141 FERC ¶ 61,183
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;
Philip D. Moeller, John R. Norris,
Cheryl A. LaFleur, and Tony T. Clark.

Dominion Transmission, Inc. Docket No. CP12-59-000

ORDER ISSUING CERTIFICATE

(Issued November 30, 2012)

1. On February 10, 2012, Dominion Transmission, Inc. (Dominion) filed an application pursuant to section 7 of the Natural Gas Act (NGA) for a certificate of public convenience and necessity to establish a protective boundary, or buffer zone, around its Sabinsville Storage Pool (Sabinsville Pool) in Tioga County, Pennsylvania (Sabinsville Storage Pool Boundary Project). For the reasons discussed below, and subject to the conditions herein, the Commission will grant Dominion a certificate authorizing the addition of a protective buffer zone around its Sabinsville Pool.

Background

2. Storage operations in the Sabinsville Pool, which is located in the Townships of Chatham, Clymer, and Westfield, in Tioga County, Pennsylvania, began in 1950.[1] The pool is approximately 1.75 miles wide and 9 miles long, encompassing 6,490.34 acres. The current capacity of the Sabinsville Pool is 35,618 million cubic feet (MMcf), comprising 17,697 MMcf of working gas, and 17,921 MMcf of cushion gas. The Sabinsville Pool has a defined and authorized active boundary. Until now, neither Dominion nor its predecessors have ever requested the Commission to establish a specific protective boundary.

3. The Sabinsville Pool is a combination structural-stratigraphic trap type pool, located in the Lower Devonian-aged Oriskany Sandstone Formation (Oriskany), at an average depth of 4,495 feet. It has an average thickness of 23 feet and is bounded on the southwest by a fault, with a structural closure greater than 430 feet, and on the other sides by tight sand, pinch outs, and other structural closures. The Oriskany is overlaid by an

[1] *New York State Natural Gas*, 9 FPC 271 (1950).

approximately 12-foot layer of the Onondaga Limestone which is, in turn, overlaid by a 75-foot layer of the Marcellus Shale.

4. Dominion proposes to establish a 2,000-foot protective boundary (buffer zone), comprising 4,703 acres, around the pool's active storage reservoir boundary. The proposed buffer will include the Marcellus Shale, Onondaga Limestone, and Oriskany formations. The total acreage of the pool, with the proposed buffer, will be approximately 11,193 acres. Dominion states that it possesses storage rights for more than 4,235 acres (approximately 90 percent) of the proposed 2,000-foot buffer zone under existing leases.[2] Dominion asserts that a buffer zone is needed to protect the integrity of its storage operations at the Sabinsville Pool from a potential breach that may be caused from hydraulic fracturing of the Marcellus Shale by third-party production wells located in the vicinity of the storage pool. Dominion states that the protective boundary would reduce the risk of a breach in the confinement mechanism that has historically provided the vertical/stratigraphic containment of the storage gas.

5. Dominion states that no new incremental service is associated with this project. Dominion contends that its proposal will protect the security and integrity of the storage reservoir, which will maintain the reliability of its existing customers' storage services. Dominion expects to incur costs in acquiring property rights necessary for the proposed protective boundary, and it requests a pre-determination that it may roll the costs associated with its proposal into its system rates in a future NGA section 4 rate proceeding.

Notice, Interventions, and Protests

6. Notice of Dominion's application was published in the *Federal Register* on February 27, 2012 (77 Fed. Reg. 11,422). The parties listed in the appendix to this order filed timely, unopposed motions to intervene. Timely, unopposed motions to intervene are granted by operation of Rule 214 of the Commission's regulations.[3]

7. Ultra Resources, Inc. (Ultra) and SWEPI LP (SWEPI) included protests with their intervention requests. Dominion filed a motion for leave to answer Ultra's and SWEPI's protests and the intervention request of CNX Gas Company LLC. SWEPI filed an answer to Dominion's answer, Dominion answered SWEPI's answer, and SWEPI responded to Dominion's second answer. Although our rules do not permit answers to

[2] Dominion states that the majority of the property rights it holds are in the form of traditional oil and gas leases acquired in the 1940s and 1950s.

[3] 18 C.F.R. § 385.214(a)(3) (2012).

protests and answers to answers,[4] the Commission may, for good cause, waive this provision.[5] The Commission finds good cause to do so in this instance because Dominion's and SWEPI's pleadings provide information that has assisted in the decision making process.

Protests and Answers

8. SWEPI and Ultra, natural gas producers with lease rights in the vicinity of the proposed buffer zone, contend that Dominion has not presented any geologic data establishing the need for a protective area as large as 2,000 feet and suggest that the proposed 2,000-foot figure is arbitrary or based on speculation. SWEPI states that the Commission found that a 1,000-foot buffer zone was sufficient for Dominion's Quinlan Storage Pool in New York. SWEPI states that it offered to work with Dominion in conducting a seismic evaluation to provide updated imaging of the subsurface in the proposed buffer zone and other areas to determine a more reasonable buffer zone based on actual and current scientific and engineering evidence, but that Dominion declined the offer. SWEPI states that approval of the proposed buffer will impinge on property rights and commercial interests of producers and landowners, with no evidence that the proposed buffer is needed and/or properly sized. SWEPI contends that it would be unjust and unreasonable to allow a storage entity to remove property from potential development, at significant sunk costs and loss of future revenues for impacted producers and landowners (and ultimately detrimental consumer impacts), without factual justification. Ultra also expresses concern that Dominion has not yet taken steps to acquire production rights from lessees whose interests may be directly affected by the proposed buffer zone and that Dominion may rely on extensive use of condemnation proceedings.

9. SWEPI asserts that the Commission should determine the appropriate size of a buffer zone on the basis of horizontal stress dynamics consistent with the specific subsurface geological factors at the location in question. SWEPI contends this would protect the storage field and the mineral and other interests of landowners and leasehold rights of producers by not removing any more land than necessary from production operations and royalty benefits.

10. Dominion avers that Ultra and SWEPI misunderstand the basis for its proposal. Its proposed buffer zone, Dominion emphasizes, is not based on the structural geology of the area, but is based on the potential that fractures generated using current hydraulic fracturing technology in wells drilled close to or above the storage pool may extend into

[4] 18 C.F.R. § 385.213(a)(2) (2012).

[5] 18 C.F.R. § 385.101(e) (2012).

the Onondaga and Oriskany formations, potentially forming migration paths for storage gas to move out of the storage pool. Dominion states that, while aware of current research on hydraulic fracturing, it does not know of any proven model or technology that can be rigorously applied to predict accurately the location and extent of encroachment of a horizontally completed, multi-staged hydraulically fractured well like those in the Marcellus Shale. Dominion contends that the proposed 2,000-foot zone is intended to avoid any impact on Dominion's storage field with an appropriate margin of safety, and that the 2,000-foot zone is the appropriate boundary provided for under Pennsylvania law.

11. Dominion states that the size of a protective buffer needs to be site-specific. In regard to the 1,000-foot approved buffer zone around its Quinlan storage field, Dominion asserts that Quinlan's buffer is smaller as the result of a very different set of circumstances. Specifically, Dominion explains that Quinlan is a reef structure surrounded by tight, impermeable layers of Onondaga Limestone and about 30 to 70 feet of Marcellus Shale. Further, Dominion states, as there is a moratorium on hydraulic fracturing in New York, there is no current active development of the Marcellus Shale around Quinlan. In contrast, Dominion points out, as noted above, the Sabinsville Pool is a combination structural and stratigraphic trap of Oriskany sandstone, bounded by one fault and either tight sand, structural closures, or gas water contacts, with relatively thin layers of Onondaga limestone (12 feet) and Marcellus Shale (75 feet), capping it, with active development of the Marcellus Shale occurring all around the field.

12. Dominion urges the Commission to reject SWEPI's proposed variable length buffer because it is impractical to implement and is based on an unproven methodology that fails to account for other relevant factors. Dominion argues that a buffer zone of different sizes at various places creates uncertainty about the precise demarcation of the buffer zone and that uncertainty would not provide the protection of a uniform buffer zone. Dominion asserts that SWEPI's contention that data generated from microseismic monitoring can be utilized to accurately predict the extent of fractures is only a theory, not a proven practice, and that the Sabinsville Pool should not be the "test" case for this theory, as a single fracture could cause permanent damage to the integrity of its field. Dominion states SWEPI's own evidence suggests its proposed approach could put the pool at risk (the fracture height of SWEPI's example extends 200 feet vertically below the Marcellus). Dominion contends that SWEPI has provided no site specific examples or any evidence of its theories having been applied to actual wells in such close proximity to an existing storage operation and has not demonstrated that a migration path could not develop over time. Dominion believes that it is not appropriate to set safety limits based on a "best case" scenario but that they must set them to such a degree to coincide with responsible management of the pool.

13. Dominion also states that it has not begun negotiating with, or even fully identified, producers with leasehold interests in the acreage within the proposed buffer

zone, but points out that it already holds current and active lease rights for approximately 90.1 percent of the proposed buffer zone. Dominion contends that it intends to work with all remaining landowners and leaseholders to acquire any necessary storage rights on the 468 acres for which it does not already possess storage rights and does not expect to rely extensively on condemnation to secure acreage.

Request for an Evidentiary Hearing and Technical Conference

14. SWEPI requests an evidentiary hearing to establish technical geologic and engineering evidence to evaluate the extent to which a buffer zone is required, and if so, what its dimensions should be. As an alternative to its request for an evidentiary hearing, SWEPI requests that the Commission convene a technical conference to permit SWEPI to explain their proposed methodology for determining the appropriate size of buffer zones surrounding gas storage facilities.

15. An evidentiary, trial-type hearing is necessary only where there are material issues of fact in dispute that cannot be resolved on the basis of the written record.[6] SWEPI has not raised a material issue of fact that the Commission cannot resolve on the basis of the written record. As demonstrated by the discussion below, the existing written evidentiary record provides a sufficient basis for resolving the issues relevant to this proceeding. The Commission has satisfied the hearing requirement by giving interested parties an opportunity to participate through evidentiary submission in written form.[7] Likewise, a technical conference would not add to the Commission's understanding of the issues to be determined in this proceeding. Accordingly, the Commission will deny SWEPI's request for an evidentiary hearing or technical conference.

Discussion

16. Because Dominion's Sabinsville Pool is used for the storage of natural gas in interstate commerce subject to the jurisdiction of the Commission, the proposal to establish a protective buffer around the Sabinsville Pool is subject to the requirements of subsections (c) and (e) of section 7 of the NGA.

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[6] *See, e.g.*, *Southern Union Gas Co. v. FERC*, 840 F.2d 964, 970 (D.C. Cir. 1988); *Cerro Wire & Cable Co. v. FERC*, 677 F.2d 124 (D.C. Cir. 1982); *Citizens for Allegan County, Inc. v. FPC*, 414 F.2d. 1125, 1128 (D.C. Cir. 1969).

[7] *Moreau v. FERC*, 982 F.2d 556, 568 (D.C. Cir. 1993).

Certificate Policy Statement

17. The Certificate Policy Statement provides guidance for evaluating proposals to certificate new natural gas energy projects.[8] 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 Policy Statement explained that in deciding whether to authorize the construction of major new natural gas 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, the avoidance of unnecessary disruptions of the environment, and the unneeded exercise of eminent domain in evaluating new pipeline construction.

18. Under this policy, the threshold requirement for pipelines proposing new projects is that the pipeline must be prepared to financially support the project without relying on subsidization from its existing customers. The next step is to determine whether the applicant has made efforts to eliminate or minimize any 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 proposal. 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 proceed to complete the environmental analysis where other interests are considered.

19. As noted above, the threshold requirement is that the pipeline must be prepared to financially support the project without relying on subsidization from its existing customers. However, the Certificate Policy Statement also provides that existing customers should pay for the costs of projects designed to improve their service, such as projects to replace existing capacity, improve reliability, or provide additional flexibility. Under the Certificate Policy Statement, increasing the rates of existing customers to pay for these types of improvements does not constitute a subsidy, and the costs of such projects are permitted to be rolled into system-wide rates.[9]

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[8] *Certification of New Interstate Natural Gas Pipeline Facilities*, 88 FERC ¶ 61,227 (1999), *clarified*, 90 FERC ¶ 61,128 (2000); *further clarified*, 92 FERC ¶ 61,094 (2000) (Certificate Policy Statement).

[9] Certificate Policy Statement, 88 FERC ¶ 61,227 at 61,747, n.12.

20. Dominion did not include any cost information in its filing because it does not expect to construct new facilities. However, Dominion states that it expects to incur expenses to acquire the property rights necessary for the creation of a storage field buffer zone. Since the purpose of this project is solely to protect the reliability of existing customers' storage service and not to add new services or increase the facility's capacity or deliverability, there is a presumption that Dominion will be allowed to roll its costs into its system-wide rates in a future rate case, absent a material change in circumstances. However, Dominion's customers will have the opportunity to examine the prudence of the level of costs Dominion seeks to recover through its rates in that future rate proceeding. Thus, Dominion should keep separate, detailed records of all of the costs associated with the Sabinsville Storage Pool Boundary Project. The Commission concludes that Dominion has satisfied the threshold requirement of the Certificate Policy Statement.

21. The proposed Sabinsville Pool buffer zone will not have an adverse impact on existing customers or their services. The buffer zone will not impact the certificated operational parameters of the storage field, nor will it degrade any existing service provided by Dominion. Further, Dominion's proposal will have no adverse impact on other pipelines or their customers.

22. When certificating interstate natural gas storage today, it is typical for the Commission to approve buffer zones in order to protect the integrity of the storage facility.[10] The Commission believes, absent evidence to the contrary, that it is important that storage fields have a buffer zone to protect the integrity of the storage field, especially in areas, as here, where intensive natural gas production activities are possible. The Commission also believes that there is a real possibility that drilling and completion activities in the vicinity of the Sabinsville Pool could have a detrimental affect on its integrity. Dominion has a responsibility to protect the natural gas that its customers have entrusted to it to store for them in the Sabinsville Pool and a responsibility to maintain the integrity of the storage reservoir.

23. John Davis-Reinhold, a property owner south of the town of Westfield, Pennsylvania and north of the Sabinsville Pool, is concerned about compensation for landowners whose property rights will be affected by the protective buffer zone.[11] Dominion currently possesses storage rights to approximately 90 percent of the proposed

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[10] *Dominion Transmission, Inc.*, 111 FERC ¶ 61,414 (2005).

[11] Mr. Davis-Reinhold is also concerned about the safety of drilling operations in the Marcellus Shale and in another formation called the Utica Shale located below the Oriskany Sandstone and the Marcellus Shale. The Commission has no jurisdiction over drilling but will address Mr. Davis-Reinhold's general safety questions below.

buffer zone and has expressed its commitment to working collaboratively with landowners to acquire necessary rights to the remaining acreage. In the event owners of any property interests are unable to reach agreement with Dominion regarding the compensation to be paid for those rights, Dominion, pursuant to section 7(h) of the NGA, may acquire the property rights necessary for the buffer zone through the eminent domain process in state or federal court.[12] In such a proceeding, the court will take into account the fair market value of the necessary property rights, including the current market value of mineral rights, in deciding the compensation due.

24. The Commission finds that the proposed project is necessary to ensure the integrity of the Sabinsville Pool and the reliability of storage service to the benefit of all Dominion's customers. In making this finding, as discussed in more detail below, the Commission has balanced the interests of surrounding land and mineral rights owners against the public benefits of a secure Sabinsville Pool, and finds that the potential adverse economic impacts to the interests of the landowners are outweighed by the substantial public benefits associated with the need for Dominion to protect the integrity of its storage field. Accordingly, in view of the above considerations, and as further supported below, the Commission finds that, consistent with the Certificate Policy Statement and section 7 of the NGA, approval of a proposed buffer zone for the Sabinsville Pool is in the public convenience and necessity. The Commission will discuss below the extent of the protective buffer zone necessary to maintain the integrity of the Sabinsville Pool and the reliability of storage service.

Engineering Analysis

25. The primary issues remaining are the size of the buffer zone to be approved and how the Commission should determine that buffer zone boundary. SWEPI contends that the Commission should, as a general rule, determine the buffer size and location on the basis of stress orientation theory. Doing so, SWEPI believes, will limit the size of the buffer zone and make more land available for potential shale gas development. Dominion's concern is protecting the integrity of its storage field, and it urges the Commission to continue to use a combination of site-specific data, rather than a single test, to determine the buffer zone size. The Commission finds that the size of a buffer

[12] Under section 7(h) of the NGA, a certificate of public convenience and necessity confers on the certificate holder the right to acquire property rights by exercising the right of eminent domain in a court action if the certificate holder cannot acquire the property rights by contract or is unable to agree with the property owner on the amount of compensation. It is incumbent upon the applicant to make good faith efforts to negotiate with landowners for any needed rights. However, if the parties cannot reach agreement, issues of compensation for property rights taken by a pipeline under the eminent domain provisions of the NGA are matters for state or federal court.

zone should be based on a site-specific, case-by-case basis, taking into consideration the surrounding geology, structure, operational history, presence of third party producers, and any other circumstances or technical information that may be specific to a particular storage field.

26. In this instance, the structural geology of the Sabinsville Pool and surrounding area is well understood, as detailed in updated maps and other information provided by Dominion. The active storage boundary corresponds to the structure described and depicted in Dominion's structural and isopach maps. The Sabinsville Pool has been an active storage reservoir for over 50 years and has no history or evidence of gas loss or migration from the field. However, the development of gas production in the Marcellus Shale around the storage field has created a situation that was not at issue previously. Since 2007, over 4,600 Marcellus Shale wells have been drilled in Pennsylvania, with over 700 in Tioga County. Because the Marcellus Shale is the caprock of the Sabinsville Pool, Dominion is concerned that the structural integrity of the Marcellus Shale could be compromised by hydraulic fracturing either directly above the field or within a zone around the field, which the establishment of a protective buffer zone around the field should prevent.

27. On the basis of written testimony from Dr. James Hnat, a geologist for Shell Exploration & Production Company assigned to Shell Appalachia – Exploration and a paper by the Society of Petroleum Engineers (SPE paper),[13] SWEPI asserts that it is possible to predict fracture length accurately. SWEPI contends that since stresses control the orientation of faults, folds, joints, and natural and manmade fractures, a buffer zone's size should be based on these horizontal stress dynamics. SWEPI asserts that fractures in the Marcellus Shale would open in the northeast-southwest direction so that a buffer of 500 feet on the north and south boundaries, and 2,000 feet on the east and west boundaries would provide sufficient protection to the storage field.

28. The Commission disagrees with SWEPI's method of analysis. In his testimony, Dr. Hnat limits his discussion to the horizontal plane of fracturing, using as justification the SPE paper which evaluates the fracturing of two wells located in Tioga County, Pennsylvania. The SPE paper describes the fractures as propagating in a northeast/southwest direction for approximately 1,200 feet. Dr. Hnat, however, does not mention or consider the SPE paper's discussion of the height of those fractures, nor does he mention that fracture orientation is affected by variations in the geology of rock. SWEPI's own evidence shows that fracture height could exceed several hundred feet in vertical growth, extending the fractures into formations both above and below the

[13] SPE 145463 "Integrating Fracture Diagnostics and Engineering Data in the Marcellus Shale," Mayerhofer, M.J., et al. (2011).

Marcellus Shale.[14] In addition, the paper states that "only approximately 41 percent of the total [stimulated reservoir volume][15] is located within the Marcellus Shale group," implying that 59 percent is outside the Marcellus Shale, either above or below the shale. As the Marcellus Shale averages only 75 feet in thickness in the area around the Sabinsville Pool, and the Onondaga (which is between the Marcellus and the storage formation's Oriskany sandstone) is only 12 feet thick, there is a distinct risk that wells hydraulically fractured near a 500-foot buffer from the active storage boundary could penetrate into the Oriskany formation and set up paths for gas migration/gas loss from the storage field.

29. SWEPI also states that microseismic analysis can be used to predict accurately the extent of fractures. Under this analysis, during a hydraulic fracture treatment, monitoring equipments is placed within offset wells and on the surface which then monitor, or pickup, the faint (micro) seismic events that indicate rock breaking (or fracturing) and moving a very slight distance (micro to millimeter movements). Evaluation of this data with a computer program can show the initiation and propagation and extent of the fracture network in the subject well. This occurs concurrently with or after the hydraulic fracturing treatment to see how the fractures developed and to estimate the stimulated reservoir volume. To the Commission's knowledge, there has been no model developed that has been used to predict the exact placement and path, width, length and height of a fracture and then to prove, with actual microseismic events, that the fractures were placed where predicted and extended only to the predicted length, width, and height, and no farther. SWEPI's evidence does not include any type of predictive model, only a paper that uses a microseismic evaluation program to determine where the fractures were created and to estimate how much formation was stimulated in two wells. While this type of model might be in development somewhere, Dominion is correct that SWEPI's microseismic analysis model should not be tested adjacent to an active storage field.

30. Further, while SWEPI maintains correctly that fractures open perpendicularly to the minimum horizontal stress direction, which is called the primary fracture orientation, SWEPI does not address the orientation of secondary fractures, which open perpendicularly to the primary fracture orientation. Thus, even if the primary fracture orientation is northeast/southwest, parallel to the long boundaries of the field, the secondary fracture orientation would be northwest/southeast. These secondary fractures could penetrate the active boundary area if they occur too close to the storage pool.

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[14] SPE 145463, page 4. "Fracture network heights ranged from 250 to 480 feet with vertical growth imaged in the overlying Skaneateles . . . shale group and minimal downward growth detected in the underlying Onondaga group… however, more downward growth into the Onondaga was observed."

[15] Stimulated reservoir volume – the volume of reservoir rock fractured.

31. In addition to the deficiencies found in SWEPI's analysis of stress dynamics in the hydraulic fracturing process, the Commission finds that Dominion has provided sufficient engineering data to support its proposed 2,000-foot buffer boundary. The Commission believes that the 2,000-foot boundary is necessary to protect the Sabinsville Pool from potential damage caused by fracture technology and evaluation methods currently used in the development of the Marcellus Shale. In addition to the geological information regarding the Sabinsville Pool, Dominion refers to information it presented in its recent application to establish a buffer zone around its Woodhull Pool in Steuben County, New York, showing that hydraulic fracture half length (that is, the length of the fracture from the well bore to the fracture tip) can extend hundreds to thousands of feet, with one example of almost 2,000 feet.[16] SWEPI recognizes that that the underlying structure of the area under consideration requires a 2,000-foot buffer for the east and west boundaries of the storage pool. Because of the uncertainty involved in assessing the direction and lengths of fractures, the Commission finds that a 2,000-foot buffer to the north and south of the pool is likewise appropriate. The Commission also believes that a smaller area, like SWEPI's proposed variable area, would not provide the same level of protection as the uniform 2,000 feet sought by Dominion. This is not yet a precise science, and the Commission must resolve any questions in favor of protecting the integrity of the storage pool. Dominion, moreover, states that it already possesses the rights to 90 percent of the proposed buffer area within that 2,000 foot linear limit and has provided, in map form, the locations of all of the leases it holds. Beyond its stated desire to have as much acreage as possible available for Marcellus Shale development, SWEPI has not shown that it holds any lease interests within the proposed buffer zone and has not demonstrated that it will be negatively impacted by Dominion's proposal.[17]

Environment

32. The Commission reviewed Dominion's proposal and concludes that the environment is not involved. Thus, no National Environmental Policy Act of 1969 analysis was conducted.

Landowner Concerns

33. Mr. Davis-Reinhold raises concerns about the impact of potential drilling operations in the Utica Shale layer (located approximately 2,000 feet beneath the

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[16] *Dominion Transmission, Inc.*, 137 FERC ¶ 61,132 (2011).

[17] Pennsylvania law defines a "Reservoir protective area" as "[a]ll of that area outside of and surrounding the storage reservoir boundary but within 2,000 linear feet thereof, unless an alternate area shall have been designated." Title 58, Chapter 32, section 3203 of the Pennsylvania Oil and Gas Act of 1984.

Marcellus Shale and the Sabinsville Pool) or earthquakes on the Sabinsville Pool or his property.

34. Matters related to drilling permits are beyond the jurisdiction of the Commission. These issues are a matter of Pennsylvania law, not federal law. Nevertheless, a well, if properly cased and cemented and sufficiently far enough below the Oriskany, should not pose a significant threat to the storage field. The buffer zone authorized here encompasses the portions of the Marcellus Shale, Onondaga Limestone, and Oriskany formations within the proposed 2,000 foot area. It does not include formations below the Oriskany, such as the Utica Shale. Defining a buffer zone in this proceeding, however, does not prevent Dominion from, in the future, requesting a deeper buffer zone if necessary to protect the storage field from activities related to any future development of the lower Utica Shale.

35. Mr. Davis-Reinhold also is concerned about the possible effects of an earthquake in the area. Mr. Davis-Reinhold should also direct area geology questions to Pennsylvania officials. Evaluating the risk of an earthquake, whose epicenter would be near the Sabinsville Pool and its potential damage to the storage field or its caprock, is speculative. Moreover, to the best of the Commission's knowledge, there has been no damage or loss of integrity to a storage field (or to a natural gas field or oil field) in the United States from an earthquake. The Sabinsville Pool has been in operation for over 50 years as a storage reservoir and 15 years as a natural gas production field before that. It has trapped and held natural gas for thousands of years. Nothing the Commission is doing in this order, which concerns the potential of a third party fracturing the Marcellus so close to the storage field as to damage the storage field's integrity and establishing a buffer zone to prevent such an occurance, will impact the existing risk of earthquake damage.

36. The Commission on its own motion received and made a part of the record in this proceeding all evidence, including the application(s), as supplemented, 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 Dominion authorizing the establishment of a 2,000-foot certificated protective buffer zone to include the Oriskany formation, the Onondaga Limestone, and Marcellus Shale cap rock, all as described in the body of this Order.

(B) Dominion's request for rolled-in rate treatment for the costs of its proposed project is granted, as discussed in the body of this order.

(C) The certificate issued in Ordering Paragraph (A) is conditioned on Dominion's complying with all regulations under the NGA including, but not limited to, paragraphs (a), (c), (e), and (f) of section 157.20 of the Commission's regulations.

(D) SWEPI's request for an evidentiary hearing or, in the alternative, a technical conference is denied.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

Appendix

Atmos Energy Corporation
Atmos Energy Marketing LLC
CNX Gas Company LLC
Consolidated Edison Company of New York, Inc. and Philadelphia Gas Works (joint)
Exelon Corporation and PECO Energy Company (joint)
New Jersey Natural Gas Company
National Fuel Gas Corporation
National Grid Gas Delivery Companies
Piedmont Natural Gas Company, Inc.
PSEG Energy Resources & Trade LLC
SWEPI LP (SWEPI)
Ultra Resources, Inc. (Ultra)