BEFORE THE INDUSTRIAL COMMISSION

OF THE STATE OF NORTH DAKOTA

CASE NO. 29452 (CONTINUED) ORDER NO. 32252

IN THE MATTER OF A HEARING CALLED ON A MOTION OF THE COMMISSION TO CONSIDER THE APPLICATION OF DAKOTA GASIFICATION COMPANY FOR OF AN ORDER THE COMMISSION DETERMINING THE AMOUNT OF FINANCIAL RESPONSIBILITY FOR THE **GEOLOGIC STORAGE** OF CARBON DIOXIDE FROM THE GREAT PLAINS SYNFUELS PLANT IN THE STORAGE FACILITY LOCATED IN SECTIONS 5, 6, 7, 8, 17, 18, 19, TOWNSHIP 145 NORTH, RANGE 87 WEST, SECTIONS 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16, 22, 23, 24, TOWNSHIP 145 NORTH, RANGE 88 WEST, SECTIONS 30, 31, 32, TOWNSHIP 146 NORTH, RANGE 87 WEST, SECTIONS 25, 26, 27, 33, 34, 35, 36, TOWNSHIP 146 NORTH, RANGE 88 WEST, MERCER COUNTY, NORTH DAKOTA, IN THE BROOM **CREEK** FORMATION. PURSUANT TO NORTH DAKOTA ADMINISTRATIVE CODE SECTION 43-05-01-09.1.

ORDER OF THE COMMISSION

THE COMMISSION FINDS:

(1) This cause originally came on for hearing at 9:00 a.m. on the 20th day of July, 2022. The Commission entered Order No. 32022 on October 5, 2022 continuing this matter for one hundred and seventy (170) days or until further order of the Commission.

(2) This case is a motion of the Commission to determine the amount of financial responsibility to be required of Dakota Gasification Company (DGC) for geologic storage of carbon dioxide in the amalgamated storage reservoir pore space of the Broom Creek Formation within Sections 25, 26, 27, 33, 34, 35, and 36, Township 146 North, Range 88 West, Sections 30, 31, and 32, Township 146 North, Range 87 West, Sections 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16, 22, 23, and 24, Township 145 North, Range 88 West, and Sections 5, 6, 7, 8, 17, 18, and 19,

Township 145 North, Range 87 West, Mercer 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. 29452, 29450, and 29451 were combined for the purposes of hearing.

(4) Case No. 29450, also on today's docket, is an application by DGC for an order authorizing geologic storage of carbon dioxide from the Great Plains Synfuels Plant in the amalgamated pore space of the Broom Creek Formation in portions of Sections 25, 26, 27, 33, 34, 35, and 36, Township 146 North, Range 88 West, Sections 30, 31, and 32, Township 146 North, Range 87 West, Sections 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16, 22, 23, and 24, Township 145 North, Range 88 West, and Sections 5, 6, 7, 8, 17, 18, and 19, Township 145 North, Range 87 West, Mercer County, North Dakota, pursuant to North Dakota Administrative Code (NDAC) Chapter 43-05-01.

(5) Case No. 29451, also on today's docket, is a motion of the Commission to determine the amalgamation of storage reservoir pore space, pursuant to a Storage Agreement by DGC for use of pore space falling within portions of Sections 25, 26, 27, 33, 34, 35, and 36, Township 146 North, Range 88 West, Sections 30, 31, and 32, Township 146 North, Range 87 West, Sections 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16, 22, 23, and 24, Township 145 North, Range 88 West, and Sections 5, 6, 7, 8, 17, 18, and 19, Township 145 North, Range 87 West, Mercer 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) 38-22-10.

(6) The record in these matters was left open to receive additional information from DGC. Such information was received on August 8, 2022, and the record was closed.

(7) Order No. 32250 entered in Case No. 29450 created the DGC Beulah Broom Creek Storage Facility #1; and Order No. 32251 entered in Case No. 29451 determined said storage facility will become effective as provided by subsequent order of the Director of the North Dakota Oil and Gas Division.

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

(9) 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.

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- (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.

(10) DGC 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 DGC's demonstration.

(11) DGC estimates the injection well plugging cost pursuant to NDAC Section 43-05-01-11.5 to be \$1,000,000 total for six wells. The Commission accepts this as a conservative estimate.

(12) The DGC Beulah Broom Creek Storage Facility #1 will have six injection wells, the Coteau #1 well (File No. 38379), located 555 feet from the south line and 460 feet from the west line of Section 1, Township 145 North, Range 88 West, Mercer County, North Dakota; the Coteau #2 well (File No. 38916), located 424 feet from the south line and 805 feet from the west line of Section 2, Township 145 North, Range 88 West, Mercer County, North Dakota; the Coteau #3 well (File No. 38917), located 2,462 feet from the south line and 2,391 feet from the east line of Section 2, Township 145 North, Range 88 West, Mercer County, North Dakota; the Coteau #4 well (File No. 38918), located 1,641 feet from the south line and 2,421 feet from the west line of Section 1, Township 145 North, Range 88 West, Mercer County, North Dakota; the Coteau #5 well (File No. 39418), located 1,408 feet from the south line and 1,138 feet from the east line of Section 12, Township 145 North, Range 88 West, Mercer County, North Dakota; and the proposed Coteau #6 well, to be located approximately 688 feet from the south line and 2,037 feet from the east line of Section 11, Township 145 North, Range 88 West, Mercer County, North Dakota. DGC proposes covering the plugging of injection wells with an escrow account with initial funding of \$1,000,000, paid in prior to injection, and paying in an additional \$3,000,000 over three annual payments, with the final payment occurring in 2025, totaling \$4,000,000. Escrow accounts are a qualifying financial responsibility instrument under NDAC Section 43-05-01-09.1

(13) DGC estimates the postinjection site care and facility closure financial responsibility pursuant to NDAC Section 43-05-01-19 is \$3,000,000 and is proposed to be covered by the aforementioned \$4,000,000 escrow account, that is deemed a qualifying financial responsibility instrument under NDAC Section 43-05-01-09.1.

(14) DGC estimates the emergency and remedial response costs pursuant to NDAC Section 43-05-01-13 by considering a conservative scenario there is carbon dioxide migration to the surface combined with groundwater interferences. Technical manuscripts by Manceau and others (2014) and Bielicki and others (2014) were used to identify and estimate the costs of mitigation and remediation technologies to address undesired migration of carbon dioxide from a geological storage reservoir. DGC's estimate for the emergency and remedial response actions is \$16,000,000 and is proposed to be covered by a \$16,000,000 third-party pollution liability

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insurance policy, that is deemed a qualifying financial responsibility instrument under NDAC Section 43-05-01-09.1.

(15) 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.

IT IS THEREFORE ORDERED:

(1) Dakota Gasification Company, 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 DGC Beulah Broom Creek Storage Facility #1 in Mercer 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 \$1,000,000 for 6 injection wells.

The minimum amount for postinjection site care and facility closure that meets the requirements of NDAC Section 43-05-01-19 is \$3,000,000.

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

- (3) This order shall be reviewed when a review of Order No. 32250 is conducted.
- (4) This order shall remain in full force and effect until further order of the Commission.

Dated this 24th day of January, 2023.

INDUSTRIAL COMMISSION STATE OF NORTH DAKOTA

/s/ Doug Burgum, Governor

/s/ Drew H. Wrigley, Attorney General

/s/ Doug Goehring, Agriculture Commissioner