

PUBLIC SERVICE COMMISSION
STATE OF NORTH DAKOTA

TRANSCANADA KEYSTONE PIPELINE, LP) CASE NO. PU-06-421
30-INCH OIL PIPELINE/CAVALIER TO) AOH File No. 20070181
SARGEANT COUNTIES SITING APPLICATION)

**SUPPLEMENTAL MEMORANDUM BRIEF OF TRANSCANADA KEYSTONE
PIPELINE, LP IN RESPONSE TO INTERVENTION OF THE CITY OF FARGO AND
RE-OPENED HEARING HELD ON NOVEMBER 27TH AND 28TH, 2007**

APPEARANCES

Commissioners Susan E. Wefald, Tony Clark and Kevin Cramer

Thomas D. Kelsch and Todd D. Kranda, Kelsch Kelsch Ruff & Kranda, 103 Collins Avenue, Mandan, ND 58554 on behalf of the Applicant TransCanada, Keystone Pipeline, LP

Matthew Shimanek, Hammarback, Dusek & Associates, PLC 712 DeMers Ave. East Grand Forks, MN 56721, and Jana M. Linderman (IA #AT00004750) Plains Justice 100 1st Street SW Cedar Rapids, Iowa 52404 on behalf of Interveners, Dakota Resources Council, Ramona Klein, Merle and Linette Kratochvill, Janie and John Capp, and Mark Novak

Erik R. Johnson City Attorney Fargo, 505 Broadway St N Ste 206 Fargo, ND 58102 and John M. Dingess and Pat Madsen Duncan, Ostrander & Dingess PC 3600 S Yosemite St Ste 500 Denver CO 80237-1829, on behalf of the City of Fargo

William W. Binek, Chief Counsel, Public Service Commission, State Capitol, Bismarck, ND 58505, on behalf of The Public Service Commission

Al Wahl, Office of Administrative Hearings, 1707 North 9th Street, Bismarck, ND 58501
As Procedural Hearing Officer

EXECUTIVE SUMMARY

On October 24, 2007, the City of Fargo ("Fargo") filed a motion to Intervene as a Party in the above action and to re-open the hearing. On November 7, 2007, the Public Service Commission (Commission) granted Fargo's motion. The Commission limited the scope of the reopened proceeding to the safety and public health issues raised by Fargo relating to Fargo's water supply from Lake Ashtabula and the Sheyenne River. A hearing was held on November 27-28, 2007. Subsequently, TransCanada Keystone Pipeline, LP ("Keystone") and Fargo entered into a Settlement Stipulation and filed the Stipulation with the Commission. Fargo filed a Motion to Withdraw as Party Intervenor on December 20th 2007.

The Settlement Stipulation resolves all of the limited issues that were set for hearing in the Commission's November 7, 2007 order and resolves Fargo's intervention in this proceeding. Fargo has moved to withdraw its intervention and Fargo now supports Keystone's proposed route in the Lake Ashtabula and Sheyenne Rive area. Moreover, the evidence adduced at the November 27-28, 2007 hearing further confirmed that the proposed route and corridor in the Lake Ashtabula and Sheyenne River area is safe. Because the safety and public health issues raised by Fargo relating to its back-up water supply from Lake Ashtabula and the Sheyenne River have been resolved to Fargo's satisfaction, and the route in that area has been demonstrated to be safe, the Commission should approve the proposed route in that area, subject to the conditions set forth in the Settlement Stipulation.

PRELIMINARY STATEMENT

On October 24, Fargo filed a motion to intervene as a Party in the above action and to re-open the hearing.

On November 7, 2007, the Commission issued an order granting Fargo's motion. The Commission limited the scope of the reopened proceeding, as authorized under Section 69-02-02-05 of the North Dakota Administrative Code, to the safety and public health issues relating to the water supply of the City of Fargo from Lake Ashtabula and the Sheyenne River.

The parties agreed to a hearing date and the Commission issued an Order on November 8, 2007, determining that an emergency exists under the circumstances of this proceeding and that hearing be scheduled on an expedited basis as authorized under NDCC ss 49-22-13(4), and scheduling the hearing for November 27, 2007.

At the hearings in Bismarck on November 27th and 28th 2007, the Commission heard testimony from six witnesses called by Fargo, from one member of the public, and from one rebuttal witness called by Keystone. The following exhibits were received by the commission at the November hearing.

F 1	City of Fargo Water Permits
F 2	Red River at Fargo Annual 7 Day Duration Low Flow
F 3	Photograph of Fargo Water Treatment Plant
F 4	Red River Valley Water Supply Project SDEIS Chapter Two Alternatives
F 8	CV of Mark R. Deutschman
F 9	CV of Barton L. Schultz
F 10	CV of Allen C. Schlipp
F 11	CV of Bruce W. Long
F 12-1-9	Charts and Graphs re Keystone Pipeline Project
F 13	Keystone Pipeline and USGS Hydrology Stream Data
RS 6	Letter from Dan Bernhardt Valley City Public Works
RS 7	Map
RS 8	Map, USGS Valley City East (ND) Quadrangle

RS 9	Photograph
T 39	Keystone Pipeline Project --Analysis of Risk to Fargo Water Supply
T 40	Code of Federal Regulations 49 CFR Section 195.450
T 41	Code of Federal Regulations. 49 CFR Section 195.6
T 42	Risk Analysis for Lake Ashtabula
T 43	Risk Analysis for Sheyenne River
T 44	Map of Other Pipelines
T 45	Rebuttal of Mr. Deutschman's Calculations

The Commission received the following late filed exhibits:

T 46	Report on Quantification of High Consequence Areas Regarding Keystone Pipeline
F 14	Water Quality Standards 2006 Chapter 33-16-02.1

After the November hearing was completed Keystone and Fargo commenced confidential settlement negotiations in an attempt to resolve Fargo's intervention in Case No. PU-06-421. Keystone and Fargo entered into a stipulation on December 17th, 2007, and filed the Stipulation with the Commission on December 20th 2007. The Settlement Stipulation resolves Fargo's intervention in this proceeding.

Pursuant to the Settlement Stipulation, Fargo filed a Motion to Withdraw as Party Intervenor on December 20th 2007. As grounds for this motion, Fargo asserts that its concerns are addressed by the Settlement Stipulation and, in accordance with the Stipulation, Fargo supports Keystone's route and corridor in the Lake Ashtabula/Sheyenne River area.

Keystone files this Memorandum Brief as a supplement to the Memorandum Brief Keystone filed in this proceeding on October 15th 2007.

ADDITIONAL STATEMENTS OF FACT FROM NOVEMBER HEARING

1. Heidi Tillquist has 17 years of experience as a risk assessor and an environmental toxicologist. Tillquist has worked on a number of refined products, crude oil, natural gas liquids, and natural gas pipelines. Tillquist has authored texts, including a report on the effects of crude oil in freshwater environments. Tillquist's area of expertise is in risk analysis for crude oil pipelines. (BIV Tr. Pg. 915)
2. Tillquist viewed the route from Cooperstown to the north all the way to Little Yellow Stone Park just above the Sheyenne River crossing. (BIV Tr. Pg. 920)
3. Keystone had already looked at the potential effects to water supplies in Lake Ashtabula and on the Sheyenne River closer to the pipeline. (BIV Tr. Pg. 921)

4. Lake Ashtabula and the Sheyenne River are not defined as a high consequence area under the Code of Federal Regulations. (BIV Tr. Pg. 1049, Ex. T-40, Ex. T-41)
5. Tillquist prepared a risk analysis looking specifically at the potential risk from the Keystone pipeline to Fargo's water supply. (BIV Tr. Pg. 920, Ex. T-39)
6. In her risk analysis Tillquist found that, in the unlikely event of a spill from the pipeline, crude oil would not reach the Sheyenne River or Lake Ashtabula, via overland flow, via subsurface flow, or via dry stream channels. Therefore, these routes were eliminated as viable exposure routes. (BIV Tr. Pg. 922, Ex. T-39)
7. Tillquist next looked at the Sheyenne River and Lake Ashtabula area and identified viable stream channels where, if a spill occurred, crude oil could potentially get into the stream channel and be transported by flowing water down towards Lake Ashtabula or the Sheyenne River. In order for this to occur, it would take a large spill for oil to get out of the trench, have sufficient volume to get into the stream channel, and have sufficient volume to move on down the stream. (BIV Tr. Pgs. 922-923)
8. In the Lake Ashtabula area, a pipeline leak would have to occur along 1.4 miles of pipeline segments that could intersect with the intermittent streams that could actually flow into Lake Ashtabula. There is another 1.4 miles of pipeline segments where a pipeline leak could get into the Sheyenne River. These intermittent streams are shown on the map, Exhibit T-23. (BIV Tr. Pgs. 925-926)
9. The maximum occurrence frequency of a spill along the 1.4 miles of pipeline segments in the area of Lake Ashtabula is not more than once every 13,000 years. The intermittent streams would have to be flowing at the time of the occurrence of the spill, and intermittent streams by definition are only flowing 50 percent or less of the time. (BIV Tr. Pg. 926)
10. If a spill occurred, the volume of the spill would be reduced by adherence to vegetation during transport as it goes downstream. The closest the Keystone pipeline crosses a viable intermittent stream to Lake Ashtabula is 1.6 miles. (BIV Tr. Pg. 927)
11. The closest viable stream to Baldhill Dam is 15 miles upstream of the dam. If a spill reached Lake Ashtabula via this stream, it would take three days to reach Baldhill Dam. The crude oil would float on the surface. Crude oil spreads at the rate of between 600 to 1000 feet per minute. Using the fastest rate, 1000 feet per minute, it would take three days before an oil spill could reach Baldhill Dam. This provides more than ample time for emergency response teams to detect, contain and clean up the spill within Lake Ashtabula. (BIV Tr. Pg. 927)

12. The release of water from the Baldhill Dam is from the bottom of the reservoir. Because crude oil floats on the surface of the water, the crude oil would not be capable of going down and getting through the subsurface outlet. BTEX compounds (benzene, Toluene, ethyl benzene, and xylenes), within the crude oil will start to dissolve into the water column. (BIV Tr. Pgs. 928-929)
13. Evaporation is an important process for the fate of a crude oil spill. It accounts for a significant loss of crude oil. The lighter components will dissipate, which happens much more quickly and efficiently than the dissolution process of BTEX compounds, dissolving into the water column. (BIV Tr. Pgs. 929-930)
14. In the event of a spill that reached Lake Ashtabula or the Sheyenne River, the City of Fargo, the ND Department of Health, (DOH), the Environmental Protection Administration, (EPA), as well as other communities located along the Sheyenne River would be notified. (BIV Tr. Pg. 928)
15. Fargo's water intake on the Sheyenne River is located 236 river miles from Baldhill Dam, which holds back the water in Lake Ashtabula. Fargo's water intake is 209 river miles from the Keystone crossing of the Sheyenne River. (BIV Tr. Pg. 924)
16. EPA did an environmental impact study on the Longhorn Pipeline – Colorado River in Texas, which is comparable to the Keystone Pipeline – Sheyenne River. The study used a benzene concentration of 0.14; the crude oil in the Keystone Pipeline will have a maximum benzene concentration of 0.15. The Colorado River study used a flow of 200 CFS, and the average flow of the Sheyenne River is 200 CFS. In the Longhorn study, 2000 barrels were put into the river without any containment or cleanup, and by the time the plume reached 120 miles downstream, the benzene level was below the maximum containment level, five parts per billion. (BIV Tr. Pgs. 930-932)
17. Given a distance of 209 river miles from the Sheyenne River crossing to Fargo's water intake, the chance of BTEX compounds ever reaching Fargo is highly improbable or nonexistent. (BIV Tr. Pg. 933)
18. Fargo was concerned that in the event of a severe drought, the Red River Fargo's primary water source might not be available and Fargo would have to look to Lake Ashtabula and the Sheyenne River. However, during drought conditions similar to the 1930's, the risk to Fargo is less. In a drought, the intermittent streams would not likely be flowing. If the BTEX compounds did reach the Sheyenne River during a drought, the river will have a reduced velocity, which will increase transit time, giving more time for the benzene to evaporate, and more time for containment and cleanup. (BIV Tr. Pgs. 932-933)
19. The same analysis was done for the 1.4 miles of contributory pipeline segments for the Sheyenne River. Emergency response would have time to detect the spill

and implement containment and cleanup. The crude oil would be floating on the surface, which would facilitate cleanup. Fargo would be notified of the spill under the emergency response procedures. The transit time for the dissolved constituents to travel the 209 miles from the Sheyenne River crossing to Fargo would be 8-12 days at normal flow. The BTEX concentrations would dissipate and be below the maximum contaminant level before they reached Fargo. (BIV Tr. Pg. 937)

20. Multiple petroleum pipelines cross Lake Ashtabula, the Sheyenne River and the Red River, as shown on map ex. T-44. The Cenex line crosses under Lake Ashtabula and there are three petroleum pipelines in close proximity up-river from Fargo's water intakes on the Red River. (BIV Tr. Pgs. 943-945, Ex. T-39 Table 1.)
21. Pipelines continue to coexist with water supplies without adversely affecting them. Some of these pipelines have been around for decades without adverse effects. (BIV Tr. Pg. 946)
22. The Red River Valley Water Supply Project draft EIS and Supplemental Draft EIS did not mention the Cenex pipeline under Lake Ashtabula, or the proposed Keystone Pipeline, or any of the other pipelines located on exhibit T-44. (BIV Tr. Pgs. 951-952)
23. Tillquist has done risk assessments for seven pipelines with approximately 4000 miles of pipeline. Six of those pipelines have been approved by the regulatory agencies. The seventh is the Keystone Pipeline. In all of the pipeline risk analysis Tillquist has done she has always used the deterministic type modeling which is the state of practice for crude oil pipeline risk assessment, rather than the stochastic method used by Fargo's witness Mr. Deutschman. (BIV Tr. Pgs. 953-954)
24. Using Deutschman's estimated likelihood of a spill rate, (Ex F 12-3), and applying it to the 2.8 total miles of pipeline segment where a large spill could be transported to reach Lake Ashtabula or the Sheyenne River, results in a maximum of one spill every 1,412 years. (BIV Tr. Pgs. 955-957)
25. A spill would have to be a large spill to reach Lake Ashtabula or the Sheyenne River. Large spills are a smaller fraction of the total number of spills. (BIV Tr. Pg. 958) According to Exhibit F 12-6, ninety percent of the spills would be less than 803 barrels. (Exhibit F 12-6)
26. Tillquist's risk assessments for the other approved pipelines had risks of one spill per mile every 344-833 years. The risks of spills were deemed acceptable risks by the regulating agencies reviewing those risk assessments. In the case of the Keystone Pipeline, there is a risk of one spill per mile every 4,000-9,000 years. (BIV Tr. Pgs. 958-959)

27. The chances of adverse effects to Fargo's water quality are negligible. The proposed Keystone Pipeline route is safe. If the proposed routing of a pipeline is safe, it is not necessary to look at a different route. (BIV Tr. Pgs. 1049, 1054)
28. Keystone received a special permit from PHMSA. Under the Special Permit, Keystone is required to use stronger steel and comply with approximately 51 other stipulations to ensure that Keystone is operating at an equal or safer level than under existing regulations. (BIV Tr. Pg. 1026)
29. In reviewing Keystone's Special Permit application, PHMSA performed a rigorous evaluation and conducted a public comment period to ensure that the design, construction and operation of the Keystone pipeline will meet or exceed existing pipeline regulations. Upon conclusion of its analysis, PHMSA reached two findings:
 - a. The operation of the Keystone pipeline at hoop stress of up to 80 percent SMYS is not inconsistent with pipeline safety
 - b. The operation of the Keystone pipeline at hoop stress of up to 80 percent SMYS will provide a level of safety equal to, or greater than, that which would be provided if the pipeline were operated under existing regulations. (December 14, 2007 Letter Response filed by Keystone)
30. PHMSA reached these findings through its review of public comments and its analysis of Keystone's application, which described actions for the life cycle of the proposed pipeline addressing pipe and material quality, construction quality control, pre-in service strength testing, the Supervisory Control and Data Acquisition (SCADA) system inclusive of leak detection, operations and maintenance and integrity management. (December 14, 2007 Letter Response filed by Keystone)
31. The aggregate affect of Keystone's actions and PHMSA's 51 conditions provide for more inspections and oversight than would occur on pipelines installed under existing regulation. (December 14, 2007 Letter Response filed by Keystone)
32. Keystone is required to comply with all 51 conditions and is required to provide reporting as it relates to these conditions. If Keystone fails to comply with these conditions, the special permit may be revoked. (December 14, 2007 Letter Response filed by Keystone)
33. Keystone talked to the Department of Health ("DOH") about the location of the Keystone Pipeline and its proximity to Lake Ashtabula and the Sheyenne River and DOH was comfortable with the proposed location of the Keystone Pipeline route. (BIV Tr. Pgs. 1046, 1048-1049)

34. Tillquist viewed the Starke property and confirmed that the pipeline is approximately two-and-a-half to three miles away from the Sheyenne River. Crude oil would not be able to move across the relatively flat surface of the Starke property to get to the Sheyenne River. (BIV Tr. Pg. 919)

TESTIMONY PRESENTED AT HEARING

A. Fargo Testimony:

At the re-opened hearing in Bismarck on the 27th of November 2007, Fargo called six witnesses to the stand.

Bruce Grubb, Fargo's enterprise director, testified about Fargo's water treatment plant, its water permits, and the proposed Red River Valley Water Supply Project. Grubb testified that it takes approximately 14 days for water to travel from Baldhill Dam to Fargo's water intakes on the Sheyenne River. (BIII Tr. Pg. 631)

Grubb testified that Fargo has utilized the Sheyenne River intake approximately a dozen times in the last ten years he has been involved with the water treatment plant. (BIII Tr. Pgs. 636-637)

Grubb testified that the Red River Valley Water Supply Project Draft Environmental Impact Study (DEIS) did not list the petroleum pipeline located under Lake Ashtabula as a risk to the project. (BIII Tr. Pg. 640)

David Koland, the general manager of Garrison Diversion Conservancy District, testified about the Red River Valley Water Supply Project that proposes to take water from Lake Sakakawea at the Snake Creek Pumping Plant through the McClusky Canal, treat the water, and pipe the water to the Sheyenne River just north of Lake Ashtabula. (BIII Tr. Pg. 676)

Koland testified that, if the existence of the petroleum pipeline located under Lake Ashtabula was not acknowledged in the RRVWSP draft EIS, then it was not considered a risk to the water project. (BIII Tr. Pg. 695)

Bruce Long, with Black and Veatch, a company that designs and sometimes constructs power stations and potable water and wastewater treatment facilities, was called to testify by Fargo. Long was involved with the design of the Fargo water treatment plant. Long testified that they did not consider the risk of petroleum pipelines located upstream of the Fargo intake systems when the plant was designed. Such prophylactic measures would be very expensive and would probably not be used very often. (BIII Tr. Pg. 733)

Long testified that in his 25 years of working with water treatment plants he is not aware of any public water system that actually got crude oil into it from a pipeline leak. (BIII Tr. Pg. 734)

Barton L. Schultz, an engineer with Houston Engineering, was called to testify by Fargo. Schultz testified that the Lake Ashtabula and Sheyenne River do not fit into the Code of Federal Regulations definition of a "high consequence area". (BIII Tr. Pg. 781)

Schultz testified that he didn't do any field work on Keystone's proposed route, and had not looked at Keystone's proposed route. (BIII Tr. Pg. 783)

Schultz testified that after doing a complete study he could still come to the same result that Keystone did, i.e., that the current route is the preferred route. (BIII Tr. Pg. 798)

Mark Deutschman with Houston Engineering was called to testify by Fargo. Deutschman prepared and testified about exhibits F 12-1 to 12-9. Exhibit F 12-6 according to Deutschman showed that fifty percent of the leaks would be below 146 barrels, and only ten percent of the time would the leaks be in excess of 803 barrels, and the maximum estimated spill was 2,880 barrels. (BIII Tr. Pg. 849)

Fargo also called Allen C. Schlipp to testify on its behalf. Mr. Schlipp testified that he had studied pipeline safety regulations and other materials over a period of weeks but had no relevant expertise with crude oil pipelines. (BIII Pgs. 869-870, 881)

B. Public Testimony

Richard Starke, a member of the public, testified that normal water elevation of the Sheyenne River in Valley City is 1,207 feet and the elevation of Starke's property is 1,400 feet over three miles away. (BIII Tr. Pg. 898)

C. Keystone Rebuttal Testimony

Keystone called Heidi Tillquist as a rebuttal witness. Tillquist's testimony is fully set out in the statement of facts in the first portion of this brief. Tillquist has 17 years of experience as a risk assessor and an environmental toxicologist. Tillquist testified that the chances of adverse effects to Fargo's water quality are negligible and the chance of BTEX ever reaching Fargo is highly improbable or nonexistent.

LEGAL ARGUMENT

ISSUE 1: The Settlement Stipulation between Keystone and Fargo, and Fargo's Motion to Withdraw as a Party Intervenor Settles Fargo's concerns.

ISSUE 2: Keystone's proposed route and corridor in the Lake Ashtabula and Sheyenne River are is safe and will produce minimal adverse impacts on the environment, natural resources and upon the welfare of the citizens of North Dakota.

ISSUE 1: The Settlement Stipulation between Keystone and Fargo, and Fargo's Motion to Withdraw as a Party Intervenor, Settle Fargo's Concerns.

In granting Fargo's motion to intervene, the Commission limited the issues in the reopened proceeding to the safety and public health issues raised by Fargo relating to its back-up water supply from Lake Ashtabula and the Sheyenne River. After the hearing before the Commission, Keystone and Fargo negotiated a Settlement Stipulation, which settles Fargo's intervention in Case No. PU-06-421.6.

The Settlement Stipulation entered into by Keystone and Fargo provides that Keystone will voluntarily incorporate certain design features into its pipeline project, in the area of Lake Ashtabula and the Sheyenne River, above and beyond what is required by the governing federal pipeline safety regulations. Keystone submits, however, that the imposition of conditions by the Commission requiring similar features in other areas, in excess of federal pipeline safety requirements, would be contrary to the doctrine of federal preemption.¹

In the Settlement Stipulation Keystone and Fargo agreed to the following:

1. Design Review:
 - a. Keystone agrees to present information, by June 1, 2008, regarding Keystone's pipeline safety and integrity management program specifically for the Lake Ashtabula / Sheyenne River area.
 - b. Keystone agrees to provide Fargo with plans for the pipeline in the Lake Ashtabula / Sheyenne River area that show the features agreed to by the parties at Term #4 - Keystone Design, by June 1, 2008.
 - c. Keystone agrees to provide Fargo with the crossing method Keystone intends to use in crossing the Sheyenne River prior to commencement of construction work at the crossing, or no later than, March 31, 2008.
 - d. Fargo agrees to present information by June 1, 2008, regarding Fargo's current and long term water use plans.
2. Emergency Response Planning:
 - a. Keystone agrees to permit Fargo to review and provide comment on the development of Keystone's emergency response planning in the area of Lake Ashtabula and the Sheyenne River.
 - b. Keystone will provide Fargo with an initial opportunity to review the status of its emergency response planning no later than March of 2008.
 - c. Keystone will complete its Emergency Response Plan in the first quarter of 2009.
 - d. Keystone agrees to place Emergency Response resources in the Lake Ashtabula / Sheyenne River area.
3. Notice of Future Pipeline Infrastructure:
 - a. Keystone agrees to provide Fargo with specific notice of any application seeking regulatory approval of Keystone pipeline expansions: (i) in the Lake Ashtabula / Sheyenne River drainage basin, (ii) crossing the McClusky Canal, (iii) crossing of

¹ See Keystone Letter Dated December 14, 2007, and attached legal memorandum on federal preemption of hazardous liquid pipeline safety, filed as part of the record pursuant to N.D.C.C. Section 28-32-25.

the Red River Valley Water System pipeline running from the McClusky Canal to Lake Ashtabula, or (iv) any combination of said locations. Notice to Fargo will be provided at the time of such regulatory filing.

4. Keystone Design:

- a. Keystone will install an additional valve at or near mile post marker 131; and
- b. Keystone will implement additional pipeline integrity measures at the contributory pipeline segments associated with the seven intermittent stream crossings between milepost 105 and 128 [specifically at or near milepost 104.9, 111, 112.8, 113.2, 126.8, 127.5, and 128] identified in Exhibit T – 24, as follows:

1.A Cathodic Protection test station will be installed, subject to the approval of the landowner, at each of the identified seven intermittent stream crossings.

2.Keystone will perform high resolution in-line inspection of the identified pipeline segments for internal and external corrosion within the first three years of operation. Keystone will re-inspect within five years of the initial inspection.

5. Water Quality Research Program:

- a. Keystone agrees to fund the North Dakota Water Education Foundation a sum of \$ 100,000 to be paid over two years beginning in 2008 and ending in 2009.
- b. Fargo will use best efforts to solicit funding from other sources for additional funding to the North Dakota Water Education Foundation.
- c. Fargo will direct that the funding be utilized to study and monitor the overall quality of all of Fargo's primary and secondary water sources and this program will not be used to oppose the Keystone pipeline.

6. Dispute Resolution:

- a. Resolution of any dispute arising out of the terms of this Settlement Stipulation will be by arbitration.
- b. Arbitration will be conducted by an arbitrator or arbitrators. - After a party serves notice of a request for arbitration, the parties shall have thirty (30) days to agree to a single arbitrator. If the parties cannot agree on a single arbitrator, then each party may have an additional ten (10) days to select an arbitrator, and those two arbitrators shall, within thirty (30) days after the later of the two is selected, select a third arbitrator, who shall be an engineer with field and management experience in the long-term operation of high pressure crude oil pipelines over 24 inches in diameter. If the two arbitrators selected by the parties cannot agree within the specified time to a third arbitrator, then a judge of the State of North Dakota shall designate the third arbitrator in accordance with the Uniform Arbitration Act in effect in the State of North Dakota on the date the arbitration is requested.
- c. In the event of arbitration the parties agree that they have a right to have oral hearings, which will be held in Bismarck, North Dakota, unless the parties agree to a different site. Hearings will be conducted in English.

- d. The decision of the arbitrator(s) subject to state and federal regulation will be legally enforceable in accordance with the provisions of the Uniform Arbitration Act as in effect in the State of North Dakota on the date the arbitration is requested.
7. Settle Intervention and Public Press Release:
- a. Fargo agrees to withdraw its intervention in Case PU-06-421, and to publicly support Keystone's route and corridor in the Lake Ashtabula / Sheyenne River area.
 - b. Fargo agrees not to file any comments with respect to the Section 404 U.S. Army Corp of Engineers permit application, and agrees to file with the Department of State a letter indicating that the concerns noted by the City of Fargo in its prior filing have been resolved by a Settlement Stipulation entered into with Keystone.
 - c. Keystone and the City of Fargo agree to issue a joint press release describing the settlement of the City of Fargo's intervention in the Keystone project in North Dakota.
 - d. The parties agree that they will both affirmatively seek expedited approval of this Settlement Stipulation by the North Dakota Public Service Commission, and that neither party will take any action contrary to the terms of this Settlement Stipulation.
 - e. The parties agree that after the issuance of a certificate of corridor compatibility and route permit to Keystone, if the North Dakota Public Service Commission commences a proceeding to modify or revoke the permit, Fargo will have the right to intervene in the proceeding, and Keystone will stipulate and agree to the intervention. Fargo agrees that the provisions contained in this Settlement Stipulation will control any future intervention and that the issues settled by this Settlement Stipulation may not be re-litigated in a future proceeding,

The Settlement Stipulation resolves Fargo's intervention in this proceeding. Fargo has moved to withdraw its intervention and Fargo now supports Keystone's proposed route in the Lake Ashtabula and Sheyenne Rive area. Thus, the Settlement Stipulation resolves all of the issues that were set for hearing in the Commission's November 7, 2007 order. The resolution of all issues related to the safety of Fargo's water supply supports the approval of Keystone's proposed route in the area of Lake Ashtabula and the Sheyenne River.

ISSUE 2: Keystone's proposed route and corridor in the Lake Ashtabula and Sheyenne River area is safe and will produce minimal adverse impacts on the environment, natural resources, and the welfare of the citizens of North Dakota.

Keystone, in the first four days of hearings, through uncontested expert testimony, established that the location, construction and operation of the Keystone Pipeline will produce minimal adverse impacts, on the environment, natural resources, and the welfare of the citizens of North Dakota. Keystone further demonstrated that the Keystone Pipeline is compatible with environmental preservation and the efficient use of resources.

At the reopened hearing in November, Keystone established that Fargo's water intake on the Sheyenne River is located 236 river miles from Baldhill Dam, which holds back the water in Lake Ashtabula. Fargo's water intake is 209 river miles from the Keystone crossing of the Sheyenne River. In her risk analysis, Keystone's witness Heidi Tillquist found that crude oil would not reach the Sheyenne River or Lake Ashtabula, via overland flow, via subsurface flow, or via dry stream channels. Thus, those routes were eliminated as viable exposure routes. Tillquist looked at the Sheyenne River and Lake Ashtabula area and identified viable stream channels where, if a crude oil spill occurred, a spill could potentially get into the stream channel and be transported by flowing water down towards Lake Ashtabula or the Sheyenne River. In order for this to occur, it would take a large spill to get out of the trench, have sufficient volume to get into the stream channel, and have sufficient volume to move on down the stream. In the Lake Ashtabula area, a pipeline leak would have to occur along 1.4 miles of pipeline segments that could intersect with the intermittent streams that could actually flow into Lake Ashtabula. These intermittent streams are shown on the map, Exhibit T-23. There is another 1.4 miles of pipeline segments where a pipeline leak could get into the Sheyenne River.

The maximum occurrence frequency of a spill along the 1.4 miles of pipeline segments in the Lake Ashtabula area is not more than once every 13,000 years. The intermittent streams would have to be flowing at the time of the occurrence of the spill, and intermittent streams by definition are only flowing 50 percent or less of the time.

The closest viable stream to Baldhill Dam is 15 miles upstream of the dam. If a spill reached Lake Ashtabula via this stream, it would take three days to reach Baldhill Dam. The crude oil would float on the surface. Crude oil spreads at the rate of between 600 to 1000 feet per minute. Using the fastest rate, 1000 feet per minute, it would take three days before an oil spill could reach Baldhill Dam. This provides more than ample time for emergency response teams to detect, contain and clean up the spill within Lake Ashtabula.

The same analysis was done for the 1.4 miles of contributory pipeline segments for the Sheyenne River. Emergency response would have time to detect the spill and implement containment and cleanup. The crude oil would be floating on the surface, which would facilitate cleanup. Fargo would be notified of the spill under the emergency response procedures and could shut down its water intakes. The transit time for the dissolved constituents to travel the 209 miles from the Sheyenne River crossing to Fargo, would be 8-12 days at normal flow. As confirmed by the Longhorn oil spill study, the BTEX concentrations would dissipate and be below the maximum contaminant level before they reached Fargo.

The chance of BTEX compounds ever reaching Fargo is highly improbable or nonexistent. The chances of adverse effects to Fargo's water quality are nonexistent.

Keystone talked to the Department of Health about the location of the Keystone Pipeline and its proximity to Lake Ashtabula and the Sheyenne River and DOH was comfortable with the proposed location of the Keystone Pipeline route. In addition, Fargo now supports the proposed Keystone route in the Lake Ashtabula Sheyenne River area.

For all of the reasons set forth above, and as demonstrated at the original September 6

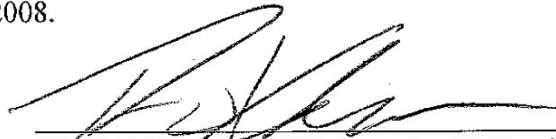
and 7, 2007 hearing, the proposed Keystone Pipeline route is safe. If the propose routing of a pipeline is safe, there is no need to look at a different route. Moreover, no party has proposed a fully developed alternative route in this area.

Because the evidence presented at the hearings in this proceeding demonstrate that Keystone's proposed route in the area of Lake Ashtabula and the Sheyenne River is safe and because all issues related to the safety of Fargo's water supply have been resolved to Fargo's satisfaction, the Commission should approve Keystone's proposed route in the area of Lake Ashtabula and the Sheyenne River.

CONCLUSION

With specific regard to the reopened portion of this proceeding, Keystone submits that the proposed route in the area of Lake Ashtabula and the Sheyenne River has been demonstrated to be safe and that the safety and public health issues raised by the City of Fargo regarding its water supply have been addressed to Fargo's satisfaction by the Settlement Stipulation. Accordingly, for the reasons set forth above, and in Keystone's earlier brief in this proceeding, Keystone respectfully requests that the Commission act expeditiously to approve Keystone's application for a certificate of corridor compatibility and route permit.

Dated this 7 day of January, 2008.



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