

137 FERC ¶ 61,132
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;
John R. Norris and Cheryl A. LaFleur.

Dominion Transmission, Inc.

Docket No. CP11-493-000

ORDER ISSUING CERTIFICATE

(Issued November 17, 2011)

1. On May 27, 2011, 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 revise the active boundary and to establish a protective boundary, or buffer zone, around its Woodhull Storage Pool located in the towns of Woodhull, Rathbone, Troupsburg, and Tuscarora in Steuben County, New York (Woodhull Storage Boundary Project). For the reasons discussed below, and subject to the conditions herein, the Commission will grant Dominion a certificate authorizing the reduction in its active storage reservoir acreage, and the addition of a protective buffer zone around its Woodhull Storage Pool.

I. Background

2. The Woodhull Pool was discovered in 1937 and was used for natural gas production until it was converted to storage operations and certificated for service commencing in 1957 as the Woodhull Storage Pool.¹ At the time the Woodhull Pool was converted to storage operations only an active boundary was authorized. Dominion never requested a protective boundary until it filed this application.

3. In the Woodhull Storage Pool, gas is stored in the Lower Devonian aged Oriskany Sandstone Formation (Oriskany). The Oriskany is overlaid by the Onondaga Limestone which is, in turn, overlaid by the Marcellus Shale. Dominion states that the Onondaga

¹ *New York State Natural Gas*, 17 FPC ¶ 820 (1957).

Limestone and the Marcellus Shale act as the geological cap rock² to the Oriskany sandstone reservoir of the Woodhull Storage Pool.³

4. Dominion states that the Woodhull Storage Pool is approximately two miles wide and 10 miles long and has a total capacity of 35.904 Bcf, comprising 20.597 Bcf of working gas, 14.200 Bcf of cushion gas, and 1.107 Bcf of native reserves.

II. Description of Proposal

5. Dominion proposes to revise the active boundary of the Woodhull Storage Pool and to establish a new protective boundary, or buffer zone, for the Pool. Dominion asserts that a buffer zone is needed to protect the integrity of its storage operations at the Woodhull Storage Pool from a potential breach that may be caused from hydraulic fracturing used in the drilling of Marcellus Shale production wells in the vicinity of the Pool.

6. Dominion states that the most recent maps depicting the active storage reservoir boundary for the Woodhull Storage Pool were submitted to the Commission with the 1957 application to certificate storage operations at the Pool. Dominion states that it digitized those maps into a GeoGraphix Software project to calculate an active storage boundary of 9,505.14 acres. Dominion states that it further updated its volumetric calculation by incorporating actual operating information about the Woodhull Storage Pool to reach a revised active boundary of 9,334.12 acres. Therefore, Dominion requests authorization to revise the active storage reservoir boundary from 9,505.14 acres to 9,334.12 acres.

7. Dominion also seeks authority to establish a 2,000-foot, 5,472.27-acre protective boundary around the proposed active storage reservoir boundary.⁴ Dominion states that it currently possesses storage rights within approximately 88.6 percent (4,850.65 acres) of the acreage under the terms of existing storage leases.

² Cap rock is relatively impermeable rock that forms a barrier or seal around reservoir rock so that fluids cannot migrate beyond the reservoir.

³ Cap rock information was not included in the 1957 storage certificate application.

⁴ Dominion states that its proposal in this application is in accord with the 2,000-foot protective buffer it currently has on file with the New York Department of Environmental Conservation (NYSDEC) for the Woodhull Storage Pool.

8. Dominion states that there is currently no protective boundary at the Woodhull Storage Pool. It contends that current and proposed Marcellus Shale well drilling and completion activities have the potential to jeopardize the geologic sealing/trapping mechanism in place for the Oriskany sandstone.⁵ Therefore, Dominion asserts that it would not be prudent to permit any drilling or completion activity in the Marcellus Shale within the proposed protective boundary.

9. Dominion states that a 2,000-foot protective buffer zone around the proposed active storage reservoir would provide a measure of safety from the influence of hydraulically induced fractures in the Marcellus Shale and the Onondaga Limestone which serve as the cap rock for the Oriskany storage reservoir. Dominion states that if storage gas migration is suspected over time, it could then install observation well(s) in the protective buffer zone to better identify and/or confirm any storage gas migration path.

10. Finally, Dominion states that the original Commission order certifying the Woodhull Storage Pool did not include a specific quantity for native gas. It asserts it has operated Woodhull for approximately 50 years with a native gas volume of 1.107 Bcf. Accordingly, Dominion requests that the Commission clarify that the native gas volume at the Pool is 1.107 Bcf.

11. Dominion seeks no new incremental service in association with its proposal. Dominion states that the purpose of the Woodhull Pool project is to protect the security and integrity of the storage reservoir to improve the reliability of existing customers' storage service. Dominion states that it expects to incur additional costs in acquiring property rights necessary for the proposed protective boundary. Therefore, Dominion requests the Commission to grant Dominion permission to roll-in the project costs in its next section 4 rate proceeding.

III. Notice, Interventions, and Protests

Notice of Dominion's Woodhull Storage Pool application was published in the *Federal Register* on June 16, 2011 (76 Fed. Reg. 35,203). Timely, unopposed motions to intervene were filed by Atmos Energy Marketing LLC; Atmos Energy Corporation; Baltimore Gas and Electric Company (BGE); Consolidated Edison Company of New York, Inc. and Philadelphia Gas Works (jointly); Exelon Corporation on behalf of PECO Energy Company (Exelon) New Jersey Natural Gas Company; New York State Department of Environmental Conservation; New York State Electric & Gas Corporation and Rochester Gas and Electric Corporation (jointly); New York State Public Service

⁵ The State of New York currently has a moratorium on Marcellus Shale well drilling and completion. Dominion's July 21, 2001 data response.

Commission; Piedmont Natural Gas Company, Inc.; PSEG Energy Resources & Trade LLC; and The UGI Distribution Companies. Timely, unopposed motions to intervene are granted by operation of Rule 214 of the Commission's regulations.⁶

12. National Fuel Gas Supply (National Fuel) filed a motion to intervene out of time and comments. National Fuel states that Dominion's proposed protective area appears to include several properties that are already included within the protective buffer zone of its Tuscarora Storage Field, that is located just to the east of Dominion's Woodhull Storage Field. National Fuel states that it opposes Dominion's proposal to establish a protective area to the extent that establishment of such a protective zone would authorize Dominion to acquire property interests now held by National Fuel for the purpose of protecting its certificated Tuscarora Storage Field. We find that National Fuel has a direct and substantial interest in this proceeding, and that granting the untimely motion will not delay the proceeding or cause undue prejudice to the other parties. We will grant the motion.⁷

13. Exelon and BGE both protest Dominion's request for a pre-determination to roll-in the costs of the project in its next section 4 rate proceeding. Exelon and BGE argue that Dominion should be required to support the project's claimed reliability benefits when it seeks to formally recover the costs on a rolled-in basis in a subsequent section 4 proceeding.

14. Exelon urges the Commission to direct Dominion to provide a full and separate breakdown of the costs associated with the project, at the time it seeks recovery under the NGA, so that all parties may review and evaluate the specific expenditures identified by Dominion. Although Commission policy permits natural gas companies to roll-in costs for projects that are designed solely to improve reliability in providing existing services for their customers, Exelon states that the application does not fully explain how the project will produce such benefits.

15. BGE also recognizes that the preservation of reliability for existing customers is a basis for rolled-in rate treatment. However, BGE questions whether policing the activities of Marcellus Shale drillers translates into a reliability preservation measure as opposed to a landowner claim enforcement step for which a cost/benefit showing should be required as a prerequisite for any rate treatment determinations. BGE argues that Dominion should be required to submit a detailed breakdown of all costs associated with this certificate authorization, rather than be allowed to lump such costs into a rolled-in

⁶ 18 C.F.R. § 385.214(a)(3) (2011).

⁷ 18 C.F.R. § 385.214(d) (2011).

rate without any ability of the Commission and ratepayers to tie specific expenditures to specific projects and benefits.

16. Landowners Wren M. Owens, John E. Wills, John Crane, Terry L. Towner, Arnold S. Herrington, Robert M. Brown, and Lisa Robinson strongly object to Dominion's proposed 2,000 foot protective buffer. They state that Dominion's power to gain rights to that land through the use of eminent domain could prevent the landowners from entering into agreements with natural gas production companies for leases to extract natural gas from their property and obtaining fair market value for such leases.

IV. Discussion

17. Because Dominion seeks certificate authority to enlarge its Woodhull Storage Pool facility used for the storage of natural gas in interstate commerce subject to the jurisdiction of the Commission, the proposal is subject to the requirements of subsections (c) and (e) of section 7 of the NGA.

A. Certificate Policy Statement

18. The Certificate Policy Statement provides guidance for evaluating proposals for certificating new construction.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 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, the 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.

19. 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 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 route of the new pipeline. If residual adverse effects on these interest groups are identified after efforts

⁸ *Certification of New Interstate Natural Gas Pipeline Facilities*, 88 FERC ¶ 61,227 (1999), *order on clarification*, 90 FERC ¶ 61,128, *order on clarification*, 92 FERC ¶ 61,094 (2000) (Certificate Policy Statement).

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.

20. 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

21. Dominion did not include any cost information in its filing since it is not expecting 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.

22. As discussed below, the Commission finds it is appropriate for Dominion to establish a buffer zone around its Woodhull Storage Pool in order to provide a level of protection from the influence of well completions in its cap rock. We find nothing to indicate that Dominion is proposing to extend the boundaries of the storage pool in order to increase its storage operations. Further, we do not need to know the level of costs in order to determine whether the costs are of such a nature to be eligible for rolled-in rate treatment. There is no reason to delay our ruling until after the level of costs is known as requested by Exelon and BGE. Since the purpose of this project is solely to improve 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. Therefore, Dominion should keep separate, detailed records of all of the costs associated with the Woodhull Storage Boundary Project.

23. Revision of the Woodhull Storage Pool's storage boundary and the institution of a buffer zone will enable Dominion to protect the security and integrity of the storage field and protect the storage facility from possible impacts associated with anticipated natural gas production in the vicinity of the storage field. As we find below, the proposed project

⁹ Certificate Policy Statement, 88 FERC ¶ 61,227 at 61,747, n.12 (1999).

is necessary to ensure the integrity of the Woodhull Storage Pool and reliability of storage service to the benefit of all Dominion's customers. Thus, the Commission concludes that it is appropriate to permit Dominion to roll in the reasonable project costs as part of its storage function cost of service in its next NGA section 4 rate proceeding, absent a significant change in circumstances. The Commission finds that the threshold requirement of the Certificate Policy Statement is satisfied.

24. The Commission does not expect that the creation of a Woodhull Storage Pool protective buffer zone to have an adverse impact on existing customers or their services. The buffer zone expansion 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.

25. However, a number of landowners have raised issues regarding the economic impact of Dominion's proposal on surrounding landowners and communities. The essence of their opposition to Dominion's proposal to establish a buffer zone is that they believe it will prevent owners of property interests within the zone from entering into what the commenters believe would be more lucrative gas leasing agreements. Several landowners assert that Dominion should be required to pay current market rates for leases rather than be allowed to obtain the land cheaply through eminent domain proceedings. Several also mention that theirs is a rural, farming community that is burdened by high state taxes and that the potential for leasing their land to natural gas production companies would lift the fortunes of the entire region.

26. Under the Certificate Policy Statement, the Commission will not issue a certificate of public convenience and necessity authorizing a project, with the concomitant right to obtain the necessary property rights through either negotiation or the eminent domain process if negotiations between the parties fail, unless the Commission finds that the project benefits the public and is in the public interest, and that the overall public, not private, benefits of the project outweigh the potential adverse impacts. The Commission has recognized that underground natural gas storage fields are an essential part of the natural gas infrastructure. Natural gas storage is critical in ensuring that overall demands and specific requirements of natural gas customers are met.

27. However, the Commission is also sensitive to the concerns expressed by landowners that they, and their community as a whole, will be negatively impacted to the extent that production of minerals within the buffer zone is curtailed. In this regard, we note that Dominion currently possesses storage rights to 88.6 percent of the proposed buffer zone and has expressed its commitment to working collaboratively with landowners to acquire necessary rights to the remaining 11.4 percent of acreage. We recognize that in the event property owners are unable to reach agreement regarding the compensation to be paid, Dominion will have the ability, pursuant to section 7(h) of the NGA, to acquire necessary property rights through the eminent domain process in state or

federal court.¹⁰ In such a proceeding, however, 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 each individual landowner.¹¹

28. The Commission finds that permitting Dominion to establish a protective buffer zone around its Woodhull Storage Pool will enable Dominion to better limit activities that could jeopardize the cap rock and storage formations of the storage reservoir, thereby ensuring that Dominion can continue to use the Woodhull Storage Pool as previously authorized. Dominion has a responsibility to protect the natural gas that its customers have entrusted to it to store for them in the Woodhull Storage Pool and a responsibility to maintain the integrity of the storage reservoir.

29. The Commission has balanced the interests of surrounding land and mineral rights owners against the public benefits of a secure Woodhull Storage 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 the reduction in acreage of the active storage limits, and the establishment of the Woodhull Storage Pool's buffer zone are in the public convenience and necessity.¹²

¹⁰ Under section 7(h) of the NGA, a certificate of public convenience or 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.

¹¹ We note that some landowners also expressed concerns regarding existing storage leases in their area which they believe no longer provided adequate compensation, given current market conditions. Just as the Commission has no jurisdiction to address the level of compensation for property rights associated with the instant proposal, we have no authority to amend existing contracts regarding property rights.

¹² Certificate Policy Statement, 88 FERC ¶ 61,227 (1999); *Southern Star Central Gas Pipeline, Inc.*, 115 FERC ¶ 61,219 (2006).

B. Analysis of Dominion's Proposal

30. Our analysis of Dominion's proposal is based upon a record that includes Dominion's application, including the geological and engineering data in Exhibit H and Dominion's July 21, August 11, and August 31, 2011 data responses and National Fuel's August 8, 2011 data response to staff's requests seeking additional information to supplement the record.

1. Active Boundary

31. Dominion requests authority to decrease the size of the active storage reservoir from 9,505.14 acres to 9,334.12 acres, as determined by Dominion's recent engineering analysis of the Woodhull Storage Pool. The Commission grants jurisdictional storage field operators additional certificate authority to revise the boundary of storage fields when the applicant can demonstrate, with engineering and geological data, that such authorization is required by the public convenience and necessity in order to improve the operation of the storage field or to maintain its integrity.¹³

32. Because the actual boundaries of an underground reservoir depend on characteristics that can generally be confirmed only after the facility has commenced operation, it not unusual to find that the underground reservoir does not confine gas volumes as anticipated. In such cases, to ensure the integrity of the storage reservoir and the efficient operation of the storage facility, the Commission typically either revises a storage facility's certificated boundaries to conform to the enlarged contours of the actual underground reservoir¹⁴ or alters the operating parameters of the storage facility to prevent gas from migrating beyond the facility's certificated boundaries.¹⁵

¹³ See *Northern Natural Gas Co.*, 131 FERC ¶ 61,209 (2010); *Columbia Gas Transmission Corp.*, 128 FERC ¶ 61,050 (2009); and *Williston Basin Interstate Pipeline Co.*, 127 FERC ¶ 61,045 (2009).

¹⁴ See, e.g., *Williston Basin Interstate Pipeline Co.*, 127 FERC ¶ 61,045 (2009); *Dominion Transmission, Inc.*, 100 FERC ¶ 61,168 (2002); *Williams Natural Gas Co.*, 83 FERC ¶ 61,120 (1998); *Williams Natural Gas Co.*, 77 FERC ¶ 61,150 (1996); *ANR Pipeline Co.*, 76 FERC ¶ 61,263 (1996), *reh'g denied*, 78 FERC ¶ 61,122 (1997); and *Columbia Gas Transmission Corp.*, 35 FERC ¶ 61,345 (1986).

¹⁵ See, e.g., *Equitrans, L.P.*, 119 FERC ¶ 61,287 (2007), in which the Commission set maximum inventory and pressure parameters at levels to ensure the integrity of storage reservoirs and minimize gas migration.

33. Dominion's recent geologic and engineering analysis determined that the Woodhull Storage Pool is confined to the southeast by faulting and in other directions due to tight sand or structural closure. Thus, it seeks to slightly revise the active storage boundary to reflect these parameters. Dominion calculated the size of the revised active boundary and determined that it comprised 9,334.12 acres.

34. Based on this engineering and geologic data, we find that Dominion's geologic description of the structural and stratigraphic containment of the Woodhull Storage Pool is sound and thus supports its proposal to decrease the acreage of the reservoir. Accordingly, the Commission will authorize the reduction in size of the acreage of the active storage reservoir at Woodhull from 9,505.14 acres to 9,334.12 acres.

2. 2,000 Foot Protective Buffer

35. Dominion requests authorization to establish a 2,000 foot protective buffer comprising 5,472.27 acres around the perimeter of the 9,334.12 acre active storage reservoir. Dominion does not currently have a protective buffer of any size around its Woodhull Storage Pool. Dominion is concerned that storage gas could be lost from the Woodhull storage pool if well completion techniques in the Marcellus Shale and Onondaga Limestone cap rock impair the confining properties of cap rock formations in the vicinity of the active storage reservoir. Therefore, Dominion seeks to establish the buffer to limit drilling and well completion activities in the Marcellus Shale that may jeopardize the sealing/trapping mechanisms in place for the Woodhull Storage Pool.

36. A brief discussion of the geology in the region of the Woodhull Storage Pool is instructive on the question of whether the protective buffer is necessary. The Woodhull Storage Pool is located in the southern portion of Steuben County, New York and the southern extreme of the Pool is less than 2.5 miles from the State of Pennsylvania. The Pool is located in the northern Appalachian producing province that is characterized by alternating, gently dipping anticlines and synclines aligned on a northeast-southwest axis.¹⁶ Corresponding fault trends are also typically aligned parallel to the northeast-southeast trend. Natural gas is stored in the Oriskany Sandstone¹⁷ at the Woodhull Storage Pool, which is overlain by the cap rock consisting of the Onondaga Limestone and overlain by the Marcellus Shale. The Onondaga Limestone ranges in thickness from

¹⁶ Anticlines and synclines are folded rock strata. Anticlines are typified by upfolded strata, while synclines are typified by the downfolded "trough" strata.

¹⁷ Dominion states that the average thickness of the Oriskany Sandstone is 20 feet and the average depth to the top of the formation is 3,995 feet below ground surface.

20 feet to 49 feet and has an average thickness of 34 feet; the Marcellus Shale ranges in thickness from 46 feet to 66 feet with an average thickness of 57 feet.¹⁸

37. Storage gas at the Woodhull Storage Pool is confined along the southeast flank by faulting and in all other directions by either “tight sand” or structural closure.¹⁹ The Oriskany Sandstone reservoir is confined vertically by the overlying Onondaga Limestone and the Marcellus Shale. Dominion states that Marcellus Shale has long been recognized as an effective seal for the Oriskany Sandstone, as well as the source rock for natural gas produced from the Oriskany Sandstone.²⁰

38. Both National Fuel’s August 8, 2011 data response and Dominion’s August 11, 2011 data response assert that gas molecules from the Marcellus Shale traveled downward through fractures in the Onondaga Limestone to the Oriskany Sandstone. Over geologic time, they posit, mineralization either wholly or partially filled the fractures such that the Onondaga Limestone also serves as a cap rock for the Oriskany Sandstone.

39. Dominion states that it continually evaluates natural gas inventory after each injection and withdrawal cycle by observing pressures around the active perimeter and assessing whether maximum certificated inventory levels are achieved without exceeding the initial discovery pressure. Dominion asserts that it has successfully cycled gas into the Oriskany Sandstone reservoir at the Woodhull Storage Pool for decades without exceeding the original discovery pressure of the field.²¹ This, states Dominion, indicates not only that the storage reservoir is effectively confined, but also that the Onondaga Limestone and Marcellus Shale are effective cap rock.

40. Dominion states the 2,000 foot boundary is necessary because proposed Marcellus Shale well drilling and completion activities have the potential to breach the vertical confinement of the cap rock. Marcellus Shale wells typically involve the drilling of horizontal well bores with hydraulic fracturing well completion techniques to extract natural gas from the shale formation.

¹⁸ Dominion’s July 21, 2011 data response number 4.

¹⁹ Tight sands are low permeability sandstones with little to no natural gas flow.

²⁰ Dominion’s August 11, 2011 data response.

²¹ *Id.*

41. Dominion provided two technical papers by the Society of Petroleum Engineers (SPE) regarding hydraulic fracturing of shale formations.²² Both papers conclude that hydraulic fracture treatments in shale can have both vertical and horizontal impacts. Thus, Dominion argues that wells completed in the Marcellus Shale in the vicinity of the Woodhull Storage Pool could potentially impact the integrity of the cap rock for the storage reservoir.

42. Additionally, Dominion states that the NYSDEC allows for the establishment of a 3,500 foot protective buffer zone around the perimeter of an underground storage reservoir.²³ Dominion states that it currently has a 2,000 foot protective buffer zone on file with the NYSDEC for the Woodhull Storage Pool.²⁴ Here, Dominion seeks a certificate for the 2,000 foot protective buffer to protect against any harmful impacts from producer completions in and around the Woodhull Storage Pool.

43. 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.²⁵ It is unclear whether that would have been the practice in a 1957 certificate. However, we now believe, 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 where intensive natural gas production activities are possible. While New York has a current moratorium on drill and completion in the Marcellus Shale, we believe that there is a real possibility that drilling and completion activities in the vicinity of the storage pool could have a detrimental affect on the integrity of Woodhull. Therefore, the Commission finds that Dominion has demonstrated that its request for a certificated 2,000 foot protective buffer around the active storage reservoir at the Woodhull Storage Pool to maintain the integrity of the Oriskany Sandstone and the overlying cap rock is required by the public convenience and necessity.

3. National Fuel's Concerns

44. National Fuel states that Dominion's proposed expansion area appears to include several properties that lie within the protective buffer zone of its Tuscarora Storage Field. National Fuel's Tuscarora Storage Field is located just to the east of Dominion's Woodhull Storage Field. National Fuel opposes Dominion's proposal for a protective

²² Dominion's August 12, 2011 data response.

²³ *Id.*

²⁴ *Id.*

²⁵ *Dominion Transmission, Inc.*, 111 FERC ¶ 61,414 (2005).

area to the extent that Dominion would be authorized to acquire property interests held by National Fuel to protect its certificated Tuscarora Storage Field.

45. National Fuel provided maps showing the overlap of its Tuscarora Storage Field buffer and Dominion's buffer zone. Both National Fuel and Dominion report that they are currently in discussions with the intent to reach an agreement under which both companies would hold oil, gas and storage rights in the overlap area for the protection of both fields.

46. The Commission finds that issue of overlapping buffer zones is best resolved by Dominion and National Fuel reaching agreement on how to protect the integrity of their respective storage fields. The Commission will require, however, that the parties file such an agreement no later than three months from the date of this order, detailing the objectives of the agreement, and the responsibilities of each party that will ensure that the integrity of Woodhull Storage Pool and the Tuscarora Storage Field are maintained.

4. Clarification Regarding Native Gas

47. Finally, Dominion requests the Commission to clarify that the amount of native gas at the Woodhull Storage Pool is 1.107 Bcf. Although the Commission's 1957 certificate order authorizing the Woodhull Storage Pool did not specify a quantity for native gas, Dominion states that it has operated Woodhull for approximately 50 years with a native gas amount of 1.107 Bcf. As evidence, Dominion provided semi-annual storage reports from 1962 and 1963 which confirm that on October 13, 1961, native gas reserves at Woodhull were 1.085151 Bcf at 15.025 psia which converts to 1.107 Bcf at 14.73 psia. While this is persuasive evidence that native gas capacity at the Woodhull Storage Pool in 1961 was 1.107 Bcf, Dominion provided no information regarding current native gas amounts at the Woodhull Storage Pool except for Dominion's response to a data request in a Dominion's proceeding in Docket No. CP07-31, where it stated that "the present pool capacity including the native gas of 1.107 Bcf is 35.904 Bcf."

48. Although the total pool capacity of 35.904 Bcf at one time included a native capacity of 1.107 Bcf, the Commission is not convinced that 1.107 Bcf of native gas molecules remain in the pool. Over the course of 50 years of injections and withdrawal at the Woodhull Storage Pool, there is a strong possibility that native gas may have comingled with injected gas and thus been withdrawn from the gas inventory. Accordingly, the Commission will not grant Dominion's request for clarification. However, Commission determines that the Pool's base gas of 15.307 Bcf includes the capacity created by 1.107 Bcf of original native gas in place.

V. Environmental

49. The Commission reviewed Dominion's proposal and determined that the environment is not involved, and thus, no National Environmental Policy Act (NEPA) analysis was conducted.

VI. Conclusion

50. For the reasons discussed above, and with the conditions imposed by this order, the Commission concludes that the public convenience and necessity require certificate authorization for Dominion to decrease the acreage of the reservoir and to expand the certificated boundary of the Woodhull Storage Pool. The Commission will not grant the requested clarification regarding the amount of native gas remaining in the Woodhull Storage Pool, but finds that the base gas consists of 15.307 Bcf that includes the capacity created by 1.107 Bcf of original native gas in place.

51. At a hearing held on November 17, 2011, the Commission on its own motion received and made a part of the record in this proceeding all evidence, including the application, 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 2000 foot certificated buffer zone to include the Oriskany Sandstone storage formation and the Onondaga Limestone and Marcellus Shale cap rock, all as described in the body of this order.

(B) The certificate of public convenience and necessity authorizes Dominion to decrease the size of its Woodhull Storage Pool storage reservoir from 9,505.14 acres to 9,334.12 acres.

(C) Dominion's request for a predetermination supporting rolled-in rate treatment for the reasonable costs of the Woodhull Boundary Expansion Project is granted, absent a significant change in material circumstances.

(D) The certificate issued in Ordering Paragraph (A) is conditioned on Dominion:

- (1) injecting no gas for storage into the Woodhull Storage Pool 5,472.27 acre buffer zone;

- (2) 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;
- (3) filing its agreement with National Fuel, no later than three months from the date of this order, detailing the objectives of the agreement, and the responsibilities of each party that will ensure that the integrity of Woodhull Storage Pool and the Tuscarora Storage Field are maintained.

By the Commission. Commissioners Spitzer and Moeller are not participating.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.