

**BASIN ELECTRIC  
POWER COOPERATIVE**

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June 19, 2013



Mr. Darrell Nitschke  
Executive Secretary  
North Dakota Public Service Commission  
600 E. Boulevard, Dept. 408  
Bismarck, ND 58505-0480

Re: Dakota Gasification Company for a Waiver of Procedures and Timelines, and Consolidated Certificate of Corridor Compatibility and Route Permit for the Antelope Valley Station Natural Gas Pipeline  
Case No. 13-22

Dear Mr. Nitschke:

Enclosed please find the proposed Findings of Fact, Conclusions of Law & Order in the above captioned case.

If you have any questions, please feel free to contact me at [russm@bepc.com](mailto:russm@bepc.com) or 701-557-5319.

Sincerely,

A handwritten signature in blue ink, appearing to read "R. Russell Mather".

R. Russell Mather  
Staff Counsel

rrm/ds  
enclosures

c: Mitch Armstrong  
Sara Cardwell

**STATE OF NORTH DAKOTA**  
**PUBLIC SERVICE COMMISSION**

Dakota Gasification Company  
10" Natural Gas Pipeline – Mercer  
County Siting Application

Case No. PU-13-22

**ORDER GRANTING CORRIDOR CERTIFICATE AND ROUTE PERMIT**

**June 13, 2013**

**Appearances**

Commissioners: Brian P. Kalk, Randy Christmann, Julie Fedorchak

R. Russell Mather , Staff Attorney, Basin Electric Power Cooperative, 1717 East Interstate Avenue, Bismarck, North Dakota 58503, on behalf of Dakota Gasification Company.

Mitchell D. Armstrong, Special Assistant Attorney General for the Public Service Commission; Smith Bakke Porsberg Schweigert & Armstrong, 122 E. Broadway Avenue, Bismarck, North Dakota 58501.

Bonny M. Fetch, Office of Administrative Hearings, 1707 North Ninth Street, Bismarck, North Dakota 58501-1882, as Administrative Law Judge.

**Preliminary Statement**

On January 2, 2013, Basin Electric Power Cooperative (Basin Electric) filed with the Commission a letter of Intent stating its intent to construct a natural gas pipeline extending from Basin Electric's Antelope Valley electric generating station to Dakota Gasification's Great Plains Synfuels plant. The letter of intent also requested that the Commission shorten the one-year waiting period between the filing of the letter of intent and the filing of an application for a Certificate of Corridor Compatibility to thirty days. On January 16, 2013 the Commission passed a motion acknowledging the letter of intent, shorting the waiting period to thirty days as requested and assessing a filing fee of \$45,000. On February 28, 2013, Basin Electric filed an Application for a Consolidated Certificate of Corridor Compatibility and Route Permit ("**Application**") to site a 3.5-mile, ten-inch diameter natural gas pipeline (Pipeline) from Basin Electric's Antelope Valley Station to an interconnection with Dakota Gasification Company's ("**DGC**") gas pipeline on the DGC plant site-----all in Mercer County. The pipeline route is specifically shown by a route overview map included in the Application.

Along with the Application, Basin Electric filed an “Application for Waiver of Procedures and time Schedules (**“Waiver Application”**) in which it requested that the Commission waive the following requirements:

1. The requirements of Section 49-22-08 and 49-22-08.1 of the North Dakota Century Code (“NDCC”) insofar as those sections might require the separate filing of applications for a Corridor Certificate and a Route Permit and insofar as they might require separate publications of notices.
2. The requirements that separate hearings be held on the waiver request, the application for a Certificate of Corridor Compatibility and the application for a Route Permit as might be required by Sections 49-22-07.2, 49-22-08, 49-22-08.1 and 49-22-13 of the NDCC and Chapter 69-06-01-02 of the North Dakota Administrative Code (“**NDAC**”).

The Waiver Application further requested that the Commission waive or modify the requirements of NDAC section 69-04-02(1)(b) regarding minimum corridor width, and that Basin Electric instead be permitted to present a 100 foot wide corridor in its application for a Certificate of Corridor Compatibility.

Finally, the Waiver Application requested: 1) that the Commission hold a single, consolidated hearing on the Waiver Application and the Application and 2) that the Commission shorten the three-month period specified in NDCC section 49-22-098.(5) and the six-month period specified in Section 49-22-08.1 NDCC.

On April 19, 2013, Basin Electric submitted an amendment to the Application identifying DGC as the owner/operator of the proposed pipeline and stating that Basin Electric staff and contractors would continue to participate in the Project. The amendment also described certain minor changes to the proposed route to better accommodate existing infra-structure along the route and to ensure that the project would not interfere with the Coteau Properties Company’s plans for future development of the Freedom Mine.

On April 24, 2013, the Commission deemed the Application and the Waiver Application complete. The Commission issued a Notice of Filing and Notice of Hearing scheduling a hearing for June 13, 2013, at 1:00 p.m. CDT in the Mercer County Courthouse, 1021 Arthur Street, Stanton, North Dakota.

The Notice of Hearing identified the following issues to be considered in connection with the Application:

1. Will the location, construction, and operation of the proposed facilities produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota?
2. Are the proposed facilities compatible with the environmental preservation and the efficient use of resources?

3. Will the proposed facility locations minimize adverse human and environmental impact while ensuring continuing system reliability and integrity and ensuring that energy needs are met and fulfilled in an orderly and timely fashion?

The Notice of Hearing identified the following issues to be considered in connection with the Waiver Application:

1. Is it appropriate for the Commission to waive any procedures and time schedules as requested in the application?
2. Are the proposed facilities of such length, design, location, or purpose that they will produce minimal adverse effects and that adherence to applicable procedures and time schedules may be waived?

Having allowed all interested persons an opportunity to be heard and having heard, reviewed and considered all testimony and evidence presented, the Commission makes the following:

### **Findings of Fact**

#### (Applicant Information)

1. DGC is a North Dakota corporation headquartered in Bismarck, North Dakota. DGC owns and operates the Great Plains Synfuels Plant. DGC is a wholly-owned subsidiary of Basin Electric Power Cooperative, a North Dakota not-for-profit electric cooperative corporation headquartered in Bismarck, North Dakota.
2. DGC owns and operates the Great Plains Synfuels plant (the “**Synfuels Plant**”) located approximately 5 miles north of Beulah, North Dakota. The **Synfuels Plant** produces synthetic natural gas and associated by-products and co-products related to the coal gasification process employed to make synthetic natural gas.
3. In connection with the operation of the Synfuels Plant, DGC has constructed, owns and operates a 205-mile pipeline that transports carbon dioxide and a natural gas pipeline that transports synthetic natural gas (“**SNG**”) from the Synfuels Plant for a distance of 34 miles.

#### (Size and Type, and Integrity of Facility)

4. The pipeline would be a ten-inch nominal size diameter API 5L X52 steel natural gas pipeline with a minimum 0.365 inch wall thickness. The maximum operating pressure will be at 1440 pounds per square inch. The maximum design flow rate will be 125 million cubic feet per day. In addition to the pipeline itself, DGC would also construct various valves and instrumentation, a pig launcher and receiver for use while performing pipeline inspections, a filter/separator vessel for capturing debris or liquids present in the gas stream, and two meters for measuring gas flow.
5. The total estimated cost of the project is \$6.5 million.

6. DGC affirms that the design, construction and operation of the pipeline would be in all respects compliant with the United States Department of Transportation regulations governing the transportation of natural gas as prescribed under 49 CFR Part 192 - Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards.

(Purpose of and Need for Facility)

7. The purpose of the proposed pipeline is to provide Basin Electric with access to natural gas for use in periodic start-up activities at the Antelope Valley Station electric generating facility to achieve compliance with the Electric Generating Units Mercury and Air Toxics Standards (“**EGU MATS**”) Rule promulgated by the Environmental Protection Agency (“**EPA**”) in February, 2012. The proposed pipeline is the most efficient, cost-effective method to enable AVS to achieve compliance with the EPA rule and will have the least impact reasonably possible upon the environment, future development and use of the area and human health and welfare in the vicinity of the proposed route.

(Study of Route and Corridor)

8. DGC/Basin Electric staff sent letters requesting review and comment on the Project to the designated state agencies and officers listed in NDAC 69-06-01-05, as well as to the various federal and county agencies and officials. The following county, state and federal agencies provided written comments regarding the Project: United States Army Corps of Engineers, U.S. Fish and Wildlife Service, Natural Resources Conservation Service, North Dakota State Historical Society, North Dakota Game and Fish Department, North Dakota State Health Department, North Dakota State Water Commission, North Dakota Parks and Recreation Department and Mercer County. No objections to the corridor or route were raised by the Agencies providing comments.

9. A wetland and waterbody survey was conducted along the proposed corridor. Three wetlands and three waterbodies (stream crossings) were mapped. Waterbodies included a concrete lined canal as well as two other drainages. All wetland and waterbodies crossed by the proposed route would be avoided by using the Horizontal Directional Drilling (HDD) construction method.

10. A tree and shrub inventory has been completed in the proposed corridor. A total of 157 trees and shrubs were counted within the boundary of the corridor.

11. Class I (file search) and Class III (pedestrian) cultural resource surveys were conducted along the proposed route and corridor. The survey area consisted of a 100 ft. wide corridor approximately centered on the proposed route centerline. In addition, areas identified for pipe string out and material laydown were also surveyed. No new prehistoric or historic sites were identified during the Class III surveys. An abandoned farmstead was previously recorded as site 32ME767. The ND SHPO, in a letter dated December 21, 2012, recommended no avoidance of the site and issued a *No Historic Properties Affected* determination for the Project. Further, it is unlikely that paleontological resources would be affected by the project.

12. No exclusion areas were identified in the Proposed Corridor.

13. Avoidance areas, including a cultural resource site crossing the corridor and route, and two businesses within 500 feet are present along the route.
14. One previously recorded cultural resource site (32ME767) is located within the Project area. While the site was greater than 50 years old and was thus recorded during a prior cultural resource survey, not all sites are significant enough to be recommended for preservation. No avoidance of the site and no further work were recommended. The ND SHPO, in a letter dated December 21, 2012, concurred with these recommendations and issued a *No Historic Properties Affected* determination. Moving the corridor/route to the east would impact the existing County Road right-of-way, while moving the corridor/route to the west would impact future operations at Coteau. Avoiding the farmstead site would cause the route to become longer and more complex, resulting in additional impact and cost. Since the site does not require preservation and impacts would occur to other important infrastructure or facilities if the corridor/route is moved, there is no reasonable alternative to the corridor/route as proposed.
15. The DGC and AVS Plant sites are both within 500 feet of the pipeline route. Since the pipeline must connect to AVS, maintaining a 500 foot setback is not possible. Three of the buildings on the DGC plant site are within the 500 foot setback distance, but all are at least 400 feet from the route. DGC and Basin Electric do not have any objections to the route. Moving the route west, away from DGC, would impact future operations at Coteau. Further, the route would become longer and more complex, resulting in additional impacts and cost. Given the density of development along the corridor/route, there is no reasonable alternative to the route as it proposed.
16. No residences or schools are located within 500 feet of the proposed route.
17. DGC submitted substantial information in its Application and through its testimony that any significant adverse effects from the location, construction and maintenance of the transmission facility as they relate to the Selection Criteria listed at Section 69-06-08-1(3) North Dakota Administrative Code, will be at an acceptable minimum or will be managed and maintained at an acceptable minimum.
18. DGC submitted substantial information in its Application and through its testimony to demonstrate its commitment to maximize the benefits of the proposed transmission facility to meet the Policy Criteria set forth in Section 69-06-08-1(4), North Dakota Administrative Code.

(Measures to Mitigate Impact)

19. Prior to pipeline trenching, topsoil will be segregated before the pipeline trench is excavated. Upon completion of construction, subsoil will be first placed on the pipe, followed by replacement of the topsoil.
20. DGC will participate in the North Dakota One-Call Excavation System.
21. The pipeline will be included and managed in accordance with DGC's existing Emergency Response Plan.

22. All crossings of graded roads will be bored.
23. Wetland and waterbody surveys were conducted along the proposed corridor/route. No impacts to the wetlands are anticipated as a result of project construction. DGC will provide a 50 ft. buffer zone around wetlands, whenever feasible, to prevent impacts; wetland areas along the pipeline route would be avoided using HDD methods. DGC will implement mitigation measures to minimize indirect impacts to surface water and wetland resources, such as erosion and sedimentation control Best Management Practices. DGC will require its contractor to secure required storm water permits for the project from the North Dakota Department of Health.
24. DGC agreed to comply with the Tree and Shrub Mitigation Specifications attached to this Order. A tree and shrub inventory has been completed in the proposed corridor. A total of 157 trees and shrubs were counted within the boundary of the corridor. It is recognized that this inventory area represents an area larger than would be impacted by construction (e.g., HDD bore areas are included, survey corridor wider than construction corridor, etc.). The tree and shrub inventory will be refined once construction has been completed.
25. Construction would take place in late summer or fall, thereby avoiding any impacts to nesting the migratory birds.
26. An Unanticipated Discovery Plan (“UDP”) detailing the procedures to be implemented if cultural resources or human remains are discovered during construction has been prepared for the project.

(Statutory Findings)

27. There will be no significant long-term irreversible effects to the environmental or to cultural resources by construction of this pipeline.
28. The project will have no significant impact on fish and wildlife resources and no endangered or threatened plant or animal species are known to occupy the proposed route.
29. The Commission finds the location, construction, and operation of the Pipeline will produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota.
30. The Commission finds the proposed project compatible with environmental preservation and the efficient use of resources.
31. The Commission finds that the proposed project minimizes adverse human and environmental impact while ensuring continuing system reliability and integrity, and ensuring that energy needs are met and fulfilled in an orderly and timely fashion.
32. The Commission finds the proposed project is of such length, design, location and purpose that it will produce minimal adverse effects, so that procedures and time schedules may be waived.

From the foregoing Findings of Fact, the Commission now makes its:

### **Conclusions of Law**

1. The Commission has jurisdiction over the applicant, DGC and over the subject matter of this application under North Dakota Century Code Chapter 49-22.
2. The proposed pipeline is a transmission facility as defined in North Dakota Century Code Section 49-22-03(12).
3. The location, construction, and operation of the pipeline will produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota.
4. The location, construction and operation of the pipeline are compatible with environmental preservation and the efficient use of resources.
5. The pipeline will minimize adverse human and environmental impact while ensuring continuing system reliability and integrity and ensuring that energy needs are met and fulfilled in an orderly and timely fashion.
6. The project is of such design and location that it will produce minimal adverse effects, as defined under North Dakota Century Code Section 49-22-07.2.
7. It is appropriate for the Commission to waive those certain procedures and time schedules as requested in the Application and provided under North Dakota Century Code Section 49-22-07.2.

From the foregoing Findings of Fact and Conclusions of Law, the Commission now issues its:

### **Order**

The Commission orders:

1. DGC's application for a waiver of procedures and time schedules is granted.
2. Certificate of Corridor Compatibility Number \_\_\_\_ is issued to DGC, designating a corridor for its proposed pipeline project.
3. Route Permit Number \_\_\_\_ is issued to DGC, granting authority to construct and operate a 10-inch natural gas pipeline in Mercer County.
4. The Certificate of Corridor Compatibility Number \_\_\_\_ and Route Permit Number \_\_\_\_ are effective for the life of the pipeline, but are subject to modification by order of the Commission if deemed necessary to further protect the public or the environment.

5. DGC must obtain approval from the Commission prior to any changes in the facility route or structure locations.
6. DGC shall comply with the rules and regulations of all other agencies having jurisdiction over any phase of the proposed pipeline, shall obtain all other necessary licenses and permits, and shall provide copies of all licenses and permits to the Commission.
7. DGC shall conduct a preconstruction conference prior to the commencement of any further construction, which must include a DGC representative, its construction supervisor, and a representative of Commission staff to ensure that DGC fully understands the conditions set forth in the Commission's order.
8. DGC shall inform the Commission of its intent to start construction on the pipeline prior to the commencement of construction, report to the Commission on the date construction has started, and once construction has started, it shall keep the Commission updated on construction activities on a weekly basis.
9. DGC shall construct and operate the pipeline in the manner described in its application, in any late filed exhibits and supplemental materials, and in accordance with all applicable safety requirements.
10. The pipeline shall be buried to a minimum depth from the ground surface to the top of the pipe of 48 inches in rangeland and 48 inches at the bottom of the ditch for road crossings.
11. All crossings of graded roads shall be bored unless the responsible governing agency specifically permits DGC to open cut the road.
12. The width of clear cuts through any wooded areas and shelterbelts shall be kept at a maximum of 50 feet where possible.
13. DGC shall promptly report to the Commission the presence in the permit area of any critical habitat of threatened species, endangered species, bald eagles, or golden eagles that DGC becomes aware of and which were not previously reported to the Commission.
14. Further construction must be suspended when weather conditions are such that construction activities will cause irreparable damage, unless adequate protection measures approved by the Commission are taken.
15. If any cultural resource, paleontological site, archeological site, historical site, or grave site is discovered during construction, it must be marked, preserved and protected from further disturbances until a professional examination can be made by the State Historical Society, a report of such examination is filed with the Commission, and clearance to proceed is given by the SHPO and the Commission.

16. At least six inches of topsoil (where available) over and along trench areas where cuts will be made must be stripped and segregated from the subsoil. Any area on which excavated subsoil will be placed must also be stripped of topsoil. After backfilling is completed, and excess subsoil must be placed over the excavation area, blending the grade into existing topography. Topsoil must be replaced over areas from which it was stripped only after the subsoil is replaced.

17. Reclamation and clean up along the right-of-way must be continuous and coordinated with construction.

18. All pre-existing roads and lanes used during any further construction must be restored to a condition that will accommodate their previous use, and areas used as temporary roads or working areas during construction must be restored to their original condition.

19. Reclamation, fertilization, and reseeding are to be done by DGC according to the Natural Resources Conservation Service recommendations, unless otherwise specified by the landowner and approved by the Commission.

20. DGC shall comply with the Tree and Mitigation Specifications attached to this order.

21. DGC shall work to mitigate any increase in television and residential radio interference that results from the route of the pipeline.

22. DGC shall provide the Commission with a hard copy of the facility alignment drawings with alignment data showing the facility as built (hardcopy and electronic versions), and an electronic version of the as-built facility that can be imported into ESRI GIS mapping software within six months of the completion of construction.

23. DGC's obligation for reclamation and maintenance of the right-of-way will continue throughout the life of the pipeline.

24. The authorizations granted by the corridor certificate and route permit are subject to modification by order of the Commission if deemed necessary to further protect the public or the environment.

## **PUBLIC SERVICE COMMISSION**

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Brian Kalk

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Randy Christmann

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Julie Fedorchak

## Case No. PU-13-22

### Tree and Shrub Mitigation Specifications

#### Inventory

1. Trees and shrubs anticipated to be cleared, including those that are considered invasive species or noxious weeds (e.g., *Caragana arborescens*, *Elaeagnus angustifolia*, *Rhamnus cathartica*, *Tamarix chinensis*, *T. parviflora*, *T. ramosissima*, *Ulmus pumila*), shall be inventoried before cutting. The inventory shall record the location, number, and species of trees and shrubs.
2. In windbreaks, shelterbelts and other planted areas, trees or shrubs anticipated to be cleared, regardless of size, shall be inventoried for replacement.
3. In native growth areas, trees anticipated to be cleared that are 1 inch diameter at breast height ("dbh") or greater shall be inventoried for replacement.
4. In native growth areas, shrubs anticipated to be cleared in the permanent right-of-way shall be inventoried for replacement.
5. In native growth areas outside the permanent right-of-way, shrubs shall be cut flush with the surface of the ground, taking care to leave the naturally occurring seed bank and root stock intact. If soil disturbance is necessary, the native topsoil shall be preserved and replaced after construction. Shrubs shall be allowed to regenerate naturally where native topsoil is preserved and replaced. Where native topsoil is not preserved and replaced, shrubs anticipated to be cleared shall be inventoried for replacement.
6. In native growth areas, trees and shrubs may be inventoried by actual count or by sampling method that will properly represent the woody vegetation population. A sampling plan developed by the company, filed with the North Dakota Public Service Commission (NDPSC) and approved prior to the start of construction shall define the sampling method to be used for trees, for tall shrubs and for low shrubs. The data from the sample plots shall be extrapolated to the total acreage of the wooded area to be cleared to determine the species and quantity of trees and shrubs to be replaced.

#### Clearing for Construction

7. Trees and shrubs shall be selectively cleared, leaving mature trees and shrubs intact where practical.
8. The width of clear cuts through windbreaks, shelterbelts and all other wooded areas shall be limited to 50 feet or less unless otherwise approved by the NDPSC.

9. If the area of trees or shrubs actually cleared differs from the area inventoried, the difference in number of trees and shrubs to be replaced shall be noted on the inventory.

### **Replacement**

10. Prior to tree/shrub replacement, documentation identifying the number and variety of trees removed as well as the mitigation plan for the proposed number, variety, type, location and date of replacement plantings shall be filed with the NSPSC for approval.
11. Tree replacement shall be on a 2 to 1 basis with 2-year-old saplings. Shrub replacement shall be on a 2 to 1 basis with stem cuttings.
12. Trees and shrubs shall be replaced by the same species or similar species suitable for North Dakota growing conditions as recommended by the North Dakota Forest Service.
13. Tree and shrub replacement shall not be conducted within a 20 to 30 foot wide path over the pipeline to facilitate visual inspections of the right-of-way in accordance with U.S. Department of Transportation safety regulations.
14. Landowners shall be given the option of having replacement trees/shrubs planted off the right-of-way on the landowner's property or waiving that requirement in writing and allowing those replacement trees/shrubs to be planted at alternative locations.
15. At the conclusion of the project, documentation identifying the actual number, variety, type, location and date of the replacement plantings shall be filed with the NDPSC.
16. Tree/shrub replacements shall be inspected once a year for three years, on about the anniversary of the plantings, and, on or shortly before October 1 of each year, a report shall be submitted to the NDPSC documenting the condition of replacement planting and any woodlands work completed. If after three years from the anniversary of the plantings the survival rate is less than 75%, the NDPSC may order additional planting(s).