

INTRODUCTION

CHAPTER 1

1.0 INTRODUCTION

1.1 Background

On September 17, 2004, Entrega Gas Pipeline Inc. (affiliate of EnCana Oil and Gas USA, Inc. [EnCana]) filed an application with the Federal Energy Regulatory Commission (FERC or Commission) in Docket Nos. CP04-413-000, et al., to construct, own, and operate a new natural gas transmission system in Colorado and Wyoming.¹ In its filing, Entrega Gas Pipeline Inc. (Entrega) seeks a Certificate of Public Convenience and Necessity (Certificate) under Section 7(c) of the Natural Gas Act (NGA) and Part 157 of the Commission's regulations. The Commission's environmental staff has prepared this final environmental impact statement (EIS) to assess the environmental impact resulting from construction and operation of the facilities proposed by Entrega in accordance with the requirements of the National Environmental Policy Act (NEPA).

The vertical line in the margin identifies text that has been modified in this final EIS and differs from the corresponding text in the draft EIS.

Entrega's proposal, referred to in this EIS as the Entrega Pipeline Project (EPP) would involve construction and operation of about 328.1 miles of 36- and 42-inch-diameter natural gas pipeline, 66,020 horsepower of compression at three new compressor stations, seven new meter stations, and related facilities. The pipeline would extend from the Piceance Basin (the "Meeker Hub") in Rio Blanco County, Colorado, northward to Wamsutter, Wyoming, and then proceed eastward roughly following Interstate 80 (I-80) past Rawlins, Laramie, and Cheyenne, Wyoming, to terminate at the Cheyenne Hub (near Rockport) in Weld County, Colorado (**figure 1.1-1**). Entrega proposes to transport up to 1.5 billion cubic feet per day (Bcf/d) of Rocky Mountain region natural gas from the Meeker Hub Compressor Station to interconnections with two interstate transporters at Wamsutter and three interstate transporters at the Cheyenne Hub.² With these interconnections, the EPP would deliver gas into the nationwide transmission network with access to large markets west of Wamsutter and east or south of the Cheyenne Hub. By constructing a 42-inch-diameter segment between Wamsutter and the Cheyenne Hub, the EPP would provide additional capacity for volumes traveling either to mid-continent/eastern markets or westward.

Entrega proposes to begin project construction in the late summer of 2005, with desired in-service dates of January 1, 2006, for the segment between the proposed Meeker Hub and Wamsutter Compressor Station (about 136 miles). Construction of the pipeline segment between the Wamsutter Compressor Station and the Cheyenne Hub (about 191.5 miles) would be initiated in 2006 and be completed prior to the end of the year. Entrega proposes to initiate construction of the three compressor stations in September 2006 with an in-service date of April 2007.

¹ Entrega Gas Pipeline Inc. also requested in Docket Nos. CP04-414-000 and CP04-415-000 that the FERC grant certificates for blanket-type transportation of natural gas, and construction and operation of certain facilities under Parts 284 and 157 of the FERC's regulations, respectively. Under the FERC's regulations, these dockets qualify for categorical exclusions with no environmental analysis required (see Title 18 of the Code of Federal Regulations, Part 380).

² Entrega also proposed to interconnect with Public Service of Colorado (PSCo) at the Cheyenne Hub. PSCo is a local distribution company, which provides natural gas to the Denver regional market.

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FINAL ENVIRONMENTAL IMPACT STATEMENT FOR THE PROPOSED ENTREGA PIPELINE PROJECT

Docket Nos. CP04-413-000, et al.

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Figure 1.1-1

Public access for the above information is available only through the Public Reference Room, or by e-mail at public.referenceroom@ferc.gov.

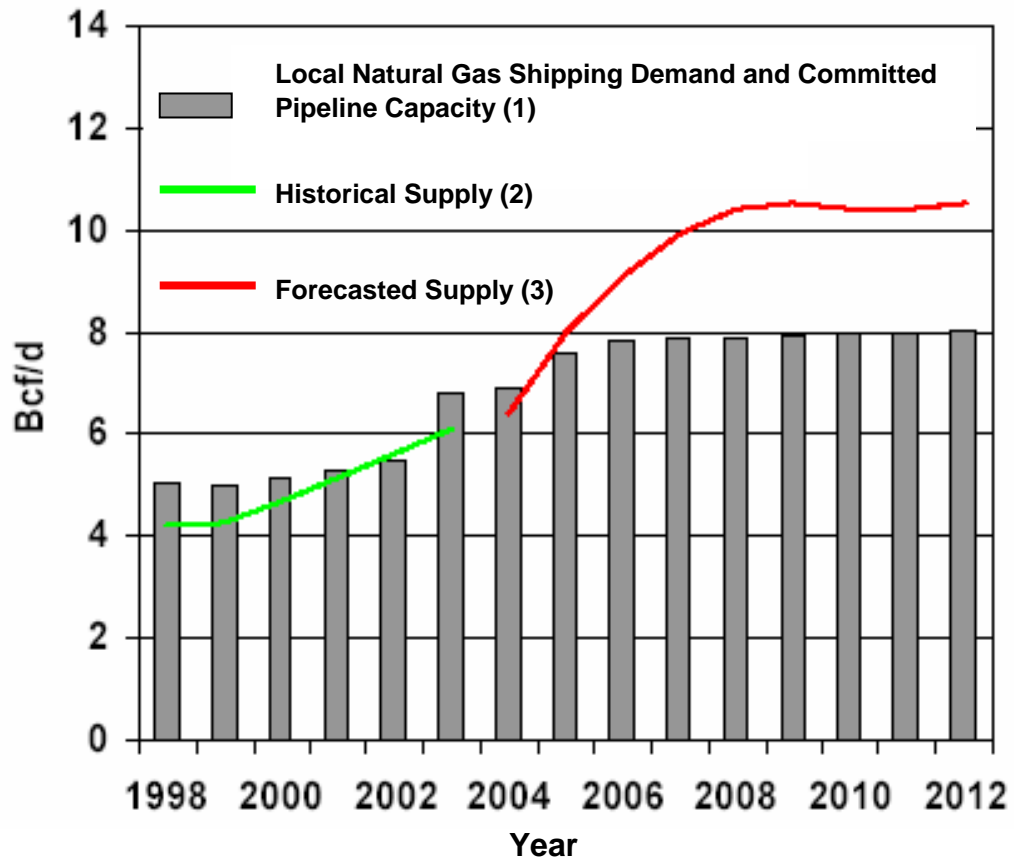
1.2 Project Purpose and Need

The purpose of the EPP is to transport natural gas from supply basins in the central Rocky Mountains to interstate shippers at Wamsutter and the Cheyenne Hub who would carry the gas to markets either in the West, the Midwest, or the Central United States (U.S.), depending on the delivery location specified by the shipper.³ The need for the project is dictated by an increasing natural gas supply (production) in the Rocky Mountain region, which is occurring without a concurrent increase in pipeline capacity to transport this gas out from the production basins and into the interstate pipeline network. Rocky Mountain region (New Mexico, Colorado, Wyoming, Utah, Montana) gas production is predicted to increase from 3.3 trillion cubic feet per year (Tcfy) in 2002 to 4.6 Tcfy in 2010 and 6.3 Tcfy in 2025 (U.S. Department of Energy [DOE] 2004). This mirrors the 2003 National Petroleum Council estimate that by 2020, Rocky Mountain production will grow by 50 percent. This increase in production will offset declining production in other U.S. gas producing regions. The Energy Information Administration (2005) estimates that the Rocky Mountain region will make up 38 percent of the nations lower-48 natural gas production by 2025, up from 27 percent today.

Entrega forecasts that from 2004 to 2010, Rocky Mountain region production (not including the San Juan Basin) will increase by 3.7 Bcfd to 10.3 Bcfd. Pipeline exit capacity is not expected to match the increase in gas production over this time period. **Figure 1.2-1** illustrates Entrega's estimate of the relationship between the Rocky Mountain region gas supply increase and committed pipeline capacity. As shown, Entrega estimates that there will be a shortfall of pipeline capacity of more than 2 Bcfd after 2007.

Entrega's shipping customer, EnCana, would be supplying gas to the pipeline from the Uinta-Piceance Basin region of Rio Blanco, Garfield, and Mesa Counties, Colorado. The U.S. Geological Survey (USGS) (2002) assessed undiscovered conventional oil and gas and continuous (unconventional) oil and gas, including coal-bed gas within the Uinta-Piceance Basin. This assessment estimated that 21 trillion cubic feet of gas remains undiscovered. During the same timeframe (2002), the Potential Gas Committee (Colorado School of Mines) estimated undiscovered natural gas reserves at 30.7 trillion cubic feet within the Uinta-Piceance Basin. **Figure 1.2-2** illustrates recent annual gas production trends in Rio Blanco, Mesa, and Garfield Counties, where EnCana conducts the majority of its gas production and gathering in Colorado (Colorado Oil and Gas Commission 2004). The graphs indicate relatively flat production over the past 5 years in Rio Blanco and Mesa Counties, and strongly increasing production in Garfield County. Assuming that Entrega's initial transportation volume is 750 million cubic feet per day (MMcfd), the annual transported volume would be almost 274 billion cubic feet (Bcf). This volume represents about 143 percent of the total annual volume (192 Bcf) produced by these three counties in 2003. **Figure 1.2-2** also indicates that the fraction of the three-county production contributed by EnCana in 2003 was about 73 Bcf per year, or almost 27 percent of a 750-MMcfd shipping rate. This comparison suggests that production must substantially increase within the existing shipper's fields, and additional gas would be needed from other shippers to

³ As an interstate transporter, Entrega would accept gas at a location(s) designated by a shipper and deliver the gas at a downstream location(s) specified by the shipper. Entrega would not own the gas it transports, nor would it contract for the sales of the gas transported on its system. The shipper would contract with as many interstate transporters as necessary to reach the delivery location specified by the gas buyer.



- (1) Natural Gas Shipping Demand and Committed Pipeline Capacity – Historical demand from EIA; Committed pipeline capacity from EnCana Oil & Gas (USA) Inc.
- (2) Historical Supply – Wellhead Supply from Lippman Consulting Inc. (February 2004) and assumed 15.97% average gathering and processing fuel, loss and shrinkage.
- (3) Forecasted Supply from PACE Global Energy Services – Wyoming Pipeline Study (February 2003).

Source: Entrega, FERC Application, Exhibit H.

Figure 1.2-1 **Rockies Natural Gas Supply vs. Local Natural Gas Shipping Demand and Committed Pipeline Capacity**

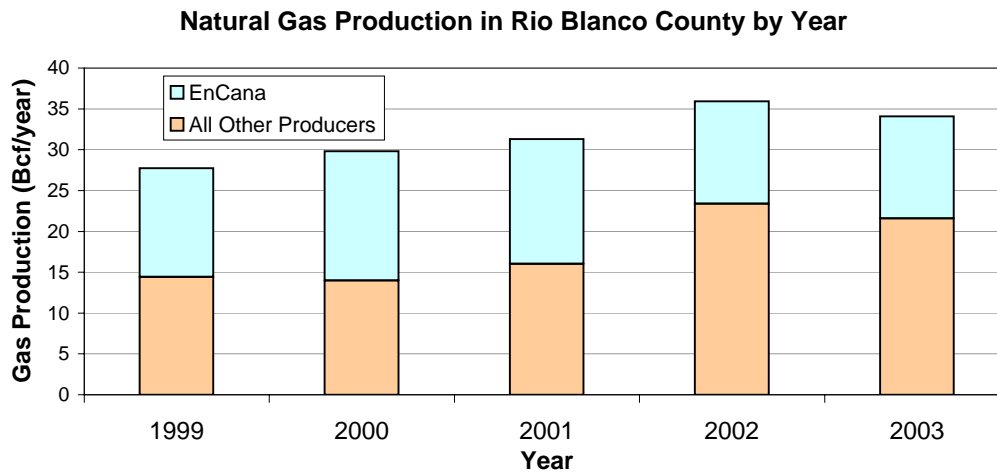
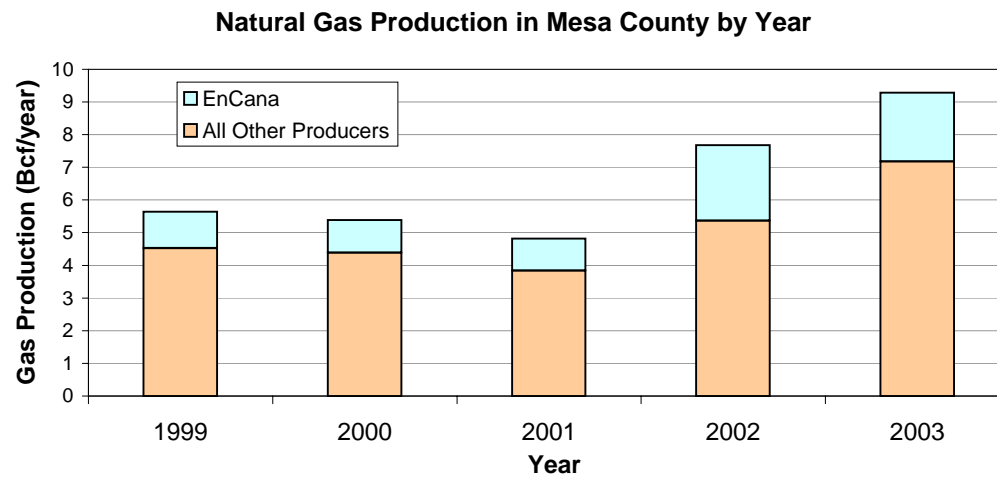
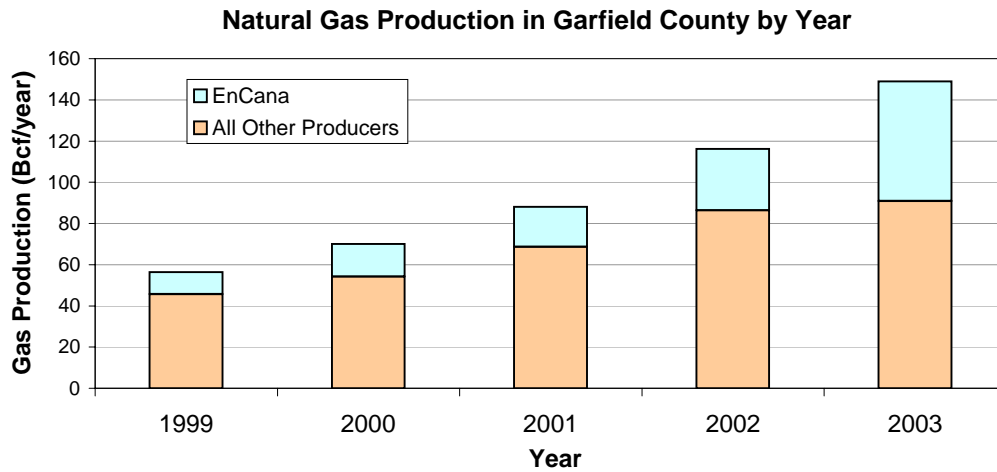


Figure 1.2-2 Natural Gas Production in Garfield, Mesa, and Rio Blanco Counties, Colorado, from 1999 through 2003; and the Relative Contribution from EnCana Oil and Gas, USA

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reach Entrega's maximum design transportation capacity of 1.5 Bcfd between the proposed Meeker Hub and Wamsutter Compressor Stations.

In a supplemental filing, Entrega identified several additional factors that support its assessment of an increasing production trend in the Piceance Basin including:

- EnCana's recent acquisition of Tom Brown Inc. (TBI), which greatly increased its production property holdings in western Colorado;
- EnCana's plan to reduce well spacing from one well per 20 acres to one well per 10 acres, using infill drilling;
- EnCana's average production in the Mamm Creek area (Garfield County) alone increased by about 75 MMcfd in the first half of 2004; and
- between May and October 2004, EnCana (including TBI) had an average of 20 drilling rigs per month in Garfield, Mesa, and Rio Blanco Counties, with an average mobilization and completion time of 20 days.

Beyond factors related to its shipping customer, Entrega noted that there also is significant potential for increased gas production by third parties in the region. In particular, Entrega reported that:

- in October 2004, 44 drilling rigs were working for all producers in the three-county area; and
- about 10,000 new wells are projected to be drilled in the three-county area over the next decade, with additional production totaling about 3 Bcfd.

Overall, Entrega believes these factors demonstrate that production in the Piceance Basin will outstrip regional pipeline take-away capacity in the immediate future. When one considers the Piceance and other supply basins that could deliver natural gas into the pipeline, Entrega concludes that future production will easily yield more than sufficient gas to support a pipeline of the proposed size and scope.

1.3 Purpose and Scope of this Document

The principal purposes for preparing an EIS are to:

- identify and assess potential impact on the natural and human environment that would result from the implementation of the proposed action;
- identify and recommend reasonable alternatives and specific mitigation measures, as necessary, to avoid or minimize project-related environmental impact; and
- facilitate public involvement in the environmental review process.

This EIS focuses on facilities that are under the FERC's jurisdiction, i.e., about 328.1 miles of natural gas pipeline, three compressor stations, and related ancillary facilities. The scope of the analysis of facilities not under the jurisdiction of the FERC (e.g., facilities related to development, production, gathering, and processing of natural gas) is described in section 1.5.

The topics addressed in this EIS include geology (including hazards and mineral and paleontological resources); soils; groundwater; surface waters (including water quality); wetlands; vegetation; wildlife and aquatic species; special status species; land use (including agricultural resources); transportation; recreation and special interest areas (including Areas of Critical Environmental Concern [ACECs], Wild and Scenic Rivers, and Wilderness Areas); visual resources; socioeconomics (including population, housing, and public services); environmental justice; cultural resources; Native American concerns; air quality and noise; reliability and safety; cumulative impacts; and alternatives. The EIS describes the affected environment as it currently exists, discusses the environmental consequences of the proposed project, and compares the project's potential impact to that of alternatives. The EIS also presents recommended mitigation measures and our⁴ conclusions.

The FERC is the "lead federal agency" for preparation of this EIS. This effort was undertaken with the participation and assistance of the U.S. Department of the Interior's Bureau of Land Management (BLM), which acted as a "cooperating agency" under NEPA. The EIS will provide a basis for coordinated federal agency decision-making in a single document, avoiding duplication between federal processes. In addition to the lead and cooperating agency, other federal, state, and local agencies will use the EIS in approving or issuing permits or approvals for all or part of the proposed project. Federal, state, and local permits, approvals, and consultations for the project are discussed in section 2.8.

1.3.1 FERC

The FERC is the federal agency responsible for regulating the transportation of natural gas in interstate commerce. Under the NGA, the FERC determines whether interstate natural gas facilities are in the public interest and, if so, grants a Certificate for their construction and operation. As part of this determination, the FERC will consider the findings presented in this EIS as well as non-environmental issues in its review of Entrega's application. The FERC will authorize the construction and operation of the proposed facilities only if it finds that the evidence produced on technical competence, financing, rates, market demand, gas supply, existing facilities and service, environmental impacts, long-term feasibility, and other issues demonstrates that the project is, or will be, required by the public convenience and necessity.

Environmental impact assessment and mitigation development are important factors in the overall public interest determination. Under NEPA, the FERC has a responsibility to consider the potential environmental impacts associated with proposals which come before it. This EIS has been prepared to fulfill that responsibility for Entrega's proposal, in compliance with the requirements of NEPA, the Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA (Title 40 of

⁴ "We," "us," and "our" refer to the environmental staff of the Commission's Office of Energy Projects (OEP). Unless specifically identified otherwise, the recommendations and conclusions presented in this EIS are those of the FERC Staff.

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the Code of Federal Regulations, Parts 1500-1508 [40 CFR 1500-1508]), and the FERC's regulations for implementing NEPA (18 CFR 380).

1.3.2 BLM

Entrega's proposed pipeline would cross federal lands managed by the BLM. Because the BLM must comply with the requirements of NEPA before granting rights-of-way (ROWs) across lands under its management, the BLM has elected to cooperate with the FERC in preparing this EIS.

As a cooperating agency, the BLM proposes to adopt this EIS per 40 CFR 1506.3 to meet its responsibilities under NEPA in considering Entrega's application for a ROW grant, which was submitted to the BLM's Rawlins, Wyoming, Field Office (FO) on October 28, 2003. Under section 185(f) of the Mineral Leasing Act of 1920 (MLA), the BLM has the authority to issue ROW grants for all affected federal lands. This action would be in accordance with 43 CFR 2800 and 2880, subsequent 2800 and 2880 Manuals, and Handbook 2801-1. For the EPP, the BLM would consider the issuance of a new ROW grant and issuance of associated temporary use permits that would apply to BLM-managed lands crossed by the project. The BLM also would consider conformance with land use plans and impacts on resources and programs in determining whether to issue a ROW grant. The BLM's decision will be documented in a project Record of Decision (ROD) prepared by the BLM. The BLM will consider FERC approval or denial of Entrega's proposal before issuing or denying a ROW grant for the proposed project.

The primary decisions to be addressed and made by the BLM include:

- Shall a ROW grant that includes mitigation and monitoring requirements be issued for a permanent pipeline ROW that will support pipeline construction and operation on federal lands?
- Shall Temporary Use Permits be granted for roads and temporary work areas needed for project construction on federal lands?

Should the BLM decide to approve the EPP, it will issue a ROW grant that would allow construction. ROW grants typically include standard agency stipulations, conditions imposed on the project as the result of the NEPA review, and a complete Plan of Development (POD). The BLM also would require that Entrega furnish a surety bond or other acceptable security to cover losses, damages, or injury to human health, the environment, and property in connection with the use and occupancy of the ROW. A separate BLM bond would be required to cover liability from releases or discharges of hazardous materials.

1.4 Public Review and Comment

On March 19, 2004, the FERC approved Entrega's request to use the NEPA Pre-Filing (PF) Process for the proposed EPP and established Docket No. PF04-7-000 to place information filed by Entrega and documents issued by the Commission into the public record.⁵ The intent of the PF process is to initiate

⁵ Entrega's PF Docket was closed on September 17, 2004, when Entrega filed its application with the Commission. On that date, a new docket number (CP04-413-000, et al.) was assigned to the EPP.

environmental review activities early in the project planning process. Starting our environmental review before an application is formally filed with the Commission enables early involvement by the public, governmental agencies, and other interested parties while the project is still being designed. In this manner, we can identify environmental issues early in the process and facilitate resolution among the stakeholders.

As part of the PF process, Entrega mailed letters to landowners, government officials, and the general public informing them about the project and inviting them to attend open houses to learn about the project and ask questions. The open houses were held in Greeley, Colorado (March 29, 2004); Cheyenne, Wyoming (March 30, 2004); Laramie, Wyoming (March 31, 2004); Rawlins, Wyoming (April 1, 2004); Wamsutter, Wyoming (April 6, 2004); Craig, Colorado (April 7, 2004), and Meeker, Colorado (April 7, 2004). Representatives of the FERC and the BLM attended these meetings.

On May 3, 2004, the FERC issued a *Notice of Intent to Prepare an Environmental Impact Statement for the Planned Entrega Gas Pipeline Project, Request for Comments on Environmental Issues, and Notice of Public Scoping Meetings and Route Inspection* (NOI). This document briefly described the project components, invited written comments from the public on the proposal, and listed the date and location of four public scoping meetings to be held in communities along the route. The NOI was sent to about 1,670 entities on a mailing list that included the landowners crossed and/or adjacent to the proposed ROW; federal and state agencies; Native American tribes; non-governmental and environmental organizations; libraries; the media; and other potentially interested parties.

We invited other federal agencies with jurisdiction and special expertise to be cooperating agencies during the project review. The BLM requested and received cooperating agency status. As part of this effort, we invited the U.S. Fish and Wildlife Service (FWS) and the U.S. Army Corps of Engineers (COE) to cooperate because of their responsibilities under the Endangered Species Act (ESA) and the Clean Water Act (CWA), respectively.

We held public scoping meetings in Cheyenne (June 7, 2004), Rawlins (June 8, 2004), Craig (June 9, 2004), and Meeker (June 10, 2004). These meetings were announced in the NOI and in local area newspapers. Transcripts of the public scoping meetings are part of the public record and are available for viewing at the FERC website for the Entrega docket.⁶

During the same time period, we organized and conducted separate “agency scoping” meetings with federal and state agency representatives, and local officials to solicit input and coordinate our review of the proposed project. These meetings were held in Rawlins (June 8, 2004), Craig (June 9, 2004), and Meeker **Error! Bookmark not defined.** (June 10, 2004). A summary of the issues discussed was made part of the public record and posted on the FERC website.

⁶ Public meeting transcripts and a summary of the issues discussed during agency scoping meetings are available for viewing on the FERC Internet website (<http://www.ferc.gov>). Using the “eLibrary” link, select “General Search” from the eLibrary menu, enter the selected date range and “Docket No.” (CP04-413-000), and follow the instructions. (For assistance, call 1-866-208-3676 or e-mail FercOnlineSupport@ferc.gov.) Because scoping was conducted during the PF review (before Entrega formally filed its application with the FERC on September 17, 2004), PF04-7 must be used in the “Docket No.” field to view the public scoping transcripts.

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In addition to oral and written comments received during agency and public scoping meetings, the Commission received written comments during and after the close of the public scoping period (June 15, 2004). In total, 38 written correspondences⁷ containing project comments were received from 31 parties, including items from federal, state, and local government agencies; landowners; and environmental groups. Each letter was evaluated and comments were divided into issue groups. When written comments were combined with oral meeting comments, 166 individual comments were received. Many of these comments addressed the same environmental issues. Of the comments received, about one-third were non-environmental in nature (project need, easement acquisition, compensation, and general statements of support or opposition). **Table 1.4-1** lists the environmental issues and concerns identified by commentors during the scoping process.

The draft EIS⁸ was filed with the U.S. Environmental Protection Agency (EPA) and mailed to 862 federal, state, and local agencies, elected officials, Native American tribes, newspapers, public libraries, intervenors to the FERC's proceeding, and other interested parties (i.e., landowners, miscellaneous individuals, and environmental groups who provided scoping comments or asked to remain on the mailing list). A formal notice indicating that the draft EIS was available for review and comment was published in the Federal Register (FR). The public was given 45 days from the date the EPA published a Notice of Availability in the FR (70 FR 10,615) to review and comment on the draft EIS both in the form of written comments and at public meetings held in communities along the pipeline route.

Four public meetings were held in the project area to receive comments on the draft EIS. These meetings were conducted in Cheyenne, Wyoming (April 11, 2005); Rawlins, Wyoming (April 12, 2005); Craig, Colorado (April 13, 2005); and Meeker, Colorado (April 14, 2005). These meetings were announced in the draft EIS and in the notice issued by the FERC indicating that the draft EIS was available. Each meeting was recorded and the transcripts are part of the public record for the EPP. Oral comments were received from 12 local agency officials, 1 company representative, 3 representatives of private organizations, and 4 individuals. The comments of speakers at the meetings were summarized and are presented in chapter 6.0 of this final EIS.

The comment period for receiving comments on the draft EIS closed on April 18, 2005. Written comments were received from 4 federal agencies, 1 state agency, 6 local agencies, 2 organizations, 2 individuals, and the project applicant. The written comments and our responses to them are included as chapter 6.0 of this final EIS.

This final EIS⁹ was filed with the EPA and mailed to approximately 808 federal, state, and local agencies; elected officials, Native American tribes; newspapers; public libraries; intervenors to the FERC's proceeding; and other interested parties who provided scoping comments, commented on the draft EIS, or wrote to the FERC asking to receive a copy of the document. The distribution list for the final EIS is presented in appendix A. A formal notice indicating that the final EIS is available was published in the FR.

⁷ Written correspondences included letters, Return Mailers (attached to our NOI), and electronic mail. The Commission also received one Congressional correspondence (included in the total).

⁸ Includes the stand-alone Executive Summary, which was sent to some recipients rather than the full draft EIS.

⁹ Like the draft EIS, the final EIS was distributed to recipients either as a stand-alone Executive Summary or as a full EIS.

Table 1.4-1
Issues Identified in Comments Received
During the Public Scoping Process for
the Entrega Pipeline Project

Purpose and Need

- Sources and suppliers of natural gas for the project.
- Existing regional pipeline transportation capacities.

NEPA Process

- Pipeline and ancillary facilities to be included in the EIS analysis.
- Consideration of a single EIS for Entrega and Wyoming Interstate Company, Ltd. (WIC) Pipeline projects.
- Completion of the BLM Rawlins FO Resource Management Plan (RMP) prior to making ROW decisions for the EPP.
- Jurisdiction for gathering pipelines that provide gas for the EPP.

Geology

- Potential landslide risk on steep slopes.
- Potential pipe exposure at incised channel crossings.

Soils and Noxious Weeds

- Soil loss from wind and water erosion.
- Long-term loss of grazing resources caused by inappropriate revegetation species selection, weed invasion, and difficult reclamation conditions (e.g., alkaline soils).
- Spread of noxious and invasive weeds in excavated soils.
- Loss of vegetation productivity from soil mixing and compaction.
- Restoration and monitoring of the ROW to original contour.

Water

- Potential loss of water yield from shallow groundwater resources (springs).
- Increased sedimentation at river and stream crossings and irrigation ditches.
- Depletion of surface water sources used for dust control and hydrostatic testing (Platte River and Colorado River systems).
- Potential reduction in water quality at hydrostatic test water discharge locations.
- Identification and protection of municipal water supplies and aquifers.
- Storage of hazardous materials at refueling sites.

Vegetation

- Long-term loss of native species and structural diversity in areas with high wildlife habitat values (sagebrush communities, mountain shrublands, riparian areas, hay meadows along Piceance Creek).

Fish and Wildlife

- Potential loss of wildlife individuals and reproductive success because of human activity, construction surface disturbance, and compressor station operational noise during critical periods of the year. Primary species of concern: big game, migratory birds (including raptors).
- Potential loss of fish individuals and reproductive success because of construction disturbance in waterways during critical periods of the year. Primary species of concern: trout in the Platte River, Medicine Bow River, and Rock Creek.
- Increased habitat fragmentation from expansion of surface disturbance caused by existing and new pipeline ROWs, and indirect effects (increased human activity, noise).

Special Status Species

- Potential loss of wildlife species individuals and reproductive success because of human activity, construction surface disturbance, and compressor station operational noise during critical periods of the year. Primary species of concern: Preble's meadow jumping mouse, Wyoming toad, bald eagle,

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Table 1.4-1 (Continued)

and other special status raptors, sage grouse, prairie dog colonies and associated species, other BLM special status species.

- Potential loss of fish individuals and reproductive success because of construction disturbance in waterways during critical periods of the year. Primary species of concern: native Colorado River system fish.
- Depletion effects on surface water regimes and habitats for downstream listed species (Platte River system).
- Potential loss of plant species individuals and reproductive success because of construction surface disturbance. Primary species of concern: Dudley Bluffs twinpod, Dudley Bluffs bladderpod, Ute ladies'-tresses orchid, Colorado butterfly plant, BLM special status plants.
- Potential natural gas or condensate leaks and impacts on fish.

Land Use, Recreation, and Visual Resources

- Loss or delay of agricultural production and potential interference with livestock management, including fence and irrigation system repairs.
- Construction noise, human activity, and surface disturbance near residential areas and farms.
- Effects of heavy loads on county and private roads, and plans for repair.
- Visual impacts from new pipeline surface disturbance and aboveground ancillary facilities on nearby residential areas and Key Observation Points (KOPs).
- Increased public access to public and private lands from new road construction.
- Potential conflicts between big game hunting and pipeline construction.
- Potential conflicts between recreational boating on the North Platte River and pipeline construction.
- Potential for precluded future land uses.
- Decommissioning plans for temporary access roads.
- Protection measures for unique or sensitive areas.

Cultural Resources

- Consultation with potentially affected Native American tribes.
- Identification and protection of cultural resources in and near construction areas.
- Identification and protection of traditional cultural properties in the area.
- Identification and protection of the Overland and other National Historic Trails.

Socioeconomics

- Potential reductions in property value and changes in future use because of a new pipeline.
- Adequacy of temporary housing and camp sites during construction.
- Short- and long-term fiscal benefits and costs to local communities and counties.
- Carpooling or busing crews to work sites.
- Limited emergency medical and fire fighting capabilities in Rio Blanco County, Colorado.

Air and Noise

- Increased fugitive dust generation and need for control on access roads.
- Compressor station combustion emissions compliance with air quality standards.
- Compressor station noise impacts on nearby residences, and potential mitigation.

Public Safety

- Proximity of adjacent pipelines.
- Construction practices around electrical transmission lines.
- Ensure pipe strength sufficient for heavy vehicles.
- Properly mark the location and ownership of underground utilities.
- Electrical grounding of the pipeline.

Cumulative Impacts

- Growth induced by increase in local pipeline capacity.
- Relationship to other oil and gas development activities.

Table 1.4-1 (Continued)

- Inclusion of WIC's proposed Piceance Basin Expansion Pipeline (PBEP) and its associated facilities.
- Disruption and loss of agricultural production from two pipelines (Entrega, WIC) constructed sequentially.
- Cumulative impacts from multiple pipelines in nearby, but not abutting, ROWs.
- Cumulative pipeline impacts (surface disturbance, restoration, and precluded land use) on nearby landowners.
- Cumulative impacts on wildlife and their habitats.
- Conversion plans for the existing soda ash pipelines.

Alternatives

- Single pipeline for WIC and Entrega where the two projects overlap.
- Construction of WIC and Entrega pipelines within a single, common ROW.
- Simultaneous construction and restoration of WIC and Entrega pipelines.
- Construction of Entrega pipeline in an alternative pipeline corridor between the Meeker Hub Compressor Station and EPP MP 33.2.

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In accordance with CEQ regulations implementing NEPA, no agency decision on the proposed action may be made until 30 days after the EPA publishes a Notice of Availability of the final EIS in the FR. However, the CEQ regulations provide an exception to this rule when an agency decision is subject to a formal internal appeal process that allows other agencies or the public to make their views known. This is the case at the FERC, where any Commission decision on Entrega's proposal would be subject to a 30-day rehearing period. Therefore, the agency decision may be made at the same time that notice of the final EIS is published by the EPA, allowing the appeal periods to run concurrently.

For the BLM, the date the EPA's Notice of Availability appears in the FR initiates a 30-day period before the decision to issue or amend a ROW grant is made. Comments received on the final EIS during the 30-day period will be reviewed to determine if they have merit (e.g., identify significant issues not previously addressed or introduce significant new information). If no changes are warranted, a ROD is prepared that documents the selected alternative as well as mitigation measures. No action concerning a proposal may be taken on federal land until the ROD for the ROW grant has been issued.

1.5 Changes Since Issuance of the Draft EIS

Since publication of the draft EIS in late February 2005, Entrega has made numerous refinements to its proposed action and provided supplemental information in a number of areas. These refinements are reflected in our analysis as presented in this EIS. Where additional areas would be disturbed, we have accounted for these areas in the EIS text and tables. Notable changes include:

- **Proposed Schedule:** Entrega has revised its proposed construction schedule (see chapter 2.0, table 2.4-1).
- **Pipeline Realignments:** Entrega has realigned portions of its proposed route to accommodate landowner concerns, additional engineering, and to avoid or minimize environmental impact on sensitive resources. Engineering modifications largely involved crossing existing pipelines at sharper angles. However, by making adjustments to the proposed route, Entrega would be able to avoid impact on 27 cultural resource sites, 2 paleontological sites, and a spring in the Piceance Creek drainage. As a result of the realignments, the proposed route is now about 328.1 miles long (a 0.6-mile-long increase).
- **Pipe Storage and Contractor Yards:** Entrega identified 13 additional pipe storage and contractor yards and eliminated 4 previously-identified yards. These new areas are identified in chapter 2.0, tables 2.2-1 and 2.2-4, and discussed in section 2.2.3.
- **Metering Stations:** While the overall number of meter stations has not changed, five of the total seven meters would now be located outside of Entrega's compressor station sites (two at Wamsutter, three at the Cheyenne Hub). Four of the five relocated meters would be constructed by either El Paso Corporation or Kinder Morgan, while the fifth meter would be constructed by Entrega on land associated with Public Service of Colorado's (PSCo's) facility at the Cheyenne Hub. Pipeline laterals associated with the relocated meters have also changed in length, diameter, and location. See chapter 2.0, table 2.1-2 and figures 2.3-5 and 2.3-7.

- **Access Roads:** Entrega has identified additional access roads that would be used during construction. The discussion in section 2.2.4 has been revised and access roads near the pipeline centerline are illustrated in appendix C.
- **Revised Plans:** As a result of comments received on the draft EIS and further review, Entrega has revised many of its plans associated with the BLM's POD. We have included additional plans associated with the POD as appendices to this EIS.
- **Temporary Workspaces:** Entrega has modified its initial list of temporary workspaces. These changes are reflected in chapter 2.0, **table 2.2-1**.

All of the changes proposed since issuance of the draft EIS have been incorporated into the EIS. Overall, the changes have been minor or have been adopted by Entrega as its proposed action for the purpose of avoiding or reducing potential impacts.

1.6 Nonjurisdictional Facilities

1.6.1 Background

Under Section 7 of the NGA, the FERC is required to consider, as part of its decision to authorize interstate natural gas facilities, all factors bearing on the public convenience and necessity. The facilities for the EPP that would be under the FERC's jurisdiction include approximately 328.1 miles of natural gas pipeline, 3 compressor stations, 7 metering stations, 9 lateral lines interconnecting with existing pipelines, 22 mainline valves, and 4 pig launcher/receivers.¹⁰ These facilities are discussed in detail in section 2.1. In the future, Entrega may identify additional metering facilities or receipt/delivery laterals under the FERC's jurisdiction to connect its system to new supply sources or shipper delivery points.¹¹

Occasionally, proposed natural gas pipeline projects have associated facilities that do not come under FERC jurisdiction. These "nonjurisdictional" facilities may be integral to the need for the proposed project (e.g., a new or expanded power plant at the end of a FERC-jurisdictional pipeline) or they may be merely associated as a minor, non-integral component of the jurisdictional facilities that would be constructed and operated as a result of the proposed facilities.

Nonjurisdictional facilities associated with the EPP are existing and proposed natural gas development, production, gathering, and processing facilities that have been or would be constructed and operated by EnCana or other producers in the basin. These facilities are located upstream (i.e., prior to the origin) of the proposed Entrega Pipeline, which begins at a proposed "Meeker Hub" along Piceance Creek in Rio Blanco County, Colorado. **Table 1.5-1** lists currently identified nonjurisdictional facilities that are associated with the EPP and the status of their environmental review.

¹⁰ A pipeline "pig" is a device used to clean or inspect the pipeline. A pig launcher/receiver is an aboveground facility where pigs are inserted or retrieved from the pipeline.

¹¹ These facilities could be added using the Blanket Certificate which Entrega has requested in Docket No. CP04-415-000.

Table 1.5-1
Nonjurisdictional Facilities Related to the Entrega Pipeline Project

Facility (see figure 1.5-1)	Status	Location	Interconnections	Facility Description	Environmental Review Status
South Shale Ridge Lease Area	Proposed	Mesa County, Colorado	Gas gathering and produced water pipelines to existing gathering pipelines near DeBeque.	Natural gas wells (20) to be drilled over a 20-year period.	Evaluated in a BLM Grand Junction FO environmental assessment (EA) (2004); final approvals pending.
EnCana Natural Gas Fields: Mamm Creek, Rulison, South Parachute, Plateau Creek, Orchard, Grand Valley, South Douglas, Dragon Trail, Canary Left Fork, Gasaway, White River Dome	Existing	Mesa, Garfield, Rio Blanco Counties, Colorado	Multiple small diameter interconnecting pipelines with larger diameter (24-inch) gathering trunklines that feed gas to existing gas plants.	Natural gas wells on variable spacing (20, 40, 80 acres) that are connected to gathering pipelines.	Wells individually approved on a site-specific basis by the BLM on federal, state, and private lands with federal ownership of oil and gas rights. Wells individually approved on State and private lands under Colorado Oil and Gas Commission requirements where oil and gas rights are state or privately held.
EnCana Eureka (Figure Four) Natural Gas Field	Proposed	Garfield, Rio Blanco Counties, Colorado	Gas gathering and produced water pipelines from field to Meeker Gas Plant.	Natural gas wells on variable spacing (40, 80 acres) that are connected to gathering pipelines.	Evaluated in a BLM White River FO EA (2004); final approvals pending.
EnCana Meeker Pipeline and Gas Plant	Proposed	Garfield and Rio Blanco Counties, Colorado	Logan Wash Delivery (near DeBeque) to Meeker Gas Plant. Multiple interconnections with gathering pipelines; one natural gas export pipeline (Entrega); and one natural gas liquids pipeline (interconnection with the Enterprise natural gas liquids pipeline system).	Multiple pipelines: <ul style="list-style-type: none"> • 44.5-mile-long 30-inch-diameter unprocessed natural gas pipeline; • 44.5-mile-long 10-inch-diameter natural gas liquids pipeline; • 11.1-mile-long 16-inch-diameter unprocessed natural gas pipeline; • 20.2-mile-long 12-inch-diameter water 	Evaluated in a BLM White River FO EA (2005); final EA under preparation.

Table 1.5-1 (Continued)

Facility (see figure 1.5-1)	Status	Location	Interconnections	Facility Description	Environmental Review Status
				<ul style="list-style-type: none"> or natural gas pipeline; 0.9-mile-long corridor to interconnect 12-inch-diameter gas/water pipeline; and 16-inch-diameter gas pipeline to Hunter Creek Compressor Station. Compressor Station (20.2 miles south of Meeker Gas Plant): Compression for unprocessed gas pipelines. <p>The plant would be located on a 40 to 80 acre site (former American Soda mine). This facility would receive unprocessed gas from the gathering system, separate the associated natural gas liquids and water, and deliver sales quality gas and natural gas liquids to interstate pipeline systems. Separated water would be injected into an approved deep geologic formation, or evaporated in ponds.</p>	

Table 1.5-1 (Continued)

Facility (see figure 1.5-1)	Status	Location	Interconnections	Facility Description	Environmental Review Status
EnCana Natural Gas Gathering and Produced Water Pipelines (Former American Soda Pipelines)	Existing	Garfield and Rio Blanco Counties, Colorado	Former American Soda plant site to former American Soda mine site (recently purchased by EnCana).	Two 12-inch-diameter 35-mile-long water pipelines that would be converted to natural gas and produced water delivery service.	Pipeline construction effects analyzed in conjunction with the soda ash project.
EnCana Colorado River Valley Natural Gas Gathering Pipeline	Existing	Garfield County, Colorado	Connects gas fields south of Rifle (e.g. Mamm Creek) with Logan Wash Delivery near DeBeque.	Approximately 16 miles of recently completed 24-inch-diameter pipeline that interconnects with multiple fields in the Colorado River and Plateau Creek valleys.	All federal, state, and local approvals received, and project constructed in 2004.
EnCana Unprocessed/Processed Natural Gas Pipeline	Proposed	Rio Blanco County, Colorado	Dragon Trail Gas Plant to Meeker Gas Plant	31.2-mile-long 16-inch-diameter pipeline would deliver unprocessed gas to the Meeker Gas Plant from Dragon Trail. The proposed pipeline would also interconnect with Northwest Pipeline (NWPL) near Dragon Trail to alternatively flow processed gas from the proposed Meeker Gas Plant to NWPL, depending on market conditions and as a contingency.	ROW application filed with the BLM White River FO as part of the EnCana Meeker Gas Plant referenced above.
EnCana Natural Gas Liquids Pipeline	Proposed	Uintah County, Utah, and Rio Blanco County, Colorado	Meeker Gas Plant to Enterprise Pipeline System	47.8-mile-long 12-inch-diameter pipeline to transport natural gas liquids from Meeker Gas Plant to interstate Enterprise pipeline. To be built in same ROW as Dragon Trail to Meeker Gas Plant facilities.	ROW application filed with the BLM White River FO as part of the EnCana Meeker Gas Plant referenced above.

Table 1.5-1 (Continued)

Facility (see figure 1.5-1)	Status	Location	Interconnections	Facility Description	Environmental Review Status
Entrega electrical power supply line	Proposed	Meeker Compressor Station, Rio Blanco County, Colorado	Existing White River Electric Association distribution line to compressor station site.	0.2 mile of 3-phase 25-kilovolt (kV) line and single-phase transformation. Future system expansion would require conversion of single-phase transformer to three-phase transformer.	Included in this EIS.
Entrega electrical power supply line	Proposed	Wamsutter Compressor Station, Sweetwater County, Wyoming	Existing Pacific Power distribution line to compressor station site.	One mile of 3-phase 34.5-kV line and single-phase transformation. Future system expansion would require conversion of single-phase transformer to three-phase transformer.	Included in this EIS.
Entrega electrical power supply line	Proposed	Cheyenne Hub Metering Station, Weld County, Colorado	Existing Poudre Valley Electric Association distribution line to site.	0.25 mile of single-phase 7.2-kV line and single-phase transformer.	Included in this EIS.

1.0 INTRODUCTION

On July 22, 2004, EnCana filed an Application for Transportation and Utility Systems and Facilities on Federal Lands (#COC67979) with the BLM's White River FO to construct and operate the majority of the nonjurisdictional facilities listed in **table 1.5-1**. This application underwent numerous revisions, and a final application was presented to the BLM in January 2005. On March 21, 2005, the BLM's White River FO issued a *Preliminary Environmental Assessment for EnCana's Meeker Pipeline and Gas Plant Project (CO-110-2004-18-EA*, which analyzes the potential impacts associated with EnCana's proposal. A 30-day comment period on the environmental assessment (EA) closed on May 2, 2005, and a final EA is under preparation.

All the proposed gathering, treated gas, and natural gas liquids pipelines included in EnCana's BLM application would be connected at a proposed gas plant to be constructed at the existing American Soda plant site, about 4 miles north-northwest of the proposed Meeker Hub. **Figure 1.5-1** illustrates EnCana's currently proposed project.

We carefully considered the relationship between these upstream nonjurisdictional facilities and the EPP. Although most of these facilities would be functionally attached to the Entrega Pipeline, we have concluded that these facilities do not represent actions that must be addressed at the same level of detail as the EPP in this EIS. Part of our decision on the appropriate scope of analysis is based on the CEQ's "connected action" criteria (40 CFR 1508.25, Scope).

1. Connected actions "automatically trigger other actions which may require environmental impact statements." As indicated in the Project Purpose and Need section, there has been a substantial increase in natural gas drilling activity in the Uinta-Piceance Basin. These drilling activities are authorized by BLM approvals of Applications for Permits to Drill with the required EAs and RODs. We anticipate that this same permitting process will be used by the BLM to approve future expansions of natural gas supplies in this geologic basin. We do not see that the BLM's regulatory actions have, or will, automatically trigger FERC actions, or vice versa. Each agency's action is taken pursuant to its own underlying authority, and those authorities are independent.
2. Connected actions "cannot or will not proceed unless other actions are taken previously or simultaneously." EnCana has proposed establishing a "Meeker Hub" on the Piceance Creek precisely because there are existing interstate natural gas pipelines available at that location (e.g., Questar Pipeline Company [Questar], TransColorado Gas Transmission Company [TransColorado], and Colorado Interstate Gas Company [CIG]), which could accept its processed gas. Because there are other interstate pipeline options available, EnCana's proposal could go forward without construction of the EPP. We interpret Entrega's proposal as a response to an ongoing increase in the natural gas development and supply by its affiliate and other gas developers that must be conveyed to market. The EPP is timed to address projected shortfalls in pipeline capacity. Entrega has clearly stated that it does not expect its system capacity to be fully utilized upon completion of pipeline construction, and that other sources of gas beyond that from the Uinta-Piceance Basin may be transported through its proposed facilities. Thus, EnCana will proceed with its production, gathering, and treatment facilities whether or not the FERC takes action to approve the EPP.

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Figure 1.5-1

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1.0 INTRODUCTION

3. Connected actions “are interdependent parts of a larger action and depend on the larger action for their justification.” As discussed previously, the Entrega Pipeline would be functionally related to EnCana’s upstream development as presently proposed. However, given the existing pipeline infrastructure that is not owned by EnCana and intersects with Entrega’s origin, the proposed pipeline could easily provide regional gas transportation service if EnCana’s upstream facilities were not constructed. However, it is likely that Entrega would have to acquire additional gas in the short term from other sources to justify the EPP. If EnCana’s upstream development could not connect with the Entrega Pipeline, then EnCana would have to reach agreements with another interstate gas transporter(s) to move its gas in the short term. Therefore, the EPP and EnCana’s proposed development do not display the tight interdependency necessary to be considered part of a larger single action.

In addition, the FERC has adopted a four-factor procedure to determine the appropriate scope of its environmental review when project-related nonjurisdictional facilities are involved. These factors are:

- whether the regulated activity compromises “merely a link” in a corridor-type project (e.g., a transportation or utility transmission project);
- whether there are aspects of the nonjurisdictional facility in the immediate vicinity of the regulated activity that affect the location and configuration of the regulated activity;
- the extent to which the entire project would be within the FERC jurisdiction; and
- the extent of cumulative federal control and responsibility.

1.6.2 Conclusions

After applying the four-factor procedure to the EPP, we conclude the following:

- the FERC’s control and responsibility is not sufficient to extend its environmental review to include the associated nonjurisdictional facilities proposed by EnCana and others;
- environmental review of the upstream EnCana facilities is already being conducted by another federal agency and it would be duplicative to include an environmental review of those facilities in this EIS; and
- the powerlines that would be constructed by local electrical service companies and cooperatives to Entrega’s compressor stations are addressed in this EIS (see **table 1.5-1**).

In a broader context, we see the relationship between upstream development and “downstream” pipeline transportation as discontinuous from a NEPA processing perspective. The upstream development proposals are not currently as mature as the downstream Entrega Pipeline proposal. We expect that the upstream system may change further as relationships among producers and gas gatherers/processors are solidified and the gas supply volumes to be shipped are better estimated. We believe the most reasonable approach

for addressing the upstream facilities is to fully inform the public about the proposed nonjurisdictional facilities and discuss their locations and functions to the extent these facts are known.

1.7 Related Actions

On March 26, 2004, the WIC filed an application with the BLM Rawlins FO to construct and operate a new interstate natural gas pipeline and related facilities that would begin at the Greasewood Hub (about 7 miles east of the proposed Meeker Hub) and extend northward. These facilities would include:

- about 142 miles of 24-inch-diameter natural gas pipeline, extending between CIG's existing Greasewood Compressor Station in Rio Blanco County, Colorado, and an interconnection with the CIG and WIC interstate pipeline systems at CIG's existing Wamsutter Compressor Station in Sweetwater County, Wyoming;
- one 1,650-horsepower compressor, to be installed at the Greasewood Compressor Station; and
- related appurtenant facilities.

The proposed Piceance Basin Expansion Project (PBEP) pipeline alignment would parallel an existing PSCo pipeline from Greasewood Compressor Station to the White River Valley and then an existing electrical transmission line to a point immediately west of Meeker. The pipeline would be constructed in a new ROW with no adjacent utilities over a distance of about 17 miles between Meeker and Deep Channel Creek, where it would join an existing pipeline utility corridor that currently contains CIG's 20-inch-diameter Uinta Basin Lateral (UBL) and a small diameter Kinder Morgan natural gas pipeline. WIC's Piceance Basin Expansion Pipeline would parallel the UBL the remainder of the distance to the Wamsutter Compressor Station (**figure 1.6-1**). The proposed WIC pipeline would be in the same utility corridor from Entrega milepost (MP) 41 to MP 137, a distance of approximately 96 miles. WIC proposes to begin construction in the fourth quarter of 2005, with a desired in-service date of February 2006.

On June 22, 2004, WIC¹² requested that the FERC initiate a NEPA PF review of the PBEP. The FERC granted WIC's request and assigned Docket No. PF04-13-000 to the proceeding. On July 13, 2004, the FERC issued a *Notice of Intent to Prepare an Environmental Impact Statement for the Piceance Basin Expansion Project, Request for Comments on Environmental Issues, and Notice of Public Scoping Meetings and Route Inspection* (Piceance NOI). The Piceance NOI invited public participation in joint stakeholder and public scoping meetings that were held in Craig, Colorado, on August 3, 2004, and in Meeker, Colorado, on August 4, 2004. The comment period for the PBEP closed on August 15, 2004. On January 24, 2005, WIC filed its application for the PBEP with the FERC. On that date, WIC's PF docket was closed and Docket No. CP05-54-000 was assigned to the PBEP.

The Commission issued a draft EIS for the PBEP on April 29, 2005, and a formal notice indicating that the document was available for review and comment was published by the EPA in the FR on May 6, 2005

¹² The request was made and the PF docket assigned in the name of El Paso Pipeline Group, Western Pipelines (WIC's affiliate). Both entities are owned by El Paso Corporation.

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Figure 1.6-1

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(70 FR 24,038). The 45-day public comment period closed on June 20, 2005. During this period, meetings were conducted to receive public comments on the PBEP draft EIS in Craig, Colorado (June 7, 2005); Wamsutter, Wyoming (June 8, 2005); and Meeker, Colorado (June 9, 2005).

Because the PBEP would be located in the same utility corridor as the EPP over a distance of approximately 96 miles, and both projects are proposed to be constructed in nearly the same timeframe between the Piceance Basin and Wamsutter, the FERC and BLM considered whether to analyze both projects together in the same EIS. This approach was ultimately rejected because the planning for the PBEP was several months behind that of the EPP. We determined that if either project were delayed, development of a single EIS would potentially penalize the other project by imposing unnecessary NEPA processing delays. Had WIC's project development caught up with the EPP prior to release of a draft EIS, the issue of a single EIS covering both projects would have been revisited.

Consequently, each project is being analyzed in a separate EIS; however, the combined environmental effects of both projects are being considered together where the two projects overlap. In some instances, the decisions to be made for the EPP could affect the location and construction procedures for the PBEP. To account for the joint environmental and construction issues for both projects, route alternatives were developed in which both projects would be located together for all or part of the pipeline segment between the Piceance Basin and Wamsutter. The purpose of these alternatives is to examine options to reduce the overall surface disturbance for both projects and a consequent reduction in resource effects. Another purpose is to determine whether one applicant's proposal would yield greater environmental protection benefits than the other proposal where the two project proposed routes are geographically separate (between the Piceance Basin and Entrega MP 33.2). The rationale and scope of the route alternatives are presented in chapter 4.0. The FERC and the BLM have encouraged the two companies to work together to closely collocate their facilities wherever possible, and to conduct joint construction planning with the goal of minimizing environmental impact to the maximum extent practicable.