

Application to the
North Dakota Public Service Commission
for a
Route Permit for the Keystone Pipeline

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Application for Route Permit

TransCanada Keystone Pipeline, LP

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Section A

Introduction

Keystone is submitting this application for a Route Permit to the North Dakota Public Service Commission (Commission) together with its Application for a Certificate of Corridor Compatibility. The information required in the Application for a Certificate of Corridor Compatibility and the Application for a Route Permit is similar, except the Application for a Route Permit also requires a discussion of factors listed in the North Dakota Century Code Section 49-22-09. Therefore, discussion of the factors listed in Section 49-22-09 is included in this Route Permit application. Factors discussed in the Application for a Certificate of Corridor Compatibility are referenced in the following sections:

Section B

Factors Discussed in Section 49-22-90 of the North Dakota Century Code

1. **Available research and investigations relating to the effects of the location, construction, and operation of the proposed facility on public health and welfare, natural resources, and the environment.**

Section B of the *Application for a Certificate of Corridor Compatibility* discusses available research and investigations relating to the effects of the location, construction, and operation of the proposed pipeline facility on public health and welfare, natural resources, and the environment.

2. **The effects of new energy conversion and transmission technologies and systems designed to minimize adverse environmental effects.**

Pipeline design and construction technology and pipeline materials have advanced significantly over the past several decades. Keystone proposes to utilize the best available proven technology in pipeline design, construction techniques, pipeline materials, and enhanced pipeline transmission monitoring methods, including leak-detection systems and remotely-controlled valves.

New federal regulations have increased the United States Department of Transportation (USDOT), Office of Pipeline Safety (OPS) oversight during pipeline construction and operations. Attachments to these applications include the Keystone Pipeline Construction Mitigation and Reclamation (CMR) Plan. The CMR Plan describes the best management construction practices that will be implemented including protective measures specific to areas such as wetlands, forested areas, waterbody crossings and residential structures. Reclamation procedures, which are also described in the CMR Plan, will return the construction corridor to its original contours and vegetative status, except for the permanent right-of-way (ROW) and five pump stations.

3. **The potential for beneficial uses of waste energy from a proposed energy conversion facility.**

The proposed Keystone Pipeline does not involve energy conversion facilities. Consequently, there is no potential beneficial use of waste energy.

4. Adverse direct and indirect environmental effects which cannot be avoided should the proposed route be designated.

Section D of the *Application for a Certificate of Corridor Compatibility* discusses adverse direct and indirect environmental effects which cannot be avoided should the proposed route be designated.

5. Alternatives to the proposed site, corridor, or route which are developed during the hearing process and which minimize adverse effects.

Keystone's consideration of alternatives related to the planned project is discussed in Section C.2 and D.1.d in the *Application for a Certificate of Corridor Compatibility*. Section C.2 describes alternative pipeline projects and Section D.1.d describes the modifications made to the route and corridor based primarily on reducing impacts to sensitive environmental areas.

6. Irreversible and irretrievable commitments of natural resources should the proposed site, corridor, or route be designated.

Irreversible or irretrievable commitments of natural resources associated with this project are discussed in Section D.1.f of the *Application for a Certificate of Corridor Compatibility*. The proposed pipeline ROW and associated facilities (block valves and pump stations) will be in place for an indefinite period of time and this will result in permanent environmental impacts.

A total of 1,413 acres will be maintained as permanent ROW after construction is completed. This total includes the loss of seventeen acres of woodland vegetation since trees will not be allowed to reestablish above the pipeline centerline. The permanent ROW will be maintained in a herbaceous state which will represent different habitat. Habitat losses also will be long term at permanent aboveground pipeline facility locations such as pump stations and block valves (approximately 11 acres).

There will be a short-term use of surface water for hydrostatic testing of the pipeline but there will be no extended consumptive use of water resources. No unique geological features that have received state or federal protection will be disturbed by project facilities. The proposed pipeline route does not cross any active quarries or mines or the wellpads of any active oil and gas wells. The North Dakota Game and Fish Department (NDGF) has indicated that they do not believe that the project would have any significant adverse effects on wildlife or wildlife habitat, including rare or priority species.

7. The direct and indirect economic impacts of the proposed facility.

Section D, Table 3, Subsection 1.g and Subsection 2.d.iii of the *Application for a Certificate of Corridor Compatibility* discuss direct and indirect economic impacts of the proposed Keystone Pipeline project.

8. Existing plans of the state, local government, and private entities for other developments at or in the vicinity of the proposed site, corridor, or route.

Section D.1.h of the *Application for a Certificate of Corridor Compatibility* discusses the inquiries conducted to determine existing plans of the state or local governments. Keystone also met with the U.S. Army Corps of Engineers (USACE) and with communities to determine if conflicts exist with other proposed developments. The proposed Keystone pipeline was rerouted to avoid developments within the vicinity of the project.

9. The effect of the proposed site or route on existing scenic areas, historic sites and structures, and paleontological or archaeological sites.

Section D.1.i of the *Application for a Certificate of Corridor Compatibility* discusses the effect of the proposed site or route on existing scenic areas, on historic sites and structures, and on paleontological or archaeological sites.

10. The effect of the proposed site or route on areas which are unique because of biological wealth or because they are habitats for rare and endangered species.

Section D.1.j of the *Application for a Certificate of Corridor Compatibility* discusses the effect of the proposed site or route on areas which are unique because of biological wealth or because they are habitats for rare and endangered species.

11. Problems raised by federal agencies, other state agencies, and local entities.

Section D.1.k of the *Application for a Certificate of Corridor Compatibility* discusses problems raised by agencies and local entities. Keystone consulted with federal, state, and local agencies to identify potential problems that may be associated with the proposed pipeline project. Keystone worked with the agencies to minimize potential conflicts with environmental and communities' resources.

The following section summarizes the permitting agencies that have worked with TransCanada regarding the proposed Keystone pipeline project activities and agency-specific concerns.

Federal Agencies:

Department of State (DOS)

The Department of State (DOS) is gathering agency and public issues through the federal Environmental Impact Statement process, pursuant to NEPA.

U.S. Army Corps of Engineers (USACE)

The USACE has not identified any concerns with the proposed project that the USACE's permitting process will not address.

U.S. Department of Interior, Fish and Wildlife Service (USFWS)

Keystone consulted with the USFWS regarding potential occurrence of special status species along the pipeline route. The USFWS provided a list of federally endangered, threatened and candidate species and designated critical habitat that could potentially be found in the construction corridor. Based on USFWS input, Keystone developed a list of special status species that would require surveys and identified appropriate survey protocols. Surveys were initiated in the fall of 2006 and will continue during the spring of 2007.

The USFWS provided a letter expressing concerns about several segments of the proposed pipeline route that would cross USFWS grassland and wetland easements in North Dakota. Based on this input, there have been several proposed reroute areas including the Hecla Sandhills. Keystone rerouted the pipeline to avoid Hecla grasslands and water easements, developed specific Best Management Plans (BMPs), and revised crossing methods to minimize potential impacts to wetlands and grassland easements. The reroute resulted in 3 fewer miles of impacts to USFWS wetland easements.

U. S. Department of Transportation, Office of Pipeline Safety (USDOT)

Keystone is familiar with the regulations and requirements of the OPS, Pipeline and Hazardous Materials Safety Administration, within the USDOT. To comply with federal regulations (49 CFR Parts 194 and 195), Keystone will be required to develop a comprehensive Emergency Response Plan for the pipeline project and areas of operation and an Integrity Management Plan for High Consequence Areas. The OPS has been consulted for clarification of various requirements.

State Agencies:

North Dakota Public Service Commission

The North Dakota Public Service Commission will evaluate the Keystone Pipeline Project's request for a Certificate of Corridor Compatibility and a Route Permit. The Commission has not yet identified concerns to Keystone.

North Dakota Game and Fish Department (NDGF)

Keystone coordinated with the NDGF to identify North Dakota species of special concern that could be affected by pipeline construction and operation. Keystone obtained a list of these species from the North Dakota Heritage Program. Based on the information received, Keystone initiated biological surveys in the summer of 2006 and the winter of 2006-2007. Biological and habitat surveys will be continuing in 2007.

Consultation with the NDGF Department included a letter received on May 4, 2006 (see Appendix E) that outlined the department's wildlife concerns with the project. The letter enumerated several streams classified as valuable fisheries:

- Pembina River
- Sheyenne River
- Middle Branch of the Forest River
- Tongue River and a specific tributary in Pembina County
- Goose River
- North and South Branches of the Park River
- Middle Branch of the Park River
- North Branch of the Forest River

The department requested either directional drilling of these streams or no construction activities between April 15 and June 1 with appropriate controls to minimize erosion and sedimentation. The department also requested specific mitigation measures for protection of wetlands. The letter indicated that the NDGF Department did not believe that the project would have any significant adverse effects on wildlife or wildlife habitat, including rare or priority species. There have been changes to the pipeline route since this opinion was received; these route changes will be reviewed with the NDGF Department to determine if there are any additional concerns.

North Dakota State Lands Department

North Dakota State Lands Department deferred to the USFWS and did not identify any concerns. The USFWS concerns are discussed above and in Section D of the Application for a Certificate of Corridor Compatibility.

North Dakota State Health Department

The North Dakota State Health Department staff expressed concern about methods to prevent potential oil spill and oil spill response. The following summary responds to the Health Department concerns relating to crude oil release. Water quality certification will be implemented through the North Dakota Water Quality program.

There is potential risk of crude oil releases (leaks and spills) during pipeline operations, including the contribution of natural hazards (seismicity and faults, landslides, and subsidence) and the subsequent

potential effects on humans and other sensitive resources such as populated areas, drinking water sources, and ecologically sensitive areas.

Keystone will use proven pipeline design, materials, construction methods, best management plans, and operational safeguards including a SCADA system that, combined, will minimize the risk of oil releases. The pipeline reroute away from local water sources, OPS oversight, and emergency oil spill response procedures further minimize the risk of water contamination.

The North Dakota State Health Department requested information related to water withdrawal and water discharge resulting from hydrostatic testing. Withdrawals rates and volumes will be designed to avoid impacts to aquatic life and downstream water users. Hydrostatic test water will be discharged to the land surface at an approved location. Construction across waterbodies will cause local short-term increases in total suspended solids and deposited sediment in perennial streams and rivers.

Keystone rerouted the proposed pipeline route to avoid the Hecla Sandhills located in Sargent County, North Dakota. As a result of the reroute, the pipeline route would cross approximately 5 fewer miles of sandy and gravelly soils, and approximately 25 fewer miles of mapped shallow water supply aquifers in North Dakota. Consequently, there will be even less potential for crude oil releases to directly affect underlying shallow water supply aquifers and the risk of downward spread in the unlikely event of a spill or leak into highly permeable soil also will be reduced.

The Hecla sandhills reroute reduces the surface disturbance of sensitive habitats that include wetlands, shallow aquifers, and native prairie grass lands.

Discharged water may evaporate or infiltrate into the soil or drainage where the water is released. Keystone will use a continuous hydrostatic testing method that will re-use the same test water. Hydrostatic test waters will be discharged in accordance with Keystones BMPs and Storm Water Pollution Prevention Plan to avoid harm to vegetation, prevent erosion and siltation.

Keystone will continue to update and refine this evaluation as the project progresses in accordance with federal regulations. Keystone will keep the North Dakota Health Department apprised of planned activities and will continue consultations to avoid impacts to the water system. Copies of the Keystone Oil Spill Prevention and Response Plan will be provided to the Commission upon receiving federal approval.

North Dakota State Water Commission

Keystone will work cooperatively with the North Dakota State Water Commission and provide a site-specific water use plan. Water resources are discussed in the Department of Health section above.

State Historical Society of North Dakota (State Historic Preservation Office)

Advisory Council on Historic Preservation

Section 106 of the National Historic Preservation Act (NHPA), as amended, requires the lead federal agency to take into account the effects of its undertakings on historic properties or historic resources that are listed in, or eligible for listing in, the National Register of Historic Places (NRHP) and to afford the Advisory Council on Historic Preservation (ACHP) an opportunity to comment if there will be adverse effects to NRHP-eligible properties. Historic properties are prehistoric or historic districts, sites, buildings, structures, objects, or properties of traditional religious or cultural importance, which are listed or eligible for listing in the NRHP, including artifacts, records, and material remains related to such a property or resource.

Keystone completed files and records reviews for the Keystone Pipeline Project area. Protocols for field surveys were prepared by Keystone and reviewed and approved by state historic preservation officers (SHPOs). Field surveys started in the spring of 2006 along the Keystone Mainline. Several potentially eligible

sites were located within the project area of potential effect (APE) during the field surveys. Keystone is either avoiding or conducting evaluative testing in order to definitively determine NRHP eligibility for these sites. For those sites in which avoidance was not feasible, evaluative testing was conducted in the fall of 2006. Evaluative testing was conducted at two sites. Both sites were determined not eligible for listing on the NRHP.

Information from the files and records searches and field will be documented in reports and submitted to the DOS, SHPOs, and land managing agencies, as appropriate. The DOS will consult with the SHPO to determine site eligibility for the NRHP and the project's effects on NRHP-eligible sites within the APE. If the Keystone Project will adversely affect NRHP-eligible sites, the DOS will require the preparation and implementation of treatment plans to mitigate adverse effects. No construction will begin until all required consultations and approvals are received.