

BEFORE THE INDUSTRIAL COMMISSION
OF THE STATE OF NORTH DAKOTA

CASE NO. 29031
ORDER NO. 31585

IN THE MATTER OF A HEARING CALLED ON A MOTION OF THE COMMISSION TO CONSIDER THE APPLICATION OF MINNKOTA POWER COOPERATIVE, INC. FOR AN ORDER OF THE COMMISSION DETERMINING THE AMOUNT OF FINANCIAL RESPONSIBILITY FOR THE GEOLOGIC STORAGE OF CARBON DIOXIDE FROM THE MILTON R. YOUNG STATION LOCATED IN SECTIONS 35 AND 36, T.142 N., R.84W., SECTIONS 19, 20, 21, 22, 26, 27, 28, 29, 30, 31, 32, 33, 34 AND 35, T.142N., R.83W., SECTIONS 1, 2, 12 AND 13, T.141N., R.84W., SECTIONS 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20 AND 21, T.141N., R.83W., OLIVER COUNTY, ND PURSUANT TO NDAC SECTION 43-05-01-09.1.

ORDER OF THE COMMISSION

THE COMMISSION FINDS:

- (1) This cause came on for hearing at 9:00 a.m. on the 2nd day of November, 2021.
- (2) This case is a motion of the Commission to determine the amount of financial responsibility to be required of Minnkota Power Cooperative, Inc. (Minnkota) for geologic storage of carbon dioxide in the amalgamated storage reservoir pore space of the Broom Creek Formation within Sections 35 and 36, Township 142 North, Range 84 West, Sections 19, 20, 21, 22, 26, 27, 28, 29, 30, 31, 32, 33, 34, and 35, Township 142 North, Range 83 West, Sections 1, 2, 12, and 13, Township 141 North, Range 84 West, Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, and 21, Township 141 North, Range 83 West, Oliver County, North Dakota, pursuant to North Dakota Administrative Code (NDAC) Section 43-05-01-09.1, and such relief as is appropriate.
- (3) Case Nos. 29029, 29030, 29031, 29032, 29033, and 29034 were combined for the purposes of hearing.
- (4) Case No. 29029, also on today's docket, is an application by Minnkota for an order authorizing geologic storage of carbon dioxide from the Milton R. Young Station in the amalgamated pore space of the Broom Creek Formation in portions of Sections 35 and 36, Township 142 North, Range 84 West, Sections 19, 20, 21, 22, 26, 27, 28, 29, 30, 31, 32, 33, 34, and 35, Township 142 North, Range 83 West, Sections 1, 2, 12, and 13, Township 141 North,

Range 84 West, Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, and 21, Township 141 North, Range 83 West, Oliver County, North Dakota, pursuant to NDAC Chapter 43-05-01.

(5) Case No. 29030, also on today's docket, is an application filed with the Commission by Minnkota for an order of the Commission determining the amalgamation of storage reservoir pore space, pursuant to a Geologic Storage Agreement for use of pore space falling within portions of Sections 35 and 36, Township 142 North, Range 84 West, Sections 19, 20, 21, 22, 26, 27, 28, 29, 30, 31, 32, 33, 34, and 35, Township 142 North, Range 83 West, Sections 1, 2, 12, and 13, Township 141 North, Range 84 West, Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, and 21, Township 141 North, Range 83 West, Oliver County, North Dakota in the Broom Creek Formation, has been signed, ratified, or approved by owners of interest owning at least sixty percent of the pore space interest within said lands pursuant to North Dakota Century Code (NDCC) Section 38-22-10.

(6) Case No. 29032, also on today's docket, is an application by Minnkota for an order authorizing geologic storage of carbon dioxide from the Milton R. Young Station in the amalgamated pore space of the Deadwood Formation in portions of Sections 35 and 36, Township 142 North, Range 84 West, Sections 19, 20, 21, 22, 26, 27, 28, 29, 30, 31, 32, 33, 34, and 35, Township 142 North, Range 83 West, Sections 1, 2, 12, and 13, Township 141 North, Range 84 West, Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, and 21, Township 141 North, Range 83 West, Oliver County, North Dakota, pursuant to NDAC Chapter 43-05-01.

(7) Case No. 29033, also on today's docket, is an application filed with the Commission by Minnkota for an order of the Commission determining the amalgamation of storage reservoir pore space, pursuant to a Geologic Storage Agreement for use of pore space falling within portions of Sections 35 and 36, Township 142 North, Range 84 West, Sections 19, 20, 21, 22, 26, 27, 28, 29, 30, 31, 32, 33, 34, and 35, Township 142 North, Range 83 West, Sections 1, 2, 12, and 13, Township 141 North, Range 84 West, Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, and 21, Township 141 North, Range 83 West, Oliver County, North Dakota in the Deadwood Formation, has been signed, ratified, or approved by owners of interest owning at least sixty percent of the pore space interest within said lands pursuant to NDCC Section 38-22-10.

(8) Case No. 29034, also on today's docket, is a motion of the Commission to determine the amount of financial responsibility for the geologic storage of carbon dioxide from the Milton R. Young Station located in portions of Sections 35 and 36, Township 142 North, Range 84 West, Sections 19, 20, 21, 22, 26, 27, 28, 29, 30, 31, 32, 33, 34, and 35, Township 142 North, Range 83 West, Sections 1, 2, 12, and 13, Township 141 North, Range 84 West, Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, and 21, Township 141 North, Range 83 West, Oliver County, North Dakota in the Deadwood Formation, pursuant to NDAC Section 43-05-01-09.1.

(9) The record in these matters was left open to receive additional information from Minnkota. Such information was received on November 16, December 8, and December 10, 2021, and the record was closed.

(10) Order No. 31583 entered in Case No. 29029 created the Minnkota Center MRYS Broom Creek Storage Facility #1; and Order No. 31584 entered in Case No. 29030 determined said storage facility will become effective February 1, 2022.

(11) Minnkota outlined its proposed qualifying financial responsibility instruments to be utilized to demonstrate financial responsibility pursuant to NDAC Section 43-05-01-09.1.

(12) Pursuant to NDAC Section 43-05-01-09.1 the qualifying financial responsibility instruments must cover the cost of:

- (a) Corrective action that meets the requirements of NDAC Section 43-05-01-05.1.
- (b) Injection well plugging that meets the requirements of NDAC Section 43-05-01-11.5.
- (c) Postinjection site care and facility closure that meets the requirements of NDAC Section 43-05-01-19.
- (d) Emergency and remedial response that meets the requirements of NDAC Section 43-05-01-13.

(13) Minnkota demonstrated that corrective action pursuant to NDAC Section 43-05-01-05.1 is not necessary within the delineated area of review. The Commission agrees with Minnkota's demonstration.

(14) Minnkota estimates the injection well plugging cost pursuant to NDAC Section 43-05-01-11.5 to be \$2,025,000 total for three wells. The Commission accepts this as a conservative estimate.

(15) The Minnkota Center MRYS Broom Creek Storage Facility #1 will have two injection wells, the J-ROC1 #1 well (File No. 37672), located 1,959 feet from the north line and 333 feet from the west line of Section 4, Township 141 North, Range 83 West, Oliver County, North Dakota, and the proposed Unity #1 well, to be located 1,979 feet from the north line and 373 feet from the west line of Section 4, Township 141 North, Range 83 West, Oliver County, North Dakota; and one monitor well, the proposed NRDT #1 well, to be located 2,148 feet from the south line and 691 feet from the east line of Section 34, Township 142 North, Range 83 West, Oliver County, North Dakota. Minnkota proposes covering the plugging of injection and monitoring wells with a trust fund with initial funding of \$2,120,000, paid in prior to injection, and paying in an additional \$17,704,000 in seven equal installments at least seven days prior to successive anniversaries of injection permit issuance, totaling \$19,824,000. Trust funds are a qualifying financial responsibility instrument under NDAC Section 43-05-01-09.1

(16) Minnkota estimates the postinjection site care financial responsibility pursuant to NDAC Section 43-05-01-19 is \$10,285,000 and is proposed to be covered by the aforementioned \$19,824,000 trust fund, that is deemed a qualifying financial responsibility instrument under NDAC Section 43-05-01-09.1.

(17) Minnkota estimates the facility closure financial responsibility pursuant to NDAC Section 43-05-01-19 is \$1,554,000 and is proposed to be covered by the aforementioned \$19,824,000 trust fund, that is deemed a qualifying financial responsibility instrument under NDAC Section 43-05-01-09.1.

(18) Minnkota estimates the emergency and remedial response costs pursuant to NDAC Section 43-05-01-13 by considering a conservative scenario where a significant volume of briny water rises to the surface. Historic price data from projects managed by Oxy Low Carbon Ventures, cost quotes from third-party companies, regulatory guidance documents, and professional judgement about the level of effort required to complete the activity was considered. Minnkota's estimate for the emergency and remedial response actions is \$16,560,000 and is proposed to be covered by the aforementioned \$19,824,000 trust fund in part, in the amount of \$5,960,000, and is deemed a qualifying financial responsibility instrument under NDAC Section 43-05-01-09.1. The remaining \$10,600,000 is proposed to be covered by a \$10,600,000 commercial insurance policy, also deemed a qualifying financial responsibility instrument under NDAC Section 43-05-01-09.1. Pursuant to NDAC 43-05-01-09.1, utilizing more than one financial instrument for a specific geologic sequestration phase must be limited to instruments that are not based on financial strength or performance. A trust fund and commercial insurance policy qualify to be combined under this requirement.

(19) Minnkota estimates the risk to an underground source of drinking water by considering a subsurface leak scenario. Costs to be covered include delineation of groundwater, and a 10-year period of quarterly monitoring and reporting after remedial actions are taken. The estimated cost is \$2,240,000 and is proposed to be covered by the aforementioned \$10,600,000 commercial insurance policy, that is deemed a qualifying financial responsibility instrument under NDAC Section 43-05-01-09.1.

(20) The Commission should set minimum amounts of qualifying financial responsibility for injection well plugging, postinjection site care and facility closure, and emergency and remedial response.

(21) Financial responsibility is provided for the same wells and lands in the Minnkota Center MRYS Broom Creek Storage Facility #1 and the Minnkota Center MRYS Deadwood Storage Facility #1.

IT IS THEREFORE ORDERED:

(1) Minnkota Power Cooperative, Inc., its assigns and successors, is hereby required to maintain financial responsibility with qualifying instruments in the minimum amounts specified in paragraph (2) below, pursuant to NDAC Section 43-05-01-09.1, covering the Minnkota Center MRYS Broom Creek Storage Facility #1 and the Minnkota Center MRYS Deadwood Storage Facility #1 in Oliver County, North Dakota.

(2) The minimum amount for injection well plugging that meets the requirements of NDAC Section 43-05-01-11.5 is a \$2,025,000 for 3 injection wells.

The minimum amount for postinjection site care and facility closure that meets the requirements of NDAC Section 43-05-01-19 is \$11,839,000.

The minimum amount for emergency and remedial response that meets the requirements of NDAC Section 43-05-01-13 is \$16,560,000.

- (3) This order shall be reviewed when a review of Order No. 31583 is conducted.
- (4) This order shall remain in full force and effect until further order of the Commission.

Dated this 21st day of January, 2022.

INDUSTRIAL COMMISSION
STATE OF NORTH DAKOTA

/s/ Doug Burgum, Governor

/s/ Wayne Stenehjem, Attorney General

/s/ Doug Goehring, Agriculture Commissioner