

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

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

Case No. PU-16-94

FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

August 17, 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 as counsel for the Public Service Commission, 600 East Boulevard Avenue, Bismarck, North Dakota 58505.

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 applications for a certificate of corridor compatibility and route permit concerning approximately 41.8 miles of 16-inch outside diameter pipeline and associated facilities for the transmission of crude oil (Project). The Project will be located in Dunn and McKenzie Counties, North Dakota.

Also on February 24, 2016, the Company filed an application for waivers of procedures and time schedules established under North Dakota Century Code sections 49-22-07.2, 49-22-08, 49-22-08.1 and 49-22-13, and North Dakota Administrative Code chapter 69-06-06 and section 69-06-01-02, requiring separate filings, separate notices, separate hearings and certain time schedules.

On March 23, 2016, the Commission found the applications for a certificate of corridor compatibility and a route permit complete. Also on March 23, 2016, the Commission issued a Notice of Filings and Notice of 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 applications for certificate of corridor compatibility and route permit:

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?

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

On June 10, 2016, the Company filed Late Filed Exhibit 7 consisting of an Amendment/Correction to Appendix B relating to bore locations and Late Filed Exhibit 8 consisting of a Memorandum Regarding the Avoidance Area Analysis.

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:

Findings of Fact

1. BOE is a Kansas limited liability company authorized to transact 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-16-93.
2. BOE testified that Progress Solutions, LLC, a subsidiary of KLJ Solutions Co., will operate the Project.

Size, Type, and Preferred Location of Facility

3. The Project will originate at an Area Custody Transfer meter location 8 miles east of Johnsons Corner, North Dakota. The Project will terminate at a BOE terminal located southwest of Killdeer, North Dakota. This terminal is connected by pipeline to the BOE Rail Hub located southwest of Dickinson, North Dakota.
4. The Project consists of 41.8 miles of 16-inch outside diameter pipe, nine mainline valve settings, one pipeline inspection gauge launcher and receiver, pipeline markers and signs.
5. The maximum capacity of the Project will be 165,000 barrels per day. The pipe wall thickness will be 0.281 inches where open-cut installation will occur and 0.344 inches where horizontal direct drilling will occur. The maximum operating pressure of the pipeline will be 1480 psig. The normal operating pressure is expected to be between 200 and 1440 psig.
6. The total anticipated cost of the Project is \$55 million.

Study of Preferred Location

7. BOE performed a desk top evaluation of a five-mile wide area centered on the proposed route for soils, land use, wetlands and waterbodies, trees and shrubs and protected species and critical habitats (Study Area).
8. BOE conducted a Class I cultural resource literature search on the Study Area.
9. BOE conducted a Class III cultural resource survey and a natural resource field survey on a 200-foot wide area centered on the proposed route (Survey Area). The natural resource field survey gathered information on soils, land use, vegetation, wetlands and waterbodies, noxious weeds, trees and shrubs, and wildlife, including protected species and critical habitats.
10. The following agencies were contacted by BOE and provided comments: 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. The Commission finds that these comments did not identify any significant adverse impacts resulting from the Project.
11. The Company has also been in contact with the United States Fish and Wildlife Service (USFWS), the United States Forest Service (USFS) and the United States Bureau of Land Management (BLM). Because the Project will cross both USFS lands and BLM lands, the Project is subject to the National Environmental Policy Act (NEPA)

and the Federal Mineral Leasing Act. BLM is the lead agency for the Project review. The Company is in the process of completing an Environmental Assessment which will be reviewed by the agencies. After review, the BLM would issue a finding of no significant impact (FONSI).

Siting Criteria

12. 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.

13. BOE evaluated the Project with respect to the Exclusion, Avoidance, Selection, and Policy criteria of the Commission.

14. A transmission facility route must not be sited within an Exclusion Area. Exclusion Areas may be located within a corridor, but at no given point may such an area or areas encompass more than fifty percent of the corridor unless there is no reasonable alternative.

15. 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.

16. 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.

17. 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.

18. 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. Fencing will be installed to prevent accidental disturbances of identified potential habitat adjacent to the Project. Where one section of the route borders Dakota Skipper habitat located on both sides of the route, the section will be bored to minimize environmental impacts.

19. No other Exclusion Areas are present within the Survey Area.

20. 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.

21. 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.

22. Certain Avoidance areas will be impacted by the Project.

23. The route will cross the Little Missouri National Grassland, managed by the BLM. An alternative route to the west would need to cross a United States Forest Service wilderness area. No construction is allowed in wilderness areas. An alternative route to the east would cross lands owned by the Three Affiliated Tribes. BOE was unable to negotiate a right-of-way agreement with the Three Affiliated Tribes. There is no reasonable alternative to crossing the Little Missouri National Grassland Avoidance Area. 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.

24. The route will also cross USFS land. The USFS is a cooperating federal agency 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 BLM is the ultimate authority for granting the Project access across both the BLM and USFS lands.

25. The route will cross the Little Missouri River, which has been designated a State Scenic River. Since the Little Missouri River stretches from near the southwest corner of North Dakota's border with South Dakota to Lake Sakakawea, there is no reasonable alternative to the proposed route crossing this Avoidance Area. BOE testified that the crossing will be bored in order to protect the integrity of this Avoidance Area. The estimated depth of the bore beneath the river channel will be a minimum of 20 feet and potentially as deep as 60 feet.

26. The Class III cultural resource survey identified four previously recorded cultural sites, 20 new cultural sites and eight isolated finds. The Class III study has not yet been finalized as the federal process requires that a Memorandum of Agreement and a testing plan 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. The Company testified that cultural monitors will be present during earth moving activities and cultural resource sites will be buffered by 50 feet on state and private lands and by 100 feet on federal lands. An Inadvertent Discovery Plan will also be developed to identify procedures for any additional finds that are uncovered during the construction process.

27. The route crosses through an area that is very landslide prone. The route was sited to avoid as many landslide areas as possible but, it was not possible to avoid four landslide areas. Alternative routes through these areas were considered but rejected due to topography constraints, constructability concerns, other pipelines in the area and landowner requests. During construction through the landslide areas, 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.

28. In accordance with the Commission's Selection Criteria, a transmission facility route shall be designated 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.

29. The impact to wetlands, woodlands and wooded areas is to be evaluated as part of the Commission's Selection Criteria. As a result, surveys were completed for the Survey Area. Wetlands and waterbodies will be crossed by the route. BOE will bore wetlands and waterbodies, and no permanent impacts to wetlands or waterbodies are anticipated. BOE will also bore woodlands and wooded areas to the extent possible to avoid impacts to these areas.

30. BOE has analyzed the impacts of the Project in relation to all remaining relevant Selection Criteria as well and has determined that no significant adverse impact will result from the location, construction and operation of the Project.

31. 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

32. 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 (PHMSA) regulations as set forth in 49 C.F.R. Part 195.

33. BOE testified that a supervisory control and data acquisition system will be installed as part of the Project, and operations will be continuously monitored by a control center located in Bismarck, North Dakota.
34. BOE submitted its existing PHMSA Emergency Response Plan as Exhibit 2 at the hearing. BOE will update this plan to include the Project.
35. BOE testified that 100 percent of all field welds will be tested.
36. BOE testified that it will participate in the North Dakota One-Call notification system.
37. BOE testified that the Project includes 87 bores that will cover 21 percent of the route.
38. BOE testified that no roads will be built as part of the Project construction.
39. BOE testified that a third party construction inspection group will be on site to include environmental and cultural monitors. The environmental monitor will track the trees and shrubs removed as well as oversee the control of any noxious weeds found.
40. BOE testified that it has Public Awareness Plans in place for working with landowners and county emergency planning groups.
41. 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.

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

Conclusions of Law

1. The Commission has jurisdiction over BOE Pipeline, LLC and the subject matter of these applications under North Dakota Century Code chapter 49-22.
2. BOE is a utility as defined in North Dakota Century Code section 49-22-03(13).
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, and, therefore, it is appropriate for the Commission to waive those certain procedures and time schedules as requested in the waiver application pursuant to North Dakota Century Code section 49-242-07.2.

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

Order

The Commission orders:

1. BOE Pipeline, LLC's application for a waiver of procedures and time schedules is granted.
2. Certificate of Corridor Compatibility No. 187 is issued to BOE Pipeline, LLC designating a corridor for the construction, operation, and maintenance of an approximately 41.8 mile 16-inch diameter pipeline and associated facilities for the transmission of crude oil in Dunn and McKenzie Counties, North Dakota. For purposes of the Certificate, the Corridor is 200-foot wide centered on the pipeline route designated in this order.
3. Route Permit No. 199 is issued to BOE Pipeline, LLC, designating a route in Dunn and McKenzie Counties, North Dakota, for the construction and operation of a 41.8 mile long crude oil pipeline. The designated route for this purpose is illustrated in maps included in Appendix A of BOE's Application (Hearing Exhibit 1).
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. To the extent there are any conflicts or inconsistencies between BOE's Application and the Certification, the Certification provisions control.
6. BOE is required to comply with the applicable laws, rules and or regulations in the event it desires to construct another or a different transmission facility than was specified in the application within the corridor granted in this proceeding.

7. BOE is required to comply with all applicable laws, rules and regulations of all other agencies having jurisdiction over any phase of the proposed Project.

8. Thirty days prior to commencing construction, the Company shall inform PHMSA of the intent to start construction.

9. Prior to commencing construction of any portion of the proposed Project, BOE shall obtain all other necessary licenses and permits for construction of such portion, and provide copies to the Commission prior to construction of that portion of the Project.

10. Prior to BOE Pipeline, LLC commencing construction BOE shall file with the Commission the following:

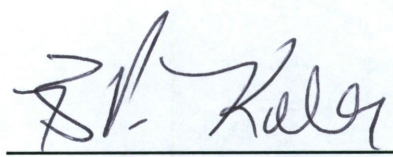
- A. Documentation of the Federal Process including:
- Class III Cultural Resources Inventory Report
 - Wildlife survey and habitat assessment
 - USFWS Biological Assessment
 - USFWS Environmental Assessment
 - Documentation not included in the above list that was filed with the BLM as part of the federal application process
 - The FONSI by the BLM
- B. State required documentation:
- SHPO concurrence with respect to cultural resources
 - Inventory of trees and shrubs
 - Inventory of noxious weeds
 - Construction and reclamation plans

11. If a spill by BOE Pipeline, LLC requires notification to any other state or federal agency, BOE Pipeline, LLC will also inform the Commission of such spill within 24 hours of occurrence by leaving a message at the Commission's Toll Free Number, with a follow-up email to the Commission's Executive Secretary.

PUBLIC SERVICE COMMISSION


Randy Christmann
Commissioner


Julie Fedorchak
Chairman


Brian P. Kalk
Commissioner

**PUBLIC SERVICE COMMISSION
STATE OF NORTH DAKOTA**

Certificate of Corridor Compatibility Number 187

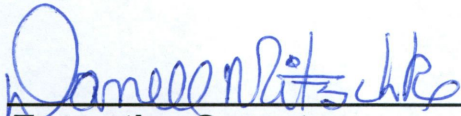
This is to certify that the Commission has designated a transmission facility corridor for BOE Pipeline, LLC for the construction, operation, and maintenance of approximately 41.8 miles of 16-inch outside diameter crude oil pipeline and associated facilities in Dunn and McKenzie Counties, North Dakota.

This certificate is issued in accordance with the Order of the Commission dated August 17, 2016 in Case No. PU-16-94 and is subject to the conditions and limitations noted in the Order.

Bismarck, North Dakota, August 17, 2016.

ATTEST:

PUBLIC SERVICE COMMISSION


Executive Secretary


Commissioner

**PUBLIC SERVICE COMMISSION
STATE OF NORTH DAKOTA**

Route Permit Number 199

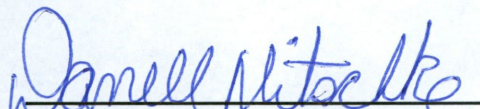
This is to certify that the Commission has designated a transmission facility route for BOE Pipeline, LLC for the construction, operation, and maintenance of approximately 41.8 miles of 16-inch outside diameter crude oil pipeline and associated facilities in Dunn and McKenzie Counties, North Dakota.


This permit is issued in accordance with the Order of this Commission dated August 17, 2016, in Case No. PU-16-94 and is subject to the conditions and limitations noted in the Order.

Bismarck, North Dakota, August 17, 2016.

ATTEST:

PUBLIC SERVICE COMMISSION


Executive Secretary


Commissioner

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

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

Case No. PU-16-094

CERTIFICATION RELATING TO ORDER PROVISIONS
TRANSMISSION FACILITY SITING

I am JOHN C WADSWORTH a representative of BOE Pipeline, LLC ("Company") with authority to bind it to requirements to be set forth by the Commission in its Order and I certify the following:

1. Company understands and agrees that any Certificate of Corridor Compatibility or Route Permit issued by the Commission will be subject to the conditions and criteria set forth in Chapter 49-22 of the North Dakota Century Code and Chapter 69-06-08 of the North Dakota Administrative Code, and that Company shall be responsible for compliance with this order and conditions and criteria set forth in the applicable laws and rules.
2. Company agrees to comply with the rules and regulations of all other agencies having jurisdiction over any phase of the transmission facility including all city, township, and county zoning regulations.
3. Company understands and agrees that it shall obtain all other necessary licenses and permits, and shall provide copies of all licenses and permits to the Commission prior to construction activity associated with the transmission facility that requires said license or permit.
4. Company understands and agrees that any Certificate of Corridor Compatibility or Route Permit issued by the Commission is subject to suspension or revocation and may, in an appropriate and proper case, be suspended or revoked for failure to comply with the Commission's order, the conditions and criteria of the certificate or subsequent modification, or failure to comply with the applicable statutes, rules, regulations, standards, and permits of other state or federal agencies.
5. Company agrees to maintain records that will demonstrate that it has complied with the requirements of the Commission's order issuing a Certificate of Corridor Compatibility or Route Permit, and that it will preserve these records for Commission inspection at any reasonable time upon reasonable notice.
6. Company understands and agrees that the authorizations granted by any Certificate of Corridor Compatibility or Route Permit issued by the Commission for

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the transmission facility are subject to modification by order of the Commission if deemed necessary to protect further the public or the environment.

Construction:

7. Company agrees to hold a preconstruction conference prior to commencement of any construction, which must include a Company representative, its construction supervisor, and a representative of Commission Staff, to ensure that Company fully understands the conditions set forth in the Commission's order.
8. Company understands and agrees that all cultural resource mitigation plans must be submitted to the North Dakota State Historic Preservation Office and approved prior to the start of any fieldwork and construction activity in the affected area.
9. Company understands and agrees that topsoil removal will begin when the Commission's third-party construction inspector is present at the Project site to observe that topsoil is properly removed and kept segregated from subsoil until replacement occurs. Company shall establish the date and time for the Commission's third-party construction inspector's topsoil removal oversight in the preconstruction conference.
10. Company agrees to inform the Commission and the Commission's third-party construction inspector of its intent to start construction on the transmission facility prior to the commencement of construction. Once construction has started, Company shall keep the Commission and the Commission's third-party construction inspector updated on construction activities on a monthly basis.
11. Company understands and agrees that the pipeline will be buried to a minimum depth from the ground surface to the top of the pipe of 48 inches in range land, 48 inches for cultivated land, 48 inches at the bottom of the ditch for road crossings, and 72 inches across undeveloped section lines.
12. Company understands and agrees that all topsoil, up to 12 inches, or topsoil to the depth of cultivation, whichever is greater, over and along trench areas where cuts will be made, must be carefully stripped and segregated from the subsoil. Any area on which excavated subsoil will be placed must also be stripped of topsoil. The stripped topsoil must not be stockpiled in natural drainages, and must be protected from water erosion. Care must be taken to protect topsoil from unnecessary compaction by heavy machinery. Unless otherwise approved by the Commission, topsoil must be removed before topsoil freezes in the late fall/ early winter to the point that frost inhibits proper soil segregation. After backfilling with subsoil is completed, any 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.

13. Company understands and agrees that all buried facility crossings of graded roads must be bored unless the responsible governing agency specifically permits Company to open cut the road.
14. Company understands and agrees that staging areas or equipment shall not be located on land owned by a person other than Company unless otherwise negotiated with landowners.
15. Company understands and agrees that 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 and a report of such examination is filed with the Commission and the State Historical Society.
16. Company understands and agrees that construction must be suspended when weather conditions are such that construction activities will cause irreparable damage to roads or land, unless adequate protection measures are taken by Company.
17. Company understands and agrees that the Commission has authority to stop Project construction activities in the event of a probable violation of the siting laws, siting rules, or applicable Commission Orders if, in the opinion of the Commission, construction activities are likely to result in irreparable or significant harm.

Restoration and Maintenance:

18. Company understands and agrees that it shall, as soon as practicable upon the completion of the construction of the transmission facility, restore the area affected by the activities to as near as is practicable to the condition as it existed prior to the beginning of construction.
19. Company understands and agrees that all pre-existing township and county roads and lanes used during construction must be repaired or restored to a condition that is equal to or better than the condition prior to the construction of the transmission facility and that will accommodate their previous use, and that areas used as temporary roads or working areas during construction must be restored to their original condition.
20. Company understands and agrees that reclamation, fertilization, and reseeding is to be done according to the Natural Resources Conservation Service recommendations, unless otherwise specified by the landowner and approved by the Commission.

21. Company will fulfil its obligation for reclamation and maintenance of the approved transmission facility right-of-way, transmission facility, and associated facilities continuing throughout the life of the transmission facility.
22. Company will repair all fences and gates removed or damaged during all phases of construction and operation of the transmission facility.
23. Company will repair or replace all drainage tile broken or damaged as a result of construction and operation of the transmission facility.
24. Company agrees to comply with the Tree and Shrub Mitigation Specifications, attached.
25. Company understands and agrees that it shall remove all waste that is a product of construction and operation, restoration, and maintenance of the site, and properly dispose of it on a regular basis.
26. Company understands and agrees that it shall provide any necessary safety measures for traffic control or to restrict public access to the transmission facility.

Communication with Landowners and PSC:

27. Company understands and agrees that, prior to beginning construction of the transmission facility at a location, it shall send a letter to each landowner with whom an easement was executed for that location specifying the name and phone number of the company representative who is responsible for receiving and resolving landowner issues for the life of the easement.
28. Company understands and agrees that it will file with the commission the name and phone number of the current company representative who is responsible for receiving and resolving landowner issues for the transmission facility. The company will update this information whenever there is a change to the current company representative for the life of all easements for the transmission facility.
29. Upon request, Company agrees to provide the Commission with engineering design drawings of the transmission facility prior to construction.
30. Company understands and agrees that it shall advise the Commission as soon as reasonably possible of any extraordinary events which take place at the site of the transmission facility, including injuries to any person.
31. Company agrees to report to the Commission, as soon as reasonably possible, the presence in the permit area of any critical habitat or threatened or endangered species of which Company becomes aware and which were not previously reported to the Commission.

32. Company understands and agrees that it shall inform the Commission in writing of any plans to modify the transmission facility or of any plans to modify the site plan for the transmission facility.
33. Company agrees to provide the Commission with both an electronic and a paper copy of the corridor approved by the Commission and the facility design specifications for the construction of the transmission facility showing the location of the transmission facility as built, and will provide this information within 3 months of the completion of the construction. Company also agrees to provide an electronic version of the corridor approved by the Commission and the facility design specifications for the construction of the transmission facility showing the location of the transmission facility as built that can be imported into ESRI GIS mapping software within 3 months of the completion of the construction. This electronic map data must be referenced to the North Dakota coordinate system of 1983, North and/or South zones US Survey feet (NAD 83) UTM Zone 13N or 14N feet (NAD 83), or geographic coordinate system (WGS 84) feet. The vertical data must be in the appropriate vertical datum for the coordinate system used. All submissions must specify the datum in which the data was developed.
34. Company shall notify the Commission as soon as reasonably possible if any damage, as defined by North Dakota Century Code Chapter 49-23, occurs to underground facilities during construction conducted under the certificate or permit issued in this proceeding. In the event of any damage to underground facilities, Company shall suspend construction in the vicinity of the damage until compliance with One-Call Excavation Notice System requirements under North Dakota Century Code Chapter 49-23 has been determined.

Route Adjustments Before or During Construction:

35. Company agrees to utilize the following procedures if Company seeks a route adjustment before or during construction of the pipeline, pursuant under N.D.C.C. §49-22-16.3:
36. Company will specifically identify which subsection of NDCC 49-22-16.3 it is requesting the adjustment under. Company will file the name and contact information for a key contact person for the purposes of notice and communication during the adjustment application.
37. **ROUTE ADJUSTMENT WITHIN DESIGNATED CORRIDOR, NO AVOIDANCE AREA AFFECTED:** Before conducting any construction activities for any adjustment to the designated route within the designated corridor under NDCC 49-22-16.3(1), the Company will file:

- a. Certification and supporting documentation affirming that construction activities will be within the designated corridor, will not affect any known exclusion or avoidance areas within the designated corridor;
- b. Certification and supporting documentation, including a map meeting the requirements of N.D. Admin. Code § 69-06-04-01(2)(n) identifying the designated corridor, route and the route adjustment;
- c. Certification that Company will comply with the Commission's order, law and rules designating the corridor and route.

38. ROUTE ADJUSTMENT WITHIN DESIGNATED CORRIDOR, AVOIDANCE AREA AFFECTED: Before adjusting the route of a gas or liquid transmission line under NDCC 49-22-16.3(2), within the designated corridor that may affect an avoidance area, and before conducting any construction activities for any adjustment to the designated route within the designated corridor, the Company will file:

- a. A specific description of the avoidance area expected to be impacted, including a map meeting the requirements of N.D. Admin. Code § 69-06-04-01(2)(n) identifying:
 - i. the designated corridor, route and the route adjustment;
 - ii. all exclusion and avoidance areas within the portion of the designated corridor containing the route adjustment
- b. Certification and supporting documentation affirming:
 - i. That construction activities will be within the designated corridor
 - ii. That construction activities will not affect any known exclusion area
- c. All field studies performed on the portion of the designated corridor containing the route adjustment;
- d. Specific information about any mitigation measures Company will take within the adjustment area;
- e. Certification that each owner of real property on which the adjustment is to be located and any applicable governmental entity with an interest in the same adjustment area do not oppose the adjustment;
- f. Certification that unless the Commission previously authorized the impact to the same avoidance area, that the utility has good cause and a specific reason to impact the avoidance area and a reasonable alternative does not exist;
- g. Certification that Company will comply with the Commission's order, law and rules designating the corridor and route.

Company acknowledges and agrees that:

1. Written authorization from the Commission for impacting the avoidance area is necessary prior to commencement of construction activity unless the Commission fails to act within ten working days of receipt of filing a complete adjustment application, in which case the adjustment is deemed approved.
2. The initiation of the ten working days begins upon receipt of a complete filing, to include Company's certifications, supporting documentation and maps. However, Commission may extend the ten working day provision if Company, in the person of the key contact referenced above, is informed of the reason additional time is necessary for extension and has no objection to an extension.

39. **ROUTE ADJUSTMENT OUTSIDE DESIGNATED CORRIDOR, NO AVOIDANCE AREA AFFECTED:** Before adjusting the route of a gas or liquid transmission line under NDCC 49-22-16.3(3), outside the designated corridor and not affecting any exclusion and avoidance area, before conducting any construction activities for any adjustment to the designated route outside the designated corridor, the Company will file:

- a. Certification and supporting documentation affirming that construction activities will not affect any known exclusion or avoidance areas,
- b. Certification and supporting documents stating the length of the proposed route outside of the corridor and a map meeting the requirements of N.D. Admin. Code § 69-06-04-01(2)(n) identifying the designated corridor, corridor adjustment, designated route and the route adjustment;
- c. Certification that each owner of real property on which the adjustment is to be located and any applicable governmental entity with an interest in the same adjustment area do not oppose the adjustment; and
- d. Detailed field studies indicating exclusion and avoidance areas for the proposed adjustment area; and
- e. Certification that Company will comply with the Commission's order, law and rules designating the corridor and route.

40. **ROUTE ADJUSTMENT OUTSIDE DESIGNATED CORRIDOR, AVOIDANCE AREA AFFECTED:** Before adjusting the route of a gas or liquid transmission line under NDCC 49-22-16.3(4), outside the designated corridor that may affect an avoidance area, and before conducting any construction activities for any adjustment to the designated route outside the designated corridor, the Company will file:

- a. A specific description of the avoidance area expected to be impacted, including a map meeting the requirements of N.D. Admin. Code § 69-06-04-01(2)(n) identifying:

- i. the designated corridor, corridor adjustment, route and the route adjustment;
- ii. all exclusion and avoidance areas within the adjustment area
- b. Certification that construction activities will not affect any known exclusion area;
- c. Certification that the utility has good cause and a specific reason to impact the avoidance area and a reasonable alternative does not exist within the designated corridor and route;
- d. Certification that each owner of real property on which the adjustment is to be located and any applicable governmental entity with an interest in the same adjustment area do not oppose the adjustment;
- e. Provide specific information about any mitigation measures Company will take within the adjustment area;
- f. Detailed field studies indicating exclusion and avoidance areas for the proposed adjustment area; and
- g. Certification that Company will comply with the Commission's order, law and rules designating the corridor and route.

Company acknowledges and agrees that:

- 1. Written authorization from the Commission for impacting the avoidance area is necessary prior to commencement of construction activity unless the Commission fails to act within ten working days of receipt of filing a complete adjustment application, in which case the adjustment is deemed approved.
- 2. The initiation of the ten working days begins upon receipt of a complete filing, to include Company's certifications, supporting documentation and maps. However, Commission may extend the ten working day provision if Company, in the person of the key contact referenced above, is informed of the reason additional time is necessary for extension and has no objection to an extension.

41. When applicable, Company may submit the field studies from the original application for the corridor and route provided they cover the adjustment area.

Dated this 06 day of May, 2016.

BOE PIPELINE, LLC

By *John C. Wadsworth*
JOHN C. WADSWORTH

Its COO

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

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

Case No. PU-16-094

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*), must be inventoried before cutting. The inventory must 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, must 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 must be inventoried for replacement.
4. In native growth areas, shrubs anticipated to be cleared in the permanent right-of-way must be inventoried for replacement.
5. In native growth areas outside the permanent right-of-way, shrubs must 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 must be preserved and replaced after construction. Shrubs must 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 must be inventoried for replacement.
6. In native growth areas, trees and shrubs may be inventoried by actual count or by a 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 (Commission) and approved prior to the start of construction must define the sampling method to be used for trees, for tall shrubs and for low shrubs. The data from the sample plots must 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 must be selectively cleared, leaving mature trees and shrubs intact where practical.
8. The maximum width of clear cuts through windbreaks, shelterbelts and all other wooded areas is 50 feet, unless otherwise approved by the Commission.
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 must be noted on the inventory.

Replacement

10. Prior to tree and shrub replacement, documentation identifying the number and variety of trees and shrubs removed, as well as the mitigation plan for the proposed number, variety, type, location and date of replacement plantings, must be filed with the Commission for approval.
11. Two 2-year-old saplings must be planted for every one tree removed. Two shrubs (stem cuttings) must be planted for every one shrub removed.
12. Except in the case of invasive or noxious species, trees and shrubs must be replaced by the same species or similar species, suitable for North Dakota growing conditions as recommended by the North Dakota Forest Service. Invasive or noxious species must be replaced by similar non-invasive or non-

noxious species suitable for North Dakota growing conditions as recommended by the North Dakota Forest Service.

13. Tree and shrub replacement must 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 must be given the option of having replacement trees and shrubs planted on the landowner's property, either on or off the right-of-way. The landowner must also be given the opportunity to waive those options in writing in order to have replacement trees and shrubs planted off the landowner's property.
15. At the conclusion of the project, documentation identifying the actual number, variety, type, location and date of the replacement plantings must be filed with the Commission.
16. Tree and shrub replacements must be inspected annually, in September, for three years. The first annual inspection must be at least one year from the anniversary date of the original plantings. A report of each annual inspection must be submitted to the Commission by October 1 of each year, documenting the condition of plantings and any woodlands work completed as of September of each year. If after the third annual report the survival rate is less than 75%, the Commission may order additional planting(s).