

126 FERC ¶ 61,237
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Acting Chairman;
Sudeen G. Kelly, Marc Spitzer,
and Philip D. Moeller.

Columbia Gas Transmission Corporation

Docket No. CP08-431-000

ORDER ISSUING CERTIFICATE AND GRANTING ABANDONMENT

(Issued March 19, 2009)

1. On June 24, 2008, Columbia Gas Transmission Corporation (Columbia) filed an application under sections 7(b) and (c) of the Natural Gas Act (NGA) to abandon and construct certain facilities in order to expand storage capabilities at its Crawford and Weaver Storage Fields in Ohio (the Ohio Storage Project). Columbia also seeks authorization pursuant to NGA section 4(f) to provide storage service through the expanded facilities at market-based rates. As discussed below, this order grants the requested abandonment and certificate authorization, as well as Columbia's request for market-based rate authority, subject to conditions.

I. Background

2. Columbia is engaged in the transportation and storage of natural gas in interstate commerce. Columbia's underground natural gas storage system consists of 36 storage fields in four states with nearly 265 billion cubic feet (Bcf) of working gas. In the past few years, Columbia has undertaken two major storage expansions: (1) development of the Hardy Storage Field in Hampshire and Hardy Counties, West Virginia,¹ and (2) Eastern Market Expansion project, which involved the Crawford Storage Field.²

¹ *Columbia Gas Transmission Corp.*, 113 FERC ¶ 61,118 (2005), *order on clarification*, 114 FERC ¶ 61,209 (2006), *order amending certificate authority*, 118 FERC ¶ 61,200 (2007)

² *Columbia Gas Transmission Corp.*, 122 FERC ¶ 61,021 (2008), *order amending certificate*, 126 FERC ¶ 61,213 (2009).

3. The Crawford Storage Field is located in Fairfield and Hocking Counties, Ohio. Currently, the storage field contains about 200 wells which access the Clinton Formation, a storage formation situated in the western portion of the Appalachian Basin. The Weaver Storage Field is located in Ashland, Knox, and Richland, and Holmes Counties, Ohio. Currently, the Weaver Storage Field contains more than 150 wells.

II. Proposals

4. As proposed, the Ohio Storage Project will provide an additional 103,400 dekatherms per day (Dth/d) of natural gas storage deliverability for regional use and will add 3.0 Bcf of storage within the Crawford Storage Field and 3.7 Bcf within the Weaver Storage Field. Columbia states that the proposed modification of its existing facilities will reduce environmental impacts at the storage fields when compared to constructing new facilities. Columbia contends that its proposals can provide storage capacity for its expansion shipper, as well as prospective shippers seeking storage capacity close to the market for gas transported on Rockies Express Pipeline LLC (Rockies Express),³ asserting that local distribution companies, who typically do not flow gas ratably over a 24-hour period, will use the capacity. Columbia also contends that customer demand for access to increased production in the Appalachian region will result in a greater demand for storage capacity provided by Columbia.

A. Facilities

1. Crawford Storage Field Facilities

5. Columbia proposes to construct new storage wells, as well as upgrade and convert existing wells, within the existing Crawford Storage Field boundary. Specifically, Columbia proposes to: (1) construct 19 new storage wells on previously undisturbed sites within the limits of the existing storage field (these wells would require new permanent rights-of-way and access roads); (2) convert 11 existing counter storage wells to injection/withdrawal wells; (3) convert 10 existing observation wells to counter storage or injection/withdrawal wells; (4) convert two injection/withdrawal wells to counter-storage wells; and (5) purchase and convert four production wells to storage wells.⁴

³ *Rockies Express Pipeline LLC*, 123 FERC ¶ 61,234, *order granting and denying clarification and denying reconsideration*, 125 FERC ¶ 61,160 (2008).

⁴ An injection/withdrawal well is used to inject gas for storage and withdraw gas from storage. A counter storage well is a low-pressure continuous-withdrawal well that creates an artificial pressure sink in order to maintain storage field integrity. An observation well is used for monitoring gas pressure at various points in the field, usually

(continued...)

6. Columbia also proposes to construct an estimated 13.4 miles of pipeline, ranging from four to eight inches in diameter, at 42 locations within the storage field, interconnecting various facilities. In conjunction with the proposed construction, Columbia proposes to abandon approximately 1.2 miles of existing pipeline by replacement and to abandon in-place approximately 0.2 mile of existing pipeline. In addition, Columbia proposes to replace two existing cathodic protection (anode) ground beds and install two additional anode ground beds within the Crawford Storage Field. Columbia will also install a new mainline valve on an existing field pipeline and a gate valve at the tie-in location of each proposed well line to its existing storage system.

7. Columbia also proposes to make minor modifications to the existing Crawford Compressor Station within the limits of the existing station yard in the Crawford Storage Field. Proposed modifications include replacement of an existing gas-fired line heater and upgrades to existing meter and regulation equipment. No increase in compression or installation of additional compressor units is proposed as part of the Ohio Storage Project.

2. Weaver Storage Field Facilities

8. Columbia proposes to construct facilities at its Weaver Storage Field enabling it to initiate a continually operating withdrawal-only, or counter storage system. The counter storage system will allow Columbia to increase the operating pressure in portions of the field, while also addressing a potential gas migration problem in the eastern portion of the field. The increase in actual operating pressure⁵ will accommodate an increase in working gas capacity and design day deliverability at the Weaver Storage Field. Specifically within the Weaver Storage Field boundary, Columbia proposes to: (1) install approximately 4.15 miles of 6-inch-diameter high-density polyethylene (HDPE) plastic natural gas pipeline in a new permanent right-of-way as part of its counter storage facilities; (2) abandon and remove approximately 1.7 miles of 2-inch-diameter plastic pipeline (along with the 8-inch- and 10-inch-diameter pipelines within which the 2-inch line is encased) at two locations, and replace these segments with a 6-inch-diameter HDPE plastic pipeline within the existing right-of-way; (3) install one meter station (the Miley Measurement Station) in Holmes County; (4) install one regulation station (the Weaver Regulation Station) in Ashland County; and (5) install one mainline valve setting.

along the boundaries, for purposes of field integrity monitoring. Production wells are non-storage wells that produce natural gas native to the area.

⁵ While the operating pressure in the eastern portion of the Weaver Storage Field will increase above its recent level, it will not exceed historic or certificated pressure levels of the field.

9. Columbia also proposes to recondition 21 wells in the Weaver Storage Field. Twelve of these wells are within the boundary of the Mohican Memorial State Forest (Mohican Forest). Columbia will use existing roads to conduct project activities within the Mohican Forest.

10. As part of the well reconditioning, Columbia will replace the well heads (as necessary), using existing access roads to reach project facilities. For wells within the Mohican Forest, Columbia will limit project activities to a 120-foot radius surrounding the well. This is generally consistent with Columbia's operation and maintenance agreement with the Ohio Department of Natural Resources.

B. Open Season and Request for Market-based Rates

11. Columbia conducted two open seasons for its proposed Ohio Storage Project. During Columbia's first open season, Columbia solicited non-binding bids from prospective customers for up to 15 Bcf of storage capacity. Twenty-eight customers submitted bids, requesting a total of up to 82 Bcf of service. Based on this expression of interest, Columbia conducted a second open season, soliciting binding bids for up to 15 Bcf of storage capacity at an estimated cost-based rate of \$3.251 per Dth per year for a minimum term of 15 years (conforming bid). In addition, Columbia's open-season notice stated that Columbia would also consider non-conforming bids "exceeding an overall unit rate of \$2.15 per Dth per Year . . . for 15 years" (the minimum that Columbia considered potentially adequate to support its proposed project) as a starting point for negotiations for its proposed expansion storage service. Columbia states that it did not receive any acceptable bids during this open season. However, subsequent to the close of the open season, Columbia negotiated a binding precedent agreement with Washington Gas Light Company (Washington Gas) for 60,000 Dth/d of Maximum Daily Storage Quantity (MDSQ) and 4.0 MMDth of Storage Contract Quantity (SCQ).⁶

12. In light of the response to the binding open season, Columbia proposes to construct facilities resulting in the creation of 6.9 MMDth (6.7 Bcf equivalent) of incremental storage capacity and 103,400 Dth/d of deliverability to provide firm and interruptible storage services under proposed Rate Schedules FSS-M (Firm Storage with Market-Based Rates) and ISS-M (Interruptible Storage Service with Market-Based Rates) at market-based rates, pursuant to the provisions of NGA section 4(f). As described above, 4.0 MMDth of the storage capacity and 60,000 Dth/d of daily deliverability will be used to serve Washington Gas. The remaining 43,400 Dth per day of MDSQ and 2.9 MMDth of SCQ is unsubscribed. If granted market-based rate authority, Columbia states

⁶ For transportation access to the storage service, Washington Gas will convert 60,000 Dth/d of its existing Rate Schedule FTS (Firm Transportation Service) capacity to Rate Schedule SST (Storage Service Transportation) capacity.

it is willing to accept the risk associated with the unsubscribed portion of the Ohio Storage Project. In the alternative, Columbia seeks authority to construct only the 4.0 MMDth of working capacity and deliverability supported by the binding precedent agreement with Washington Gas, filing to provide service with an appropriate recourse rate.

13. Columbia alleges that it faces significant risk in constructing and operating the 2.9 MMDth of unsubscribed storage capacity and that without market-based rates it would be unable to recover its cost of service. Columbia asserts that while customers are willing to enter into short-term contracts at higher rates than it can charge under a cost-based rate structure, such short-term contracts require it to accept certain financial risks. Columbia maintains that market-based rates provide it with the opportunity to earn a fair return on shorter-term contracts as market conditions change, providing the incentive to invest in constructing the additional facilities. Thus, Columbia asserts that it is only willing to proceed with the construction of the 2.9 MMDth of unsubscribed storage capacity if it is allowed to charge market-based rates for services utilizing that capacity.

III. Procedural Matters

14. Notice of Columbia's application was published in the *Federal Register* on July 22, 2008 (73 Fed. Reg. 42,555). Twelve parties filed timely, unopposed motions to intervene.⁷ The timely, unopposed motions to intervene are granted by operation of Rule 214 of the Commission's regulations.⁸

15. Virginia Power Energy Marketing, Inc. (Virginia Power); NiSource Distribution Companies; Janet Selby; and Charles R. and Melanie A. Ogle filed motions to intervene out-of-time. Inasmuch as granting the out-of-time interventions will not prejudice any party to this proceeding, the late motions to intervene are granted for good cause.

16. Washington Gas filed comments in support of the proposed project. Charlottesville and Richmond, Honeywell, and Virginia Power filed comments expressing various concerns with Columbia's market-based rate proposal. Orange and

⁷ They are: The Cities of Charlottesville and Richmond Virginia (Charlottesville and Richmond); Duke Energy Ohio, Inc. and Duke Energy Kentucky, Inc. (joint motion); East Ohio Gas Co. d.b.a. Dominion East Ohio, et al.; Honeywell International Inc. (Honeywell); National Fuel Gas Distribution Corporation; National Grid Gas Delivery Companies; New Jersey Natural Gas Company; NJR Energy Services Company; Orange and Rockland Utilities, Inc. (Orange and Rockland); Proliance Energy LLC; PSEG Energy Resources and Trade LLC; and Washington Gas.

⁸ 18 C.F.R. § 385.214(c) (2008).

Rockland filed a protest. Columbia filed a motion for leave to reply and comments.⁹ The protest, comments, and reply comments are discussed below. Several parties filed comments in response to the Commission's environmental review of the proposed facilities. Those comments are addressed in the Environmental Assessment (EA) prepared for the proposed project and in the environmental section below.

IV. Discussion

17. Since the construction, operation, and abandonment of the proposed facilities would involve the transportation of natural gas in interstate commerce, the proposals are subject to the jurisdiction of the Commission under sections 7(b), (c), and (e) of the NGA.

A. Abandonment

18. At the Crawford Storage Field, Columbia proposes to abandon by replacement approximately 1.2 miles of existing pipeline, as well as to abandon in-place approximately 0.2 mile of existing pipeline, as a result of project activities. At the Weaver Storage Field, Columbia proposes to abandon and remove approximately 1.7 miles of 2-inch-diameter plastic pipeline (encased within 8-inch- and 10-inch-diameter pipelines) at two locations, and replace these segments with a 6-inch-diameter HDPE plastic pipeline. Since the abandonments are an integral part of an expansion project which will, in sum, enhance storage operations at the Crawford and Weaver Storage Fields, the Commission finds the abandonments to be in the public convenience and necessity and abandonment authorization is granted.

B. Certificate Policy Statement

19. The Certificate Policy Statement provides guidance as to how the Commission will evaluate proposals for certificating new construction.¹⁰ The Certificate Policy Statement established criteria for determining whether there is a need for a proposed project and whether the proposed project will serve the public interest. The Certificate

⁹ Although answers to protests are not permitted by Rule 213(a)(2), 18 C.F.R. § 385.213(a)(2)(2008), the Commission finds good cause to waive the rule and to permit Columbia's answer in the instant proceeding as it provided information that may aid in the disposition of the issues raised by the filing.

¹⁰ *Certification of New Interstate Natural Gas Pipeline Facilities*, 88 FERC ¶ 61,227 (1999), *order on clarification*, 90 FERC ¶ 61,128 (2000), *order on clarification*, 92 FERC ¶ 61,094 (2000) (Certificate Policy Statement).

Policy Statement explained that in deciding whether to authorize the construction of major new pipeline facilities, the Commission balances the public benefits against the potential adverse consequences. The Commission's goal is to give appropriate consideration to the enhancement of competitive transportation alternatives, the possibility of overbuilding, subsidization by existing customers, the applicant's responsibility for unsubscribed capacity, and the avoidance of the unnecessary exercise of eminent domain or other disruptions of the environment.

20. Under this policy, the threshold requirement for existing pipelines proposing new projects is that the pipeline must be prepared to financially support the project without relying on subsidization from existing customers. The next step is to determine whether the applicant has made efforts to eliminate or minimize any other adverse effects the project might have on the applicant's existing customers, existing pipelines in the market and their captive customers, or landowners and communities affected by the route of the new pipeline. If residual adverse effects on these interest groups are identified, after efforts have been made to minimize them, the Commission will evaluate the project by balancing the evidence of public benefits to be achieved against the residual adverse effects. This is essentially an economic test. Only when the benefits outweigh the adverse effects on economic interests will the Commission then proceed to complete the environmental analysis where other interests are considered.

21. The threshold requirement is that the pipeline must be prepared to financially support the project without relying on subsidization from existing customers. As discussed below, current customers will not subsidize the storage services since the new services will be provided on an incremental basis and none of the costs associated with the proposed expansion will be allocated to existing customers. The construction of the facilities as proposed will not result in any adverse operational effects on existing Columbia customers because the level and quality of service provided existing shippers will remain unchanged. The proposed project will have no adverse effect on other pipelines in the area or Columbia's captive customers.

22. Columbia minimized landowner impacts by proposing to recondition existing storage wells and drill new injection and withdrawal wells that, to the maximum extent practicable, will be located at or near existing roads and clearings. The use of expanded existing rights-of-way and an existing compressor station site for proposed construction, as well as expansion of storage capabilities within the existing boundaries of Columbia's storage field, will help minimize landowner impacts.

23. The Rockies Express system will increase gas supply into Columbia's market area. Columbia's proposals herein will provide additional storage opportunities for gas transported on Rockies Express.¹¹ Customer demand for access to natural gas supplies

¹¹ Application at P 15.

delivered to the region from Rockies Express and increased production in the Appalachian region should result in a greater demand for storage capacity provided by Columbia. Thus, based on the benefits Columbia's project will provide to the market and the minimal adverse effects on existing customers, other pipelines, landowners, or communities, the Commission finds, consistent with the Certificate Policy Statement and NGA section 7, that the public convenience and necessity requires approval of Columbia's proposal.

C. Rates

1. Market-Based Rates under NGA Section 4(f)

24. Columbia requests authority to charge market-based rates for its proposed storage service pursuant to the provisions of NGA section 4(f). In Order No. 678, the Commission promulgated regulations to implement the provisions of section 4(f) to permit underground natural gas storage service providers that are unable to show that they lack market power to nevertheless provide service at market-based rates.¹² Specifically, Order No. 678 required that underground natural gas storage providers meet the following criteria in order to gain authority to provide service at market-based rates: (1) the capacity providing the storage service must relate to a "specific facility" requiring certification placed in service after the date of the Energy Policy Act of 2005,¹³ be it a new storage cavern or a facility which expands capacity at an existing cavern or reservoir;¹⁴ (2) market-based rates must be in the public interest and necessary to encourage the construction of storage capacity in an area needing storage services;¹⁵ and (3) customers must be adequately protected.¹⁶

¹² *Rate Regulation of Certain Natural Gas Storage Facilities*, Order No. 678, FERC Stats. & Regs., Regulations Preambles 2006-2007 ¶ 31,220, Order No. 678-A, *order on clarification and reh'g*, 117 FERC ¶ 61,190 (2006).

¹³ Energy Policy Act of 2005, Pub. L. No. 109-58, § 312, 119 Stat. 594, 688 (2005).

¹⁴ Order No. 678, FERC Stats. & Regs. ¶ 31,220 at P 115. Columbia anticipates an in-service date in November 2009.

¹⁵ *Id.* P 125-132.

¹⁶ *Id.* P 153-159.

a. **Market-Based Rates Are in the Public Interest and Necessary to Encourage the Construction of the Storage Capacity in the Area Needing Storage Service**

25. In determining whether allowing market-based rates is in the public interest, the Commission will consider, among other things, the extent to which additional capacity is needed in the area of the project, the risk faced by the project sponsors, and the strength of the applicant's showing that the facilities would not be built but for market-based rate treatment.¹⁷

26. The Commission has stated that an applicant can demonstrate that storage services are needed in an area by providing evidence of: (i) a general lack of storage in the area; (ii) full utilization of existing storage capacity; (iii) pipeline constraints in the area; and/or (iv) projected increased demand for natural gas in the area to be served.¹⁸

27. The Commission's Staff Storage Report estimated that 90 Bcf of incremental working gas capacity will be needed in the markets served by Columbia, including Pennsylvania and West Virginia, by 2020.¹⁹ Columbia's existing storage capacity, including its recent Eastern Market Expansion project, also in the Crawford Field,²⁰ and Hardy Storage Field²¹ are fully contracted. In addition, Columbia asserts that customers have shown a significant interest in new storage capacity even though they have been unwilling to contract for that capacity under the long-term contracts necessary to support cost-based rates.²² Thus, the Commission finds that there is a demonstrated need for natural gas storage in the area to be served by the Ohio Storage Project.

¹⁷ *Id.* P 128-129.

¹⁸ *Id.* P 131.

¹⁹ See Federal Energy Regulatory Commission, *Staff Report: Current State of and Issues Concerning Underground Natural Gas Storage*, at 15 (Sept. 30, 2004).

²⁰ *Columbia Gas Transmission Corp.*, 122 FERC ¶ 61,021 (2008), *order amending certificate*, 126 FERC ¶ 61,213 (2009).

²¹ *Columbia Gas Transmission Corp.*, 113 FERC ¶ 61,118 (2005), *order granting clarification*, 114 FERC ¶ 61,209 (2006); *order amending certificate authority*, 118 FERC ¶ 61,200 (2007).

²² Columbia states that 28 customers submitted bids expressing interest in as much as 82 Bcf of capacity in response to its non-binding open season for the Ohio Storage Project.

28. The Commission has indicated that the best means for demonstrating that cost-based rates are not sufficient to encourage the construction of storage capacity is for an applicant to present evidence that it offered its capacity at cost-based rates through an open season and was unable to obtain sufficient long-term commitments for service.²³ As discussed above, Columbia held a binding open season for up to 15 Bcf of storage capacity, soliciting bids at incremental cost-based recourse rates. Columbia did not receive any acceptable, long-term bids in that open season.

29. In addition, Columbia states that it faces significant risk in constructing and operating storage capacity that is not fully subscribed and that without market-based rates it will be unable to recover its cost of service. Columbia contends that while customers are willing to enter into short-term contracts at higher rates than it can charge under a cost-based rate structure, such short-term contracts require it to accept certain financial risks. Columbia contends that market-based rates provide it with the opportunity to earn a fair return on shorter-term contracts as market conditions change, providing the incentive to invest in additional facilities. Columbia explains that it has incurred significant cost overruns in connection with its recent Eastern Market Expansion project,²⁴ which also involves the Crawford Storage Field and the Hardy Storage Project,²⁵ contending that it needs the protection of market-based rates in order to proceed with further expansions of storage capacity. Because of the lack of response during the open season for 15 Bcf of working gas capacity, Columbia is now proposing to construct only 6.7 Bcf of storage capacity. However, a portion of that capacity is still unsubscribed and Columbia asserts that it will only proceed to construct that unsubscribed increment of capacity if it is allowed to charge market-based rates.

30. Based on the above, the Commission finds that market-based rates are in the public interest and necessary to encourage the construction of the proposed storage capacity.

²³ Order No. 678, FERC Stats. & Regs. ¶ 31,220 at P 129.

²⁴ *Columbia Gas Transmission Corp., order amending certificate* 126 FERC ¶ 61,213 (2009) authorizing revised initial rates to recover cost overruns of \$42,566,325 reflecting a 24.4 percent construction cost increase..

²⁵ *Hardy Storage Company, LLC*, 118 FERC ¶ 61,200 (2007), authorizing revised initial rates based on cost overruns of \$42,445,300, reflecting a 34.8 percent construction cost increase.

b. Customer Protection

31. The final requirement for obtaining market-based rate authority under NGA section 4(f) is that customers be adequately protected. In Order No. 678, the Commission discussed various ways in which an applicant for market-based rates could ensure that both existing cost-based rate customers and potential market-based rate customers are adequately protected. The Commission noted that protection of potential storage customers started with a fair and open opportunity to contract for proposed new capacity and stated that one way an applicant could demonstrate that this requirement had been met was by showing that it had conducted a fair and transparent open season. As discussed above, we find that the open seasons conducted by Columbia satisfy this requirement. The Commission also stated that, like every Part 284 transporter, storage providers charging market-based rates pursuant to section 4(f) must comply with the nondiscriminatory access requirements of the Commission's regulations. Further, the Commission stated that applicants which already serve customers under prior authorizations would be required to demonstrate that existing customers will not be subject to additional costs, risks, or degradation of service resulting from the new market-based rate services. In addition, successful applicants for section 4(f) authority would be required to separately account for the costs, services, and commitments associated with section 4(f) authorizations and to provide such service under an open-access tariff stating the terms and conditions of the service offered. Finally, Order No. 678 provides that an applicant for section 4(f) authority must demonstrate how it intends to safeguard against withholding capacity and specify whether and, if so, how it will establish a reserve price.²⁶ As discussed below, we believe that Columbia's proposal, as modified and conditioned by this order, will satisfy all these requirements.

(1) Auction Procedure

32. As its primary means of implementing adequate measures to prevent the withholding of capacity, Columbia proposes an auction process for selling unsubscribed firm and interruptible capacity, and states how it intends to establish a reserve price for the auction. Columbia contends that selling its storage capacity through its proposed interactive auctions will prevent withholding of capacity, price discrimination, or favoritism.²⁷ Columbia asserts that its proposed auction process adheres to the principles

²⁶ Order No. 678, FERC Stats. & Regs. ¶ 31,220 at P 154-67.

²⁷ *Regulation of Short-Term Natural Gas Transportation Services and Regulation of Interstate Natural Gas Transportation Services*, Order No. 637, FERC Stats. & Regs., Regulations Preambles July 1996-2000 ¶ 31,091, at 31,294; *clarified*, Order No. 637-A, FERC Stats. & Regs. ¶ 31,099; *reh'g denied*, Order No. 637-B, 92 FERC ¶ 61,062 (2000); *aff'd in part and remanded in part sub nom. Interstate Natural Gas Association of America v. FERC*, 285 F.3d 18 (D.C. Cir. 2002); *order on remand*, 101 FERC ¶ 61,127

(continued...)

outlined in Order No. 637 regarding: (1) notification of auction; (2) predictable timing; (3) open to all bidders on a nondiscriminatory basis; (4) user-friendly with accessible rules; (5) full prior disclosure of procedures for bidding in an auction and how winning bids will be selected; (6) no favoritism in selecting the winning bid, including monitoring of the application of selection criteria and methods for verifying reserve price; and (7) disclosure of transaction information, including prices and volumes.²⁸ Columbia's auction procedures would be set forth in its open-access transportation tariff and available to all market participants.²⁹

33. Columbia proposes to post all available market-based rate storage capacity on its website. Under Columbia's proposed procedures, there are two ways that an auction for capacity can be initiated: (1) Columbia can initiate the auction if it has excess storage capacity, or (2) a customer can initiate an auction by requesting available firm market-based rate storage service. The notice of auction would contain the quantity of capacity available, the term, and reserve price. It would also state the time(s) of the auction, the steps necessary to participate and bid in the auction, and the criteria for determining the winning bid. Once the bidding period terminates, all submitted bids are binding. Columbia reserves the right to reject any bid that requires it to offer firm service below the reserve price. If the winning bidder fails to execute a new service agreement, Columbia would have the right to re-auction the capacity and the customer that failed to execute a service agreement would be required to pay the difference between the winning bid price and the price received in the re-auction.

34. For auctions of unsubscribed firm and interruptible capacity, Columbia proposes to establish a reserve price using one of three methods, which are described in proposed section 51.4 of the General Terms and Conditions (GT&C) of its tariff. The reserve price would be set at up to: (1) \$3.251 per Dth per year, which is the incremental rate proposed during the binding open season for the Ohio Storage Project; (2) the highest price paid to

(2002), *order on reh'g*, 106 FERC ¶ 61,088 (2004), *aff'd sub nom. American Gas Association v. FERC*, 428 F.3d 255 (D.C. Cir. 2005). (Auctions, if properly designed, can provide for efficient allocation of capacity and natural gas, reduce the transaction costs of finding and arranging capacity transactions, and provide for more accurate dissemination of relative pricing information to the marketplace. Auctions also can be used as methods of mitigating the effects of market power by limiting the ability of sellers to withhold capacity, to price discriminate, or to show favoritism.)

²⁸ Order No. 637, FERC Stats. & Regs. ¶ 31,091 at 31,296.

²⁹ See proposed section 51 of the General Terms and Conditions, "Auctions for Storage Service with Market-Based Rates" at Pro Forma Sheet No. 490.

a competing storage provider in Columbia's market area;³⁰ or (3) the highest rate paid to Columbia for service under the applicable market-based rate schedule (FSS-M or ISS-M) during the 12-month period preceding the auction. Columbia reserves the right to refuse any bid that would require it to sell capacity at a rate lower than the applicable reserve price.

35. Section 284.505(a)(2) requires that a storage service provider seeking market-based rate authority pursuant to section 4(f) must provide a means of protecting customers from the potential exercise of market power. In Order No. 678 we found that "a proposal that acts to prevent withholding as a method of exercising substantial market power, tempered with a reasonable reserve price which would allow a section 4(f) applicant to recover its investment appears to be the best way to satisfy the test."³¹ We find that Columbia's auction process for selling firm and interruptible storage service using the proposed expansion capacity can meet the customer protection requirement of NGA section 4(f), if modified to address the concerns discussed below.

36. While Columbia's proposal allows a customer, as well as Columbia, to initiate an auction, Columbia has the sole right to establish the term of the capacity offering. As both the Commission and the courts have recognized, a pipeline can exert market power by requiring customers to sign up for longer terms of service than they otherwise would in a competitive market.³² With unfettered discretion to dictate the term of a storage contract, Columbia would have the ability to exercise this form of market power. Accordingly, we will require Columbia to modify its proposal to address this concern. One approach the Commission has found acceptable under NGA section 4(f) is to allow for the price and term of a customer-initiated auction to be established through arms-

³⁰ Columbia's proposed tariff states that the reserve price is the "highest price offered" by a competing storage seller. Columbia states that it intends to revise this language to reflect its intentions that the reserve price should be the "highest rate charged" by a competing storage seller. See Columbia's October 10, 2008 Response to Staff Data Requests, Question No. 15(b). Columbia is directed to make this tariff revision.

³¹ Order No. 678, FERC Stats. & Regs. ¶ 31,220 at P 163.

³² See *Process Gas Consumers Group v. FERC*, 177 F.3d 995, 1004 (D.C. Cir. 1999) (where the court's initial concerns involved the potential for a pipeline to exert market power by requiring customers to sign excessively long bids); see also *Process Gas Consumers Group v. FERC*, 292 F.3d 831 (D.C. Cir. 2002) (affirming the Commission's finding that a term cap should be retained for the expiring contracts of existing customers with a right of first refusal, to protect those customers from term-based market power abuse).

length negotiations. To the extent the parties are unable to reach agreement, the reserve price will be established by the pipeline up to the cost-based rate for the expansion storage field with the term set by the requesting shipper.³³ If Columbia proposes an alternative approach, it must fully address how that approach prevents Columbia from exercising market power.

37. We also find the provision that permits Columbia to accept a bid below the reserve price it establishes for an individual auction to be unduly discriminatory. Other bidders may have been willing to bid for the capacity at a lower rate, but did not do so because of the higher stated reserve price. In order for the auction to be transparent and fair to all potential bidders, the reserve price should reflect the minimum acceptable bid for that particular auction. To the extent that Columbia is later willing to accept a bid lower than the reserve price established in an individual auction, it can initiate a subsequent auction with a revised reserve price. Columbia is directed to revise its tariff accordingly.

38. We will also require the following modifications to Columbia's proposed reserve prices. While the Commission has recognized the reasonableness of setting a reserve price no higher than the cost-based price for the proposed expansion facilities,³⁴ Columbia's proposal to establish a cost-based reserve price of \$3.251 per Dth per year is not supported. An appropriate cost-based reserve price must be designed on the pipeline's estimated costs associated with the proposed project. Here the reserve price should be designed based on the proposed 6.7 Bcf of capacity rather than the 15 Bcf project announced in the open season. The cost support must also be publicly filed and subject to review by interested parties.³⁵ In addition, consistent with the Commission's practice of establishing incremental rates for pipeline expansion projects,³⁶ the reserve

³³ *Texas Gas Transmission, LLC*, 125 FERC ¶ 61,189, at P 13 (2008) (*Texas Gas*).

³⁴ *Id.* P 22, and Order No. 678, FERC Stats. & Regs. ¶ 31,200 at P 165.

³⁵ In response to a data request, Columbia submitted cost support for its proposed 6.7 Bcf project but filed this information on a confidential basis. *See* Columbia's October 10, 2008 Response to Staff Data Requests, Question No. 14(a) and Columbia's January 13, 2009 Response to Staff Data Request, Question No. 1. Consistent with long-established practice, the rates and cost support for jurisdictional service must be publicly available. *Filing and Reporting Requirements for Interstate Natural Gas Company Rate Schedules and Tariffs*, FERC Statutes and Regulations ¶ 31,025 (1995); *order on reh'g*, Order No. 582-A, FERC Statutes and Regulations ¶ 31,034 (1996).

³⁶ *See, e.g., Equitrans, L.P.*, 117 FERC ¶ 61,185, at 61,909 (2006) (requiring a pipeline to revise its maximum transportation rates using the capital structure and rate of return approved in the pipeline's last general rate case settlement); *Dominion Cove Point LNG, L.P.*, 115 FERC ¶ 61,337, at P 138 (2006) (approving use of the capital structure
(continued...))

price should be based on the cost-of-service components underlying Columbia's existing Commission-approved rates.³⁷ Further, as we held in *Texas Gas*, once the Commission approves a cost-based reserve price in a section 7 proceeding and service commences on the expansion facilities, in order to change the level of the cost-based reserve price, the pipeline must make a filing under NGA section 4, providing cost data and the required exhibits to support the revised rate.³⁸

39. Columbia's other proposed methods for establishing a reserve price are to use the highest price paid to a competing storage seller or the highest rate paid to Columbia for service under Rate Schedule FSS-M and ISS-M during the last 12 months. The Commission will approve Columbia's proposal, subject to the following conditions. We find that a reserve price based on the rate agreed to between the pipeline and a customer or between a competing storage seller and a customer would be reasonable, as long as the rate used was the result of arms-length negotiations. Because transactions between affiliates are not deemed to be at arms-length,³⁹ we will require Columbia to exclude affiliated transactions on its system and on competing storage systems when establishing a reserve price under these methods.

40. We are also concerned that Columbia's proposal would permit it to establish a reserve price for a capacity auction based on a contract on its system or a competing storage provider's system the term of which could differ substantially from the term proposed in the auction. For instance, Columbia could initiate an auction for a 15-year term and establish a reserve price based upon a contract entered into by a competitor for a one-year term, or vice versa. As the Commission has recognized, the length of a transportation or storage contract can impact the risks faced by a pipeline and its

and pre-tax return consistent with the pipeline's currently approved system-wide rates); *See Wyoming Interstate Co.*, 119 FERC ¶ 61,251, at 62,416 (2007) (stating that the Commission's general policy with respect to pipeline expansions is to use the depreciation rate approved in the pipeline's last general rate proceeding).

³⁷ *Columbia Gas Transmission Corp.*, 79 FERC ¶ 61,044 (1997); *order on contested settlement*, 88 FERC ¶ 61,161 (1999).

³⁸ *Texas Gas*, 125 FERC ¶ 61,189 at P 23. If a pipeline proposes to change the level of the reserve price prior to the in-service date of the expansion facilities, the pipeline should file to amend its certificate under NGA section 7.

³⁹ *See, e.g., Copperweld Corp. v. Independence Tube Corp.*, 467 U.S. 752, 771 (1984) (“[a] parent and its wholly-owned subsidiary have complete unity of interest.”).

customers, and thus the rate for service.⁴⁰ Therefore, establishing a reserve price for a contract without regard to term is unlikely to result in a reasonable reserve price. Accordingly, we will require Columbia to revise its proposal to address this concern. One way Columbia could address this concern would be to limit the use of these methods for establishing a reserve price to auctions initiated by the pipeline where the term of the auction matches the term of the contract being used to establish the reserve price.

41. Additionally, while Columbia has limited the establishment of a reserve price based on the highest rate paid on its system to those occurring within the 12-month period preceding the auction, it has not provided a similar restriction on the use of a rate paid to a competing storage seller. Because energy markets are dynamic, we find that limiting the use of a contract price to establish a reserve price to those occurring within a reasonable period of time prior to the auction is necessary to ensure that the reserve price represents a reasonable market price. Accordingly, we will require Columbia to revise its tariff such that reserve prices based on the highest price paid to a competing storage provider in Columbia's market area will only reflect prices paid during the 12-month period preceding the auction.

42. In addition, we note that while Columbia's storage expansion is located in Ohio, Columbia's tariff does not delineate a market area in which a storage seller must be located in order to be considered "competing." In response to a data request, Columbia states that its geographic market is the Midwest and Mid-Atlantic regions of the United States, including but not limited to the states of Michigan, Ohio, Indiana, Kentucky, Virginia, West Virginia, Pennsylvania, Maryland, portions of New Jersey and New York, as well as Washington D.C.⁴¹ However, Columbia has not explained why this area can provide competitive service when the transportation costs of accessing those fields are considered.⁴² Accordingly, we will require Columbia to revise its tariff to clearly delineate the area in which storage sellers will be considered competing and fully support its proposal.

43. To the extent that Columbia satisfactorily addresses the Commission's concerns expressed herein, we believe that the auction procedures proposed by Columbia and modified in this order will be adequate to ensure that Columbia will not be able to

⁴⁰ Order No. 637, FERC Stats. & Regs. ¶31,091 at 31,293-94 (permitting a pipeline to propose term-differentiated rates in a section 4 filing).

⁴¹ See Columbia's October 10, 2008 Response to Staff Data Requests, Question No. 15(d).

⁴² See, e.g., *Texas Gas*, 122 FERC ¶ 61,190 at P 20-21.

exercise market power by improperly withholding any of its market-based rate expansion capacity.

(2) **Enforcement of Proposed Customer Protections**

44. Charlottesville and Richmond contend that their non-opposition to the Ohio Storage Project is premised on Columbia's commitment to assume the risk of cost recovery for the capital costs of the storage expansion and on Columbia's representation that the proposed service will not affect or degrade service to existing cost-based storage customers. Charlottesville and Richmond request that the Commission condition any certificate authority on: (1) a requirement that Columbia bear the financial risks for all costs associated with the Ohio Storage Project, including any cost overruns, allocated overheads, and operating and maintenance expenses and (2) the establishment of accounting procedures that ensure that Columbia fulfills the commitments made in its application. Charlottesville and Richmond also request that the Commission enforce each commitment that Columbia has made in its filing in order to ensure that existing cost-based customers are not disadvantaged by the approval of market-based rates.

45. Columbia proposes to separately account for its cost-based and market-based storage services. The Commission will require Columbia to isolate the incremental costs of the Ohio Storage Project, keeping separate books and records of all costs and revenues associated with the project so that parties during a rate case can examine such records to ensure that existing customers are not subsidizing facilities from which they are not receiving service.⁴³ The maintenance of separate records will ensure that existing customers will not subsidize the costs of the expansion.⁴⁴ This condition addresses Charlottesville's and Richmond's concerns that cost-based rate customers be shielded from costs, including cost overruns, associated with the market-based rate expansion.

46. The Commission will also require that Columbia's books be maintained with applicable cross-references as required by section 154.309 of the Commission's regulations. This information must be in sufficient detail so that the data can be identified in Statements G, I, and J in any future NGA section 4 or 5 proceeding. Columbia is required to retain such separate records for its cost-based and market-based storage for the period of time it operates the Crawford and Weaver Storage Fields. In its

⁴³ *Texas Gas*, 122 FERC ¶ 61,190 at P 43; *Dominion Cove Point LNG, LP*, 120 FERC ¶ 61,213, at P 18 (2007); *Dominion Transmission, Inc.*, 120 FERC ¶ 61,235, at P 23 (2007); *Empire State Pipeline*, 116 FERC ¶ 61,074, at P 115 (2006); *El Paso Natural Gas Co.*, 104 FERC ¶ 61,303, at P 36 (2003); and *Iroquois Gas Transmission System, L.P.*, 100 FERC ¶ 61,275, at P 37 (2002).

⁴⁴ Order No. 678, FERC Stats. & Regs. ¶ 31,220 at P 98.

compliance filing, Columbia must clarify its proposed accounting treatment of the market-based rates so that the accounting of storage-related costs and transmission-related costs are maintained separately, providing adequate consumer protection to ensure that existing customers will not subsidize the Ohio Storage Project.

(3) Conclusion

47. The Commission finds that, subject to the conditions and modifications imposed herein, customers will be adequately protected if Columbia is authorized to provide services from its Ohio Storage Project at market-based rates. The auction procedures described above as modified will prevent withholding and provide adequate consumer protections for market-based rate customers. In addition, sufficient protections are in place to protect existing customers. When the contracts for existing, cost-based storage services expire, that capacity will continue to be posted for sale in accordance with Columbia's effective tariff and will remain subject to cost-based rates. The expansion service offered is incremental to the storage service that Columbia is currently providing. Columbia, not its existing customers, will bear the risks of any cost overruns or under-collection of revenue associated with this project. Additionally, only customers that use the newly-created capacity will pay for costs associated with the new facilities. Further, Columbia will separately account for all costs and revenues associated with the facilities used to provide the market-based service. The separation of costs and revenues will enable the Commission to ensure that existing customers do not subsidize the costs of the proposed expansion. Accordingly, we will approve Columbia's request for market-based rates.

2. Other Issues Raised by Interveners

a. Storage Fuel Use Loses

48. Columbia operates its storage fields, which span four states, as a single field, reporting a single Storage Gas Loss Retainage (SGLR) rate. Orange and Rockland contends that Columbia proposes to provide FSS-M and ISS-M service only from its expanded Crawford and Weaver Fields, but does not propose to account separately for the Ohio Storage Project's fuel use/fuel recoveries. Orange and Rockland is concerned that if the retainage requirements of the expanded fields are greater than the overall system retainage requirements, Rate Schedule FSS and ISS services will subsidize the new service. Orange and Rockland requests that the Commission require Columbia to provide data comparing the Crawford/Weaver retainage percentage for the FSS-M and ISS-M services and, if the Crawford/Weaver requirements are higher than the system average requirements, that Columbia be required to establish an incremental retainage percentage for the market-based services.

49. Columbia responds that it requested the ability to negotiate the SGLR rate for its FSS-M and ISS-M storage services⁴⁵ and that it intends to track its market-based storage costs separately from those associated with its cost-based services. To the extent that Orange and Rockland, or any other shipper, desires to investigate and challenge whether existing Rate Schedule FSS and ISS shippers have subsidized the Rate Schedule FSS-M and ISS-M shippers, these shippers will have the ability to review Columbia's SGLR rate in Columbia's annual Retainage Adjustment Mechanism (RAM) filings.

50. As explained in Columbia's data response, it will provide separate workpapers in its annual RAM filing that will calculate the Storage Gas Losses (SGL) associated with the Ohio Storage Project.⁴⁶ The SGLR rate calculated for Columbia's cost-based storage facilities will not incorporate the SGL or the billing determinants associated with the Ohio Storage Project. The data response also explains that the workpapers will provide the opportunity for the Commission and parties to review and challenge the SGLR, ensuring that there will be no subsidization by Columbia's existing shippers.⁴⁷ The Commission finds that Columbia's proposal to separately track and report the SGL associated with the Ohio Storage Project addresses Orange and Rockland's concerns about subsidization of the SGLR expenses. Columbia's proposal also assures that there will be no increase in the fuel retention percentage for system customers attributable to the market-based rate storage service.⁴⁸

51. Consistent with the Commission's approval of Columbia's request for market-based rates, the Commission approves Columbia's request to negotiate the SGLR rate. However, Columbia must separately account for the full cost of any negotiated reimbursement. Columbia should not include such costs in its fuel tracker calculation so that existing shippers do not subsidize the market-based rate storage customers. To provide such protection, the Commission will require Columbia to revise its tariff sheets to account for separate reporting of the SGLR volumes.

⁴⁵ Proposed Pro Forma Original Sheet No. 176, Section 6(b).

⁴⁶ See Columbia's October 10, 2008 Data Response to questions 11 and 12.

⁴⁷ *Id.*

⁴⁸ As discussed below, the Commission will require Columbia to revise its tariff to provide that the SGL for the market-based rate storage service at the Crawford and Weaver Storage Fields will be reported on separate workpapers for the RAM filing.

b. Transportation Capacity

52. Honeywell contends that Columbia did not offer new incremental transportation service during the auction process and asserts that unless it can be shown that prospective customers had sufficient incremental transportation capacity available to them, the inference that price and term caused a lack of commitment to the Ohio Storage Project is fundamentally flawed. According to Honeywell, Columbia must address how new customers can obtain new incremental transportation capacity in order to inject gas into and withdraw gas from storage. Honeywell points out that in Columbia's recent Eastern Market Expansion project, Columbia offered both transportation and storage capacity to customers.⁴⁹

53. Columbia maintains that Honeywell is incorrect, contending that it offered incremental transportation capacity during the Ohio Storage Project's open season. Columbia further asserts that it stands ready to construct incremental cost-based firm transportation capacity for Honeywell or any other customer willing to provide the necessary market support for an expansion by executing a binding precedent agreement.

54. During the binding open season, Columbia offered up to 250,000 Dth/d of firm transportation service under Rate Schedule FTS, providing potential bidders with ample notice of the availability of the firm transportation service associated with the Ohio Storage Project.⁵⁰ Moreover, it is not a Commission requirement that pipelines provide incremental transportation service in order to access their new storage services. Potential shippers usually have several options available for obtaining firm transportation service.⁵¹ For these reasons, the Commission finds that Columbia adequately addressed the issue of transportation service, that Columbia provided customers with the opportunity to obtain transportation service during the open season, and that customers will have options to obtain the required transportation service to move gas to and from storage once the Ohio Storage Project is constructed.

⁴⁹ *Columbia Gas Transmission Corp.*, 122 FERC ¶ 61,021 (2008), *order amending certificate*, 126 FERC ¶ 61,213 (2009).

⁵⁰ *See* Columbia's binding open season notice issued July 16, 2007 at 2.

⁵¹ These options include: (1) entering into agreements with Columbia that would support the construction of new transmission facilities in a future expansion; (2) obtaining firm transportation via a capacity release service agreement; (3) being awarded transportation capacity in an auction as existing contracts come up for renewal; and (4) securing existing transportation capacity as it becomes available. *See* Columbia's October 10, 2008 Data Response to question 16(d)(ii).

c. Interruptible Capacity Withholding

55. Virginia Power and Orange and Rockland are concerned that customers are not adequately protected because Columbia has a financial incentive to withhold interruptible cost-based service and re-market that capacity at ISS-M rates. Virginia Power requests that any market-based rate authority granted Columbia be conditioned on a requirement that Columbia record and report daily volumes under Rate Schedules FSS-M and ISS-M on any day on which ISS-M service is rendered so that the Commission and shippers can determine if such service is in excess of the available incremental storage capacity. Orange and Rockland requests that cost-based customers be protected by assigning to ISS-M and FSS-M services: (1) 2.5 percent of ISS and short-term FSS revenues resulting from rates equal to or less than the ISS recourse rate; (2) 100 percent of ISS and short-term FSS revenues resulting from rates greater than the ISS recourse rate; and (3) 100 percent of ISS and short-term FSS revenues resulting from service volumes above the available ISS service. Under Orange and Rockland's proposal, the remaining interruptible and short-term firm storage revenues would be assigned to Rate Schedules ISS and FSS.

56. Columbia contends that it is already under an obligation to report storage quantities and revenues by rate schedule in its annual FERC Form No. 2 filings. Moreover, Columbia states that pursuant to section 284.12(e) of the Commission's regulations, it is required to file a semi-annual storage report detailing the volumes of gas injected into or withdrawn from storage, as well as all storage revenues. Columbia asserts that these reports will enable customers to compare the volumes and revenues under Columbia's cost-based and market-based storage services. In addition, Columbia contends that it has already committed to not sell capacity at market-based rates in excess of the capacity provided by the Ohio Storage Project.

57. Columbia contends that Orange and Rockland's revenue allocation proposal is inconsistent with the Commission's fundamental principle that cost allocation should follow cost causation and with Order No. 678's recognition that market-based rates can serve as a means of balancing the higher revenues received during peak periods with the discounted revenues received during off-peak periods. According to Columbia, Orange and Rockland's proposal would send improper signals to the market and effectively result in subsidization of Rate Schedules FSS and ISS by customers paying market-based rates. Finally, Columbia asserts that Orange and Rockland has failed to support its revenue allocation as just and reasonable or demonstrate that Columbia's proposal is unjust and unreasonable.

58. The Commission finds that the existing reporting requirements found in Form Nos. 2 and 3-Q⁵² and those required by this order are sufficient to allow the Commission and other parties to determine whether Columbia has sold Rate Schedule FSS-M and ISS-M service in excess of the available incremental storage capacity. Thus, the Commission will not require the additional reporting requested by Virginia Power, nor will the Commission require the revenue allocation proposed by Orange and Rockland. The Commission's policy when approving incremental rates is to require assignment of costs to the customers receiving the service to ensure the project is not subsidized by other customers. Such a policy provides sufficient protection to Columbia's existing Rate Schedule FSS and ISS customers from paying for market-based rate service. Further, the customers will have the opportunity during a section 4 proceeding to examine Columbia's books to confirm that the costs for services have been properly allocated.

D. Request for Waivers

59. Since it is proposing market-based storage rates, Columbia requests a waiver of certain filing requirements contained in section 157.14(a) of the Commission's regulations, namely, Exhibit K (Cost of Facilities), Exhibit L (Financing), Exhibit N (Revenues Expenses and Income) and Exhibit O (Depreciation, Depletion and Amortization). However, because Columbia is proposing to establish a cost-based reserve price as part of its auction procedures, we find that the information required in Exhibits K, L, N, and O is required to support the cost basis of Columbia's proposed reserve price. For this reason, the request for waiver of these requirements is denied. Columbia is required to file these exhibits when it files its proposed cost-based reserve price based on the pipeline's estimated costs associated with the proposed project, as required by this order.

E. Miscellaneous Tariff Revisions

60. The Commission will require Columbia to make the following additional tariff revisions:

(1) Revise Rate Schedule FSS-M at section 6(c), specifying that the Crawford and Weaver Storage Fields are the storage fields with the capacity subject to market-based rates.

⁵² Form No. 2 – Annual Report for Major Natural Gas Companies and Form No. 3-Q – Quarterly Financial Report of Electric Utilities, Licenses and Natural Gas Companies. Further, a new schedule was added to the Form No. 3-Q, “Monthly Quantity & Revenue by Rate Schedule.” *See Revisions to Forms, Statements, and Reporting Requirements for Natural Gas Pipelines*, Order No. 710, FERC Stats. & Regs ¶ 31,267 at P 51 (2008).

(2) Revise section 6(B) of Rate Schedule FSS-M, section 5(b) of Rate Schedule ISS-M, and section 35 of the GT&C, Retainage Adjustment Mechanism, that Columbia will provide separate workpapers in its RAM filing for SGLR attributable to market-based storage service under section 4(f) at the Crawford and Weaver Storage Fields.

V. Engineering Analysis

61. The Commission's engineering staff analyzed Columbia's application and concluded that if constructed as proposed, the facility enhancements at the Crawford and Weaver Storage Fields are technically sound and feasible. In each field, the proposed work will allow Columbia to bring back to active storage operation a portion of the field that was either inactive or less effective without endangering the integrity of the field and allow Columbia to provide an additional 6.7 Bcf of working gas capacity and 100 MMcf/d of increased deliverability. The Crawford Storage Field's total certificated inventory is 79.103 Bcf at a maximum shut-in wellhead pressure of 800 psig and a maximum deliverability of 295 MMcf/d. The Weaver Storage Field's total certificated inventory is 50.5 Bcf at a maximum shut-in wellhead pressure of 1,150 psig and a maximum deliverability of 223 MMcf/d. However, Columbia's authorization is subject to the reporting, monitoring, and operating conditions listed in Appendix A to this order.

VI. Environmental Analysis

62. On February 22, 2008, the Commission issued a *Notice of Intent to Prepare an Environmental Assessment* (NOI). The NOI was sent to approximately 350 individuals, organizations, federal and state agency representatives, county and local government agencies, elected officials, local libraries and newspapers, property owners affected by the pipeline route and well facilities, and other interested individuals.⁵³

63. In response to the NOI, the Commission received comments from ten landowners and two agencies. These letters expressed concerns regarding the location of facilities, general environmental impacts, relation of the Ohio Storage Project to other proceedings before the Commission, and existing Columbia gas leases.

64. The Commission's staff prepared an EA for Columbia's Ohio Storage Project. The EA was issued for public comment and placed in the record on October 31, 2008.⁵⁴

⁵³ On May 9, 2008, staff issued a Notice of Limited Scoping for four individuals, regarding Columbia's addition of four wells and the removal of two wells from the proposed Ohio Storage Project.

⁵⁴ On October 31, 2008, the Commission also issued a *Notice of Availability of the Environmental Assessment*. The notice stated that comments on the EA were due December 1, 2008.

Eighty-one copies of the EA were distributed to federal and state agencies, local libraries and newspapers, and persons that responded to the NOI. The EA addressed land requirements; water use and quality; fish, vegetation, and wildlife; threatened and endangered species; cultural resources; air quality; noise; land use; and alternatives. The EA included recommended environmental conditions which are adopted and set forth in Appendix B to this order.⁵⁵

65. In response to the NOI, Columbus and Franklin County Metro Parks requested that the project limit the amount of forest clearing within a conservation easement on property owned by James Fritts. The easement will be crossed for a distance of approximately 550 feet. The EA described Columbia's commitment to use existing private roads, existing well pads for temporary extra work space, and the procedures outlined in Columbia's Environmental Construction Standards to limit project impact within the parks. We find these measures adequately address the parks' concerns.⁵⁶

66. In its comments on the NOI, the Ohio Department of Natural Resources (ODNR) recommended that management at the Mohican Forest, Rockbridge State Nature Preserve, and Columbia consult regarding construction practices through ODNR's property. Commission staff, Columbia, and the management of the forest and nature preserve have continued this consultation about limiting the amount of disturbance on ODNR's property.⁵⁷

67. Frank Beach and Jan Dearth question the connection of this project with another Columbia project pending in Docket Number CP08-78-000.⁵⁸ In Docket No. CP08-78-000, Columbia is seeking authority to extend the reservoir boundary and protective boundary at the western edge of its Weaver Storage Field. Mr. Beach and Ms. Dearth oppose Columbia's proposal in Docket No. CP08-78-000. We find that the enhancement

⁵⁵ Columbia completed its field surveys, finding that no additional well water or spring locations were identified within the project area. Therefore, the EA's recommendation 12, regarding Columbia's identification of all wells and springs within 150 feet of the project area, is no longer necessary and is not listed as a condition in Appendix B.

⁵⁶ EA at 45.

⁵⁷ EA at 45-46.

⁵⁸ On November 12, 2008, Frank Beach filed comments with the Commission asking if NiSource Gas Transmission and Storage (Columbia's parent company) owns the entire Clinton formation. Columbia has the rights to any gas that it has stored in this formation within the authorized storage field boundaries.

of the facilities proposed in this proceeding does not affect the western edge of the storage field. Thus, we find that the project proposed herein is independent of the project in Docket No. CP08-78-000.⁵⁹

68. During the pre-filing process, Columbia moved the location of several wells to address various landowners' concerns. Issues concerning the location of three wells and associated facilities remain unresolved. They are Wells 12494 and 12577 on Janet and Charles Selby's property and Well 12487 on Charles and Melanie Ogle's property.⁶⁰ Columbia states that leases on both properties permit it to site the proposed facilities without limitation as to the type, number, and location of the wells.

69. The EA analyzed the impact of constructing Well 12494 from the currently-proposed pad for Well 12576 on the Hutchinson tract.⁶¹ The EA determined that even though construction of an additional wellhead on the Hutchison tract will increase visual impacts on the conservation easement, the wellhead facilities would be adjacent to each other, reducing the overall visual impact which would result from constructing the individual wellheads on separate pads. In addition, constructing both wells on the same pad will not result in an increase in the size of the proposed Well 12494 pad and the amount of overall forest clearing would be reduced.

70. In response, Columbia asserts that the recommendation to relocate Well 12494 on the same well pad as Well 12576 would add additional risk and increase the cost of the project. Columbia contends that the relocation would require the directional drill to be longer than that required at Columbia's proposed location. Columbia requests that it be permitted to relocate Well 12494 to an area more agreeable to the Selbys. However, the Commission finds that staff's recommended location of Well 12494 will reduce the amount of vegetation impacts (e.g., tree clearing) and eliminate further impacts on the Selby property. Thus, we will require Columbia to construct Well 12494 on the Well 12576 pad.

⁵⁹ EA at 12.

⁶⁰ The Ogles objected to the siting of the wells on their properties and questioned the validity of the lease agreements and the level of Columbia's compensation under those leases. In *Ogle v. Columbia Gas Transmission Corp.*, 125 FERC ¶ 61,116 (2008) the Commission explained that it has no jurisdiction over oil and gas leases, lacks jurisdiction concerning the lease agreement, and to the extent the Ogles seek additional compensation under an existing lease agreement, the remedy lies in the court or agency with the appropriate jurisdiction. For these reasons, issues relating to the validity of the lease and compensation are not relevant here.

⁶¹ EA at 73-75.

71. The Selbys are concerned that the location of Well 12577 could impact the future development of their property. Specifically, they state that the creation of the 300-foot by 300-foot permanent well pad would preclude access to most of the property should it be developed. The EA recommended that Columbia consult with the Selbys to allow an access road through the well pad. In response, Columbia stated that it would move the well pad to an area that would be more conducive to the future development of the Selby's property. However, the Selbys continue to express concern that access to any future development may need to cross, or be very near, Columbia's new well pad. The Commission finds that staff's recommended condition that Columbia continue to consult with the Selbys and file site-specific construction plans on the Selby property is appropriate (Environmental Condition 15). Additionally, because Columbia has not filed documentation of all landowner approval or Phase I cultural resource surveys for the revised location of the well line for Well 12577, the Commission will require Columbia to comply with Environmental Condition No. 5 before construction begins on this well site.

72. Columbia contends that the proposed location of Well 12487 was determined in consultation with the Ogles, which is now approximately 250 feet north of the originally-proposed location. Columbia states that when the Ogles indicated that they were not satisfied with the originally-proposed location, it met with them on-site to discuss an alternative.⁶² Columbia states that although the Ogles' preferred location is substantially more complex to build on and will result in increased construction costs, it has agreed to site the well to accommodate the landowner.⁶³

73. The EA analyzed the proposed site that was the result of Columbia's consultation with the Ogles. The EA evaluated alternatives to Columbia's proposed site for Well 12487 within 1,200 feet of the bottom-hole location (the maximum drilling distance Columbia believes is can safely construct the well using the directional drill method) and

⁶² See Columbia's October 7, 2008, response to Data Request No. 1.

⁶³ *Id.* In the Ogles' October 27, 2008 filing they state: "A new location for the well was staked and we are in agreement with the new location of the well, farther down the hillside from their original plan, where it is presently staked." Similarly, in a November 24, 2008 filing, the Ogles state: "David Lively of Columbia Gas Transmission Corporation has known since he met with us on our property in the spring of 2008 that we had an issue with the well, access road and pipeline. They subsequently changed the location of the well in a timely manner, but we never heard anymore about the pipeline and access road."

determined that there were no environmentally preferable locations for the proposed well.⁶⁴

74. In a filing made on November 28, 2008, however, the Ogles proposed a second alternative location for Well 12487 and an alternative route for the access road.⁶⁵ They also request that the access road be no more than 12-feet wide.⁶⁶ In a response filed on December 4, 2008, Columbia agreed to move the access road, with modifications, but did not agree to relocate the well site or to a narrower access road.

75. The Ogles' alternative for the well pad is within the 1,200 feet area that the Commission staff analyzed in the EA. As stated, the EA found that no alternatives are environmentally preferable to Columbia's proposed location. Thus, we will not require Columbia to relocate the well to the Ogles' proposed second alternative site.

76. In the November 28 filing, the Ogles proposed to relocate the access road north of the currently-proposed location on a portion of an existing pipeline right-of-way to a new well site. In its December 4 filing, Columbia agreed to this route, but to the currently-proposed well site. Since the Commission is not approving the Ogles' proposed second alternative well location, this access road will require some additional clearing to reach the approved well site. Nevertheless, the new access road location approved herein will eliminate about 600 feet of road through forest, reducing the permanent impacts that would have occurred using the originally-proposed access road. Thus, we find that this is the environmentally preferred alternative. We note, however, that Columbia and the Ogles may continue to consult regarding the location of the well on the Ogle property. Any relocation of facilities on the Ogle property can still be accomplished if done in compliance with Environmental Condition 5.

77. In the December 4 filing, Columbia stated that it agreed to re-route the well line from the well pad on the Ogle property based on an on-site meeting with the Ogles. Columbia stated that it has performed cultural resource and environmental surveys for the alignment, which have shown no additional impact. Accordingly, the Commission will approve this re-route.

78. The Ogles request the same criteria for clearing operations as Columbia will use in Clear Creek Metro Park and the Mohican Forest (clearing of a 120-foot radius around the

⁶⁴ EA at 75.

⁶⁵ The Ogles made six filings with the Commission on October 26, 2008, November 24, 25, and 28, 2008 and December 9 and 12, 2008.

⁶⁶ Columbia proposes 25-foot wide access roads.

existing well-head). However, construction in Clear Creek Metro Park and the Mohican Forest will be associated with reconditioning existing wells, which typically requires less disturbance than construction of a new well.

79. The Ogles also request that all water sources be tested by an acceptable independent company. Columbia agreed to test all water wells within 150 feet of any gas well (i.e., pump inspection, flow rate, and bacteriological examinations). The Commission will require Columbia to file a report identifying all water supply wells/systems damaged by construction and how they were repaired (Environmental Condition 12). These measures should be adequate to minimize/mitigate impacts on water supply systems.

80. Keith Sadler filed comments stating that the Commission should deny approval for this project because the U.S. Fish and Wildlife Service (FWS) is currently reviewing an incidental take permit (ITP) application for NiSource (Columbia's parent company). Columbia's proposals herein and NiSource's ITP application are unrelated and not a reason to deny Columbia's proposal. Mr. Sadler also contends that there are no conservation measures identified in staff's EA and that this is a violation of the Endangered Species Act. Staff conducted an independent analysis of the project's impacts on threatened and endangered species. The EA found that no threatened or endangered species were identified during project-specific surveys. Because the project is not likely to adversely affect any federally listed threatened or endangered species, the Commission finds no conservation measures are necessary.

81. Columbia's comments on the EA included certain updates and clarifications. Columbia proposes to replace two existing ground beds. The EA states that one existing ground bed will be replaced; however, staff analyzed the impacts associated with both ground beds which are depicted in the project map in the EA.⁶⁷

82. Columbia indicated that the realignment of access road 84, and the relocated Sater ground bed and Line SWR12002 were included in the final cultural resources report provided to the Commission on September 10, 2008. In addition, Columbia agreed to limit construction activities at wells 1955, 4429, and 10387 to a 200-by-200 foot area centered on each existing well head. We have reviewed and verified this information. Thus, the Commission revised the EA's recommended Environmental Condition 15 to reflect this information.

83. Finally, Columbia informed the Commission that it no longer intends to limit clearing activities in the Weaver Storage Field to the Indiana bat time-of-year restriction, because no Indiana bats were identified during the species surveys. This is consistent

⁶⁷ EA at 3.

with our staff's determination described in the EA of the project being not likely to adversely affect Indiana bats based on the results of these surveys. This change would have no impact on staff's determination.

84. The FWS filed a letter with the Commission on March 4, 2009, in response to our staff's November 13, 2008 letter requesting concurrence with its determinations of effect for federally-listed threatened and endangered species in the project area. The FWS concurs with the staff's determinations of effect for all listed species in the project area, thus concluding consultation under Section 7 of the Endangered Species Act. Therefore, staff's recommendation in the EA regarding completion of consultation with the FWS is no longer necessary and is not listed as a condition in Appendix B.

85. The FWS also stated in its letter that wherever possible, vegetation clearing should not take place between April 1 to July 15 to minimize any impacts on nesting migratory birds or bird eggs, in compliance with the Migratory Bird Treaty Act.⁶⁸ The EA evaluated impacts on migratory birds and concluded that: 1) adult birds are mobile and would seek more suitable habitats during construction; 2) abundant suitable habitat exists adjacent to the project area; and 3) project-related impacts would not result in impacts on migratory birds at the large scale population level.⁶⁹ The EA further states, however, that it is possible that individual nests and eggs could be destroyed by project construction. Therefore, we believe Columbia should develop conservation guidelines in consultation with the FWS to reduce these impacts. As a result, we have added an environmental condition to this order (Environmental Condition 13).

86. The FWS also requests that we require Columbia to purchase compensatory mitigation for the loss of migratory bird habitat. Monetary compensation is a voluntary agreement that may be reached between the FWS and certain parties, and we generally encourage applicants to discuss the potential to include such mitigation as a part of any conservation measure agreement. While we will not require compensation for habitat, we expect that it will be part of the conservation guidelines.

87. Any state or local permits issued with respect to the jurisdictional facilities authorized herein must be consistent with the conditions of this certificate. The Commission encourages cooperation between interstate pipelines and local authorities. However, this does not mean that state and local agencies, through application of state or

⁶⁸ 16 U.S.C. §§ 703-712 (2008).

⁶⁹ EA at 30.

local laws, may prohibit or unreasonably delay the construction or operation of facilities approved by this Commission.⁷⁰

88. Based on the discussion in the EA, we conclude that if constructed in accordance with Columbia's application and supplemental data, as well as the environmental mitigation measures in Appendix B to this order, approval of this proposal would not constitute a major federal action significantly affecting the quality of the human environment.

89. At a hearing held on March 19, 2009, the Commission on its own motion, received and made a part of the record in this proceeding all evidence, including the application and exhibits thereto, submitted in support of the authorizations sought herein, and upon consideration of the record,

The Commission orders:

(A) A certificate of public convenience and necessity is issued to Columbia to construct its Ohio Storage Project as described more fully in the application and in the body of this order.

(B) The certificate authority issued in Ordering Paragraph (A) shall be conditioned on Columbia's compliance with all applicable Commission regulations under the NGA, particularly the general terms and conditions set forth in paragraphs (a), (c), (e), and (f) of section 157.20 of the regulations.

(C) Columbia shall construct and make available for service the facilities authorized herein within three years from the date this order is issued, pursuant to paragraph (b) of Section 157.20 of the Commission's regulations.

(D) The abandonment of the facilities, as described in the order and the application, is approved.

(E) Columbia's request to charge market-based storage rates for firm and interruptible storage service using the incremental capacity to be created at the Crawford and Weaver Storage Fields is approved, as discussed and subject to the conditions in this order.

⁷⁰See, e.g., *Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293 (1988); *National Fuel Gas Supply v. Public Service Commission*, 894 F.2d 571 (2d Cir. 1990); and *Iroquois Gas Transmission System, L.P., et al.*, 52 FERC ¶ 61,091 (1990) and 59 FERC ¶ 61,094 (1992).

(F) Columbia's request for waiver of section 157.14(a) of the Commission's regulations requiring submission of Exhibits K, L, N, and O is denied, as discussed in the body of this order. Columbia is required to maintain records to separately identify the original cost and related depreciation on its storage gas facilities, reporting such information in the Form No. 2, and to maintain accounts and financial information of its storage facility consistent with generally accepted accounting principles.

(G) Within 30 days of the issuance date of this order and consistent with the above discussion, Columbia must submit: (1) revised pro forma tariff sheets; (2) publicly file cost-of-service data supporting a reserve price based upon Columbia's Commission-approved cost-of-service determinants and construction and operating costs and billing determinates for 6.7 Bcf storage capacity; and (3) revise the auction procedures to address the concerns discussed in this order including reserve price, minimum acceptable bid, term, exclusion of affiliate transactions, and definition, with support, for the geographic market used for the purposes of establishing reserve prices.

(H) The maximum inventory of natural gas stored in the Crawford Field shall not exceed the certificated levels of 79,103 MMcf at 14.73 psia and 60 degrees Fahrenheit, and the maximum storage pressure shall not exceed 800 psig, at the wellhead, without prior authorization of the Commission.

(I) The maximum inventory of natural gas stored in the Weaver Field shall not exceed the certificated levels of 50,500 MMcf at 14.73 psia and 60 degrees Fahrenheit, and the maximum storage pressure shall not exceed 1,150 psig, at the wellhead, without prior authorization of the Commission.

(J) Prior to commencing construction, Columbia must execute firm service agreements equal to the level of service reflected in its precedent agreement with Washington Gas.

(K) The certificate issued in Ordering Paragraph (A) is conditioned on Columbia's compliance with the engineering conditions listed in Appendix A to this order.

(L) The certificate issued in Ordering Paragraph (A) is conditioned on Columbia's compliance with the environmental conditions listed in Appendix B to this order.

(M) Columbia shall notify the Commission's environmental staff by telephone, facsimile, or e-mail of any environmental noncompliance identified by other federal, state, or local agencies on the same day that such agency notifies Columbia. Columbia shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

(N) The motions to intervene out-of-time are granted.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

APPENDIX A**Engineering Conditions for the Ohio Storage Project**

1. The maximum inventory of natural gas stored in the Crawford Field shall not exceed the certificated levels of 79,103 MMcf at 14.73 psia and 60 degrees Fahrenheit, and the maximum storage pressure shall not exceed 800 psig, at the wellhead, without prior authorization of the Commission.
2. The maximum inventory of natural gas stored in the Weaver Field shall not exceed the certificated levels of 50,500 MMcf at 14.73 psia and 60 degrees Fahrenheit, and the maximum storage pressure shall not exceed 1,150 psig, at the wellhead, without prior authorization of the Commission.
3. Columbia shall operate the Crawford and Weaver fields in such a manner as to prevent/minimize gas loss or migration.
4. Columbia shall submit, for both Crawford and Weaver, semiannual reports (to coincide with the termination of the injection and withdrawal cycles) containing the following information (volumes shall be stated at 14.73 psia and 60 degrees Fahrenheit, and pressures shall be stated in psia):
 - (a) The daily volumes of natural gas injected into and withdrawn from the storage reservoir.
 - (b) The volume of natural gas in the reservoirs at the end of the reporting period.
 - (c) The maximum daily injection and withdrawal rates experienced during the reporting period. Average working pressure on such maximum days taken at a central measuring point where the total volume injected or withdrawn is measured.
 - (d) Results of any tracer program by which the leakage of injected gas may be determined. If leakage of gas exists, the report should show the estimated total volume of gas leakage, the volume of recycled gas, and the estimated remaining inventory of gas in the reservoir at the end of the reporting period.
 - (e) Any surveys of pressures in gas wells, and the results of back-pressure tests conducted during the reporting period.
 - (f) The latest revised structural and isopach maps showing the surface and bottomhole locations of the wells and the location of the gas-water contact.

These maps need not be filed if there is no material change from the maps previously filed.

(g) For the reporting period, a summary of wells drilled, worked over, or recompleted with subsea depth of formation and casing settings. Copies of any new core analyses, back-pressure tests, or well log analyses.

(h) Discussion of current operating problems and conclusions.

(i) Such other data or reports which may aid the Commission in the evaluation of the storage project.

(j) Reports shall continue to be filed semiannually until the storage inventory volume and pressure have reached or closely approximate the maximum permitted in the Commission's order. Thereafter, the reports shall continue on a semiannual basis for a period of one year.

APPENDIX B

Environmental Conditions

1. Columbia (Columbia) shall follow the construction procedures and mitigation measures described in its application, supplements (including responses to staff data requests), and as identified in the EA, unless modified by this Commission order. Columbia must:
 - a. request any modification to these procedures, measures, or conditions in a filing with the Secretary of the Commission (Secretary);
 - b. justify each modification relative to site-specific conditions;
 - c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and
 - d. receive approval in writing from the Director of the Office of Energy Projects (OEP) **before using that modification.**
2. The Director of OEP has delegated authority to take whatever steps are necessary to ensure the protection of all environmental resources during construction and operation of the project. This authority shall allow:
 - a. the modification of conditions of the Commission order; and
 - b. the design and implementation of any additional measures deemed necessary (including stop-work authority) to assure continued compliance with the intent of the environmental conditions as well as the avoidance or mitigation of adverse environmental impact resulting from the project construction and operation.
3. **Prior to any construction**, Columbia shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, environmental inspectors (EI), and contractor personnel will be informed of the EI's authority and have been or will be trained on the implementation of the environmental mitigation measures appropriate to their jobs **before** becoming involved with construction and restoration activities.
4. The authorized facility locations shall be as shown in the EA, as supplemented by filed alignment sheets, data responses, and the conditions of this order, and shall include the staff's recommended location for Well 12494, as identified on page 75 of the EA. **As soon as they are available, and before the start of construction**, Columbia shall file with the Secretary any revised detailed survey alignment maps/sheets at a scale not smaller than 1:6,000 with station positions for all facilities approved by the Commission order. All requests for modifications of

environmental conditions of this Order or site-specific clearances must reference locations designated on these alignment maps/sheets.

Columbia's exercise of eminent domain authority granted under the NGA section 7(h) in any condemnation proceedings related to this Order must be consistent with the authorized facilities and their locations. Columbia's right of eminent domain granted under NGA section 7(h) does not authorize it to increase the size of its natural gas facilities to accommodate future needs or to acquire a right-of-way for a pipeline to transport a commodity other than natural gas.

5. Columbia shall file with the Secretary detailed alignment maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all route realignments or facility relocations, and staging areas, pipe storage yards, new access roads, and other areas that would be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, and documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps/sheets/aerial photographs. Each area must be approved in writing by the Director of OEP **before construction in or near that area.**

This requirement does not apply to facility locations required herein, extra workspace allowed by Columbia's Erosion and Sediment Control Plan (ESC), and/or minor field realignments per landowner needs and requirements which do not affect other landowners or sensitive environmental areas such as wetlands.

Examples of alternations requiring approval include all route realignments and facility location changes resulting from:

- a. implementation of cultural resource mitigation measures;
 - b. implementation of endangered, threatened, or special concern species mitigation measures;
 - c. recommendations by state regulatory authorities; and
 - d. agreements with individual landowners that affect other landowners or could affect sensitive environmental areas.
6. **Prior to construction of the respective project components,** Columbia shall file an initial Implementation Plan with the Secretary for review and written approval by the Director of OEP. Columbia must file revisions to the plan as schedules change. The plan shall identify:

- a. how Columbia will implement the construction procedures and mitigation measures described in its application (including responses to staff data requests), identified in the EA, and required by the Commission order;
- b. how Columbia will incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to onsite construction and inspection personnel;
- c. the number of EIs assigned, their distribution among the project components, and how the company will ensure that sufficient personnel are available to implement the environmental mitigation;
- d. company personnel, including EIs and contractors, who will receive copies of the appropriate material;
- e. the training and instructions Columbia will give to all personnel involved with construction and restoration (initial and refresher training as the project progresses and personnel change), with the opportunity for OEP staff to participate in the training session(s);
- f. the company personnel (if known) and specific portion of Columbia's organization having responsibility for compliance;
- g. the procedures (including use of contract penalties) Columbia will follow if noncompliance occurs; and
- h. for each discrete facility, a Gantt or PERT chart (or similar project scheduling diagram), and dates for:
 - i. the completion of all required surveys and reports;
 - ii. the mitigation training of onsite personnel;
 - iii. the start of construction; and
 - iv. the start and completion of restoration.

7. Columbia shall employ at least one EI at each storage field. The EIs shall be:

- a. responsible for monitoring and ensuring compliance with all mitigation measures required by the Commission order and other grants, permits, certificates, or authorizing documents;
- b. responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract (see condition 6 above) and any other authorizing document;
- c. empowered to order correction of acts that violate the environmental conditions of the order, and any other authorizing document;
- d. a full-time position separate from all other activity inspectors;

- e. responsible for documenting compliance with the environmental conditions of the order, as well as any environmental conditions/permit requirements imposed by other federal, state, or local agencies; and
 - f. responsible for maintaining status reports.
8. Columbia shall file updated status reports prepared by the head EI with the Secretary on a **bi-weekly** basis **until all construction and restoration activities are complete**. On request, these status reports will also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:
 - a. the current construction status of the project, work planned for the following reporting period, and any schedule changes for stream crossings or work in other environmentally sensitive areas;
 - b. a listing of all problems encountered and each instance of noncompliance observed by the EI during the reporting period (both for the conditions imposed by the Commission and any environmental conditions/permit requirements imposed by other federal, state, or local agencies);
 - c. a description of corrective actions implemented in response to all instances of noncompliance, and their cost;
 - d. the effectiveness of all corrective actions implemented;
 - e. a description of any landowner/resident complaints which may relate to compliance with the requirements of the Commission order, and the measures taken to satisfy their concerns; and
 - f. copies of any correspondence received by Columbia from other federal, state, or local permitting agencies concerning instances of noncompliance, and Columbia's response.
9. Columbia must receive written authorization from the Director of OEP **before commencing service** from project facilities in each of the storage fields. Such authorization will only be granted following a determination that rehabilitation and restoration of the right-of-way and other areas of project-related disturbance are proceeding satisfactorily.
10. Columbia shall develop and implement an environmental complaint resolution procedure that remains active for **at least three years** following the completion of construction at each storage field. The procedure shall provide landowners with clear and simple directions for identifying and resolving their environmental mitigation problems/concerns during construction of the project and restoration of the rights-of-way and well pads. **Prior to construction**, Columbia shall mail the

environmental complaint resolution procedure to each landowner whose property would be crossed by the project.

- a. In the letter to affected landowners, Columbia shall:
 - i. provide a local contact that the landowners should call first with their concerns; the letter should indicate how soon a landowner should expect a response;
 - ii. instruct the landowners that if they are not satisfied with the response, they should call Columbia's Hotline; the letter should indicate how soon to expect a response; and
 - iii. instruct the landowners that if they are still not satisfied with the response from Columbia's Hotline, they should contact the Commission's Enforcement Hotline at (888) 889-8030 or at hotline@ferc.gov.
 - b. In addition, Columbia shall include in its biweekly status reports a table that contains the following information for each problem/concern:
 - i. the identity of the caller and the date of the call;
 - ii. the identification number from the certificated alignment sheet of the affected property and approximate location by milepost or well;
 - iii. a description of the problem/concern; and
 - iv. an explanation of how and when the problem was resolved, will be resolved, or why it has not been resolved.
11. **Within 30 days of placing the certificated facilities in service**, Columbia shall file an affirmative statement with the Secretary, certified by a senior company official:
- a. that the facilities have been constructed in compliance with all applicable conditions, and that continuing activities will be consistent with all applicable conditions; or
 - b. identifying which of the certificate conditions Columbia has complied with or will comply with. This statement shall also identify any areas affected by the project where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.
12. Columbia shall file a report with the Secretary, **within 30 days of placing their pipeline and well facilities in service**, identifying all water supply wells/systems

damaged by construction and how they were repaired. The report should include a discussion of any complaints concerning the well yield or quality and how each problem was resolved.

13. Columbia shall develop conservation guidelines in consultation with the FWS to minimize impacts on forested lands and migratory birds during construction of the project. The conservation guidelines should be filed for review and written approval by the Director of OEP **prior to construction.**
14. Columbia shall not begin construction or use of facilities and staging, storage, temporary work space and new or to-be-improved access roads for each storage field **until:**
 - a. Columbia files a cultural resources survey report for any additional or newly identified areas requiring survey, and the State Historic Preservation Office's (SHPO) comments on the report;
 - b. Columbia files any additional evaluation report and any required treatment plan, and the SHPO's comments on any report and plan; and
 - c. the Director of OEP reviews all reports and plans and notifies Columbia in writing that it may proceed.

All material filed with the Commission containing **location, character, and ownership** information about cultural resources must have the cover and any relevant pages therein clearly labeled in bold lettering:
"CONTAINS PRIVILEGED INFORMATION--DO NOT RELEASE."

15. Columbia shall consult with the landowner to coordinate construction of Well 12577 and the future housing development on the Selby property. Prior to Construction on the Selby property, Columbia shall file documentation of this consultation and a site-specific construction plan for review and written approval of the Director of OEP that shows the location of the Selby's planned development road in relation to Well 12577.
16. In the Crawford Storage Field, Columbia shall construct Well 12494 on the same well pad as new Well 12576.