

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

BOE Pipeline, LLC
16-inch Crude Oil Pipeline – Dunn and McKenzie Counties
Siting Application

Case No. PU-16-094

[PROPOSED] FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

June ____, 2016

Appearances

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

Lawrence Bender and Danielle M. Krause, Attorneys at Law, Fredrikson & Byron, P.A.,
1133 College Drive, Suite 1000, Bismarck, North Dakota 58501, on behalf of BOE Pipeline,
LLC.

Zachary E. Pelham, Special Assistant Attorney General, Legal Counsel for Public Service
Commission, 314 E. Thayer Avenue, Bismarck, North Dakota 58502.

Timothy J. Dawson, Administrative Law Judge, Office of Administrative Hearings, 2911
North 14th Street, Suite 303, Bismarck, North Dakota 58503.

Preliminary Statement

On February 24, 2016, BOE Pipeline, LLC (“BOE”), filed with the North Dakota Public Service Commission (“Commission”) a consolidated application for a Certificate of Corridor Compatibility and Route Permit (“Application”) for an approximately 41.8-mile, 16-inch crude oil pipeline and associated facilities in Dunn and McKenzie Counties, North Dakota (the “Project”). The Project will transport crude oil from a location approximately 8 miles east of Johnson’s Corner, North Dakota to the existing BOE terminal located southwest of Killdeer, North Dakota.

Also on February 24, 2016, BOE filed an application for waiver of procedures and time schedules established under North Dakota Century Code sections 49-22-07.2, 49-22-08, 49-22-08.1, 49-22-13, and North Dakota Administrative Code chapter 69-06-06 and section 69-06-01-02, requiring separate filings and applications for a certificate of corridor compatibility and a route permit, separate notice of such applications, separate hearings on such applications, and certain time schedules.

On March 23, 2016, the Commission deemed BOE’s Application complete and issued a Notice of Filings and Public Hearing (“Notice”) scheduling a hearing for May 11, 2016, at 9:00 a.m. MDST, 10:00 a.m. CST, at Killdeer City Hall, 165 Railroad Street SE, Killdeer, North Dakota 58640.

The Notice identified the following issues to be considered with respect to the application for waiver of procedures and time schedules:

1. 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?
2. Is it appropriate for the Commission to waive any procedures and time schedules as requested in the application?

The Notice identified the following issues to be considered with respect to the Application:

1. Will the location 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?

On May 11, 2016, the hearing was held as scheduled.

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

1. BOE is a Kansas limited liability company authorized to do business in the State of North Dakota, as evidenced by the corporate papers filed with the Commission on February 23, 2016, in Case No. PU-16-093.

Need for the Facility

2. BOE determined there is a need for the Project because the Project will provide critical market access to existing crude oil producers and future production sites. The Project will transport crude oil from a location near Johnson's Corner to a BOE terminal in Killdeer, North Dakota, which connects to the BOE Rail Hub. The connection with the BOE Rail Hub will provide pipeline access for multiple producers and marketers to destinations served by local rail instead of transporting the crude oil by tanker trucks.

Size, Type, and Preferred Location of Facility

3. The Project consists of approximately 41.8 miles of 16-inch steel pipeline and associated facilities to be located in Dunn and McKenzie Counties, North Dakota.

4. The Project includes approximately 41.8 miles of 16-inch steel pipeline, which will originate at a location 8 miles east of Johnson's Corner, North Dakota, and terminate at the existing BOE terminal located southwest of Killdeer, North Dakota. The existing BOE terminal in Killdeer, North Dakota, is connected to the BOE Rail Hub located southwest of Dickinson, North Dakota.
5. The proposed pipe will have a 16-inch outside diameter and wall thickness of 0.281-inches for line pipe and 0.344-inches for bore pipe.
6. The maximum operating pressure of the pipeline will be 1,480 pounds per square inch. The maximum design flow rate of the Project will be 165,000 barrels of oil per day.
7. Above-ground facilities will consist of nine mainline valves, one pig launcher and receiver, pipeline markers, and signs.
8. The design, construction, and operation of the pipeline will be in accordance with the United States Department of Transportation ("USDOT") regulations governing the transportation of crude oil, including USDOT regulations as set forth in 49 Code of Federal Regulations Part 195.
9. The total anticipated cost of the Project is approximately \$55 million.

Study of Preferred Location

10. BOE evaluated a five-mile-wide study area centered on the proposed route ("Study Area") for exclusion and avoidance areas, including federal and state parks, protected and sensitive plants and animals, wildlife, and civil and social structures such as recreational areas, rural homes, and farmsteads.
11. BOE conducted field surveys on a typically 200-foot-wide area centered on the proposed route ("Survey Area") to inventory soils, land use, vegetation, wetlands and waterbodies, noxious weeds, and wildlife, including protected species and critical habitats.
12. BOE conducted a Class I cultural resource literature search on the Study Area and a Class III cultural resource inventory on the Survey Area.
13. The following agencies were contacted by BOE regarding the Project, pursuant to North Dakota Administrative Code § 69-06-01-05, to which comments were received: the United States Department of Agriculture – Natural Resources Conservation Service ("NRCS"); United States Department of Defense – Army Corps of Engineers, North Dakota Regulatory Office ("USACE"); North Dakota Department of Commerce; North Dakota Department of Health ("NDDOH"); North Dakota Game and Fish Department ("NDGFD"); North Dakota Parks and Recreation ("NDPR"); and the North Dakota State Water Commission.
14. In a response dated June 12, 2015, the NRCS noted that the Project was not supported by federal funding; therefore, the Farmland Protection Policy Act does not apply and no further action was required. The agency also recommended that impacts on wetlands should be avoided, and if wetland avoidance is not feasible then certain measures should be taken.

15. In a response dated June 12, 2015, the North Dakota Department of Commerce provided clearance in conformance with the North Dakota Federal Program Review System for the Project.

16. In a response dated June 16, 2015, the USACE noted that a Section 10 permit would be required if the Project results in work over, in, or under navigable waters. A Section 404 permit would be required to regulate the discharge of dredged or fill materials into waters of the United States.

17. In a response dated June 18, 2015, the NDPR indicated that they conducted a database search for plant and animal species of concern and significant ecological communities and other lands and projects that are owned or managed by the NDPR: state parks, state nature preserves, Land and Water Conservation Fund projects, Recreational Trails Program projects, and Scenic Byways and Backways. The North Dakota Natural Heritage Inventory biological conservation database was also accessed to list the occurrences found within or adjacent to the project area. The NDPR deferred further comments regarding animal species to the NDGFD and the U.S. Fish and Wildlife Service (“USFWS”).

18. In a response dated June 26, 2015, the NDDOH recommended that measures be taken to minimize fugitive dust emissions and that associated complaints be responded to in an efficient and effective manner; that care be taken near waters of the state to minimize impacts to water bodies from disturbance, reclamation, and oil, gas, or fuel spills associated with construction equipment; that a storm water discharge permit may be necessary; that construction should not take place during early morning or late evening hours; that noise levels be minimized by use of mufflers on construction equipment; that spills be restricted from reaching surface waters; that a spill response plan be developed; and that the pipeline be properly monitored for leaks.

19. In a response dated June 29, 2015, the North Dakota State Water Commission noted that there are no floodplains identified and/or mapped in the Project area and no sole-source aquifers designated in North Dakota. The State Water Commission stated that it is the duty of BOE to contact all local, state, and federal agencies for required approvals, permits, and easements, and that all waste materials associated with the Project must be disposed of properly. The State Water Commission also noted that there may be observation/monitor water wells or gaging stations in the area, with impacts by the Project to these structures to be reported.

20. In a response dated June 30, 2015, the NDGFD indicated that various wetlands are located within the proposed project corridor, and recommended that steps should be taken to protect any wetlands that cannot be avoided, that no alterations should be made to existing drainage patterns, that above-ground appurtenances should not be placed in wetland areas, and that unavoidable destruction or degradation of wetland acres should be mitigated in kind. The NDGFD indicated that the Project should not have any significant adverse effects on wildlife or wildlife habitat, including species of concern, provided the recommendations of the NDGFD are implemented where appropriate and disturbed areas are reclaimed to pre-project conditions.

Siting Criteria

21. The Commission has established criteria pursuant to North Dakota Century Code Section 49-22-05.1 to guide the Commission in evaluating the suitability of granting a certificate of corridor compatibility and route permit. The criteria, as set forth in North Dakota Administrative Code Section 69-06-08-02, are classified as Exclusion Areas, Avoidance Areas, Selection Criteria, and Policy Criteria.
22. BOE evaluated the Project for the Exclusion, Avoidance, Selection, and Policy criteria of the Commission.
23. An Exclusion Area may not encompass more than fifty percent of a corridor width unless there is no reasonable alternative. An Exclusion Area must be excluded in the consideration of a route for a transmission facility. A buffer zone of a reasonable width to protect the integrity of an Exclusion Area must be included in the siting of the transmission facility.
24. A United States Forest Service designated wilderness area is present within the five-mile-wide Study Area, but is not within the Survey Area and is not crossed by the route.
25. The Killdeer Battlefield State Historic Monument is located within the five-mile-wide Study Area, but is not within the Survey Area and is not crossed by the route.
26. The Killdeer playground, golf course, tennis court and softball fields are located within the five-mile-wide Study Area, but are not within the Survey Area and are not crossed by the route.
27. The original proposed Project route crossed through potential habitat for the Dakota Skipper. The Project was re-routed to avoid impacts to potential habitat for the Dakota Skipper, and fencing will be installed to prevent accidental disturbances of identified potential habitat adjacent to the Project.
28. No other Exclusion Areas are present within the Survey Area.
29. An Avoidance Area is a geographic area that may not be considered in the routing of a transmission facility unless the application shows that, under the circumstances, there is no reasonable alternative. In determining whether an Avoidance Area should be designated for a transmission facility, the Commission may consider, among other things, the proposed management of adverse impacts, the orderly siting of facilities, system reliability and integrity, the efficient use of resources, and alternative routes.
30. A transmission facility route may not be sited within an Avoidance Area unless the applicant demonstrates that under the circumstances there is no reasonable alternative. Economic considerations alone are not sufficient to establish no reasonable alternative.

31. Avoidance areas were avoided where possible. However, certain Avoidance areas will be impacted as part of the Project; impacts are not anticipated to exceed approximately 11% of the total Project 200-foot-wide corridor.

32. The route will cross the Little Missouri National Grassland, which has been designated as a national grassland. BOE testified that upon completion of construction activities, the topography of the Project route would be returned to its preconstruction contours and vegetation cover would be replaced, so no long term impacts are anticipated. Alternative routes were considered, but are not sufficient. Areas to the west would provide significant topographical challenges and are designated as United States Forest Service wilderness areas. Areas to the east are owned by the Three Affiliated Tribes; BOE was unable to negotiate a right-of-way agreement to cross lands owned by the Three Affiliated Tribes. The BLM is the ultimate authority for granting this project ROW across BLM and USFS lands; however, the USFS is a cooperating agency on the project and has been involved in pertinent discussions. A meeting was held between the BLM, USFS and BOE on February 12, 2015, at which point it was determined that BOE could pursue a route that crosses USFS lands. The Commission finds there is no reasonable alternative to the proposed route crossing this Avoidance Area.

33. The route will cross the Little Missouri River, which has been designated a State Scenic River. BOE testified that the crossing will be bored in order to protect the integrity of this Avoidance Area. The Little Missouri River stretches from near the southwest corner of North Dakota's border with South Dakota to Lake Sakakawea. The Commission finds there is no reasonable alternative to the proposed route crossing this Avoidance Area.

34. Historical resources which are not specifically designated as exclusion or avoidance areas are present within the Survey Area and Study Area. The original proposed route crossed through areas containing eligible cultural resources, but was relocated to the current proposed Route to avoid impacting known eligible cultural resources. Newly identified archeological sites were identified within the Study Area, Survey Area, and will be crossed by the Route; the Project will not impact any previously identified recommended eligible cultural resources. A Memorandum of Agreement and testing plan will be developed in consultation with Federal, State, and Tribal entities to ensure that any impacts to newly identified recommended eligible cultural resources are mitigated in accordance with professional and industry standards. Under the Memorandum of Agreement, buffer zones will be implemented around these areas to protect their integrity. Cultural monitors will also be present during earth moving activities. Avoidable cultural resources will be buffered by 50 feet on state and private lands and by 100 feet on federal lands. The Commission finds there is no reasonable alternative to the proposed route crossing this Avoidance Area, and appropriate buffer zones will be implemented to protect the integrity of historical resources.

35. The Project Route will cross through five landslide areas. Additional routes were considered; however, not all landslide areas could be avoided due to topography constraints, constructability concerns, and the large number of landslide areas in the region. During construction, a combination of sand bag and foam trench breakers will be installed in geologically unstable areas to limit the saturation pressure within the trench, which will

minimize the risk of potential landslides in the area. The Commission finds there is no reasonable alternative to the proposed route crossing this Avoidance Area.

36. Wetland surveys were completed for the proposed route. Wetlands and waterbodies are present within the Survey Area and will be crossed by the route. BOE will take steps to protect wetlands and waterbodies, and no permanent impacts to wetlands or waterbodies are anticipated.

37. In accordance with the Commission's Selection Criteria, a transmission facility route shall be approved if it is demonstrated that any significant adverse effects that will result from the location, construction, and maintenance of the transmission facility will be at an acceptable minimum or managed and maintained at an acceptable minimum. BOE has analyzed the impacts of the Project in relation to all of the relevant Selection Criteria. The Project will have no significant adverse effects on the Commission's Selection Criteria.

38. In accordance with the Commission's Policy Criteria, preference may be given to an applicant demonstrating certain benefits of the transmission facility. BOE has analyzed the relevant policy criteria and has committed to: designing, constructing, and operating the pipeline in accordance with all applicable federal, state, and local laws and regulations; energy conservation through the facility's location, process, and design; training and utilizing available labor in the state; constructing the Project to take advantage of economies of scale; achieving capacity in the most minimally intrusive and most efficient way possible; and coordinating with state and local officials. BOE submitted evidence to demonstrate its commitment to maximize the benefits of the proposed transmission facility to the extent possible so as to meet the Policy Criteria.

Measures to Minimize Impact

39. BOE testified that a supervisory control and data acquisition system ("SCADA") will be installed as part of the Project, and operations will be continuously monitored by a control center located in Bismarck, North Dakota.

40. BOE testified that it will conduct regular pipeline monitoring, periodic inspection, internal inspections, and aerial patrol inspections as required by the Department of Transportation regulations ("DOT").

41. BOE testified that 100% of all field welds will be tested.

42. BOE testified that it will participate in the North Dakota One-Call notification system.

43. BOE testified that the Little Missouri River will be bored where it is crossed by the route to minimize environmental impacts. The estimated depth of the bore beneath the river channel will be a minimum of 20 feet.

44. BOE testified that a Memorandum of Agreement and testing plan will be developed in consultation with Federal, State, and Tribal entities to ensure that any impacts to newly identified recommended eligible cultural resources are mitigated in accordance with professional and industry standards. Under the Memorandum of Agreement, buffer zones will be implemented around these areas to protect their integrity. Cultural monitors will also be present during earth

moving activities. Avoidable cultural resources will be buffered by 50 feet on state and private lands and by 100 feet on federal lands.

45. The design, construction, and operation of the Project will be in accordance with the United State Department of Transportation regulations governing the transportation of crude oil, including U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration regulations as set forth in 49 C.F.R. Part 195.

46. BOE has agreed to a number of steps to mitigate the impact of the Project, as indicated by the executed Certification Relating to Order Provisions – Transmission Facility Siting, with accompanying Tree and Shrub Mitigation Specifications, which is incorporated by reference and attached to this Order.

47. BOE has indicated that all easements have been voluntarily acquired for the Route.

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

Conclusions of Law

1. The Commission has jurisdiction over BOE and the subject matter of the Application under Chapter 49-22 of the North Dakota Century Code.

2. BOE is a utility as defined in Section 49-22-03(13) of the North Dakota Century Code.

3. The Project is a transmission facility as defined in North Dakota Century Code Section 49-22-03(12).

4. The location, construction, and operation of the Project will produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota.

5. The location, construction, and operation of the Project is compatible with the environmental preservation and the efficient use of resources.

6. The Project 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.

7. The Project is of such design and location that it will produce minimal adverse effects, in accordance with Section 49-22-07.2 of the North Dakota Century Code.

8. It is appropriate for the Commission to waive those certain procedures and time schedules as requested in the application for waiver of procedures and time schedules and pursuant to North Dakota Century Code Section 49-22-07.2 and North Dakota Administrative Code Chapter 69-06-06.

From the foregoing Findings of Fact and Conclusions of Law, the Commission makes the following order:

Order

The Commission orders:

1. BOE's application for a waiver of procedures and time schedules is granted.
2. Certificate of Corridor Compatibility No. ___ is issued to BOE Pipeline, LLC designating a corridor for the construction, operation, and maintenance of approximately 41.8 miles of 16-inch diameter crude oil pipeline and associated facilities in Dunn and McKenzie Counties, North Dakota. The Corridor will consist of a typical 200-foot-wide corridor centered on the pipeline route, as depicted in Figure A-1 of the Application.
3. Route Permit No. ____ is issued to BOE Pipeline, LLC designating a route for the construction, operation, and maintenance of approximately 41.8 miles of 16-inch diameter crude oil pipeline and associated facilities in Dunn and McKenzie Counties, North Dakota. The designated route for this purpose is depicted in Figure A-1 of the Application.
4. The May 10, 2016, Certification Relating to Order Provisions – Transmission Facility Siting (“Certification”), with accompanying Tree and Shrub Mitigation Specifications, is incorporated by reference and attached to this Order.
5. Prior to BOE Pipeline, LLC commencing construction on the portion of the Project for which the documents are required, BOE shall file with the Commission the following, or similar, documentation: Class III Cultural Resources Inventory Report; documentation from the SHPO indicating concurrence with the plans of BOE with respect to cultural resources; wildlife survey and habitat assessment; tree/shrub survey; noxious weed survey; USFWS Biological Assessment; Environmental Assessment; and any construction and reclamation plans for the Project.

**State of North Dakota
Public Service Commission**

**Randy Christmann
Commissioner**

**Julie Fedorchak
Chairman**

**Brian Kalk
Commissioner**