

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF SOUTH DAKOTA**

|                                    |   |                            |
|------------------------------------|---|----------------------------|
| IN THE MATTER OF THE APPLICATION   | ) | HP 09-_____                |
| BY TRANSCANADA KEYSTONE PIPELINE,  | ) |                            |
| LP FOR A PERMIT UNDER THE SOUTH    | ) |                            |
| DAKOTA ENERGY CONVERSION AND       | ) |                            |
| TRANSMISSION FACILITIES ACT TO     | ) | <b>DIRECT TESTIMONY OF</b> |
| CONSTRUCT THE KEYSTONE XL PIPELINE | ) | <b>ROBERT E. JONES</b>     |
| PROJECT                            | ) |                            |

**1. Please state your name and address for the record.**

Answer: My name is Robert E. Jones. My business address is 450 1<sup>st</sup> Street SW  
Calgary Alberta T2P 5H1 Canada.

**2. Please state your position with Keystone and provide a description of your areas  
of responsibility with respect to the Keystone XL Project?**

Answer: I am a Vice President with TransCanada PipeLines with overall  
accountability for the implementation and development of the Keystone Pipeline system,  
including the Keystone XL Project (Project). In that capacity, I am responsible for  
overall leadership and direction of the Project.

**3. Please state your professional qualifications and experience with pipeline  
operations.**

Answer: I am a professional engineer. I am registered to practice in the Province  
of Alberta.

**4. Have you provided a resume?**

Answer: Yes, my resume is attached as Exhibit A of my testimony.

**5. Are you responsible for portions of the application which Keystone is filing with the South Dakota Public Utilities Commission seeking a permit under the Energy Conversion and Transmission Facilities Act for the Keystone XL Project?**

Answer: Yes, I am individually or jointly responsible for the information provided in the following sections of the application:

- Section 1.0 Introduction, and all sections within Section 1.0;
- Section 2.1.1 Facility Description Overview;
- Section 2.1.2 Future Expansion and Other Industrial Facilities;
- Section 2.2 Engineering Design;
- Section 2.2.1 Pipeline;
- Section 2.2.2 Pump Stations;
- Section 2.2.3 Mainline Valves;
- Section 3.0 Demand for Facilities, and all sections within Section 3;
- Table 4 Impact Summary;
- Section 6.1.3 Commercial and Industrial Sectors;
- Section 6.1.4 Land Values;
- Section 6.1.5 Taxes;
- Section 6.2 Infrastructure Benefits;
- Section 6.2.2 Energy; and
- Section 7.1.3 Post-Construction Monitoring and Maintenance Programs.

**6. Could you briefly summarize the information provided in Section 1.1 – Project Purpose?**

Answer: Section 1.1 describes the Project purpose, which is to transport crude oil production from the Western Canadian Sedimentary Basin (WCSB) to meet growing

demand by refineries and markets in the United States. The demand for the proposed Project is described at Section 3.0 of the application.

**7. Could you briefly summarize the information provided in Section 1.2 – Project Overview and General Site Description?**

Answer: Section 1.2 provides a project overview and general description of the overall route of the proposed Keystone XL Pipeline. Keystone is proposing to construct and operate a crude oil pipeline and related facilities to deliver up to 900,000 barrels per day (bpd) from an oil supply hub near Hardisty, Alberta, Canada to existing terminals in Nederland, near Port Arthur, Texas, and the Houston Ship Channel in Houston, Texas. The “Steele City” Segment of the Project extends from Hardisty, Alberta, southeast to Steele City, Nebraska. The “Gulf Coast” Segment of the Project extends from Cushing, Oklahoma, south, to Nederland, Texas. The Houston Lateral extends from the Gulf Coast Segment in Liberty County, Texas, to Moore Junction in Harris County, Texas. In total, the Project will consist of approximately 1,702 miles of new, 36-inch diameter pipeline; with 327 miles in Canada and 1,375 miles in the US.

The Project will enter South Dakota at the Montana border in Harding County. The pipeline will extend in a southeasterly direction through Butte, Perkins, Meade, Pennington, Haakon, Jones, and Lyman Counties, and exit the State at the Nebraska border in Tripp County. The length of the pipeline in South Dakota is 313 miles.

**8. Could you briefly summarize the information provided in Section 1.3 –  
Estimated Capital Costs?**

Answer: Section 1.3 states that the estimated cost of equipment and installation of the Project in South Dakota is expected to be approximately \$920 million.

**9. Could you briefly summarize the information provided in Section 1.4 – Project  
Schedule?**

Answer: Section 1.4 provides the schedule for construction of the Project in South Dakota. Keystone proposes to commence construction in South Dakota in 2011 and to complete construction and commence service in 2012. This timing is consistent with the requirements of the shippers who have entered into the contractual commitments that underpin the viability and need for the Project.

**10. Could you briefly summarize the information provided in Section 1.5 – Project  
Participants?**

Answer: Section 1.5 states that the permit applicant is TransCanada Keystone Pipeline, LP, a Delaware limited partnership, owned by affiliates of TransCanada Corporation and ConocoPhillips Company.

**11. Could you briefly summarize the information provided in Section 1.6 –  
Individuals Authorized to Receive Communications?**

Answer: Section 1.6 identifies the persons designated to receive communications with respect to the application.

**12. Could you briefly summarize the information provided in Section 1.7 –  
Ownership and Management?**

Answer: Section 1.7 states that the pipeline will be owned and operated by TransCanada Keystone Pipeline, LP, and identifies Mr. Ken Murchie as the project director.

**13. Could you briefly summarize the information provided in Section 1.8 – Other  
Required Permits and Approvals?**

Answer: Section 1.8 indicates that, in addition to the siting permit required from the Public Utilities Commission, Keystone is required to obtain a Presidential Permit from the United States Department of State (DOS) to cross the international border. As required by the National Environmental Policy Act (NEPA), the DOS is preparing an Environmental Impact Statement (EIS) with respect to the project. DOS has issued a formal Notice of Intent to Prepare an Environmental Impact Statement and has conducted public scoping meetings in the project areas, including meetings in Murdo, South Dakota. Meetings also had been scheduled for Faith and Buffalo, South Dakota, but these meetings were cancelled by the Department of State due to adverse weather conditions on the day of the scheduled meetings. Keystone anticipates that a Draft EIS will be issued in summer 2009 and a Final EIS will be issued in early 2010. Additional federal and South Dakota permits required are listed in Table 1 of the application. Witness Jon Schmidt is responsible for the details regarding these additional permits.

**14. Could you briefly summarize the information provided in Section 2.1.1 – Facility Description Overview?**

Answer: Section 2.1.1 states that approximately 313 miles of pipeline will be constructed in South Dakota. Detailed route maps for the project are provided at Exhibit A of the application. Witnesses Jon Schmidt and Richard Gale are responsible for these maps. Keystone will also construct aboveground facilities in South Dakota, including pump stations and mainline valves. Powerlines required to provide power to the pump stations will be constructed by local power providers, not by Keystone.

**15. Could you briefly summarize the information provided in Section 2.1.2 – Future Expansion and Other Industrial Facilities?**

Answer: Section 2.1.2 addresses future expansion. Initially, three pumps will be installed at the pump stations to provide a nominal capacity of 700,000 bpd. When future demand warrants, pumps will be added to pump stations for a total of up to five pumps per station, thereby increasing capacity to a maximum nominal throughput of 900,000 bpd.

**16. Could you briefly summarize the information provided in Section 2.2 – Engineering Design?**

Answer: Section 2.2 addresses the engineering design of the project. The proposed facilities will be designed, constructed, and operated in accordance with all applicable requirements, including the US Department of Transportation (USDOT) regulations governing the transportation of hazardous liquids by pipeline, the American Society of Mechanical Engineers Standard B31.4, and other applicable federal and state

regulations. Keystone will implement a quality control and quality assurance plan to ensure compliance with regulations, standards, and Keystone's internal quality standards. Keystone Witness Meera Kothari is responsible for the details regarding engineering design.

**17. Could you briefly summarize the information provided in Section 2.2.1 -**

**Pipeline?**

Answer: Section 2.2.1 provides engineering details regarding the proposed pipeline. Exhibit 3 is a process flow diagram for the Steele City Segment of the pipeline. As I have stated, the length of the pipeline in South Dakota will be approximately 313 miles. In general, the pipeline will not be co-located with other utility corridors in South Dakota because there are no existing corridors traversing the State in a northwest/southeast direction. The pipeline will have batching capabilities and will be able to transport products ranging from light crude to heavy crude oil. The pipeline will be constructed of high-strength steel and will have a 36-inch nominal diameter. To protect against corrosion, Keystone will apply an external fusion bonded epoxy (FBE) coating to the pipeline and will use an impressed cathodic protection system.

The design of the pipeline system will be based on a maximum 1,440 pounds per square inch gauge (psig) discharge pressure at each pump station. The maximum operating pressure (MOP) of the pipeline between pump stations generally is 1,440 psig; however, at certain low elevation segments, the MOP will be 1,600 psig. These segments are identified in Table 2. Pipeline segments with a MOP of 1,600 psig will have a design factor of 0.72 and pipe wall thickness of 0.572 inch (X-70) or 0.500 inch (X-80).

The pipeline will be capable of the passage of internal inspection devices, which are capable of detecting internal and external anomalies in the pipeline. Launchers and receivers are designed to launch and receive these internal inspection devices. The launchers and receivers will be located at certain pump stations and generally spaced about 230 miles apart. Witness Meera Kothari is responsible for the engineering details of the project.

**18. Could you briefly summarize the information provided in Section 2.2.2 – Pump Stations?**

Answer: Section 2.2.2 states that seven pump stations will be constructed in South Dakota and describes the pump stations. Witness Meera Kothari is responsible for the engineering details of the pump stations.

**19. Could you briefly summarize the information provided in Section 2.2.3 – Mainline Valves?**

Answer: Section 2.2.3 describes the mainline valves (MLVs) that will be installed along the pipeline in South Dakota. Keystone plans to install 16 MLVs in South Dakota. Seven MLVs will be located at pump stations; seven MLVs will be installed at intermediate locations and these valves will remote operations capability; two additional manually operated MLVs also will be installed. The approximate locations of these valves are shown in Exhibit A. Witness Meera Kothari is responsible for the engineering details of the MLVs.



**20. Could you briefly summarize the information provided in Section 3 – Demand for Facility of the application?**

Answer: Section 3 describes the demand for the Project. In summary, the need for the Project is dictated by a number of factors, including: (i) increasing crude oil demand in the US; (ii) decreasing domestic crude oil supply in the US; (iii) increasing WCSB crude oil supply; (iv) an opportunity to reduce US dependence on foreign offshore crude oil through further diversification to stable, secure Canadian crude oil supplies; and (v) binding, long-term shipper contracts.

**21. What portion of Table 4 – Impact Summary Table are you responsible for?**

Answer: I am responsible for the socio-economic impacts related to easement compensation and tax revenues.

**22. Could you briefly summarize the information provided in Section 6.1.3 – Commercial and Industrial Sectors?**

Answer: Section 6.1.3 describes the socio-economic impacts of the Project on the commercial and industrial sectors. Operation of the Project will have no significant impacts on the commercial and industrial sectors.

**23. Could you briefly summarize the information provided in Section 6.1.4 – Land Values?**

Answer: Section 6.1.4 addresses the acquisition of right-of-way easements for the Project. Compensation is paid for easements and associated damages including repairs, and the imposition of certain limited land use restrictions for the duration of the

pipeline's operation. Property values in rural areas are typically not affected by the installation or presence of a pipeline.

**24. Could you briefly summarize the information provided in Section 6.1.5 – Taxes?**

Answer: Section 6.1.5 of the application estimates that, if the Project had been placed into service on January 1, 2008, Keystone would have paid approximately \$10,300,000 in ad valorem property taxes in nine counties and thirteen school districts crossed by the Project in South Dakota. In some cases, the Project will have the beneficial effect of more than doubling the assessed valuation of real property in each county and school district. In addition, because of the increase in the school districts' assessed valuations, state aid to education payments would be reduced by approximately \$5.2 million, with a corresponding savings to the State Education Foundation Payment Fund. Other taxes that may apply to the Keystone Project include taxes on gross receipts from the sales of equipment, goods, and services, subject to the rebates allowed by state law.

**25. Could you briefly summarize the information provided in Section 6.2 – Infrastructure Impacts?**

Answer: Section 6.2 states that the limited number of permanent employees associated with the Project will result in negligible long-term impact on public services.

**26. Could you briefly summarize Section 6.2.2 – Energy?**

Answer: Yes, I am responsible for matters related to electrical supply for the project facilities.

**27. Could you briefly summarize the information in Section 7.1.3 – Post-Construction Monitoring and Maintenance Programs?**

Answer: This section summarizes the post-construction monitoring and maintenance programs that Keystone will implement.


**28. Do you adopt the portions of the application referenced herein as your own testimony in this matter?**

Answer: Yes, with the caveat that I am jointly responsible for certain portions of the application with additional witnesses, as indicated above.

**29. Does this conclude your prepared direct testimony?**

Answer: Yes it does.

Dated this 26 day of February, 2009.



Robert Jones

## **Exhibit A**

### **Resume for Robert Jones**

**ROBERT EDWARD JONES, P.Eng.**  
**VICE PRESIDENT KEYSTONE PIPELINES**

**QUALIFICATIONS:**

- B.Sc. Engineering – University of Alberta, 1983
- Professional Engineer - APEGGA

**EXPERIENCE SUMMARY:**

Appointed Vice-President Keystone Pipelines, Project Development and Implementation in June 2006.

Overall accountability for the development and construction of all phases of the Keystone project including securing land and permits, engineering, procurement and construction management of the project.

Also, overall accountability for developing the infrastructure and processes required for operations build-up of Keystone.

Lead developer of the Keystone project from initial concept in 2003.

Worked in Business Development for TransCanada since 2000 with responsibilities to identify new business opportunities and providing commercial and market expertise. These efforts include TransCanada's re-entry into Mexico, market analysis of LNG proposals, and commercial analysis of pipeline acquisition opportunities.

Over twenty five years of professional experience in Business Development, Management, Engineering, and Operations of natural gas and liquid hydrocarbon pipeline systems.

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**TRANSCANADA**

12/1997 – Present

**TransCanada PipeLines***Director Eastern Business Development* Calgary, AB

- accountable for developing pipeline projects in the US Northeast and lead developer of the Northwinds project
- Management committee representative on Iroquois, Millennium and Portland partially owned pipeline entities

*Director Operations Services* Calgary, AB

- Engineering & Operations Process Optimization initiative

**TransCanada International***Venture Manager* Calgary, AB

- Bid Manager – Jose Crude Oil Storage and Ship Loading Terminal
- US \$400 million Acquisition, Build, Own & Operate Bid
- Bid Manager – Bare/Aguasay Gas Compression and Processing Project
- US \$200 million Build, Own and Operate Bid

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**ENBRIDGE**

02/1996 – 12/1997

**IPL International***Manager Venezuela Operations* Caracas, Venezuela

- Business Development
- TAP, Oriente, Cerro-Negro and Petrozuata Pipeline proposals

*Project Specialist* Calgary, AB

- OCENSA PRB member
- Proposals in Russia, Thailand and Venezuela

09/1987 - 02/1996

**Interprovincial Pipeline***Project Manager* Edmonton, AB

- System Expansion Program Phase I & II

*Senior System Development Engineer* Edmonton, AB*Team Leader, Pipeline Integrity* Edmonton, AB*Senior Operations Engineer* Edmonton, AB*Operations Engineer. District 2* Regina, SK*Project Engineer* Edmonton, AB

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**NOVA**

06/1983 – 09/1987

**Nova Corporation**

*Pipeline Engineer, Operations*

Edmonton, AB

*District Engineer, Brooks*

Brooks, AB

*EIT, Western Operations*

Edmonton, AB

05/1981 – 08/1981, 05/1982 – 08/1982

Edmonton, AB

*Gas Control*