

EXECUTIVE SUMMARY

INTRODUCTION

The staff of the Federal Energy Regulatory Commission (FERC or Commission) has prepared this Environmental Impact Statement (EIS) to assess the environmental impacts associated with the construction of facilities proposed by Rockies Express Pipeline LLC (Rockies Express) in accordance with the requirements of the National Environmental Policy Act (NEPA). This project is referred to as the Rockies Express East Project (the Project or the REX East Project). The purpose of this document is to inform the public, the FERC, and federal and state agencies about the potential environmental impacts of the Project and its alternatives, and to recommend mitigation measures that would avoid or reduce significant adverse impacts. The U.S. Army Corps of Engineers (COE), U.S. Fish and Wildlife Service (FWS), Illinois Department of Agriculture (ILDOA), and the Natural Resources Conservation Service (NRCS) are cooperating agencies and have participated in the development of this EIS.

PROJECT BACKGROUND

On June 13, 2006, we¹ approved a request by Rockies Express, a joint venture among Kinder Morgan Energy Partners, L.P. (Kinder Morgan), Sempra Pipelines and Storage (Sempra), and Conoco-Phillips (an equity partner), to use the FERC's pre-filing review for this project. On April 30, 2007, Rockies Express filed an application with the FERC in Docket Number CP07-208-000 under Section 7 of the Natural Gas Act (NGA), as amended, and Parts 157 and 284 of the Commission's regulations. On November 23, 2007, the FERC issued the draft EIS and filed it with the U.S. Environmental Protection Agency (EPA). Rockies Express is seeking a Certificate of Public Convenience and Necessity (Certificate) for the REX East Project.

PROPOSED ACTION

As currently proposed, the REX East Project would consist of the construction and operation of approximately 639.1 miles of 42-inch-diameter natural gas pipeline in Missouri, Illinois, Indiana, and Ohio. Seven compressor stations, totaling 225,716 new horsepower (hp) of compression, and ancillary facilities are proposed in Illinois, Indiana, Missouri, Nebraska, Ohio, and Wyoming.

The purpose of the REX East Project is to provide natural gas transportation service for gas produced in the Rocky Mountain region from the terminus of the REX West Project in Audrain County, Missouri to markets in the midwestern and eastern United States. The terminus of the REX East Project would be in Monroe County, Ohio. The Project pipeline would deliver up to 1.8 billion cubic feet (bcf) per day of gas to other interstate natural gas pipelines. The Project would provide access to an additional 19 inter- and intra-state natural gas pipelines at 13 interconnect points. These pipelines serve markets in the midwestern and eastern United States. The REX East Project would be part of the Rockies Express Pipeline System—a 1,679-mile natural gas pipeline system extending from Colorado to Ohio.

PUBLIC INVOLVEMENT

As part of the pre-filing process, the FERC staff worked with Rockies Express to develop a public outreach plan for issue identification and stakeholder participation. Rockies Express began implementing this outreach plan in June 2006 and sponsored 18 local, public open houses to inform landowners, government officials, and the general public about the REX East Project and invite them to

¹ "Our," "we," and "us" refer to the environmental staff of the Federal Energy Regulatory Commission's Office of Energy Projects.

ask questions and express their Project-related comments and concerns. Two additional open houses were held in October 2006 to provide information on two route alternatives and the relocation of the Brainbridge Compressor Station.

On August 16, 2006, the FERC issued a *Notice of Intent to Prepare an Environmental Impact Statement for the Proposed REX East Project, Request for Comments on Environmental Issues, and Notice of Joint Public Scoping Meeting* (Rockies Express NOI). The Rockies Express NOI was mailed to approximately 13,000 individuals and organizations including federal, state, and local agencies; elected officials; environmental and public interest groups; Native American tribes; local libraries and newspapers; other interested stakeholders; and affected landowners located along the pipeline route. The FERC staff continued to receive and consider comments during the entire pre-filing period and throughout the development of this EIS. The FERC staff held nine public scoping meetings along the Project route to provide the public an opportunity to learn more about the Project and comment on the scope of environmental issues to be included in the draft EIS. The public was also invited to attend site visits conducted by the FERC staff, which took place on July 17-20, 2007 and August 6-10, 2007.

Additionally, we initiated agency consultations to identify issues that should be addressed in the EIS. These consultations included interagency meetings from September 12 through September 14, 2006 and interagency conference calls on April 3, 5, 12; May 10; June 14 and 18; July 24; and September 18, 2007. Participants in these meetings and calls included representatives of COE, EPA, FWS, NRCS, U.S. Department of Transportation (DOT), National Park Service (NPS), Indiana Department of Environmental Management (IDEM), Indiana Department of Natural Resources (INDNR), State Historic Preservation Officers (SHPOs), Indiana Utility Regulatory Commission (IURC), Indiana Department of Agriculture (INDOA), Ohio Department of Natural Resources (ODNR), Ohio Power Siting Board (OPSB), Ohio Environmental Protection Agency (OEPA), Ohio Department of Development, Ohio Farm Bureau, ILDOA, Missouri Department of Natural Resources (MODNR), Missouri Department of Conservation (MDC), and Illinois Environmental Protection Agency (ILEPA).

From January 7 through 9, 2008 the FERC staff held 9 public comment meetings along the Project route to allow the public the opportunity to comment on issues addressed in the draft EIS or to discuss new areas of concern. Eighty-five commenters spoke at the public meetings. Also on those dates, the FERC staff conducted site visits with affected landowners to evaluate potential alternative routes along their properties. On January 8, 2008 an interagency meeting was held at the ILDOA. The ILDOA, Sangamon County Farm Bureau, and Illinois Agricultural Association (IAA) were in attendance to discuss the draft EIS. We received 225 written comments through March 14, 2008.

ENVIRONMENTAL IMPACTS

Construction and operation of the Project would result in numerous impacts to the environment. We evaluated the impacts to geology, soils, water resources, vegetation, wildlife, fisheries, special status species, land use, visual resources, socioeconomics, cultural resources, air quality, noise, and safety. We have proposed mitigation measures to minimize these impacts, and made recommendations to further avoid, minimize, and mitigate potential impacts. We also considered the cumulative impacts of this Project with other past, present, and reasonably foreseeable actions in the area. Section 5.2 of this EIS contains a compilation of our recommended mitigation.

Construction of the Project would disturb approximately 14,334.4 acres of land. After construction, 4,049.2 acres would be retained for the operation of the Project; this includes the permanent right-of-way, as well as aboveground facilities.

In general, bedrock is buried so deeply by glacial deposits or soils that it would not be encountered during construction. About 14 percent of the proposed pipeline route and none of the aboveground facilities may require blasting. Mineral resources that may be affected by the Project include gas and oil, coal, sand and gravel, and stone. Construction of the Project may restrict the surface extraction of some of these mineral resources. Geologic hazards in the Project area include seismicity, landslides, subsidence, and flood/scour. The Project would be located in an area of relatively low seismic risk. The topography near the Mississippi River and in eastern Indiana and eastern Ohio makes the area more susceptible to landslides. The proposed construction techniques, along with erosion control and slope stabilization, would reduce the potential for landslides. Subsidence may occur in portions of the Project area due to the formation of sinkholes in karst areas or the collapse of coal mines. We have recommended preconstruction identification of these areas, plans for dealing with any unidentified issues, and long-term monitoring in these areas. Although flooding does not present a risk to buried pipelines, bank erosion and scour could expose sections of pipe or cause them to become unsupported. In areas with potential for severe scour, the pipeline would be buried at a greater depth.

We believe that the implementation of Rockies Express' proposed, and our recommended, mitigation would minimize the impact to mineral resources and the impact from geological hazards.

Approximately 75 percent of the land disturbed by the Project is classified as agricultural. Construction of the Project facilities would disturb soils, resulting in increased potential for erosion, compaction, mixing of topsoil, and the introduction of rock into the soil. Rockies Express has proposed a number of mitigation measures, including Agricultural Impact Mitigation Plans (AIMPs) and an Upland Construction Plan (Plan), which would mitigate some of these concerns. We have recommended additional mitigation that would further reduce the impact on soils.

Standard pipeline construction procedures could affect groundwater resources by altering overland water flow and infiltration rates. Because the recharge areas are much larger than the footprint of the Project, changes in groundwater recharge as a result of the Project should not be significant. However, Rockies Express would repair or replace any water supply wells damaged during construction. The potential for contamination from spills of diesel fuel and hydraulic fluids is also a concern. Rockies Express has provided a plan to reduce the potential for spills and to control and remove any spills that may occur.

The REX East Project would cross 1,485 surface waterbodies: 326 perennial, 447 intermittent, 689 ephemeral, and 1 ephemeral/intermittent streams/rivers, and 22 open water areas. Rockies Express would use 21 HDDs to avoid impacts to 32 waterbodies. Construction of the pipeline could result in modification of aquatic habitat, increased sedimentation and turbidity, decreased dissolved oxygen concentrations, releases of chemical and nutrient pollutants from sediments, and introduction of chemical contaminants such as fuel and lubricants. Rockies Express has provided general mitigation measures to reduce these impacts on waterbodies. No long-term surface water impacts are anticipated as a result of constructing and operating the Project. The short-term or temporary impacts would be restricted to the construction through restoration phases of the Project.

The Project would cross eight waterbodies that are listed on the Nationwide Rivers Inventory (NRI), four in Indiana and four in Ohio. The Project would also cross two National Wild and Scenic Rivers, the Little Miami River and Big Darby Creek, both in Ohio. Both of these waterbodies would be crossed using the horizontal directional drill (HDD) method or microtunnel, if the HDD or microtunnel is unsuccessful. If the HDD or microtunnel is successfully completed, no significant impact on these two waterbodies should occur. We recommended alternative crossings that would reduce impacts to the Wild and Scenic Rivers if these methods fail.

The Mississippi River would also be crossed by the HDD method. The drill would be set up on Blackburn Island. Because access to the drill site would be by water, dredging for a temporary dock would be required. Rockies Express originally proposed to extend the drill to cross under the Sny Levee in Illinois. The Sny Levee District expressed concerns that this construction method could potentially destabilize the levee and requested that the pipeline cross over the top of the levee. Rockies Express conducted geotechnical studies and determined that crossing over the levee would be technically feasible with a shift of the drill exit point to the south; therefore, this crossing method has been adopted and is incorporated into this EIS.

Fisheries in the REX East Project area are classified as warmwater fisheries. No essential fish habitat, as defined by the Magnuson-Stevens Fishery Conservation and Management Act, would be affected by the Project. Of the 1,485 waterbodies crossed, 59 contain fisheries of special concern. The HDD method would be used to cross 17 of these waterbodies and 30 would be crossed by dry-ditch methods to avoid impacts on the fisheries. We have recommended that any of the remaining streams with fisheries of special concern that are 30 feet wide or less be crossed using a dry-ditch crossing method. A successful HDD or bore would avoid impacts on fisheries, while a dry-ditch crossing (e.g., dam and pump or flume) could result in less construction-related sedimentation and turbidity, thereby reducing impacts on the fisheries. Rockies Express would also implement erosion control and restoration measures that would reduce the impact on fisheries.

The primary impact of pipeline construction and right-of-way maintenance activities on wetlands would be the temporary and permanent alteration of wetland vegetation. Construction would disturb approximately 19.1 acres of emergent wetlands, 2.2 acres of scrub-shrub wetlands, and 16.5 acres of forested wetlands. The impact on the emergent and scrub-shrub wetlands would be temporary because the vegetation would be allowed to transition back into a community functioning similar to pre-construction wetlands. However, the clearing of forested wetlands would be a long-term or permanent impact due to the growth rate of trees. Approximately 5.3 acres of forested wetland would be permanently impacted by maintenance activities during the life of the Project. No wetlands would be permanently filled or drained as a result of the Project.

The HDD drill site for the Mississippi River and the Salt River would be on Blackburn Island, which includes a significant forested wetland system. Approximately 5.5 acres of wetlands would be impacted by construction on the island, including the permanent conversion of 0.7 acre of forested wetland to herbaceous emergent wetland.

Rockies Express would implement the mitigation measures in its Wetland and Waterbody Construction and Mitigation Procedures (Procedures) to control erosion and restore the grade and hydrology in wetlands. We have recommended that Rockies Express finalize agency consultations and its Wetland Mitigation Plan, which should include reforestation measures and compensatory mitigation.

The REX East pipeline route would cross 490.6 miles of agricultural and herbaceous open land and 143.5 miles of forested areas. Impacts from construction and operation (including maintenance mowing) of the Project on agricultural and open land would be temporary or short-term, while impacts to forested areas would be long-term to permanent. Rockies Express would implement erosion controls to contain disturbance to the work area. After construction, Rockies Express would revegetate nonagricultural lands.

The Project would affect Conservation Reserve Program (CRP) lands in Missouri, Illinois, Indiana, and Ohio, and classified forests in Indiana. We have recommended that Rockies Express identify CRP lands and prepare plans with the landowners that address the issues of constructing in these areas. The vegetation communities in Indiana include classified forests and wooded riparian corridors.

Most mobile wildlife would leave the Project area during construction. However, unfledged birds, young nonmobile animals, and slow-moving animals may be killed during construction. After construction, depending on their habitat requirements, most wildlife would return.

In areas where the Project does not parallel existing rights-of-way, forest fragmentation would result in loss of habitat to migratory birds. Rockies Express, in consultation with FWS, has developed and signed *Guidelines for Achieving Compliance with the Migratory Bird Treaty Act and Executive Order No. 13186 Through Voluntary Conservation Measures* (Conservation Guidelines) to minimize forest impacts and forest fragmentation impacts to migratory birds. The implementation of Rockies Express' Plan and Procedures, and the implementation of our recommendations, including compliance with the Conservation Guidelines would reduce impacts.

Ten federally listed threatened or endangered species and three candidate species may occur in the Project area. The Biological Assessment (BA) was issued on March 25, 2008. Based on our analysis in the BA, with the implementation of the Rockies Express mitigation measures, and our recommended mitigation measures, the Project would not affect 4 of the 10 federally listed threatened or endangered species (clubshell, decurrent false aster, eastern prairie fringed orchid, and prairie bush clover); the Project would not be likely to adversely affect the remaining 6 federally listed threatened or endangered species (Indiana bat, whooping crane, fanshell, fat pocketbook, northern riffleshell, and the running buffalo clover). We have provided the BA to FWS for its review and concurrence.

Rockies Express initially identified 23 state-listed threatened or endangered species as potentially occurring in the Project area. Ten of the state-listed species initially identified were eliminated from detailed review because they are either transient in the Project area, are unlikely to adversely respond to temporary and permanent impacts associated with the proposed facilities, or were determined after the initial review, in consultation with the agencies, to probably not occur in the Project area. A total of 15 state-listed species were identified as potentially affected by the Project. After review, it was determined that the project was unlikely to adversely affect any of the 15 state-listed species.

The primary land use that would be affected by the operation of the pipeline is agricultural (2,953.9 acres or about 73 percent). Other land uses that would be affected by the operation of the pipeline include forest land (885.7 acres or 22 percent²), open land (173.7 acres or 4 percent), open water (9.2 acres or less than 1 percent), and industrial/commercial land (19.7 acres or less than 1 percent). About 81 percent of the land that would be used for aboveground facilities is agricultural. During operation of the Project, the permanent pipeline right-of-way and aboveground facilities (including permanent access roads) would affect 2,953.9 acres of agricultural land. After construction, areas within the permanent right-of-way would generally be allowed to revert to preconstruction usage with certain restrictions, such as not allowing any permanent structures or trees.

Rockies Express has proposed to compensate landowners for reduced crop yields due to construction of pipeline facilities and use of the easement. Construction of the pipeline may affect the fertility of the agricultural fields for several years. We have recommended that Rockies Express develop and implement a 5-year post-construction monitoring program to evaluate crop productivity in areas impacted by Project construction. Rockies Express has developed AIMPs for each state to address construction and restoration issues unique to agricultural areas. Issues of concern identified in agricultural areas include drain tile repair, pipeline depth of cover, topsoil segregation, and working in wet fields; we have recommended mitigation for all of these issues. We believe that implementation of

² This includes the permanent loss of forest vegetation for aboveground facilities and the permanent right-of-way. This does not include temporary, long term construction impacts (see section 4.4.1).

the mitigation measures discussed above would minimize or mitigate the potential impacts to agricultural land uses.

There are 66 residences and 18 non-residential structures located within 50 feet of the proposed construction right-of-way. Rockies Express has adopted site-specific mitigation to reduce impacts to all 66 residences. Eighteen residences are within 25 feet of a proposed work area. Because of their proximity to construction activities, we have recommended that Rockies Express take measures to mitigate construction impacts on these residences. We also have included mitigation to repair or replace any septic systems damaged during construction.

The Project would cross 34 special-interest areas, including state parks and forests, trails, scenic highways, canoeing streams, wild and scenic rivers, and nature preserves. Impacts to these areas include clearing of vegetation, noise, dust, and the disruption of recreational uses. Operational impacts would include permanent changes in vegetation resulting from right-of-way maintenance and potential visual impacts associated with these features and aesthetics. In most cases, Rockies Express has not provided site-specific mitigation plans for the crossing of these areas; therefore, we have recommended that plans be prepared.

Rockies Express consulted with the Wyoming, Nebraska, Missouri, Illinois, Indiana, and Ohio SHPOs and performed cultural resource investigations for areas that would be affected by construction and operation of the Project. Cultural resource surveys are ongoing and the consultation process for the Project is not yet complete. Therefore, we have recommended that construction not be authorized until the required studies have been completed and we have received SHPO comments on such studies.

To date, cultural resources survey in Missouri identified 93 archaeological sites and architectural resources. Forty-five of these sites have been recommended as potentially eligible for listing on the National Register of Historic Places (NRHP). In Illinois, 481 archaeological sites and architectural resources were identified; 64 of these have been recommended as potentially eligible for the NRHP. In Indiana, 857 archaeological and architectural resources have been identified. To date, 58 were recommended as potentially eligible for listing on the NRHP. In Ohio, 639 archaeological and architectural resources have been identified. Of those, 72 are being treated as potentially eligible. In Nebraska, no cultural resources were identified at the compressor station site. One archaeology site was identified at the compressor station site in Wyoming; however, the site is not eligible for the NRHP. We have recommended that Rockies Express avoid all sites with the potential to contain human remains, and they are developing avoidance plans for five prehistoric mound sites and three historic cemeteries.

Rockies Express contacted 43 Native American tribes with cultural links to the Project area. In total, 22 tribes responded. Two tribes asked to participate in the consultation process, and 17 tribes asked to be notified if human remains were found.

Air quality would be affected by construction and operation of the Project. Most air emissions associated with the Project would result from the long-term operation of the compressor stations. Rockies Express would comply with all applicable air permit requirements from the appropriate state agencies for these facilities. A screening analysis for each station indicates that the National Ambient Air Quality Standards (NAAQS) would not be exceeded at any location. For the non-attainment areas, construction emissions were compared with, and were found to be less than, the *de minimis* threshold levels for General Conformity. The estimated emissions are based on the use of best available non-road construction equipment in the non-attainment areas. However, we believe this assumption is insufficient to demonstrate emissions would remain below General Conformity. We have recommended additional measures to demonstrate compliance.

Rockies Express performed detailed noise assessments for each of the proposed HDD locations. To mitigate significant impacts due to HDD activity at several noise sensitive areas (NSAs), Rockies Express has committed to using a temporary noise barrier at least 16 feet high and to ensure any diesel engines associated with HDD activities would include an adequate exhaust muffler to reduce noise levels at the nearest NSAs. During operation of the Project, potential noise impacts would be limited to the vicinity of the new compressor stations. All compressor stations would include design measures to minimize sound generation. The proposed compressor stations with noise mitigation measures implemented would comply with the FERC's day-night sound level limit of 55 decibels on the A-weighted scale (dBA) at the nearest NSAs.

The pipeline and aboveground facilities associated with the REX East Project would be designed, constructed, operated, and maintained to meet or exceed the DOT Minimum Federal Safety Standards in Title 49 Code of Federal Regulations (CFR) Part 192 and other applicable federal and state regulations. By designing and operating the Project in accordance with the applicable standards, the Project would not result in significant increased public safety risk.

Detailed descriptions of the impacts of the Project, Rockies Express' proposed mitigation measures, and our measures to further avoid, minimize, and mitigate these impacts are presented in section 4 of this EIS.

ALTERNATIVES CONSIDERED

The No Action and Postponed Action Alternatives were considered for the REX East Project. While the No Action or Postponed Action Alternatives would eliminate or minimize the environmental impacts identified in this EIS, U.S. markets would be denied the Project objective of delivering up to 1.8 bcf of natural gas from supply regions in the West to meet the increasing demand in the midwestern and eastern United States. By denying or delaying the Certificate for the REX East Project, the production and delivery from existing wells located in the Rocky Mountain basins may be delayed. A denial or a delay might result in more expensive and less reliable natural gas supplies for the end users and greater reliance on alternative fossil fuels, such as coal or fuel oil, or both.

A system alternative for the REX East Project would have to be able to transport large volumes of natural gas from the Rocky Mountain basins directly to markets in the Midwest and East. We are not aware of any existing pipeline systems with expansion plans that could meet the purpose and need of the REX East Project. Therefore, we have concluded that the use of existing pipeline systems is not a viable alternative.

We have also evaluated ten major route alternatives based on public comments to determine if impacts could be avoided or reduced on environmentally sensitive resources that would be affected by the Project. These major route alternatives included alternatives to the Mississippi River crossing to avoid Blackburn Island, alternative routes placed to the north of Indianapolis, and alternative route crossings of the Little Miami River and Big Darby Creek.

In addition, we have considered 64 requests for route variations by landowners and evaluated 27 variations in detail. Our evaluation of these variations was based on comment letters received from landowners or other stakeholders. Of the 27 variations evaluated in detail, we have recommended that 19 be incorporated into a revised Project route including 4 Rockies Express agreed to adopt in previous filings. We have also recommended Rockies Express continue consultations with landowners for four variations that would affect new landowners. The variations would increase the overall Project length by 1.4 miles, but would address landowner concerns, limit forest fragmentation and reduce forest impacts by 0.9 mile crossed.

CONCLUSIONS AND RECOMMENDATIONS

We conclude that if the REX East Project were constructed and operated in accordance with applicable laws and regulations, Rockies Express' proposed mitigation, coupled with the additional mitigation recommendations presented in section 5.2 of this EIS, the Project would have mostly limited adverse environmental impact and would be an environmentally acceptable action. Although many factors were considered in this determination, the principal reasons are:

- Rockies Express collocation of the REX East pipeline: more than 59 percent would follow existing rights-of-way.
- The Project would be consistent with or in conformance with federal resource management plans.
- Rockies Express would implement resource- or activity-specific plans, procedures, and agreements to protect natural resources, avoid or limit environmental impacts, and promote restoration of all disturbed areas during construction and operation of the Project.
- Rockies Express would use Agricultural Inspectors knowledgeable in farming practices along the proposed route who would provide input and guidance during construction in agricultural areas.
- The use of the HDD method would avoid disturbances to a number of major and sensitive waterbodies along the route, including the Salt and Mississippi Rivers in Missouri; the Sny Canal and Embarras River in Illinois; the Wabash, Big Blue, and Whitewater Rivers in Indiana; and several waterbodies in Ohio, including Big Darby Creek and the Little Miami River.
- The appropriate consultations with FWS, SHPOs, and other affected land management agencies, and any appropriate compliance actions resulting from these consultations, would be completed before Rockies Express would be allowed to begin construction in any given area.
- An environmental inspection and monitoring program would be implemented to ensure compliance with all mitigation measures, Certificate conditions, and other stipulations included in permits from other authorizing federal, state, and local agencies.

We have developed specific mitigation measures to further reduce the environmental impact that would otherwise result from construction of the various Project components. The additional studies or field investigations that we have recommended typically would result in site-specific mitigation and further reduction of impact; therefore, we are recommending that these mitigation measures be attached as conditions to any Certificate issued by the Commission. We believe that the recommended mitigation measures would reduce potential environmental impacts from Rockies Express' proposed action to less than significant levels.