and fugitive dust generated by operation of this equipment on unpaved surfaces; however, these air quality impacts would be temporary, localized, and minor. Large earth-moving equipment and other mobile sources may be powered by diesel or gasoline engines and are sources of combustion-related emissions including nitrogen oxides, carbon monoxide, volatile organic compounds, sulfur oxides, particulate matter less than 10 and less than 2.5 microns in aerodynamic diameter, greenhouse gas emissions (chiefly carbon dioxide, and lesser amounts of other greenhouse gases in terms of carbon dioxide equivalent emissions (CO_{2e}) according to each gas's respective global warming potential), and hazardous air pollutants. Air pollutants from construction equipment would be limited to the immediate vicinity of the construction area and would be temporary. To mitigate for the Project's potential to generate emissions, Pine Prairie would apply water as necessary to construction surfaces to minimize the creation of fugitive dust and maintain all fossil-fueled construction equipment in accordance with manufacturer's recommendations.

General conformity requirements of 40 CFR 93 do not apply to the Project, which would be within a parish classified by the U.S. Environmental Protection Agency (EPA) as being in attainment for all National Ambient Air Quality Standards criteria pollutants.

The electric motor-driven compressors would not result in a direct source of emissions during normal operation of the modified gas handling facility. However, valves, connections, and compressor components would result in minor fugitive releases of natural gas (including methane) emissions estimated not to exceed approximately 16,050 tons of CO_{2e} annually. In accordance with the EPA's Greenhouse Gas Reporting Rule specified in 40 CFR 98, Pine Prairie is required to report all actual annual emissions from the existing (and proposed modified) Pine Prairie Energy Center including gas handling facility over 25,000 metric tons of CO_{2e} per year.

We conclude that Project construction and operation would result in minimal impacts on local and regional air quality.

Noise

The noise environment can be affected both during construction and operation of facilities. Two measures that relate the time-varying quality of environmental noise to its known effect on people are the 24-hour equivalent sound level (L_{eq}) and day-night sound level (L_{dn}). The L_{eq} is the level of steady sound with the same total (equivalent) energy as the time-varying sound of interest, averaged over a 24-hour period. The L_{dn} is the L_{eq} plus 10 decibels on the A-weighted scale (dBA) added to account for people's greater sensitivity to nighttime sound levels (typically considered between the hours of 10pm and 7am). The A-weighted scale is used to assess noise impacts because human hearing is less sensitive to low and high frequencies than mid-range frequencies. The human ear's threshold of perception for noise change is considered to be 3 dBA; 6 dBA is clearly noticeable to the human ear, and 10 dBA is perceived as a doubling of noise.

In 1974, the EPA published *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*. This publication evaluated the effects of environmental noise with respect to health and safety. The EPA has determined that noise levels should not exceed 55 dBA L_{dn} , which is the level that protects the public from indoor and outdoor activity interference. This noise level has been useful for federal and state agencies to establish noise limitations for various noise sources. A 55 dBA L_{dn} noise level equates to 48.6 dBA L_{eq} (i.e., a facility that does not exceed a continuous noise impact of 48.6 dBA L_{eq} would not exceed 55 dBA L_{dn}).

Construction of the Project would require operation of various kinds of construction equipment (e.g., large earth-moving equipment, cranes, trucks, and other mobile sources). Operation of this equipment would generate intermittent and varying

levels of noise throughout the anticipated August 2016 through April 2017 construction timeframe. Project construction activities would take place primarily during daytime hours.

Results of an acoustical analysis for the proposed modified gas handling facility including Compressor Nos. 13 & 14 were presented in the EA issued in Docket No. CP11-1-000 and summarized within the Environmental Report filed with Pine Prairie's application in Docket No. CP16-468-000. The acoustical analysis concluded that noise from the modified gas handling facility after all 16 compressor units (including Compressor Nos. 13 & 14) are installed would not exceed an L_{dn} of 53.5 dBA at the nearest noise-sensitive areas (NSA) during full load operation. Pine Prairie confirms that Compressors Nos. 13 & 14 considered in the current Prior Notice application are identical in size and manufacture to those modeled within the acoustic assessment filed in Docket No. CP11-1-000, and that all other design and noise mitigation aspects assumed for the modified facility remain unchanged. To verify compliance, Pine Prairie is required under FERC blanket requirements 18 CFR 157.206(b)(5)(ii) to submit a noise survey confirming the requirement under 18 CFR 157.206(b)(5)(i) that noise from the modified gas handling facility must not exceed 55 dBA L_{dn} at the nearest NSAs. If the required compressor station survey verifies that noise levels have been adequately controlled to levels below the FERC noise criterion of 55 dBA L_{dn} , noise impacts at the nearby NSAs from the modified gas handling facility would not be significant.

Staff's Conclusion

Based on the above environmental analysis, we have determined that Pine Prairie would conduct the Project activities in compliance with the requirements under Sections 157.206(b), 157.208, and 157.213 of the Commission's regulations. We conclude that Pine Prairie's proposed action would result in minimal environmental impact.