

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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

Equitrans, L.P.

Docket No. CP05-18-000

ORDER ISSUING AND AMENDING CERTIFICATES

(Issued June 21, 2007)

1. As the result of a technical conference held by the Commission on December 15, 2004 in this proceeding, the Commission determined that certificates authorizing certain underground storage fields operated by Equitrans, L.P. (Equitrans) did not include appropriate maximum levels of inventory and pressure parameters for the facilities. Further, Equitrans explained that some of its underground storage facilities were developed before passage of the Natural Gas Act (NGA) in 1938 and may not have been authorized by the Commission on a case-specific basis. In any event, in some instances no record of initial certification has been found. However, the Commission issued two certificates in 1944 pursuant to NGA section 7(c)(1)(a) authorizing Equitrans' predecessors to continue operating their facilities used for the jurisdictional transportation and sale of natural gas that were in operation on February 7, 1942.¹ These certificates may have included the older facilities. This order amends the existing certificates of public convenience and necessity authorizing Equitrans, L.P. (Equitrans) to operate underground storage fields to include appropriate maximum levels of inventory and pressure parameters for these facilities.²

¹ See *Pittsburgh and West Virginia Gas Co.*, 4 FPC 479 (1944) and *Equitable Gas Co.*, 4 FPC 588 (1944). No case-specific certificates have been found for Equitrans' Comet, Maple Lake, Skin Creek, Bunola, Finleyville, Hunter Grove and Tepe storage facilities; however, the latter four were mentioned in an order issued in 1947 relating to the accounting for certain facilities in operation at that time. See *Equitable Gas Co.*, 6 FPC 410 (1947). Equitrans was issued a certificate to expand the Hunter Grove facility in 1996. See *Equitrans, Inc.*, 75 FERC ¶ 61,211 (1996).

² Out of an abundance of caution, the Commission will also issue certificates to Equitrans to operate the facilities that have no specific authorizations to set maximum levels of inventory and related pressure parameters.

2. Equitrans, a limited partnership organized under the laws of Pennsylvania and authorized to do business in West Virginia and Pennsylvania, is a natural gas company as defined in the NGA. It is engaged in the business of storing and transporting natural gas in interstate commerce, subject to the jurisdiction of the Commission. Equitrans has been involved in the natural gas industry since the early years of gas production in the Appalachian Basin.

3. The 14 storage fields at issue were converted from production to storage use between 1934 and 1974, with five developed for storage in the 1930s, four in the 1940s, three in the 1950s, one in the 1960s, and two in the 1970s. As noted, some of the pools developed prior to the enactment of the NGA may not have been issued certificates. Equitrans states that it considers these “pre-NGA” fields to be “grandfathered.” Appendix A lists known dockets relating to activities in the individual storage fields discussed in this order.

4. This proceeding arose in Equitrans’ general rate case in Docket No. RP04-97-000 in which Equitrans proposed, among other things, to reflect in its rates the costs associated with purchasing and injecting into certain storage facilities 9,600,000 Dth of replacement cushion gas. The projected cost for the gas was \$49.1 million. On December 31, 2003, the Commission issued an order³ noting that Equitrans was required to obtain authority under section 7 of the NGA to inject new cushion gas into its storage facilities because this action constituted a change in plant.⁴ In its request for rehearing in that proceeding, Equitrans explained it was not seeking to add new cushion gas, but merely to restore the significant amount of cushion gas that had migrated beyond the accessibility of certain storage facilities. The Commission confirmed that a separate proceeding under NGA section 7 was necessary to establish the cause of this gas migration, determine whether Equitrans was meeting its certificated service obligations, ascertain the operating parameters and boundaries of the storage facilities, and determine whether Equitrans needed certificate authority to inject the additional cushion gas.⁵ The Commission designated Docket No. CP05-18-000 as the proceeding in which these inquiries would be undertaken.

³ *Equitrans, L.P.*, 105 FERC ¶ 61,407 (2003) (rejecting the rate-related tariff sheets and accepting and suspending the tariff sheets associated with terms and conditions of service to be effective June 1, 2005), *order on reh’g and compliance*, 109 FERC ¶ 61,214 (2004) (*Equitrans*). Equitrans filed a new rate case in Docket No. RP04-203-000, but did not renew its request to include the costs associated with the injection of the cushion gas. *See* 115 FERC ¶ 61,007 (2006).

⁴ *Equitrans*, 105 FERC ¶ 61,407 at P 16.

⁵ *Equitrans*, 109 FERC ¶ 61,214 at P 18-20.

Interventions

5. Notice of this proceeding in Docket No. CP05-18-000 was published in the *Federal Register* on December 1, 2004 (69 Fed. Reg. 69,903). Seven timely, unopposed motions to intervene were filed.⁶ Both Columbia Gas Transmission Corp. and Columbia Gas Pennsylvania filed motions to intervene out-of-time. Both have demonstrated that they have an interest in this proceeding and late intervention will not delay or otherwise prejudice the resolution of the issues herein. Therefore, the motions for late intervention are granted.

6. In the December 1, 2004 Notice, the Commission indicated its intention to convene a technical conference in this proceeding.⁷ That conference was held on December 15, 2004.

Technical Conference and Filed Reports

7. At the December 15, 2004 technical conference, Equitrans presented a comprehensive analysis of the extent of its gas migration problems at each of the storage fields that are the subject of this proceeding. These fields include: Bunola, Comet, Finleyville, Hayes, Hunters Cave, Logansport, Maple Lake, Mobley, Pratt, Rhodes Complex, Shirley, Skin Creek, Swarts Complex, and Tepe. All of these fields are depleted hydrocarbon reservoir storage fields, developed in relatively shallow, blanket sand fields following the end of primary production. The focus of the presentation, however, was on the Bunola, Pratt and Shirley fields where losses of gas due to migration have occurred. The losses at the Shirley field have been most significant.

⁶ Timely, unopposed motions to intervene are granted by operation of Rule 214 of the Commission's regulations. The timely intervenors are: Peoples Natural Gas Co. d/b/a Dominion Peoples; Philadelphia Gas Works; PECO Energy Co.; Independent Oil & Gas Association of West Virginia; State of Pennsylvania Office of Consumer Advocate; PSEG Energy Resources & Trade LLC; and KeySpan Delivery Companies.

⁷ A notice containing the date of the conference was issued in the *Federal Register* on December 12, 2004 (60 Fed. Reg. 74,517).

8. Equitrans explained that its previous engineering staff had not interpreted gas per pound (GPP)⁸ and pressure inventory (PI)⁹ tests properly and, therefore, Equitrans did not recognize the extent of the gas migration problem, especially at the Shirley field. It also indicated that its assessment of the problem, as presented at the conference, was based on more sophisticated computer modeling techniques performed by a contractor. Additionally, Equitrans provided assurance that it has continued to meet its certificated service obligations, despite the fact that it has lowered the operating pressure of the Shirley field, as well as others, to help decrease the potential for continued migration.¹⁰ Equitrans stated that it intended to conduct more simulations to determine whether gas recycling would allow it to decrease gas migration further and/or recover lost gas and whether recycling was economically feasible. Equitrans agreed to file a report on the results of further modeling.

9. On January 28, 2005, Equitrans filed its first follow-up report, indicating that current operations at the Shirley, Bunola and Pratt fields, where gas migration had occurred, were safe and reliable. Equitrans also stated that it would report the results of more simulations no later than September 2005. Further, Equitrans stated that it intended to submit operating parameters and supporting engineering analysis for all of its storage pools on a system-wide basis, reflecting the integrated nature of its storage operations, and “field-specific operating parameters for those pools for which detailed certificate parameters were unavailable.”¹¹ Equitrans explained that the latter information “would provide the basis for the Commission to provide [it] with an updated set of operating

⁸ GPP relies on semi-annual shut-in testing where every well in the pool is shut in for a fixed time. An average pool pressure is calculated by dividing inventory by the reservoir pressure. Change in inventory between tests is divided by change in pressure between the tests. The relationship between these data trends provides evidence of gas loss and/or pool growth (migration).

⁹ PI testing utilizes station header pressures during brief periods of pool inactivity and the corresponding day's inventory. Plotting this pressure versus inventory "loop" from season to season provides evidence of gas loss and/or pool growth.

¹⁰ In this vein, we note that customers of Equitrans attending the technical conference were primarily concerned with assuring the reliability of their services and the treatment of costs associated with any program to decrease gas migration and/or replenish cushion gas. However, the potential treatment of costs were not an issue for the technical conference or this proceeding. In any event, the customers and Equitrans reached a settlement on this issue in another proceeding. *See infra.* note 13.

¹¹ January 28, 2005 cover letter to first follow-up report.

parameters for those fields”¹² Subsequently, Equitrans filed updated reports on July 1, 2005 and March 10, 2006, and responded to data requests on November 27, 2006 and December 27, 2006. The results of the various reports are the basis of the discussion below.¹³

10. The Commission has concluded that it is appropriate to consider the storage reports filed by Equitrans, as a result of the technical conference and as qualified and supplemented by its responses to data requests, as an application under NGA section 7(c) to amend the existing certificates or, for those fields without case-specific certificates for storage operations, to set the maximum inventory and pressure parameters for each field. We have made this determination based on the following: (1) the Commission’s engineering staff’s conclusion that the storage reports and responses to data requests contain the information necessary to evaluate and set the appropriate maximum inventory and pressure parameter for each field; (2) the fact that all interested parties appear to have filed interventions at the time this proceeding was noticed and, therefore, received all of Equitrans’ filings, and (3) no party has objected to or otherwise filed comments on Equitrans’ reports and filings in this docket.

Discussion

11. Equitrans storage fields are used in the transportation of gas in interstate commerce; therefore, the operation of the storage facilities and the services provided on them are subject to the NGA and the Commission’s jurisdiction. As explained, the existing fields that were certificated contain either no limits or pressure limits only and do not have both certificated maximum inventory and pressure parameters. Additionally, as noted, the older fields may not have been authorized on a case-specific basis and, therefore, never had these parameters set. The following discussion includes a description of each storage field and the maximum inventory and pressure parameters that we are setting for each field based on an engineering review and analysis of Equitrans’ storage reports and responses to data requests. There are no changes to any fields previously authorized boundaries, compression or number of injection/withdrawal wells.

¹² *Id.*

¹³ We note that in Article III of a settlement of its most recent general rate case in Docket No. RP05-163-000, *et al.*, Equitrans and its customers agreed that for a 10-year period, Equitrans would be solely responsible for managing its storage migration and base gas replenishment problem and will be precluded from seeking recovery from its customers for any costs related to base gas losses during this period. The settlement also provides a procedure for the sale of any gas that is recovered and how the proceeds of such sales will be treated as between the customers and Equitrans. *See Equitrans, L.P.*, 115 FERC ¶ 61,007 at P 13-15 (2006).

Bunola

12. The storage formation at Bunola is in the Upper Devonian Gantz Sandstone at an average depth of 2,136 feet, with an average net pay thickness of 14 feet. It is capped by an unnamed nonporous, non-permeable 25 to 35 foot thick shale, and the lateral boundaries are marked by porosity and permeability pinch-outs. The formation has been used for natural gas storage operations since 1938. The Commission will set the maximum inventory of Bunola at 7,300 MMcf, with a working gas capacity of approximately 3,789 MMcf. The peak deliverability is 180 MMcf/d and the maximum shut-in reservoir pressure (measured at the well head) is 905 psia.

13. Bunola has experienced a gas loss of approximately 300 MMcf over its life, the cause of which, in the absence of other evidence, Equitrans suspects is due to the inaccuracy of the metering facilities. A new ultrasonic meter was installed at Bunola in 2003 and Equitrans expects to confirm, after several more storage cycles, that the apparent loss is, in fact, due to measurement inaccuracy. Since the 300 MMcf loss occurred over a time frame of 66 plus years, and the data does not show other evidence of gas migration, the Commission agrees that meter inaccuracy is the probable cause. Thus, it is anticipated that the new metering should cure the problem.

Comet

14. The storage formation at Comet is the Lower Devonian Fifty Foot Sandstone at an average depth of 1,800 feet, with an average net pay thickness of 32 feet. It is capped by an unnamed nonporous, non-permeable shale that is approximately 32 feet thick. The lateral boundaries are marked by porosity and permeability pinch-outs. Comet began storage operations in 1936. There have been no signs of gas migration exhibited nor signs of loss throughout the field's operating life. We will set the maximum inventory at Comet at 5,300 MMcf, with a working gas capacity of approximately 3,276 MMcf. The peak deliverability is 68 MMcf/d and the maximum shut-in reservoir pressure (measured at the well head) is 1,015 psia.

Finleyville

15. The storage formation at Finleyville is the Devonian Fifth Sandstone at an average depth of 2,633 feet, with an average net pay thickness of eight feet. It is capped by an unnamed nonporous, non-permeable shale approximately eight feet in thickness. Finleyville has exhibited no signs of gas migration since storage operations began in 1934. The Commission will set the maximum inventory at Finleyville at 800 MMcf, with a working gas capacity of 456 MMcf. The peak deliverability is 38 MMcf/d and the maximum shut-in reservoir pressure (measured at the well head) is 1,015 psia.

Hayes

16. The storage formation at Hayes is the Upper Mississippian Keener Sandstone at an average depth of 2,375 feet, with an average net pay thickness of 14 feet. It is capped by the Upper Mississippian Big Lime Limestone, and is laterally bounded by porosity and permeability pinch-outs. Hayes began storage operations in 1956. Hayes has exhibited no signs of gas migration or loss throughout its operating life. Equitrans states that flow into and out of Hayes depends entirely on transmission line pressure, which in recent years has severely limited gas withdrawals. Accordingly, Equitrans has limited gas injections to maintain the integrity of the field. The maximum inventory at Hayes will be set at 193 MMcf, with a working gas capacity of 146 MMcf. The peak deliverability is 6 MMcf/d and the maximum shut-in reservoir pressure (measured at the well head) is 715 psia.

Hunters Cave

17. The storage formation at Hunters Cave is the Lower Mississippian Big Injun Sandstone at an average depth of 2,172 feet, with an average net pay thickness of ten feet. It is capped by the Upper Mississippian Big Lime (Greenbrier) Limestone, and is laterally bounded by porosity and permeability pinch-outs. It began storage operations in 1943. Hunters Cave has exhibited no signs of gas migration or loss throughout its operating life. The maximum inventory at Hunters Cave will be set at 6,700 MMcf, with a working gas capacity of 3,065 MMcf. The peak deliverability is 36 MMcf/d and the maximum shut-in reservoir pressure (measured at the well head) is 965 psia.

Logansport

18. The storage formation at Logansport is the Upper Mississippian Keener Sandstone at an average depth of 2,169 feet, with an average net pay thickness of 14 feet. It is capped by the Upper Mississippian Big Lime Limestone, and is laterally bounded by porosity and permeability pinch-outs. Storage operations began in 1954 and there have shown no signs of gas migration or loss at this field. We will set the maximum inventory at Logansport at 3,700 MMcf, with a working gas capacity of 2,221 MMcf. The peak deliverability is 49 MMcf/d and the maximum shut-in reservoir pressure (measured at the well head) is 1,015 psia.

Maple Lake

19. The storage formation at Maple Lake is in both the Lower Devonian Fifty Foot Sandstone at an average depth of 1,850 feet, with an average net pay thickness of 32 feet and the Lower Mississippian Big Injun Sandstone at an average depth of 1,316 feet, with an average net pay thickness of nine feet. The Fifty Foot is capped by an unnamed nonporous, non-permeable shale that is approximately 32 feet thick, and the Big Injun is

capped by the Upper Mississippian Big Lime (Greenbier) Limestone. The lateral boundaries are marked by porosity and permeability pinch-outs. Maple Lake began storage operations in 1947 and has exhibited no signs of gas migration or loss throughout its operating life. We will set the maximum inventory at Maple Lake at 2,400 MMcf, with a working gas capacity of approximately 980 MMcf. The peak deliverability is 14 MMcf/d and the maximum shut-in reservoir pressure (measured at the well head) is 795 psia.

Mobley

20. The storage formation at Mobley is the Lower Mississippian Big Injun Sandstone at an average depth of 2,163 feet, with an average net pay thickness of nine feet. It is capped by the Upper Mississippian Big Lime (Greenbrier) Limestone, and is laterally bounded by porosity and permeability pinch-outs. Mobley began storage operations in 1963. Mobley has exhibited no signs of gas migration or loss throughout its operating life. The maximum inventory at Mobley will be set at 7,400 MMcf, with a working gas capacity of 4,653 MMcf. The peak deliverability is 125 MMcf/d and the maximum shut-in reservoir pressure (measured at the well head) is 915 psia.

Pratt

21. The storage formation at Pratt is in the Upper Devonian Fifth Sandstone at an average depth of 2,897 feet, with an average net pay thickness of 20 feet. It is capped by an unnamed non-porous, non-permeable shale that ranges from five to 36 feet in thickness, and the lateral boundaries are delineated by porosity and permeability pinch-outs. Storage operations in this formation began 1947. The maximum inventory of Pratt will be set at 9,300 MMcf, with a working gas capacity of approximately 3,988 MMcf. The peak deliverability is 65 MMcf/d and the maximum shut-in reservoir pressure (measured at the well head) is 915 psia.

22. The Pratt storage facility has experienced a gas loss of approximately 1,900 MMcf over its life. Equitrans suspects that this has occurred due to vertical gas migration behind the casing in several wells and possibly from company production wells near the fringes of the Pratt field. While there appears to be no correlation between the production wells and the gas loss, Equitrans has instigated a continuous pressure monitoring program of the production wells in the suspect area in order to determine if storage gas is moving in that direction. Equitrans states, and staff agrees, that various wells in the field have developed integrity problems which could have resulted in significant vertical migration. Equitrans indicates that any of the wells that show communication with formations outside the storage zone will be worked over or plugged, and believes these efforts should significantly reduce gas loss from Pratt. The Commission staff's engineering review and analysis of Equitrans' data confirms that reworking wells to repair casing

and/or cement bonds as well as monitoring any suspect production wells should stop or minimize any additional gas loss.

Rhodes Complex

23. The storage formation at Rhodes is in the Upper Devonian Gantz Sandstone at an average depth of 2,136 feet, with an average net pay thickness of 17 feet. It is capped by an unnamed non-porous, non-permeable seven to 40 foot thick shale, and the lateral boundaries are marked by porosity and permeability pinch-outs. It began storage operations in 1957 and, during the early development of the field, the three sub-pools, A, B and C, were initially thought to be three distinct, independent pools. Operating history and updated geological studies have shown the pools are connected and volumetrically behave as one single unit. The Rhodes Complex has exhibited no signs of gas migration or loss throughout its operating life. The maximum inventory of Rhodes will be set at 9,700 MMcf, with a working gas capacity of approximately 4,566 MMcf. The peak deliverability is 86 MMcf/d. The maximum shut-in reservoir pressure (measured at the well head) is 990 psia in sub-pool A, 940 psia in sub-pool B, and 905 psia in sub-pool C.

Shirley¹⁴

24. The storage formation at Shirley is the Lower Mississippian Keener Sandstone at an average depth of 2,100 feet, with an average net pay thickness of 19 feet. It is capped by the Upper Mississippian Big Lime (Greenbrier Limestone), and is laterally bounded by porosity and permeability pinch-outs. The structure of the Shirley field is essentially flat. Shirley was originally certificated in 1974 with a maximum inventory of 11,000 MMcf and pressure of 865 psia, and has experienced a gas loss of approximately 4,900 MMcf. Equitrans has determined that gas loss would continue if the field is operated at the certificated levels of pressure and inventory, and that implementing any type of recovery effort, while possible, does not appear economically feasible at this time. Equitrans has modified its operations at Shirley, only injecting gas into the pool late in

¹⁴ Equitrans' reports concluded that it would be operationally feasible to initiate a recycling program at the Shirley field to recover lost gas, *i.e.*, bring gas that had migrated back into the lease boundaries of the field to the extent possible. Such a program would involve the drilling of ten recycling wells, the installation of a 350 horsepower compressor station and the laying of 23 miles of small diameter pipe. The cost would be approximately \$10.6 million and the annual operating costs would be about \$132,000. However, Equitrans has not proposed to undertake recycling activities at this time and will continue to operate the fields, in particular the Shirley field, at lower pressures in order to decrease the gas migration. We note that if Equitrans decides at a later date to initiate the recycling program, it will need to file an application with the Commission for certificate authority.

the season, injecting gas only into the center of the pool, and withdrawing gas in a systematic pattern from the center outwards, decreasing the inventory of the pool to 3,800 MMcf, and lowering the maximum shut-in reservoir pressure to 415 psia. Equitrans believes this operational strategy will significantly slow and/or halt the migration of gas from the pool while allowing Equitrans to operate the field effectively and meet its contract requirements.

25. While volumetric analysis confirmed the original certificated limit, the operational history has shown that field integrity cannot be maintained at that level or pressure and that communication must be occurring with other formations, *i.e.*, the gas is migrating. The Commission staff's engineering review and analysis has determined that Equitrans' proposed lower certificated limits and the modified operational strategy, including lowering the pressure, should slow the migration of gas. The Commission adopts this finding and, therefore, is setting the maximum inventory at Shirley at 3,800 MMcf, with a working gas capacity of 1,898 MMcf. The peak deliverability is 29 MMcf/d and the maximum shut-in reservoir pressure (measured at the well head) is 415 psia.

Skin Creek

26. The storage formation at Skin Creek is in the Upper Devonian Gordon Sandstone at an average depth of 2,600 feet, with an average net pay thickness of 15 feet. The structure of the sandstone is a series of gently folded anticlines and synclines and is capped by an unnamed nonporous, non-permeable nine to 22 foot thick shale and sandy shale. The lateral boundaries of the pool are marked by porosity and permeability pinch-outs. There is oil present and small amounts are produced in conjunction with storage operations. Skin Creek is located adjacent to and under the Rhodes Complex, and began operations in 1936. Skin Creek has exhibited no signs of gas migration or loss throughout its operating life. The maximum inventory of Skin Creek will be set at 2,165 MMcf, with a working gas capacity of approximately 1,128 MMcf. The peak deliverability is 37 MMcf/d. The maximum shut-in reservoir pressure (measured at the well head) is 1,015 psia.

Swarts Complex

27. The storage formation at the Swarts Complex is in the Lower Devonian Fifty Foot Sandstone at a depth of 2,550 feet, with an average net pay thickness of 40 feet. The Fifty Foot is capped by an unnamed nonporous, non-permeable shale that is approximately 13 feet thick. The lateral boundaries are marked by porosity and permeability pinch-outs. When storage operations began in 1949, Swarts was originally thought to be two separate pools, Swarts and Swarts West, but subsequent geological studies and operations have shown that it is, in fact, one pool. The Swarts Complex has exhibited no signs of gas migration or loss throughout its operating life. The maximum inventory at Swarts will be set at 2,600 MMcf, with a working gas capacity of

approximately 1,345 MMcf. The peak deliverability is 41 MMcf/d and the maximum shut-in reservoir pressure (measured at the well head) is 1,015 psia.

Tepe

28. The storage formation at Tepe is the Devonian Fifth Sandstone, and is at an average depth of 2,280 feet, with an average net pay thickness of nine feet. It is capped by an unnamed nonporous, non-permeable shale approximately seven feet in thickness. Tepe began operations in 1936 and there have been no signs of gas loss or gas migration throughout the field's operating life. The maximum inventory at Tepe will be set at 1,275 MMcf, with a working gas capacity of 638 MMcf. The peak deliverability is 43 MMcf/d and the maximum shut-in reservoir pressure (measured at the well head) is 1,015 psia.

Conclusion

29. For all of the reasons discussed above, the Commission will amend Equitrans' existing certificates for its storage fields, and issue new ones where no certificate exists, to set the maximum inventory and pressure parameters at the levels stated above, and in Appendix B. Equitrans is authorized under NGA section 7 to operate its storage facilities at these levels and in a manner designed to maximize the integrity of the fields and minimize gas migration. As noted above, if Equitrans decides to implement recycling activities and/or to replenish lost cushion gas, it must file a certificate application. Further, in order to closely monitor the operations at Equitrans' storage fields, we are requiring Equitrans to submit semiannual reports, coinciding with the termination of the injection and withdrawal cycles, containing the following information:¹⁵

- (1) the daily volumes of natural gas injected into and withdrawn from each storage reservoir;
- (2) the volume of natural gas in the reservoirs at the end of the reporting period;
- (3) the maximum daily injection and withdrawal rates experienced during the reporting period, with average working pressure on such maximum days taken at a central measuring point where the total volume injected or withdrawn is measured;

¹⁵All volumes shall be stated at 14.73 psia and 60 degrees Fahrenheit, and pressures shall be stated in psia.

- (4) the results of any tracer program by which the leakage of injected gas may be determined and, 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;
- (5) any surveys of pressures in gas wells, and the results of back-pressure tests conducted during the reporting period;
- (6) the latest revised structural and isopach maps showing the locations of the wells and the location of the gas-water contact, however, these maps need not be filed if there is no material change from the maps previously filed;
- (7) for the reporting period, a summary of wells drilled, worked over, or recompleted with subsea depth of formation and casing settings and summaries of any new core analyses, back-pressure tests, or well log analyses;
- (8) a discussion of current operating problems and conclusions; and
- (9) such other data or reports which may aid the Commission in the evaluation of the storage project.

30. We will require that the above-referenced reports shall be filed semiannually until the storage inventory volume and pressure have reached or closely approximate the maximum permitted in this order. Thereafter, the reports shall continue on a semiannual basis for a period of one year.

31. At a hearing held on June 21, 2007, the Commission on its own motion received and made part of the record in this proceeding all evidence, including the application, consisting of Equitrans' storage reports and responses to data requests, submitted in support of the authorizations sought herein, and upon consideration of the record,

The Commission orders:

(A) Equitrans' existing certificates of convenience and necessity authorizing it to operate the storage facilities discussed herein and also listed in Appendix A are

amended to set the maximum inventory levels and pressure parameters for each storage facility, as discussed in this order and set forth in Appendix B.

(B) Certificates of public convenience and necessity are issued to Equitrans authorizing it to operate the storage facilities that may not have been previously certificated, as discussed herein and also listed in Appendix A, at the maximum inventory levels and pressure parameters set for each such storage facility as discussed in this order and set forth in Appendix B.

(C) The certificates issued in Ordering Paragraph (B) above are conditioned on compliance with all relevant provisions of the NGA and the Commission's regulations, in particular with section 157.20 (a) and (e).

(D) The authorizations issued in Ordering Paragraphs (A) and (B) above are conditioned on Equitrans' filing the reports outlined herein consistent with the timeframes set forth in the order.

(E) The motions to intervene out-of-time are granted for good cause shown.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.

APPENDIX A

Existing Certificate Dockets for Equitrans's Storage Fields

Hunter Cave

- began operations 1943;
- initial certificate unknown;
- referred to in *Equitable Gas Co.*, 6 FPC 410 (1947) as “under development”;
- certificate to expand existing facility; Docket No. CP95-609-000, *Equitrans, Inc.*, 75 FERC ¶ 61,211 (1996);
- Amending in this proceeding certificate in Docket No. CP95-609-000 to set maximum inventory levels and pressure parameters.

Rhodes Complex

- began operations 1947;
- initial certificate: Docket G-12304, *Equitable Gas Co.*, 18 FPC 574 (1957);
- includes three sub-pools;
- certificate in Docket No. CP60-4-000 authorizing construction of various facilities to meet growing demand; notes continued development of Rhodes storage pool to also meet that demand, *Equitable Gas Co.*, 23 FPC 807 (1960).

Hayes

- began operations 1956;
- initial certificate Docket No. G-9322, *Equitable Gas Co.*, 15 FPC 1034 (1956);

Logansport

- began operations 1954;
- initial certificate: Docket No. G-2130, *Equitable Gas Co.*, 12 FPC 1185 (1956);
- certificate amended in Docket No CP62-186-000 (Mobley storage) to authorize facilities to increase deliverability from Logansport storage pool, *Equitable Gas Co.*, 46 FPC 38 (1971). (*see below*)

Mobley

- began operations 1963;
- initial certificate Docket No. CP62-186-000, *Equitable Gas Co.*, 27 FPC 1381 (1962) (also certificating pipeline related to operation of both Logansport and Mobley storage pools);

- certificate in Docket No. CP63-334-000 authorizing construction of pipeline to **increase** line pack that was previously available from incremental facilities authorized in Docket Nos. G-17871 (*see* under Pratt storage pool) and Docket Nos. CP60-4-000 (*see* under Rhodes storage pool) and allow conservation of supply in various storage pools for winter heating season, *Equitable Gas Co.*, 30 FPC 658 (1963);
- certificate amended twice in Docket No. CP62-186-000 to extend time to complete construction of facilities, *Equitable Gas Co.*, 31 FPC 1589 (1964) and 34 FPC 522 (1965);
- certificate in Docket No. CP66-293-000 authorizing addition of compression at Logansport Compressor Station to provide more pumping capacity at Mobley storage pool, *Equitable Gas Co.*, 35 FPC 770 (1966);
- certificates issued above in Docket No. CP62-186-000 amended to authorize construction of compressor station on line running between Logansport and Mobley storage pools to increase deliveries from Logansport storage pools, *Equitable Gas Co.*, 46 FPC 38 (1971).

Shirley

- began operations in 1974;
- initial certificate in Docket No. CP74-163-000 and -001, *Equitable Gas Co.*, 51 FPC 2108 (1974),
- certificate amending initial authorization to remove maximum inventory limits, Docket No. CP95-565-000, *Equitable Gas Co.*, 24 FERC ¶ 62,370 (1983).

SwartsComplex

- began operations in 1949
- initial certificate: Docket No. G-1185, *Equitable Gas Co.*, 8 FPC 865 (1949)

Pratt

- began operations in 1957;
- initial certificate Docket No. G-1393, *Equitable Gas Co.*, 9 FPC 1193 (1950);
- certificate in Docket No. G-17871 to construct pipeline and add compression at Pratt compressor Station to increase deliverability from various unidentified storage pools, *Equitable Gas Co.*, 21 FPC 771 (1959).

**Storage Pools Where Case-specific Initial Certificates Unknown
Certificates Issued in his Proceeding**

Comet Storage Pool**Skin Creek Storage Pool****Finleyville Storage Pool**

- all began operations in 1936;
- Docket No. G-273 associated with Comet Storage Pool and Skin Creek Storage Pool;
- May have been authorized if these pools belonged to Equitrans' predecessors, *see Pittsburg & West Virginia Gas Co.*, 4 FPC 479 (1944) and *Equitable Gas Co.*, 4 FPC 588 (1944);
- Equitable Gas Co. acquired Pittsburg & West Virginia Gas Co. in Docket No. G-1586, 1951, *see Equitable Gas Co.*, 10 FPC 828 (1951).;
- Comet storage pool mentioned in *Equitable Gas Co.*, 24 FPC 502 (1960) (compression added to improve deliverability of Coment);
- issuing new certificate in this proceeding to set maximum inventory levels and pressure parameters.

Bunola Storage Pool

- began service in 1938;
- Docket No. G-275 associated with Bunola storage pool;
- mentioned as being in existence in *Equitable Gas Co.*, 6 FPC 410 (1947)(compressor was added to improve deliverability of
- issuing new certificate in this proceeding to set maximum inventory levels and pressure parameters.

Tepe Storage Pool

- Docket No. G-275 associated with Tepe storage pool;
- may have been acquired from Pittsburg & West Virginia Gas Co. (*see Comet, Skin Creek, and Finleyville storage pools above*) ;
- issuing new certificate in this proceeding to set maximum inventory levels and pressure' parameters.

Maple Lake Storage Pool

- began operations in 1947;
- G docket unknown;
- only mention of Maple Lake in *Equitable Gas Co.*, 24 FPC 502 (1960);
- issuing new certificate in this proceeding to set maximum inventory levels and pressure parameters

APPENDIX B***Maximum Inventory Levels and Pressure Parameters by Storage Facility***

The maximum inventory of natural gas (including remaining native gas-in-place) stored in each field and the maximum shut-in reservoir pressure (as measured at the wellhead) shall not exceed the following limits without prior Commission authorization:

Bunola	7,300 MMcf and 905 psia;
Comet	5,300 MMcf and 1,015 psia;
Finleyville	800 MMcf and 1,015 psia;
Hayes	193 MMcf and 715 psia;
Hunters Cave	6,700 MMcf and 965 psia;
Logansport	3,700 MMcf and 1,015 psia;
Maple Lake	2,400 MMcf and 795 psia;
Mobley:	7,400 MMcf and 915 psia;
Pratt	9,300 MMcf and 915 psia;
Rhodes Complex (Pools A, B and C)	9,700 MMcf and (A) 990 psia, (B) 940 psia, (C) 905 psia;
Shirley	3,800 MMcf and 415 psia;
Skin Creek	2,165 MMcf and 1,015 psia;
Swarts Complex: (Swarts and Swarts West)	2,600 MMcf and 1,015 psia;
Tepe	1,275 MMcf and 1,015 psia.