BEFORE THE
PUBLIC UTILITIES COMMISSION
STATE OF SOUTH DAKOTA

KEYSTONE XL PROJECT
DOCKET HP09-001

PREFILED TESTIMONY OF TIM BINDER
ON BEHALF OF THE COMMISSION STAFF
SEPTEMBER 2009

BEFORE THE PUBLIC UTILITIES COMMISSION STATE OF SOUTH DAKOTA

PREFILED TESTIMONY OF TIM BINDER

Q. State your name.

A. Tim Binder.

Q. State your employer and business address.

A. South Dakota Public Utilities Commission, 500 E Capitol Ave, Pierre, SD.

Q. State you position with the South Dakota Public Utilities Commission (SDPUC)

A. I am a Staff Analyst.

Q. What is your educational background?

A. I hold a Bachelor's degree in Political Sciences from the University of South Dakota of Vermillion, SD.

Q. When did TransCanada file the siting application for the Keystone XL pipeline?

A. The South Dakota Public Utilities Commission received the application on March 13, 2009.

Q. Did you review the TransCanada Keystone XL siting application?

A. Yes, along with the company's prefiled testimony, exhibits and data responses.

Q. Were other SDPUC Staff involved in the review of this application?

A. Yes, a variety of Staff, each with a different background are "assigned" to each docket the SDPUC considers. In this case, Staff members directly assigned to this application are:

(i) Nathan Solem, an engineer and a pipeline safety inspector;

(ii) Stacy Splittstoesser, an engineer and a pipeline safety inspector, with previous experience in the South Dakota Department of Environment and Natural Resources, and;

(iii) Bob Knadle, a staff analyst with an economics background.

Q. Was the application considered complete at the time of filing?

A. Generally, the application was complete. There were several areas, however, that both commission Staff and Staff subject matter experts believed needed additional detail or otherwise were not in strict compliance with the rules or statutes. Attached as Exhibit A are relevant portions of Staff's first two data requests along with applicant's answers. Staff believes this information, along with data request information provided later by expert subject matter witnesses completes the application.

Q. Explain, in your words, the role of the SDPUC Staff in siting permit applications.

A. It is our, Staff's, role to ensure that all applicable statutes and administrative rules are addressed. We study the application in order to determine whether the proposed project, in this case the pipeline, presents any overly burdensome threat of harm or impact to South Dakota's resources and citizens. Pipelines, just like cars, airplanes and boats are legal to operate in South Dakota, despite the inherent dangers associated with each. Staff further seeks to determine whether the planned construction, operation and maintenance of this pipeline present any undue or uncharacteristic dangers in comparison to other pipelines of similar type. With that in mind, Staff received the approval of the Commission to engage several independent experts to help identify potential mitigative measures which will lessen any dangers or potential damages presented by this application if the project is approved by the Commission.

Q. Please explain the burden of proof of applicants involved in siting applications of this nature.

A. South Dakota Codified Law 49-41-22 lays out four specific burdens for the applicant. Staff reads these burdens as follows:

(1) The proposed facility will comply with all applicable laws and rules;

(2) The facility will not pose *an unacceptable* threat of serious injury to the environment nor to the social and economic condition of inhabitants or expected inhabitants in the siting area;

(3) The facility will not substantially impair the health, safety or welfare of the inhabitants; and

(4) The facility will not unduly interfere with the orderly development of the region with due consideration having been given the views of governing bodies of affected local units of government.

Q. Staff has inserted "unacceptable" into burden two (2) above, why?

A. As the SD Supreme Court recognized in *The Matter of Otter Tail Power Company on Behalf of Big Stone II for an Energy Conversion Facility Permit for the Construction of the Big Stone II Project* (attached as Exhibit B), nothing in SDCL Chapter 49-41B restricts the PUC as to require it to prohibit facilities posing any threat of injury to the environment. Such a standard could potentially eliminate all siting projects in South Dakota. Rather, it is a question of the *acceptability* of a possible threat. As previously stated, Staff engaged several independent experts to help identify any potentially unacceptable threats. The experts also identified potential mitigative measures to lessen any threat.

Q. Does Staff have any recommendations regarding an appropriate indemnity bond for damages according to SDCL 49-41B-38?

A. Yes. Staff reviewed the statute, prior commission action and all information submitted by the applicant (See Exhibit A) regarding the proper bond amount. Based on Staff's review, we find the applicant's recommendation of a $15,600,000 indemnity for 2011 and a second indemnity bond in the same amount for 2012 to be appropriate.

Q. How many parties submitted a request to intervene?

A. 15 parties requested intervention.

Mary Jasper (Jasper)

Paul F. Seamans (Seamans)

Darrell Iversen (D. Iversen)

The City of Colome (Colome)

Glen Iversen (G. Iversen)

Jacqueline Limpert (Limpert)

John H. Harter (Harter)

Zona Vig (Vig)

Tripp County Water User District (TCWUD)

Dakota Rural Action (DRA)

David Niemi (David Niemi)

Debra Niemi (Debra Niemi)

Lon Lyman (Lyman)

Ruth M. Iversen (Iversen)

Martin R. Lueck (Lueck)

Q. Were all those parties granted intervener status?

A. Yes, all parties requesting intervention status were granted party status to this proceeding.

Q. Did Staff communicate with the interveners? If so, how?

A. Yes, Staff's first discovery request sent on June 12, 2009, to interveners included a cover letter outlining the procedural schedule as approved by the Commission on June 9th, as well as a brief description of the intervention process. The correspondence is attached as Exhibit C. It was Staff's hope that interveners would come forward with

concerns that could be vetted by the independent experts, referenced below, as well as through the process of further discovery.

Q. Did Staff receive any responses or objections from interveners regarding Staff's discovery request?

A. No, with the exception of Dakota Rural Action, Staff did not receive discovery responses or objections from interveners. Staff asked that initial responses be submitted by July 13, 2009, and with the exception of Dakota Rural Action, Staff received no substantive replies to our discovery request.

Q. Did Staff receive *any* communication from interveners, other than Dakota Rural Action, regarding the pre-hearing process? (pre-filed testimony, discovery, etc.)

A. Yes, one intervener, Debra Niemi, responded to Staff's June 12, 2009, communication on August 24, 2009. Staff assisted Ms. Niemi and her brother in filing testimony.

Q. Has Staff received any other communications from any of the intervening parties other than Dakota Rural Action or Ms. Niemi?

A. No, as of the filing date of this testimony, September 25, 2009, Staff has not received any communications, replies or responses from any of the other interveners.

South Dakota Public Utilities Commission
TransCanada Keystone Pipeline, LP
Docket HP09-001
Response to Staff's First Data Request

1-1

Data Request:

Provide a description of the present US demand for crude oil per 20:10:22:10.

Response:

U.S. crude oil demand, as represented by U.S. crude oil refinery inputs, averaged about 14.5 million barrels per day (bpd) for the week ending April 17, 2009, up 529 thousand bpd from the previous week's average. Net U.S. imports of crude oil averaged nearly 9.9 million bpd during that same period, up 464 thousand bpd. (EIA Weekly Petroleum Status Report, week ended April 17, 2009 **DOE/EIA-0208(2009-16)**).

Response prepared by: Robert Jones

Exhibit A

1-2

Data Request:

Provide a map showing cemeteries and places of historical significance adjacent to or abutting the transmission site per 20:10:22:11. The towns of Buffalo and Midland show on the route maps but the cemeteries are not noted.

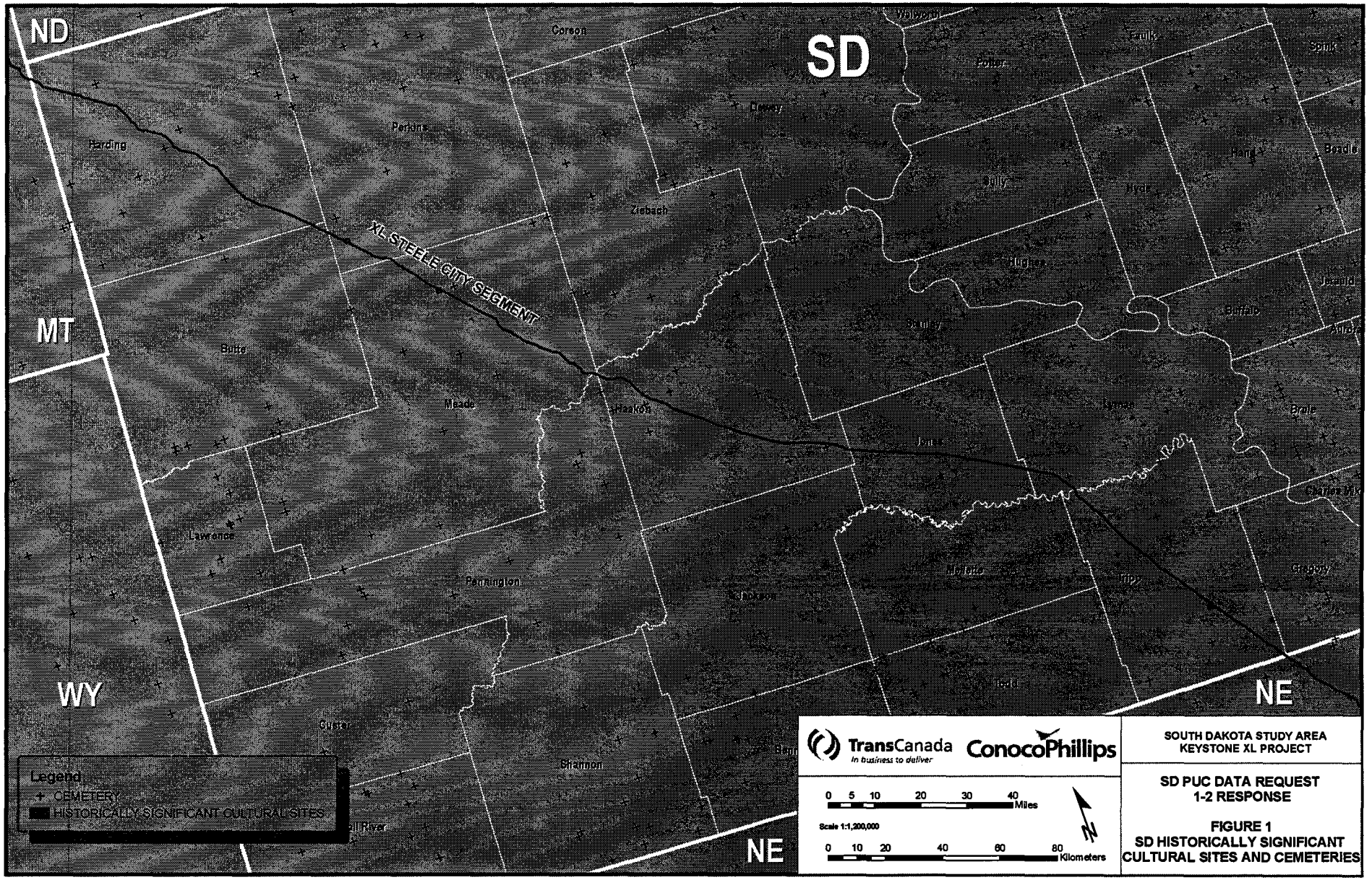
Response:

Cemeteries adjacent to or abutting the Project are noted in Exhibit A of the application as labels on Mapbook 1 and as included on the USGS 1:24,000 topographic maps base on Mapbook 2. The cemetery near the Town of Buffalo is located south of town which is not shown on the submitted maps. The cemetery of the Town of Midland is labeled in both mapbooks. Please see the attached **Figure 1** for locations of cemeteries in South Dakota.

Keystone understands "places of historical significance" to mean prehistoric or historic districts, sites, buildings, structures, or objects included in or eligible for the National Register of Historic Places (NRHP). Due to the sensitive nature of these locations, they have only been identified to the Section scale (see attached letter). Please see the attached **Figure 1** for locations of the four identified places of historical significance near the route in South Dakota.

Department of State will assess the information provided and determine eligibility for the NRHP with the South Dakota State Historic Preservation Officer.

Response prepared by: Jon Schmidt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XL STEELE CITY SEGMENT
Corson
Walworth
Faulk
Spink
Potter
Dewey
Perkins
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Ziebach
Hyde
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Jerauld
Buffalo
Butte
Meade
Haakon
Lyman
Brule
Jones
Lawrence
Pennington
Tripp
Gregory
Mellette
Todd
Custer
Shannon
Bennett
Legend
CEMETERY
HISTORICALLY SIGNIFICANT CULTURAL SITES
TransCanada
In business to deliver
ConocoPhillips
0 5 10 20 30 40 Miles
Scale 1:1,200,000
0 10 20 40 60 80 Kilometers
SOUTH DAKOTA STUDY AREA
KEYSTONE XL PROJECT
SD PUC DATA REQUEST
1-2 RESPONSE
FIGURE 1
SD HISTORICALLY SIGNIFICANT
CULTURAL SITES AND CEMETERIES

SouthDakota Department of Tourism and State Development

January 15, 2009

The South Dakota Office of the State Historic Preservation Officer encourages State and Federal agencies to protect fragile and non-renewable sacred and cultural resources through the restriction of site location data. The release of this information could result in the vandalism, looting or other damage of scared and cultural resources. The following laws prohibit the public dissemination of site location data.

South Dakota Codified Law 1-20-21.2.

Confidentiality of records pertaining to location of archaeological site-- **Exceptions**. Any records maintained pursuant to § 1-20-21 pertaining to the location of an archaeological site shall remain confidential to protect the integrity of the archaeological site. The state archaeologist may make the information from the records of an archeological site available to any agency of state government and any political subdivision of the state or to any tribe, which, in the opinion of the state archaeologist, may conduct an activity that affects any such site. The state archaeologist shall also make the information from the records of an archeological site available to the owner of the land that is an archeological site and may make the information available to any qualified researcher or research entity.

Section 304 (16 U.S.C. 4702-3)

(a) Authority to Withhold from Disclosure. The head of a Federal agency or other public official receiving grant assistance pursuant to this Act, after consultation with the Secretary, shall withhold from disclosure to the public, information about the location, character, or ownership of a historic resource if the Secretary and the agency determine that disclosure may-

(1) cause a significant invasion of privacy;

(2) risk harm to the historic resource; or

(3) impede the use of a traditional religious site by practitioners.

(b) Access Determination.-When the head of a Federal agency or other public official has determined that information should be withheld from the public pursuant to subsection (a), the Secretary, in consultation with such Federal agency head or official, shall determine who may have access to the information for the purpose of carrying out this Act.

Office of Tourism
Governor's Office of Economic Development
Tribal Government Relations
711 E Wells Ave / Pierre, SD 57501-3369
Phone: 605-773-3301 / Fax: 605-773-3256
travelsd.com / sdgreatprofits.com / sdtribalrelations.com

South Dakota Arts Council
800 Governors Dr. / Pierre, SD 57501-2294
Phone: 605-773-3131 or 1-800-423-6665 in SD
Fax: 605-773-6962
sdac@state.sd.us / sdarts.org

South Dakota State Historical Society
900 Governors Dr. / Pierre, SD 57501-2217
Phone: 605-773-3458 / Fax: 605-773-6041
sdhistory.org

South Dakota Housing Development Authority
PO Box 1237 / Pierre, SD 57501-1237
Phone: 605-773-3181 / Fax: 605-773-5154
sdhda.org

SouthDakota GREAT FACES. GREAT PLACES.

(c) Consultation with Council.-When the information in question has been developed in the course of an agency's compliance with section 106 or 110(f), the Secretary shall consult with the Council in reaching determinations under subsections (a) and (b).

Archeological Resources Protection Act - Section 9

(a) Information concerning the nature and location of any archaeological resource for which the excavation or removal requires a permit or other permission under this Act or under any other provision of Federal law may not be made available to the public under subchapter II of chapter 5 of title 5 [of the United States Code] or under any other provision of law unless the Federal land manager concerned determines that such disclosure would—

(1) further the purposes of this Act or the Act of June 27, 1960 [the Reservoir Salvage Act, as amended, 16 U.S.C. 469- 469c-1] and

(2) not create a risk of harm to such resources or to the site at which such resources are located.

1-3

Data Request:

Provide a written summary of the geological features using a topographical map as a base showing the bedrock geology and surficial geology with sufficient cross-sections to depict the major subsurface variations in the siting area. Current description does not utilize map.

Response:

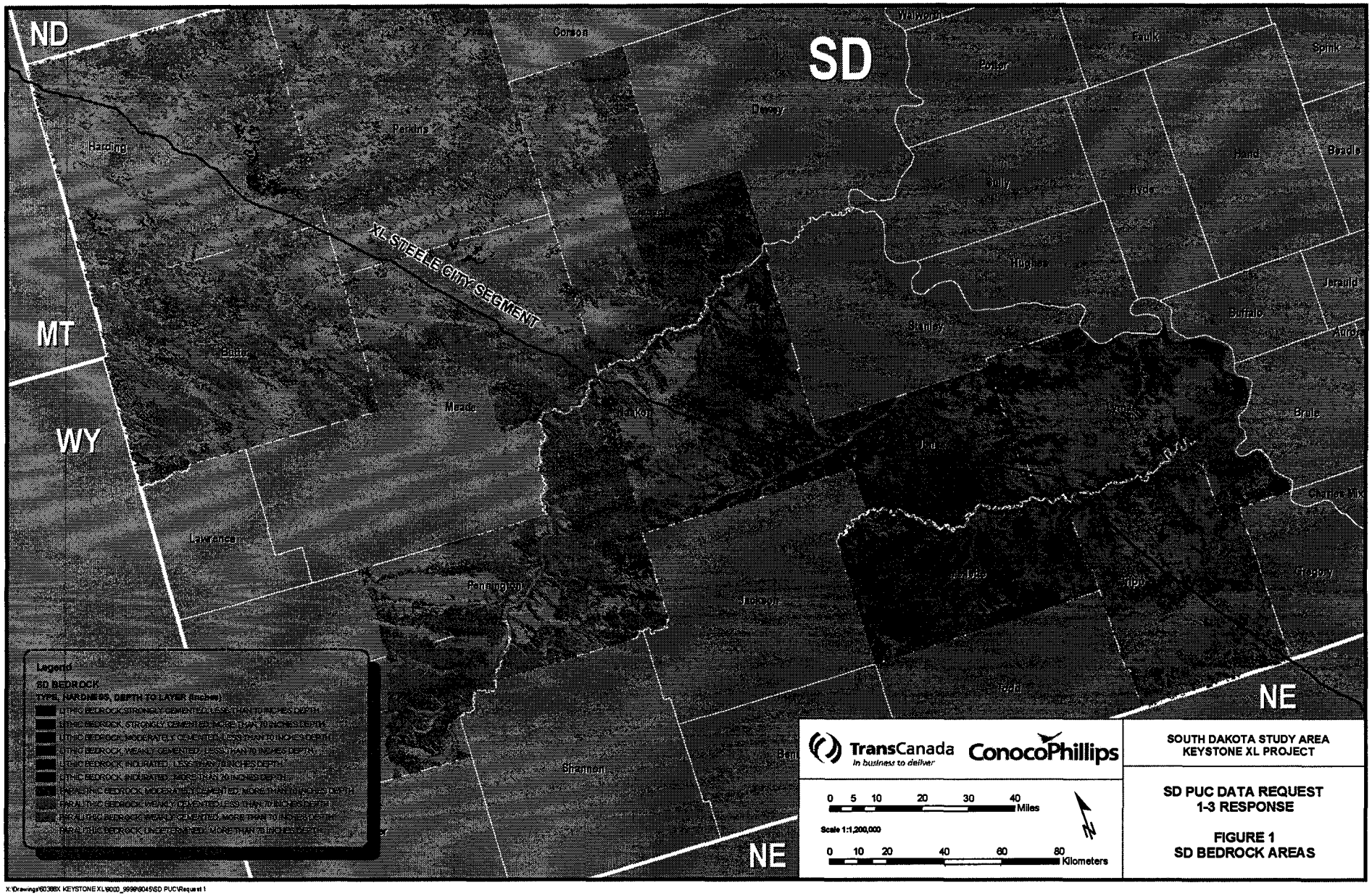
Maps depicting the bedrock and surficial geology of the Project area, along with a figure depicting available geologic cross-sections of the Project area are provided as an attachment to this response. South Dakota Geological Survey 15 minute geologic maps are also provided for reference where available in the Project area.

Figure 1 depicts the bedrock type, hardness, and depth within counties crossed by or near the route.

Figure 2 depicts the surface geology of the State of South Dakota according to the SDGS (Martin et al., 2004). Please note, that according to Martin et al. (2004) "This map should not be enlarged or otherwise used in an attempt to interpret more detail than can be seen at the 1:500,000 scale."

Figure 3 contains available generalized geologic cross sections that have been modified to reflect the relative location of the Project in the northern portion of the route.

Response prepared by: Richard Gale



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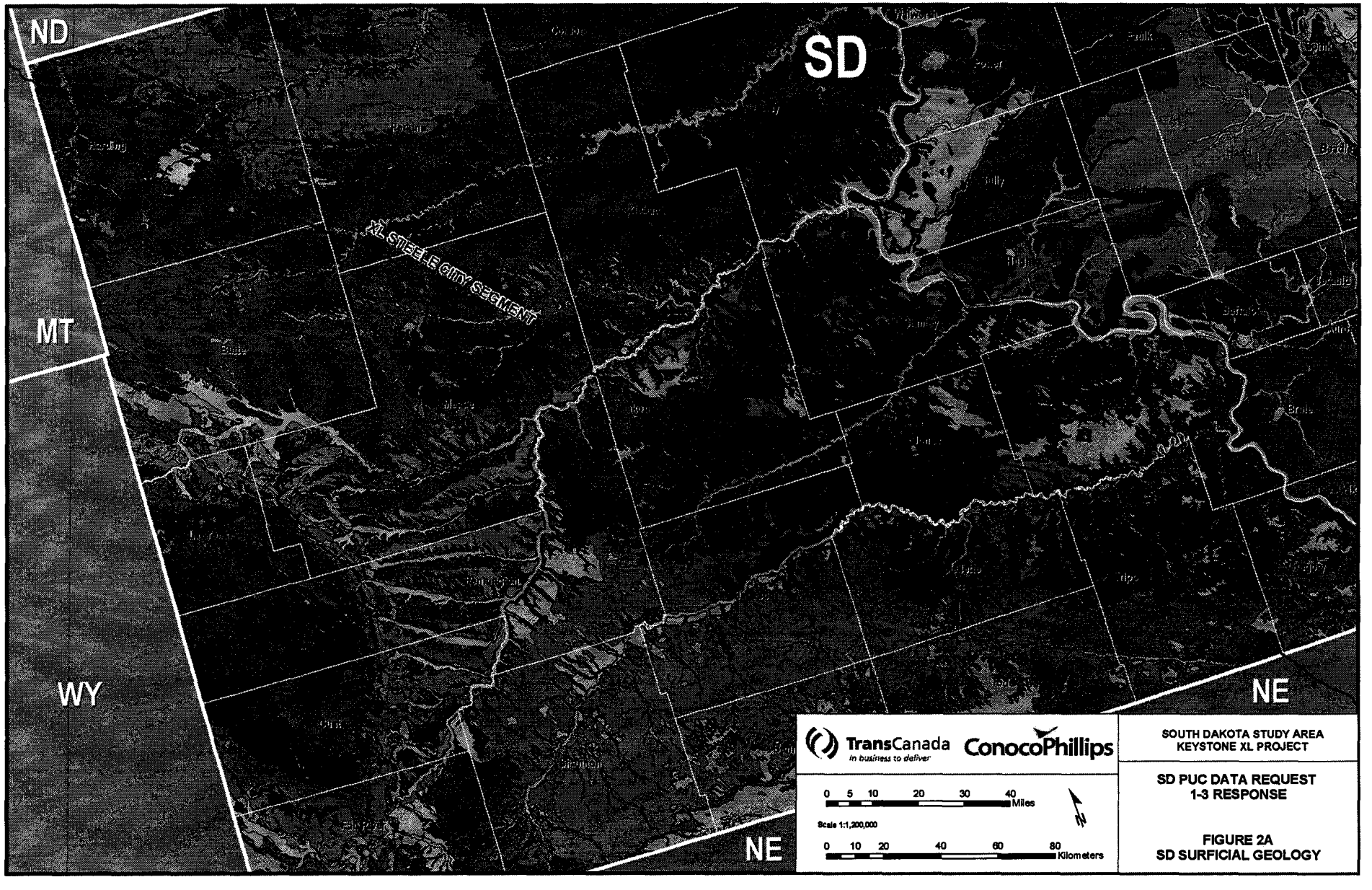
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SOUTH DAKOTA STUDY AREA
KEYSTONE XL PROJECT
SD PUC DATA REQUEST
1-3 RESPONSE
FIGURE 2A
SD SURFICIAL GEOLOGY

SOUTH DAKOTA STUDY AREA
KEYSTONE XL PROJECT

SD PUC DATA REQUEST
1-3 RESPONSE

FIGURE 2B
SD SURFICIAL GEOLOGY LEGEND

TransCanada
In business to deliver

ConocoPhillips

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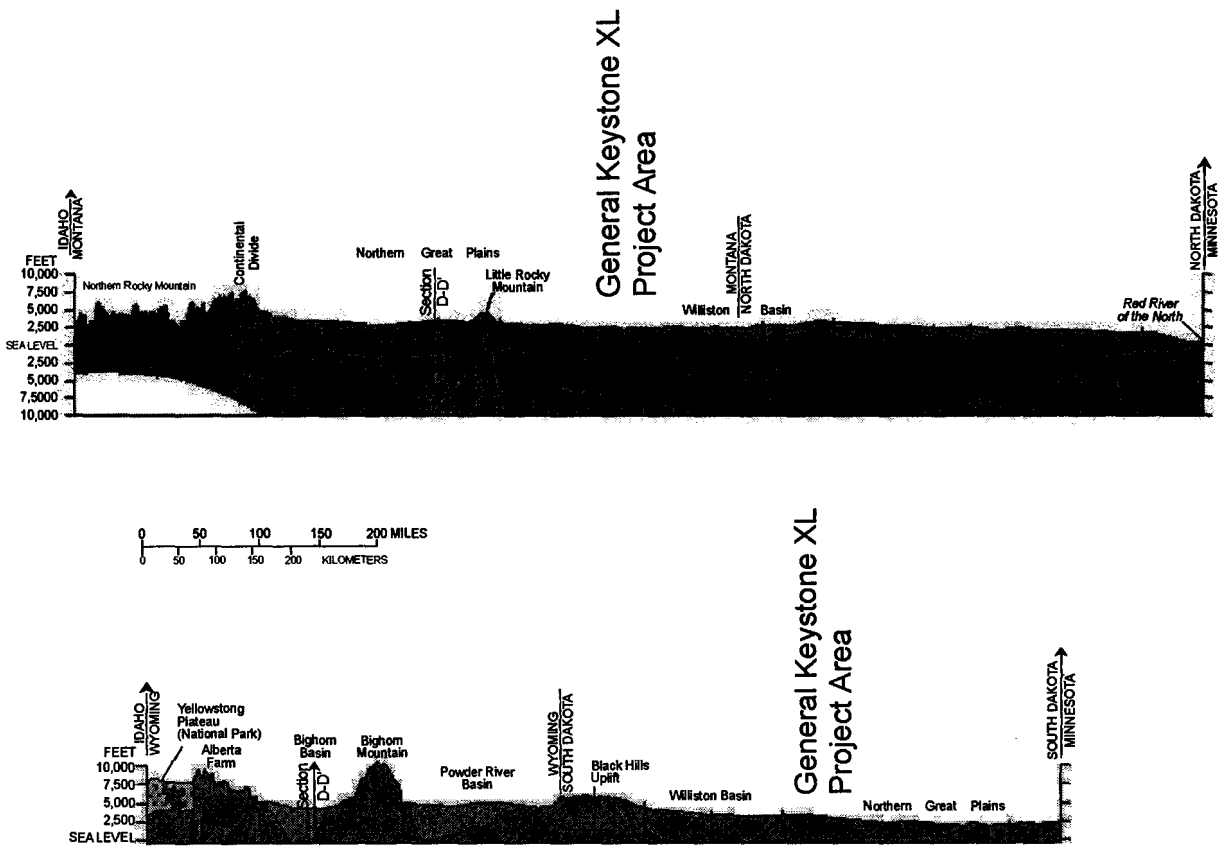

Modified from:

Whitehead, R.L. 1996. Groundwater Atlas of the United States, Segment 8: Montana, North Dakota, South Dakota, and Wyoming. US Geological Survey Hydrologic Atlas 730-I; Figure 11.

EXPLANATION

- Quaternary volcanic rocks
- Quaternary and Tertiary valley-fill deposits
- Tertiary intrusive and volcanic rocks
- Tertiary sedimentary rocks
- Mesozoic sedimentary rocks
- Paleozoic sedimentary rocks
- Precambrian Belt Supergroup
- Precambrian igneous and metamorphic rocks
- Fault—Arrows show relative vertical movement
- Bend in section

SOUTH DAKOTA STUDY AREA
KEYSTONE XL PROJECT

SD PUC DATA REQUEST
1-3 RESPONSE

FIGURE 3
GENERAL GEOLOGIC CROSS-SECTIONS

1-5

Data Request:

Provide a table to show breeding times of sensitive SD species and a map to show migration pathways of sensitive SD species. Additionally, provide a map of recorded occurrences of the prairie fringed orchid. (SDCL 20:10:22:16).

Response:

Breeding periods of sensitive species potentially occurring within the Keystone XL Project area in South Dakota are listed below.

Species	Breeding Periods
Bald Eagle	February 1 - August 15
Greater Sage Grouse	March 1 - June 15
Interior Least Tern	April 15 - August 15
Whooping Crane	NA – Migrant through the project area only.
River Otter	February 15 - June 15
Swift Fox	April 1 - August 31
Blacknose Shiner	June 1 - July 31
Northern Redbelly Dace	April 1 - June 30
Pearl Dace	June 1 - July 31
Sturgeon Chub	June 1 - July 31
American Burying Beetle	June and August

Consultation with the South Dakota Department of Game, Fish and Parks (SDGFP) indicates that there is no specific information on migration pathways of sensitive South Dakota species (SDGFP 2009). It is assumed that riparian corridors function as pathways for some species.

Comparison of the western prairie fringed orchid historical and extant ranges shows the species apparently has been lost from South Dakota (USFWS 1996), but factors that indicate the species could still be present include 1) incomplete surveys in areas of suitable habitat crossed by the project route on private lands; and 2) erratic flowering patterns and long dormancies make it difficult to detect populations (Phillips 2003). Based on these factors and agency review of the project route through South Dakota, the USFWS recommends surveys for occurrence along the

1-5

project route south of Hwy 18 in Tripp County (USFWS 2008). Surveys are planned for June 2009 and information will be provided following survey completion.

References:

Phillips, L. 2003. Pollination of Western Prairie Fringed Orchid, *Platanthera praeclara*: Implications for Restoration and Management. Restoration and Reclamation Review Student On-Line Journal (Hort 5015/5071). University of Minnesota, St. Paul, Minnesota (USA) Department of Horticultural Science. (http://hort.agri.umn.edu/h5015/rrr.htm).

South Dakota Department of Game, Fish, and Parks (SDGFP). 2009. Email correspondence from D. Backlund (SDGFP) to P. Lorenz (AECOM). April 2, 2009.

U.S. Fish and Wildlife Service (USFWS). 2008. Correspondence during a meeting held on June 10, 2008 between C. Besskin (USFWS) and P. Lorenz (AECOM) in Pierre, SD.

USFWS. 1996. Western Prairie Fringed Orchid Recovery Plan (*Platanthera praeclara*). U.S. Fish and Wildlife Service. Fort Snelling, Minnesota. Vi + 101 pp.

Response prepared by: Jon Schmidt

1-6

Data Request:

Provide a description of the steps you will take to foster positive public relations per ARSD 20:10:22:23 (7).

Response:

Please refer to Section 6 of the Keystone XL permit application for discussion of impacts that the construction, operation, and maintenance of the proposed pipeline will have on the affected area. Amelioration of potential adverse community impacts is discussed within the section and throughout other parts of the application. In general, community impacts are expected to be positive and potential negative impacts will be ameliorated through thoughtful design, construction and operation.

Complementing the design, construction and operation of the pipeline, TransCanada's approach to siting and construction fosters positive public relations by striving to:

- Provide information about the project and the company to landowners, communities and other interested parties along the route;
- Gather feedback on the proposed project from interested parties;
- Provide information in response to stakeholder issues and concerns; and
- Build a foundation for the development of long-term relations with key stakeholders and communities.

The approach includes:

- Project open houses /informational meetings;
- Local meetings and briefings with public officials and other interested parties;
- Providing information and responding to queries from local and regional media;
- Meetings and discussions with landowners;
- Establishment of toll-free information lines and project e-mail to facilitate questions about the project;
- Establishment of a project website;
- Development of fact sheets describing the project;
- Issuance of newsletters regarding project developments; and
- Monitoring and additional actions as appropriate.

Response prepared by: Robert Jones

1-7

Data Request:

Supply more detailed labor estimate by type of position per 20:10:22:24 for:

a) Number of permanent positions with Keystone XL and estimated annual labor costs
b) Number of contractor permanent positions and estimated annual labor costs
c) Number of subcontractor permanent positions and estimated annual labor costs
d) Number of construction positions with Keystone XL and estimated annual labor costs
e) Number of contractor construction positions and estimated annual labor costs
f) Number of subcontractor construction positions and estimated annual labor costs

Response:

a) Permanent staff positions with Keystone XL are planned to be in two locations, one location will have 4 employees (2 technical, 1 manager and 1 administrator), and the second location will have 2 employees (both technical). The total is 6 employees, with an estimated annual labor costs @ $860,000.
b) Keystone does not anticipate that any new contractors or subcontractors will form to construct and operate the Project; however Keystone will utilize existing local firms for brush clearing, snow removal, and emergency response contractor personnel.
c) Please see response to (b).
d) The number of construction positions associated with the Keystone XL Project is 90 with an annual labor const of $13 million over tow years.
e) **Table 16** in the original application reflects the number of contractor and subcontractor construction positions and estimated annual labor costs.
f) Please see response to (e).

Response prepared by: Robert Jones

1-8

Data Request:

Please provide for each classification in question 1-7 above, the percentage of employees that will remain in the area after construction is completed.

Response:

a) 100%
b) Although Keystone does not anticipate having permanent positions after construction, the local firms hired as described in the response to 1-7 (b) will be located in South Dakota.
c) 0% Please see response to DR 1-7 (b).
d) 0%
e) 10%-15% It is estimated that approximately 10 to 15 percent of the total construction work force could be hired locally. This same 10 to 15 percent is expected to remain in the area after construction is complete.
f) Please see response to (e).

Response prepared by: Robert Jones

1-9

Data Request:

Provide a flowchart showing design capacity of the transmission system per 20:10:22:38 (1). The current flowchart does not show the design capacity.

Response:

The Mechanical Flow Schematic provided in the application as Exhibit 3 reflects the nominal design capacity of 900,000 bpd.

Response prepared by: Meera Kothari

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF SOUTH DAKOTA

In the Matter of the Application by TransCanada Keystone Pipeline, LP for a Permit under the South Dakota Energy Conversion and Transmission Facility Act to Construct the Keystone XL Project

DOCKET HP09-001

STAFF'S SECOND DATA REQUEST

May 22, 2009

2-1. Please provided estimated time schedules for accomplishment of major events in the commencement and duration of the proposed facility per ARSD 20:10:22:22. Provide the same information for each construction spread in South Dakota.

Description	Start	End
2011 Mobilization	**04/15/11**	**05/15/11**
Spread 5	04/15/11	05/14/11
Spread 7	04/15/11	05/14/11
2012 Mobilization	**04/16/12**	**05/15/12**
Spread 4	04/16/12	05/15/12
Spread 6	04/16/12	05/15/12
Spread 8	04/16/12	05/15/12
2011 Construction	**05/16/11**	**10/12/11**
Spread 5	05/16/11	10/12/11
Spread 7	05/16/11	10/12/11
Final Clean Up for 2011 Spreads	**08/29/11**	**10/12/11**
Spread 5	08/29/11	10/12/11
Spread 7	08/29/11	10/12/11
Complete T&E Species Exclusion Windows & HDD Crossings	**09/15/11**	**12/15/11**
Spread 4	09/15/11	12/15/11
Spread 6	09/15/11	12/15/11
Spread 8	09/15/11	12/15/11
2012 Construction	**05/16/12**	**10/12/12**
Spread 4	05/16/12	10/12/12
Spread 6	05/16/12	10/12/12
Spread 8	05/16/12	10/12/12
Final Clean Up 2012 Spreads	**10/13/12**	**11/30/12**
Spread 4	10/13/12	11/30/12
Spread 6	10/13/12	11/30/12
Spread 8	10/13/12	11/30/12

2-2. Please provide the total number of open cuts across public gravel and the total across public paved roads.

Keystone does not anticipate the open cutting of any public gravel or paved road. Site visits confirm that successful road bores should be achievable at all public roads. Private roads will likely be crossed by open cutting.

2-3. Please provide the total estimated cost of the road restoration for all public road open cuts and the total estimated cost for road restoration of all public paved road open cuts.

This is not applicable, as Keystone will not open-cut any public roads.

2-4. What is the average width of an open cut across a road? (Not road width but length of road disturbed by the open cut.)

Again, Keystone does not anticipate open cutting of any public roads. Open cutting of private roads is a function of the pipe diameter. For the 36-inch Keystone XL project, it is anticipated that the length of disturbance along the private road would be 12 feet.

2-5. SCDL 49-41B-38 requires an indemnity bond for damage to roads and bridges. Propose an equitable amount for said bond and provide the basis for determining that amount.

In the Keystone Pipeline proceeding, the Commission adopted an indemnity bond amount based on 10 percent of the value of construction in South Dakota for each year of construction, as recommended in Witness Muehhausen's testimony and report. For the Keystone XL project, the total construction costs for South Dakota are approximately $312,000,000. Accordingly, using the Commission's Keystone approach, Keystone suggests a $15,600,000 indemnity bond each for 2011 and 2012.

2-6. Provide an estimate of the number of miles of gravel or stone surfaced roads that may require grading and/or replenishment of the surface materials due to deterioration from pipeline construction traffic.

The total estimated number of miles of gravel or stone surfaced roads that will be utilized during construction is approximately 600 miles. Based on experience from a previous project in North Dakota, approximately 50% or 300 miles of the roads may require grading and/or replenishment of the surface materials due to deterioration from pipeline construction traffic.

2-7. Provide an estimate of the cost of the grading and replenishment in the previous question.

An estimate of the cost of the grading and replenishment in question 2-6 is in the range of $3,168,000 to $3,326,400

744 N.W.2d 594, 2008 SD 5
(Cite as: 744 N.W.2d 594)

C

Supreme Court of South Dakota.
In the Matter of OTTER TAIL POWER COMPANY on Behalf of **BIG STONE II** co-Owners for an Energy Conversion Facility Permit for the Construction of the **Big Stone II** Project.
No. 24485.

Argued on Nov. 7, 2007.
Decided Jan. 16, 2008.

Background: Electric utility applied for a permit to construct a coal-fired conversion facility. The Public Utilities Commission (PUC) approved the permit, and environmental organizations appealed. The Circuit Court of the Sixth Judicial Circuit, Hughes County, Lori S. Wilbur, J., affirmed, and environmental groups appealed.

Holdings: The Supreme Court, Konenkamp, J., held that:
(1) the PUC's decision to grant the permit would not be reviewed de novo, and
(2) evidence was sufficient to establish that the facility would not pose a threat of serious injury to the environment, though it would emit 4.7 million tons of carbon dioxide annually.

Affirmed.

West Headnotes

[1] Public Utilities 317A 194

317A Public Utilities
317AIII Public Service Commissions or Boards
317AIII(C) Judicial Review or Intervention
317Ak188 Appeal from Orders of Commission
317Ak194 k. Review and Determination in General. Most Cited Cases
Findings of fact by the Public Utilities Commission (PUC) are reviewed under the clearly erroneous standard, while its conclusions of law are reviewed de novo. SDCL § 1-26-36.

[2] Public Utilities 317A 194

317A Public Utilities
317AIII Public Service Commissions or Boards
317AIII(C) Judicial Review or Intervention
317Ak188 Appeal from Orders of Commission
317Ak194 k. Review and Determination in General. Most Cited Cases
In an appeal of a decision by the Public Utilities Commission (PUC), a reviewing court must consider the evidence in its totality and set the PUC's findings aside if the court is definitely and firmly convinced a mistake has been made. SDCL § 1-26-36.

[3] Electricity 145 8.6

145 Electricity
145k8.6 k. Environmental Considerations in General. Most Cited Cases
Supreme Court would not review decision by Public Utilities Commission (PUC) to issue electric utility a permit to construct a coal-fired conversion facility de novo, and instead would review the decision under the clearly erroneous standard, despite contention by environmental groups that the PUC erroneously applied statute, requiring a permit applicant to establish that a proposed facility did not pose a serious threat to the environment, by approving the permit when the PUC also found that the facility would emit 4.7 million tons of carbon dioxide annually; no matter how grave the Court's concerns were on global warning, the Legislature designated the PUC as the responsible agency for the question of granting a permit, and the Legislature and Congress were the government bodies which had to balance the competing interest of economic development and protection of the environment. SDCL §§ 1-26-36, 49-41B-22.

[4] Public Utilities 317A 194

317A Public Utilities
317AIII Public Service Commissions or Boards
317AIII(C) Judicial Review or Intervention
317Ak188 Appeal from Orders of Commission
317Ak194 k. Review and Determina-

Exhibit B

tion in General. Most Cited Cases
In an appeal of a decision by the Public Utilities Commission (PUC), while a reviewing court gives due regard to the agency's well-reasoned and fully informed decision, the court will not uphold clear errors of judgment or conclusions unsupported in fact. SDCL § 1-26-36.

[5] Electricity 145 ⇐8.6

145 Electricity
145k8.6 k. Environmental Considerations in General. Most Cited Cases
Evidence was sufficient to establish, in permit proceeding before the Public Utilities Commission (PUC), that electric utility's proposed coal-fired conversion facility would not pose a threat of serious injury to the environment; though the PUC found that the facility would emit 4.7 million tons of carbon dioxide annually, environmental groups opposing the facility did not dispute there was a need for additional wattage and did not present a viable alternative to the facility, no carbon dioxide emission standards had been enacted by Congress, and there was evidence that the facility would only increase carbon dioxide emissions by 0.0007 percent nationally and that the facility would produce 18% less carbon dioxide that existing coal-fired plants. SDCL §§ 1-26-36, 49-41B-22.
***595** Janette K. Brimmer of Minnesota Center for Environmental Advocacy St. Paul, Minnesota, John H. Davidson, Vermillion, South Dakota, Attorneys for appellants ***596** Fresh Energy, Izaak Walton League of America-Midwest Office, Union of Concerned Scientists & Minnesota Center for Environmental Advocacy.

Thomas J. Welk, Christopher W. Madsen of Boyce, Greenfield, Pashby & Welk Sioux Falls, South Dakota, Attorneys for appellee **Big Stone II** Co-Owners.

John J. Smith, Assistant Attorney General, SD Public Utilities Commission, Pierre, South Dakota, Attorneys for appellee SD Public Utilities Commission.

KONENKAMP, Justice.

[¶ 1.] Otter Tail Power Company, on behalf of several utilities, applied for a permit to construct **Big Stone II**, a coal-fired energy conversion facility. Certain non-profit environmental organizations intervened to oppose the application. They asserted that the carbon dioxide (CO_2) emissions from **Big Stone II** would contribute to global warming, thereby posing a threat of serious environmental injury. The South Dakota Public Utilities Commission (PUC) concluded that although the facility will emit CO_2, the amount will not pose a threat of *serious* injury to the environment. It found that CO_2 emissions are not currently regulated by Congress or South Dakota and that **Big Stone II** would only increase the national amount of emissions by seven hundredths of one percent. Because the PUC followed existing legal guidelines in approving the permit, and its findings were not clearly erroneous, we uphold its decision.

Background

[¶ 2.] The South Dakota Legislature acknowledged the significant impact energy development has on "the welfare of the population, the environmental quality, the location and growth of industry, and the use of the natural resources of the state." SDCL 49-41B-1. It enacted legislation to "ensure that [energy conversion and transmission] facilities are constructed in an orderly and timely manner so that the energy requirements of the people of the state are fulfilled." *Id.* The Legislature deemed it "necessary to ensure that the location, construction, and operation of facilities will produce minimal adverse effects on the environment and upon the citizens of this state by providing that a facility may not be constructed or operated in this state without first obtaining a permit from the [PUC]." *Id;* SDCL 49-41B-4.

[¶ 3.] A permit application must include:

(1) The name and address of the applicant;

(2) Description of the nature and location of the facility;

(3) Estimated date of commencement of construction and duration of construction;

(4) Estimated number of employees employed at the site of the facility during the construction phase and during the operating life of the facility. Estimates shall include the number of employees who are to be utilized but who do not currently reside

within the area to be affected by the facility;

(5) Future additions and modifications to the facility which the applicant may wish to be approved in the permit;

(6) A statement of the reasons for the selection of the proposed location;

(7) Person owning the proposed facility and person managing the proposed facility;

(8) The purpose of the facility;

(9) Estimated consumer demand and estimated future energy needs of those consumers to be directly served by the facility;

*597 (10) The potential short and long range demands on any estimated tax revenues generated by the facility for the extension or expansion of public services within the affected areas;

(11) Environmental studies prepared relative to the facility;

(12) Estimated construction cost of the facility.

SDCL 49-41B-11.

[¶ 4.] After a request for a permit is filed, the PUC must enlist a local review committee, which "shall meet to assess the extent of the potential social and economic effect to be generated by the proposed facility, to assess the affected area's capacity to absorb those effects at various stages of construction, and formulate mitigation measures." SDCL 49-41B-7. This committee issues a final report to the PUC with its findings and "recommendations of the committee as to mitigation measures and minority reports." SDCL 49-41B-10. The PUC may also "prepare or require the preparation of an environmental impact statement[.]" SDCL 49-41B-21. An applicant is required "to establish that: (1) The proposed facility will comply with all applicable laws and rules; (2) The facility will not pose a threat of serious injury to the environment nor to the social and economic condition of inhabitants or expected inhabitants in the siting area; (3) The facility will not substantially impair the health, safety or welfare of the inhabitants; and (4) The facility will not unduly interfere with the orderly development of the region with due consideration having been given the views of governing bodies of affected local units of government." SDCL 49-41B-22.

[¶ 5.] On November 8, 2004, in accord with SDCL 49-41B-5, the Otter Tail Corporation, doing business as Otter Tail Power Company, submitted a proposal to the PUC for permission to construct an energy conversion facility. Otter Tail submitted the proposal on behalf of Central Minnesota Municipal Power Agency, Great River Energy, Heartland Consumers Power District, Montana-Dakota Utilities Company, a division of MDU Resources Group, Inc., Southern Minnesota Municipal Power Agency, and Western Minnesota Municipal Power Agency (Applicants).[FN1] As proposed, the facility would be a 600 megawatt (MW) coal-fired electric generating plant to be located in Grant County, South Dakota, east of Milbank and Northwest of Big Stone.[FN2] The facility would be named **Big Stone II** and be situated next to an older facility, Big Stone I.

FN1. As confirmed by counsel at oral argument, some utilities have since pulled out of the project. Otter Tail and Montana-Dakota Utilities Company indicate that they will proceed with a smaller facility.

FN2. In 1972, various electrical utilities and other electrical industry participants voluntarily joined Mid-Continent Area Power Pool (MAPP), an association organized to promote efficiency and reliability in the industry by pooling power generation and transmission. MAPP noted that by the summer of 2011, the MAPP United States region would have an 819 megawatt deficit. To alleviate the forecasted deficit, MAPP concluded that members would need to construct power generators, purchase additional capacity, and/or reduce the growth in demand.

[¶ 6.] Several organizations sought to intervene: Clean Water Action; South Dakota Chapter Sierra Club; Union of Concerned Scientists; Mary Jo Stueve; Minnesotans for an Energy-Efficient Economy; Izaak Walton League of America, Midwest Office; and Minnesota Center for Environmental Ad-

vocacy (Intervenors). The Intervenors opposed the application on multiple grounds related to the environmental impact of **Big Stone II**. ***598** The PUC granted intervention to all parties.[FN3]

FN3. Clean Water Action and the Sierra Club later withdrew.

[¶ 7.] The Applicants' petition to the PUC triggered SDCL 49-41B-6, and a local review committee was established to prepare a social and economic assessment of **Big Stone II**. The assessment (1) examined the potential impacts of **Big Stone II**; (2) addressed the area's ability to absorb those impacts; (3) identified a list of actions needed to ensure a smooth project; and (4) prepared a list of recommended mitigation measures. The committee's findings relate to issues not implicated in this appeal, and therefore, will not be discussed.

[¶ 8.] An environmental impact statement was also prepared. Among many other things, the impact statement assessed the air quality effects of **Big Stone II**. In so doing, the statement first identified the applicable regulations, stating

> The Clean Air Act, and its amendments (CAA), requires the Federal U.S. Environmental Protection Agency (USEPA) to set National Ambient Air Quality Standard (NAAQS) for pollutants considered harmful to public health and the environment.... The USEPA Office of Air Quality Planning and Standards has set NAAQS for six principal pollutants, which are called "criteria" pollutants.[FN4]
>
> FN4. These include: carbon monoxide (CO), lead, nitrogen dioxide, two types of particulate matter, ozone, and sulfur dioxides.

Draft Environmental Impact Statement May 2006 at 3-1, 3-2. The statement also recognized applicable regulations from Prevention of Significant Deterioration (PSD), New Source Performance Standards (NSPS), Best Available Control Technology (BACT), and the Clean Air Mercury Rule (CAMR). *Id.* at 4-2.

[¶ 9.] Although CO_2 is not regulated, the statement recognized that **Big Stone II** was estimated to emit approximately 4.7 million tons of CO_2 per year. It remarked, however, that "[p]rojected emissions of all hazardous air pollutants from the existing and proposed plants would be reduced by approximately 41 [million] tons/year (from approximately 63 [million] tons/year by the existing plant to approximately 22 [million] tons/year by the combined existing and proposed plant operations)." *Id.* at ES-18. Moreover, the statement noted that "[t]he proposed super-critical combustion technology for the proposed Project is three-to-four percent more efficient, and would result in lower CO_2 emissions per MWh [megawatt hours] of electrical energy output as compared to the sub-critical boiler technology." *Id.* at 4-11.

[¶ 10.] The statement summarized the air quality effects of **Big Stone II**:

> Overall, no air quality impacts exceed significance criteria for air resources. The long-term impacts from the proposed Project for NAAQS and PSD increment would be less than significant. The Grant County, South Dakota area is in attainment or is unclassifiable for all criteria pollutants. Emissions from the proposed project would not conflict with or obstruct implementation of any applicable air quality plan. Since the increase in criteria pollutant emissions would either be less than the PSD significance levels or well within the NAAQS and PSD increments, the proposed Project long-term and short-term emissions impacts on distant air quality areas that are not in compliance with NAAQS is unlikely. In addition, visibility impacts to Class I and Class II areas would be less than significant....

***599** *Id.* at 4-13. Nevertheless, according to the statement, "[t]he proposed **Big Stone II** plant would generate unavoidable emissions of air pollutants that would be an adverse impact." *Id.* at 5-1. This was determined notwithstanding that **Big Stone II** "would operate under [an] appropriate air emission permit from the state of South Dakota that requires operation of the plant under regulatory limits.... Even with the permit requirements and air emission control equipment, these impacts would be adverse and unavoidable." *Id.*

[¶ 11.] In accord with SDCL 49-41B-16, the PUC is required to hold a public hearing near the proposed facility's location. Two public hearings were held. At

the first hearing, fifteen people provided testimony. At the second hearing, twenty people attended, with twelve giving testimony. In addition to the public hearings, the Applicants, Intervenors, and the PUC exchanged substantial written discovery, with the Applicants answering more than 500 discovery requests and making available more than 47,000 pages of documents. All parties submitted pre-filed testimony and a formal evidentiary hearing was held on June 26-29, 2006. Oral argument was heard by the PUC on July 11, 2006.

[¶ 12.] Through their testimony, the Applicants asserted that **Big Stone II** would provide the energy necessary to serve consumers in South Dakota, North Dakota, Minnesota, Iowa, Montana, and Wisconsin. **Big Stone II** is projected to produce 4.6 million MW hours of electricity per year. The estimated cost to construct **Big Stone II** is $1 billion in 2011 dollars. The Applicants claimed that if construction of **Big Stone II** was delayed or prohibited, the member companies would not be able to generate sufficient energy, which would affect the reliability of their systems and harm consumers.

[¶ 13.] The Intervenors opposed construction of **Big Stone II**. They asserted that **Big Stone II** would pose a threat of serious injury to the environment under SDCL 49-41B-22 and should not be constructed. The threat of serious injury, the Intervenors alleged, would be caused by the amount of CO_2 **Big Stone II** would emit. These emissions, according to the Intervenors, would contribute to global warming, which they contend seriously harms the environment.

[¶ 14.] To support their contention that global warming harms the environment and CO_2 emissions contribute to global warming, the Intervenors submitted expert testimony from Dr. Ezra Hausman. Dr. Hausman is employed with Synapse Energy Economic, Inc., a company specializing in energy and environmental concerns. Dr. Hausman holds a Ph.D. in Atmospheric Science from Harvard University, a master's degree in Applied Physics from Harvard, and a master's degree in Water Resource Engineering from Tufts University.

[¶ 15.] Dr. Hausman testified that "[h]uman induced climate change is a grave and increasing threat to the environment and to human societies around the globe." According to Dr. Hausman, an increase in many greenhouse gases has caused a 0.6° C increase in global temperature in the twentieth century. More notably, he opined, "This means that the planet as a whole does not lose heat to space as efficiently as it otherwise would, so the system as a whole is warming up. This is the phenomenon commonly referred to as 'global warming.' "

[¶ 16.] According to Dr. Hausman, the increase in global temperature "has come primarily from the burning of fossil fuels (coal, oil, and natural gas), and also from changes in land use such as deforestation." Of the fossil fuels, he stated that "coal ***600** emits the most CO_2 per unit of energy obtained." Dr. Hausman said that "[t]here is an unequivocal scientific consensus on many aspects of the issue of global climate change." Specifically, according to Dr. Hausman, there is a consensus that:

(1) "the CO_2 content of the atmosphere is increasing rapidly;"

(2) "this rate of increase, and resulting abundance of CO_2 in the atmosphere, is unprecedented in at least the past 200,000 years and probably much longer;"

(3) "the primary source of the increase is the combustion of fossil fuels by human industrialized societies, i.e., that is the anthropogenic CO_2;" [FN5]

> FN5. According to Dr. Hausman, the term "anthropogenic" refers to human caused emissions of CO_2.

(4) "the increased abundance of CO_2 has a direct radiative forcing effect on climate by altering the heat transfer characteristics of the atmosphere;"

(5) "this change in the heat transfer properties of the atmosphere will have an impact on the climate of the planet;"

(6) "the climate of the earth is currently changing in ways that are consistent with model predictions based on the increased radiative forcing due to the anthropogenic increase in the atmospheric CO_2[;]"

(7) "the magnitude of climate impacts will increase with increasing atmospheric CO_2 content;" and

(8) "once the atmospheric abundance of CO_2 has been increased, it will only return to equilibrium levels through natural processes on a timescale of several centuries."

[¶ 17.] In regard to coal-fired power plants in general, Dr. Hausman testified that the ones "in the United States already emit almost one-third of the U.S. emissions, or 8% of all the world's anthropogenic CO_2 into the atmosphere, a staggering contribution to the global buildup of greenhouse gases." Moreover, he testified that because "base load coal plants in the United States are built to produce electricity for decades, as long as 70 years in the case of some of the older plants still operating today", the threat to the environment "is becoming increasingly obvious and severe."

[¶ 18.] With respect to **Big Stone II**, Dr. Hausman testified that it would "add over 4.5 million tons of CO_2 to the atmosphere every year of its operational life, inexorably and significantly contributing to the buildup of greenhouse gases in the atmosphere." This amount represents a 34% increase in South Dakota's emission record from the EPA in 2001. Further, he said that "[a]t 4.5 million tons per year, emissions from **Big Stone II** would be equivalent to emissions from almost 670,000 cars." The emissions from **Big Stone II**, Dr. Hausman explained, "would cause irreversible damage to the environment, especially considering its expected lifetime of 50 years or more and the slow recovery time for atmospheric CO_2." He stated, "Human societies and ecosystems will find themselves poorly adapted to their local climate and this will result in disruption of ecosystems[.]" He also predicted that the warming in a region like South Dakota will cause increased temperatures in the summer, resulting in more droughts and reduced crop yields.

[¶ 19.] He concluded that the emissions from **Big Stone II** will cause "a significant and irreversible impact on the environment, both globally and in South Dakota.... My opinion is that this facility will have a cumulative effect, in combination ***601** with other operating energy conversion facilities, both existing and under construction, of causing the level of atmospheric carbon dioxide to be significantly elevated relative to what it would be without this plant.... In my opinion, the environmental effects of this facility will pose a threat of serious injury to the environment in South Dakota and in the broader region."

[¶ 20.] In response to Dr. Hausman's testimony, the Applicants presented the rebuttal testimony of Ward Uggerud, Otter Tail's senior vice-president. Uggerud testified that Dr. Hausman's opinion that **Big Stone II** will have a significant adverse impact on South Dakota "lacks perspective, to say the least." Although he conceded that " **Big Stone II** will emit approximately 4.7 million short tons of carbon dioxide per year," Uggerud explained:

> The Energy Information Administration (EIA) reports that U.S. anthropogenic carbon dioxide emissions for 2010 are projected to be 6,365 million metric tons.... This means that **Big Stone II's** share of total U.S. anthropogenic carbon dioxide emissions in 2010 (assuming the plant came on line then) would be 0.0007 (0.07%, or seven hundredths of one percent). According to EIA, global anthropogenic CO_2 emissions in 2010 will be 30,005 million metric tons. **Big Stone II's** share of this amount will be 0.00014 (0.014% or less than two one-hundredths of one percent).

Moreover, Uggerud asserted that "[c]arbon dioxide is not the only greenhouse gas. Other gasses, such as methane and water vapor, also trap heat in the atmosphere. Water vapor is by far the most dominant greenhouse gas." He thought, therefore, that "the evidence is simply insufficient to conclude that CO_2 emissions associated with the proposed **Big Stone II** will cause [a] 'costly adverse impact on the environment both in South Dakota and throughout the region, the continent and the planet.' "

[¶ 21.] After considering Dr. Hausman's and Uggerud's testimony and the voluminous record, the PUC issued a thirty-four page letter decision, which, among other things, identified the applicable rules and regulations, the site description, alternative locations, and the impact of the plant on the environment. It also evaluated the regulatory and environmental costs associated with construction of **Big Stone II**. The PUC found that **Big Stone II** complied with all rules and regulations under SDCL Chapter 49-41B and ARSD Chapter 20:10:22. As for alternative energy sources, the PUC considered a study submitted by the Applicants from Burns & McDonnell Engineering Co. It examined alternative baseload genera-

tion technologies, such as wind, biomass, hydropower, solar, landfill gas, geothermal energy, distributed generation, atmospheric circulating fluidized bed, combined cycle natural gas turbine, and integrated coal gasification combined cycle. The PUC concluded that "there were no renewable generation options available to address the need for 600 MW of baseload power within the timeframe required, and that other fossil fuel sources were more expensive and less desirable." Further, according to the PUC, there was no single next best alternative source where the Applicants could obtain the needed energy and the "Intervenors have not proposed an alternative to provide base load capacity through natural gas or oil instead of coal" and "have not suggested any specific alternative to **Big Stone II**...."

[¶ 22.] The PUC also addressed an issue that arose at the hearing where the Intervenors argued that the Applicants should pay the costs associated with possible future regulation of CO_2 emissions. Because neither Congress nor South Dakota***602** has regulated CO_2 emissions, and the PUC found it speculative whether such regulations would be established, it concluded that imposing costs would be unwarranted.

[¶ 23.] The PUC considered the environmental impact statement filed by the Applicants. The statement indicated that **Big Stone II** would emit approximately 4.7 million tons of CO_2 each year and over 225 million tons of CO_2 over the expected life of the plant. But the plant would "produce about 18% less CO_2 than other existing coal-fired plants because the super-critical boiler proposed here is more efficient than other forms of coal-fired technologies." Thus, the PUC found that **Big Stone II** "will not contribute materially to the increase in the production of anthropogenic carbon dioxide[.]" The PUC also found that **Big Stone II** "would increase U.S. emissions of carbon dioxide by approximately .0007, or seven-hundredths of one percent[.]"

[¶ 24.] In sum, considering the voluminous record, including the pre-filed testimony, the committee report, the environmental impact statement, and the applicable rules and regulations, the PUC concluded that "if constructed in accordance with the terms and conditions" set forth in its decision, **Big Stone II** "will not pose a threat of serious injury to the environment or to the social and economic conditions of the inhabitants or expected inhabitants in the siting area."

[¶ 25.] Accordingly, the PUC granted the Applicants a permit to construct **Big Stone II** in compliance with the terms and conditions of the PUC's decision. In circuit court, the Intervenors' appeal was affirmed. They now appeal to this Court asserting that the PUC's decision (1) violated the plain language of SDCL 49-41B-22; and (2) was clearly erroneous in light of the evidence as a whole.

Standard of Review

[1][2] [¶ 26.] Our review of the PUC's decision granting the Applicant's request for a permit to construct **Big Stone II** is controlled by SDCL 1-26-36. *See Tebben v. Gil Haugen Const., Inc.*, 2007 SD 18, ¶ 15, 729 N.W.2d 166, 171 (quoting *Wells v. Howe Heating & Plumbing, Inc.*, 2004 SD 37, ¶ 9, 677 N.W.2d 586, 590 (quoting SDCL 1-26-36)). The PUC's findings of fact are reviewed under the clearly erroneous standard, while its conclusions of law are reviewed de novo. *See id.* "A reviewing court must consider the evidence in its totality and set the [PUC's] findings aside if the court is definitely and firmly convinced a mistake has been made." *Id.* (citing *Sopko v. C & R Transfer Co., Inc.*, 1998 SD 8, ¶ 7, 575 N.W.2d 225, 228-29).

Analysis and Decision

[3] [¶ 27.] According to the Intervenors, the PUC erroneously applied SDCL 49-41B-22, and therefore, our review must be de novo, and we should accord no deference to the PUC's decision that **Big Stone II** will not pose a threat of serious injury to the environment. They argue that the PUC "was duty-bound to recognize" the findings by the scientific community concerning the impact of CO_2 emissions on global warming. Moreover, they argue that the PUC's finding that **Big Stone II** will emit 4.7 million tons of CO_2 each year clearly demonstrates that the plant will pose a threat of serious harm to the environment.

[¶ 28.] The Applicants respond that there are no regulations governing the emission of CO_2, and thus there are no standards by which to conclusively establish what amount of emission constitutes a threat of serious injury to the environment. According to the Applicants, the PUC was required to determine if **Big Stone II**, not all coal-fired facilities, will ***603** pose a

threat of serious injury to the environment. Because **Big Stone II** is calculated to increase U.S. emissions by 0.0007, or seven hundredths of one percent, the Applicants contend that the PUC's conclusion is not clearly erroneous in light of all the evidence. Moreover, the PUC required that the Applicants report annually on any CO_2 regulations and their efforts to bring **Big Stone II** into compliance.

[4][5] [¶ 29.] We review the PUC's decision and decide whether, based on the evidence as a whole, we are left with a definite and firm conviction that a mistake has been made. *See Sopko*, 1998 SD 8, ¶ 6, 575 N.W.2d at 228. While we give due regard to an agency's well-reasoned and fully informed decision, we will not uphold clear errors of judgment or conclusions unsupported in fact. Our task in this appeal is to decide the narrow question of whether the PUC's conclusion that **Big Stone II** will not pose a threat of serious injury to the environment was clearly erroneous in light of all the evidence. *See id.*

[¶ 30.] There were over 1,400 pages of documentary evidence submitted in this case. The Applicants offered evidence of studies conducted concerning the effect **Big Stone II** might have on the environment and the community. They also submitted evidence regarding the alternative sources of energy they considered, but ruled out. The Intervenors do not dispute the Applicants' need for the additional wattage. Nor do they present an argument that there exists a viable alternative to **Big Stone II's** coal-fired facility. More significantly, the Intervenors suggest no standards by which the PUC may assess what amount of CO_2 emissions are tolerable. Rather, they maintain that CO_2 emissions, at any measurable level, seriously harm the environment.

[¶ 31.] Global warming presents a momentous and complex threat to our planet. A resolution for this problem, critical though it is, cannot be made in the isolation of judicial proceedings. The social, economic, and environmental consequences of global warming implicate policy decisions constitutionally reserved for the executive and legislative branches. To date, no CO_2 emission standards have been enacted by our political leaders. "Congress has recognized that carbon dioxide emissions cause global warming and that global warming will have severe adverse impacts in the United States, but it has declined to impose any formal limits on such emissions." *Connecticut v. American Elec. Power Co., Inc.*, 406 F.Supp.2d 265, 268-69 (S.D.N.Y.2005) (citing The Global Climate Protection Act of 1987, PL 100-204, Title XI, §§ 1102-03, reprinted at 15 U.S.C § 2901 note).[FN6]

> FN6. Recently, the United States Supreme Court ruled that the EPA was authorized to regulate CO_2 when the Court interpreted the phrase "any air pollutant" in the Clean Air Act to include automobile carbon dioxide emissions. *See Massachusetts v. E.P.A.*, 549 U.S. 497, 127 S.Ct. 1438, 1460-61, 167 L.Ed.2d 248 (2007). The Court reasoned that the use of the word "any" indicated that the statute was intended to require regulation of all air pollutants. *Id.*

[¶ 32.] As members of the judiciary, we refrain from settling policy questions more properly left for the Governor, the Legislature, and Congress. No matter how grave our concerns on global warming, we cannot allow personal views to impair our role under the Constitution. In South Dakota, the Legislature designated the PUC as the responsible agency for this question of granting a permit. We must uphold the PUC's decision unless we conclude that the ruling was "clearly erroneous in light of the entire evidence in the record or arbitrary or capricious or characterized by abuse of discretion or clearly unwarranted exercise of discretion." *See* ***604***_Korzan v. City of Mitchell_, 2006 SD 4, ¶ 12, 708 N.W.2d 683, 686 (citing SDCL 1-26-36).

[¶ 33.] The PUC, in its thirty-four page decision, entered several findings of fact concerning the issue of global warming and CO_2 emissions. It recognized that despite the asserted scientific consensus on the harm caused from global warming, neither Congress nor the South Dakota Legislature has chosen to regulate CO_2 emissions. Therefore, the PUC addressed the potential harm from **Big Stone II** by comparing the projected level of CO_2 emissions from **Big Stone II** to the level of emissions nationally. Because **Big Stone II** would increase CO_2 emissions by 0.0007, or seven hundredths of one percent, the PUC concluded the threat of harm would not result in serious injury. Nonetheless, as a condition on the permit, the PUC required that the Applicants submit annual reviews of any regulations on CO_2 emissions and their efforts to comply with those regulations.[FN7]

> FN7. The Applicants must "submit an annual report to the [PUC] on CO_2" which "shall review any federal or state action taken to regulate carbon dioxide, how the operator plans to act to come into compliance with those regulations, the expected costs of those compliance efforts and the estimated effect of such compliance on ratepayers. The report should also evaluate operational techniques and commercially-available equipment being used to control CO_2 emissions at pulverized coal plants, the cost of those techniques or equipment, and whether or not the operator has evaluated the prudence of implementing those techniques or equipment."

[¶ 34.] Our review of the record shows the PUC entered a well-reasoned and informed decision when it concluded that **Big Stone II** would not pose a threat of serious injury to the environment. It addressed the parties' contentions regarding global warming and CO_2 emissions and also provided a detailed explanation of why it rejected the findings proposed by the Intervenors.

[¶ 35.] While global warming and CO_2 emissions are considered harmful by the scientific community, what will pose a threat of *serious* injury to the environment under SDCL 49-41B-22 is a judgment call initially vested with the PUC by the Legislature. Nothing in SDCL Chapter 49-41B so restricts the PUC as to require it to prohibit facilities posing any threat of injury to the environment. Rather, it is a question of the acceptability of a possible threat. Resolving what is acceptable for the people of South Dakota is not for this Court. The Legislature and Congress must balance the competing interests of economic development and protection of our environment. Based on all the evidence and our limited scope of review, the PUC's decision was not clearly erroneous.

[¶ 36.] Affirmed.

[¶ 37.] GILBERTSON, Chief Justice, and SABERS, ZINTER, and MEIERHENRY, Justices, concur.
S.D.,2008.
In re Otter Tail Power Co. ex rel. Big Stone II
744 N.W.2d 594, 2008 SD 5

END OF DOCUMENT

Dustin Johnson, Chair
Steve Kolbeck, Vice Chair
Gary Hanson, Commissioner

SOUTH DAKOTA PUBLIC UTILITIES COMMISSION

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TO: HP09-001 Interveners
FROM: Public Utilities Commission Staff

DATE: June 12, 2009

Thank you for intervening in the TransCanada Keystone XL pipeline siting docket. At its June 9th meeting, the Commission approved the following schedule:

- Final discovery requests served by July 31, 2009, with replies due by August 24, 2009
- Additional Applicant (TransCanada) prefiled testimony due September 1, 2009
- Intervener prefiled testimony due September 8, 2009
- Staff prefiled testimony due September 25, 2009
- Applicant (TransCanada) rebuttal testimony due October 19, 2009
- Hearing in the Capitol Building, Pierre, South Dakota November 2 through 6, 2009

You are considered an "Intervener" and may provide testimony and participate in discovery if you wish. You must, however, submit your testimony in writing by September 8, 2009, if you intend to testify in the November live hearing. "Prefiled" testimony is a mechanism whereby all parties are put on notice, through written submissions, regarding his or her position in the case. You then must appear at the November hearing for your testimony to be placed into the formal record.

The Commission also approved consultant contracts at its June 9th meeting. PUC Staff will with work with environmental, engineering and socio-economic experts. To properly complete our research, we now ask for your input. Please answer the questions on the attached page. We ask that you submit your answers by July 13, 2009. You may submit answers electronically to Kara Semmler at: kara.semmler@state.sd.us or send them to the PUC offices at 500 E. Capitol, Pierre, SD 57501. Thank you for your research assistance. Please contact Kara Semmler at 605-773-3201 with any questions.

Exhibit C

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE APPLICATION BY TRANSCANADA KEYSTONE PIPELINE, LP FOR A PERMIT UNDER THE SOUTH DAKOTA ENERGY CONVERSION AND TRANSMISSION FACILITIES ACT TO CONSTRUCT THE KEYSTONE XL PROJECT	)	INTERROGATORIES AND REQUEST FOR PRODUCTION OF DOCUMENTS HP09-001

SOUTH DAKOTA PUBLIC UTILITIES COMMISSION STAFF'S FIRST SET OF INTERROGATORIES AND REQUEST FOR DOCUMENTS TO ALL INTERVENERS EXCEPT DAKOTA RURAL ACTION

The Staff of the Public Utilities Commission ("Staff"), by and through its Staff Attorney, hereby submits the following Interrogatories and Requests for Production of Documents to you. Responses should be received on or before July 13, 2009.

INSTRUCTIONS

1. You are required to stipulate in writing that your responses may be treated exactly as if they were filed under oath.

2. A verification or signature of the answering individual or counsel is requested with the answers for these requests as an indication of the genuineness and completeness of the responses and documents provided.

DEFINITIONS

1. "Commission" refers to the South Dakota Public Utilities Commission.

2. "Request" includes any and all interrogatories, requests for production of documents, information requests or other document request.

3. "Person" or "Persons" shall mean any individual, association, partnership, corporation, firm, organization, or entity.

4. "Refer," "referring to," "relate" and "relating to" shall mean having a legal, factual or logical connection, relationship, correlation, or association with the subject matter of the request.

5. Words of gender shall be construed as including all genders, without limitation.

6. Words in the singular shall be construed to mean the plural or vice versa as appropriate.

REQUEST 1: State your name, address and telephone number.

REQUEST 2: State whether you own land crossed by the pipeline, own land on which a pumping station is planned or believe your property is otherwise affected by the pipeline. Provide detail regarding the pipeline and associated facilities location relative your property.

REQUEST 3: If you do not own land or have an interest in land crossed or affected by the Pipeline, please state any perceived impacts the pipeline will have upon yourself, your property, or your interests.

REQUEST 4: The applicable applicant burden of proof reads as follows:

> *49-41B-22. Applicant's burden of proof. The applicant has the burden of proof to establish that:*
>
> *(1) The proposed facility will comply with all applicable laws and rules;*
>
> *(2) The facility will not pose a threat of serious injury to the environment nor to the social and economic condition of inhabitants or expected inhabitants in the siting area;*
>
> *(3) The facility will not substantially impair the health, safety or welfare of the inhabitants; and*
>
> *(4) The facility will not unduly interfere with the orderly development of the region with due consideration having been given the views of governing bodies of affected local units of government.*

Specify particular aspect(s) of the applicant's burden of proof for which you have specific concerns.

REQUEST 5: If your property is crossed by the pipeline, specify and explain any unique characteristics or conditions on your property that could affect the analysis of the pipeline siting.

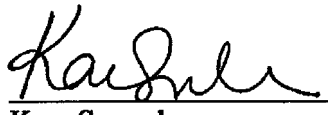
REQUEST 6: Generally what issues do you have with the pipeline relative to PUC jurisdiction?" Examples would be sensitive wildlife, reclamation, roads, emergency services, etc. Please do not include non-jurisdictional issues such as easements, pipe wall thickness and the 80 % waiver. (If you have questions about what is jurisdictional, please contact Kara Semmler.)

REQUEST 7: Do you intend to submit prefiled testimony? If so, of whom?

REQUEST 8: As an ongoing request, provide Commission Staff with a copy of all data, documentary or interrogatory requests you send any party to this docket along with its complete answer to such request.

REQUEST 9: Please specify any other information that may be useful as we begin our research and analysis of this pipeline siting application.

Dated at Pierre, South Dakota, this 12th day of June, 2009.



Kara Semmler
Staff Attorney
South Dakota Public Utilities Commission
500 East Capitol
Pierre, SD 57501
(605) 773-3201

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE APPLICATION BY TRANSCANADA KEYSTONE PIPELINE, LP FOR A PERMIT UNDER THE SOUTH DAKOTA ENERGY CONVERSION AND TRANSMISSION FACILITIES ACT TO CONSTRUCT THE KEYSTONE XL PROJECT	))))))	HP 09-001 **CERTIFICATE OF SERVICE**

I hereby certify Interrogatories and Requests for Production of Documents were served upon all of the parties listed below on the 12th day of June, 2009, either electronically or by mailing a true and correct copy thereof to them by first class mail, postage prepaid, at their last known addresses, to-wit:

MS MARY JASPER - maryjasper@hotmail.com
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MS CAROL MOYER - dakotamum@yahoo.com
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