IN THE SUPREME COURT OF SOUTH DAKOTA

In the Matter of PUC Docket HP 14-0001, Order Accepting Certificate of Permit issued in Docket HP 09-001 to Construct the Keystone XL Pipeline (Dakota Rural Action Appeal)

Case No. 28333

APPENDIX TO APPELLANT'S BRIEF

FOR DAKOTA RURAL ACTION

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INDEX TO APPENDIX

STATE OF SOUTH DAKOTA	)	IN CIRCUIT COURT
	) :SS	
COUNTY OF HUGHES	)	SIXTH JUDICIAL CIRCUIT

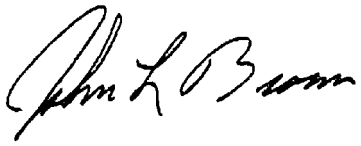
	)	
IN THE MATTER OF PUC DOCKET HP 14-0001, ORDER ACCEPTING CERTIFICATION OF PERMIT ISSUED IN DOCKET HP 09-001 TO CONSTRUCT THE KEYSTONE XL PIPELINE	)	CIV NO. 16-33
	)	ORDER

WHEREAS, the Court enters its Memorandum Decision on June 19, 2017, and that Memorandum Decision constitutes the Court's findings of fact and conclusions of law, and expressly incorporates by reference the same herein, it shall be and hereby is

ORDERED that the decision of the PUC is AFFIRMED.

Dated this 19th day of June, 2017.

BY THE COURT:



The Honorable John L. Brown
Circuit Court Judge

ATTEST:

Clerk of Courts
(SEAL)

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SIXTH JUDICIAL CIRCUIT

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Re: Hughes County Civ. No. 16-33; *In the Matter of Public Utilities Commission Docket No. HP14-001, Order Accepting Certification of Permit Issued in Docket HP09-001 to Construct the Keystone XL Pipeline*

MEMORANDUM DECISION

This is an appeal from the Final Decision of the South Dakota Public Utilities Commission ("PUC") regarding certification of TransCanada's Keystone XL Pipeline Permit. Appellants are tribes, organizations, and individual landowners who intervened in the PUC's proceeding and now appeal to this Circuit Court. In general, Appellants argue that TransCanada failed to prove that the Keystone XL Project "continues to meet the conditions upon which the permit was issued" in 2010. This Court AFFIRMS the decision of the PUC.

BACKGROUND

TransCanada Keystone Pipeline LP ("TransCanada"), appellee, is a Delaware limited partnership, a wholly owned subsidiary of TransCanada Corporation. TransCanada Reply Brief to Common Arguments of Several Appellants at 2. Based in Calgary, Alberta, Canada, TransCanada owns and operates power plants, natural gas storage facilities, and nearly 45,000 miles of crude oil and natural gas pipelines in Canada, the U.S., and Mexico. Id.

In 2005, TransCanada began developing the Keystone Project, anchored by two large capacity pipelines running from Hardisty, Alberta, to Patoka, Illinois and the Texas Gulf Coast. Id. The Keystone Pipeline, first operational in 2010, runs southeast from Hardisty to a point south of Winnipeg, then straight south across

North and South Dakota to Steele City, Nebraska, just north of the Nebraska-Kansas border. Id. In 2007, TransCanada applied for, and the South Dakota Public Utilities Commission issued, a construction permit for the Keystone Pipeline. Id. at 3.

In 2008, TransCanada announced its plan to construct the Keystone XL Pipeline. Id. The proposed Keystone XL Pipeline would primarily be used to transport tar sands crude oil extracted from the Western Canadian Sedimentary Basin from a hub near Hardisty, Alberta, Canada, to delivery points in Oklahoma and Texas. Dakota Rural Action Brief at 2; AR at 9173, referencing *U.S. State Dept. Final Supplemental Environmental Impact Statement* ("FSEIS"), pp. ES-6-7. In South Dakota, the proposed Keystone XL Pipeline would cross portions of Harding, Butte, Perkins, Meade, Pennington, Haakon, Jones, Lyman, and Tripp counties. Id.; AR at 31684-31685.

On March 12, 2009, TransCanada filed an application with the South Dakota PUC for a permit as required by SDCL § 49-41B to construct the South Dakota portion of the Keystone XL Pipeline ("Pipeline"). ICOUP Brief at 1. The original application described the Pipeline to be an approximately 1,702 mile pipeline for transporting crude oil from Alberta, Canada, to the greater Houston area in Texas, with approximately 1,375 miles to be located in the United States, 313 of which would be located in the western part of South Dakota. Id. TransCanada was required to provide information including a description of the nature and location and the purpose of the proposed Pipeline to the PUC in its permit application in order for the PUC to make an informed, sound decision on the project under South Dakota Law. SDCL § 49-41B-11; Yankton Sioux Tribe Brief at 1. The PUC issued its *Amended Final Decision and Order* on June 29, 2010, based on that information. Yankton Sioux Tribe Brief at 1. As a part of its Final Decision, the PUC issued a detailed list of its findings of fact and conclusions of law that led to the decision. Id. Through this Final Decision, the PUC issued a permit authorizing construction of the Pipeline as the project was described and defined in the findings of fact contained in the 2009 Final Decision. Id.

On September 15, 2014, after failing to commence any construction in South Dakota over a four year period under its permit granted in 2010 in HP09-001, TransCanada filed a Certification with the PUC signed by Corey Goulet, President of the Keystone Pipeline business unit, on September 12, 2014, in Calgary, Alberta, Canada, and a Petition for Order Accepting Certification under SDCL § 49-41-27. ICOUP Brief at 1-2. The certification and petition, filed as PUC Docket HP14-001 asserted that the conditions upon which the PUC granted the facility permit in Docket HP09-001 continue to be satisfied. Id. The petition requested that the PUC issue an order accepting its certification pursuant to SDCL § 49-41B-27. Id. As an appendix to the petition, TransCanada submitted a document captioned "Tracking Table of Changes" that identified thirty (30) findings contained in the Final

Decision and, for each finding, sets out a new different finding. Id.; *see* Petition for Order Accepting Certification, Appendix C.

The Cheyenne River Sioux Tribe ("CRST") filed for intervention in PUC docket HP14-001 on October 15, 2014. CRST Intervention at 305-07, Cheyenne Brief at 3. On October 30, 2015, TransCanada submitted a Motion to Define the Scope of Discovery. Id.; TransCanada's Motion to Define Discovery at 1000-05. TransCanada asserted in its motion that the scope of the proceedings in Docket HP14-001 were narrowly confined by SDCL § 49-41B-27 to the fifty requirements listed in the original permit. Id. CRST opposed TransCanada's Motion and filed its response on December 1, 2014. CRST Response to Motion to Define Discovery at 1249-61; Cheyenne Brief at 3. The PUC subsequently granted TransCanada's Motion to Define the Scope of Discovery on December 17, 2014. PUC Order to Grant Motion to Define Issues at 1528-29; Cheyenne Brief at 3.

Following discovery, the PUC held an evidentiary hearing beginning on July 27, 2015. Cheyenne Brief at 3. The hearing lasted nine days and TransCanada submitted pre-filed direct testimony for its witnesses. Id.; TransCanada Pre-Filed Test. at 27465-917. At the conclusion of the evidentiary hearing CRST, along with other Appellants, made a Joint Motion to Deny the Petition for Certification on the grounds that TransCanada failed to submit substantial evidence. Id.; HP14-001 Evidentiary Hr'g Tr. at 27338, 27345; 7-11. The PUC denied the Joint Motion to Dismiss. HP14-001 Evidentiary Hr'g Tr. at 27361:16-18; 27367;13-14, Cheyenne Brief at 3-4.

Pursuant to the PUC's instructions, CRST submitted its Post-Hearing Brief on October 1, 2015. CRST Post Hr'g Brief at 29538-559; Cheyenne Brief at 4. In its Post-Hearing Brief, CRST argued that the PUC must reject TransCanada's Petition for Order Accepting Certification on the grounds that TransCanada failed to submit substantive evidence upon which it could grant the petition. Cheyenne Brief at 4. On November 6, 2015, after all post-hearing briefs had been submitted to the PUC, President Obama rejected TransCanada's application for a Presidential Permit to cross the United States – Canada border. Id. Requirement number two (2) of the 2010 South Dakota permit explicitly requires TransCanada to obtain the Presidential Permit. Id. As such, on November 9, 2015, CRST and other Appellants filed a Joint Motion to Dismiss the Petition for Certification and Revoke the 2010 Permit. Joint Motion to Dismiss at 31347-355; Cheyenne Brief at 4.

CRST and others argued that, with the President's rejection, it was now impossible for TransCanada to meet requirement number two (2) in the underlying permit. Id. On December 22, 2015, the PUC held a hearing dismissing Appellants' Joint Motion, reasoning that it was still theoretically possible for TransCanada to eventually comply with the condition. PUC Motion Hr'g Tr. 31623:19-24 and 31625:1-14; Cheyenne Brief at 4.

On January 6, 2016, the PUC unanimously approved TransCanada's re-certification petition for continued construction through the western half of South Dakota. ICOUP Brief at 2. This region of the state, carved out of the heart of the Great Sioux Nation in 1889, remains home to five (5) of the nine (9) federally recognized, protected Indian reservations located within the geographic boundaries of South Dakota. Id. This region is presently untraversed by any major crude oil, refined products and highly volatile or hazardous liquid pipelines. Id. The only pipeline system of any real significance in this half of South Dakota is the Mni Wiconi Rural Water Supply Project which carries drinking water from the Missouri River near Pierre to "West River" communities and ensures safe and adequate municipal, rural, and industrial water supply for the residents of the Pine Ridge Indian, Rosebud Indian, and Lower Brule Indian Reservations and the citizens of Haakon, Jackson, Jones, Lyman, Mellette, Pennington, and Stanley counties. Id.

On January 21, 2016, the PUC granted TransCanada's Petition for Order Accepting Certification and published its Final Decision and Order Finding Certification Valid and Accepting Certification. PUC Final Decision and Order at 31668-695, Cheyenne Brief at 4. On February 19, 2016, CRST filed Notice of Appeal with the Sixth Circuit Court in Hughes County, TransCanada, and all interested parties in PUC Docket HP14-001. Cheyenne Brief at 4. CRST filed a Statement of Issues on February 29, 2016. Id. CRST and all other Appellants from PUC Docket HP14-001 subsequently filed a Motion and Stipulation for Consolidation and Extension of time on April 13, 2016. Id. at 4-5.

JUDICIAL NOTICE

To be built as proposed and originally permitted, the Pipeline needs permits from each of the states through which it passes. ICOUP Brief at 2-3. A Presidential Permit is required under federal law, because the proposed Pipeline crosses an international boundary. Executive Order 13337, 69 Fed. Reg. 25229 (August 30, 2004); Appellant Brief at 3. This Court takes judicial notice that on November 6, 2015, the U.S. Department of State denied TransCanada's second application for a Presidential Permit for the Keystone XL Pipeline. The federal Presidential Permit was rejected by the United States Department of State, after failed environmental reviews, as not in our national interest and denied on November 7, 2015. President Obama cited concerns about climate change, energy prices, and jobs as his major reason. ICOUP Brief at 2-3.

This Court also takes judicial notice that following the inauguration of President Trump, a number of actions have been taken to help facilitate the construction of both the Keystone XL Pipeline and the Dakota Access Pipeline (which would run thru a significant portion of Eastern South Dakota, though is not at issue in this case). On January 24, 2017, President Trump issued a Memorandum for the Secretary of State, Secretary of the Army, and Secretary of the Interior, which invited TransCanada to "promptly re-submit its application to

the Department of State for a Presidential permit for the construction and operation of the Keystone XL Pipeline, a major pipeline for the importation of petroleum from Canada to the United States." Presidential Memorandum Regarding Construction of the Keystone Pipeline; https://www.whitehouse.gov/the-press-office/ 2017/01/24/ presidential-memorandum-regarding-construction-keystone-xl-pipeline. The Memorandum further directed that the Secretary of State shall take all actions necessary and appropriate to facilitate its expeditious review and reach a final determination within 60 days of TransCanada's submission of the permit application. Id. The permit was submitted on January 26, 2017. https:// keystonepipeline-xl.state.gov/documents/organization/267737.pdf. On March 24, 2017, the Under Secretary of State for Political Affairs issued a Presidential Permit to TransCanada authorizing TransCanada to construct, connect, operate, and maintain pipeline facilities at the U.S.-Canadian border in Phillips County, Montana. https://www.state.gov/r/pa/prs/ps/2017/03/269074.htm. This Court takes judicial notice of the current Presidential Permit.

QUESTIONS PRESENTED

Appellants join in these three substantive issues:

I. Whether the PUC erred in denying Appellants' Motion to Dismiss when the Presidential Permit was denied by the State Department and President Obama?

II. Whether the PUC shifted the burden of proof to Appellants during the hearing, requiring Appellants to prove TransCanada cannot comply with the Conditions instead of requiring TransCanada to prove that they can comply?

III. Whether the PUC committed clear error when it determined that TransCanada met its burden of proof by substantial evidence that it continues to meet the Conditions?

Appellants also appeal several discovery rulings and present these discovery-related issues:

IV. Whether the PUC erroneously limited the scope of discovery by granting Motion to Define Issues?

V. Whether the PUC committed clear error by ordering that pre-filed testimony be submitted

before discovery responses from a potential motion to compel were due?

VI. Whether the PUC wrongfully excluded 20 intervenors' testimony as a discovery sanction for untimely disclosure?

DRA, ICOUP, and Yankton Sioux Tribe appeal several evidentiary rulings made by the PUC, and presents these issues:

VII. Whether the PUC erroneously excluded DRA exhibits for untimely disclosure?

VIII. Whether the PUC erred when it admitted and considered the "Tracking Table of Changes" prepared by TransCanada and included in its Petition for Certification?

IX. ICOUP appeals whether the PUC erred when it failed to admit or consider climate change testimony during this Certification hearing?

X. DRA appeals whether there was bias on behalf of the PUC regarding a denial to produce documents under the attorney work product doctrine and attorney-client privilege?

Next, Yankton Sioux Tribe appeals certain tribal rights issues:

XI. Whether the PUC erred by relying on the Final Supplemental Environmental Impact Statement in FOF 57 that TransCanada consulted with the Standing Rock Sioux Tribe?

XII. Whether the PUC erred by precluding testimony of aboriginal title or usufructuary rights?

XIII. Whether the PUC erred when it concluded that Tribes are not "local governmental units" under Condition 6?

Finally, DRA individually appeals many of the PUC findings of facts. The Court will address those arguments that have merits. Otherwise, this Court summarily AFFIRMS all other PUC findings of fact. SDCL § 1-26-36.

STANDARD OF REVIEW

This court's review of a decision from an administrative agency is governed by SDCL 1-26-36.

> The court shall give great weight to the findings made and inferences drawn by an agency on questions of fact. The court may affirm the decision of the agency or remand the case for further proceedings. The court may reverse or modify the decision if substantial rights of the appellant have been prejudiced because the administrative findings, inferences, conclusions, or decisions are:
>
> > (1) In violation of constitutional or statutory provisions;
> >
> > (2) In excess of the statutory authority of the agency;
> >
> > (3) Made upon unlawful procedure;
> >
> > (4) Affected by other error of law;
> >
> > (5) Clearly erroneous in light of the entire evidence in the record; or
> >
> > (6) Arbitrary or capricious or characterized by abuse of discretion or clearly unwarranted exercise of discretion.
>
> A court shall enter its own findings of fact and conclusions of law or may affirm the findings and conclusions entered by the agency as part of its judgment."

SDCL 1-26-36. "Agency decisions concerning questions of law . . . are fully reviewable." *Hayes v. Rosenbaum Signs & Outdoor Adver., Inc.*, 2014 S.D. 64, ¶ 7, 853 N.W.2d 878, 881.

All of the Appellants cite to pre-1998 case law for the outdated standard of review of an agency's findings of fact. Appellants cite to cases which applied a substantial evidence analysis to review an agency's findings.[1] However, the South

[1] *Abild v. Gateway 2000, Inc.*, 1996 S.D. 50, 6, ¶ 6, 547 N.W.2d 556, 558 ("Unless we are left with a definite and firm conviction a mistake has been made, the findings must stand. The question is not

Dakota Supreme Court revised and clarified the review standard in *Sopko I*. *Sopko v. C & R Transfer Co.*, 1998 S.D. 8, ¶ 6, 575 N.W.2d 225, 228. Our Supreme Court concluded,

> To allay future confusion over the proper standard of review in administrative appeals, *we will no longer employ "substantial evidence" terminology*. In the past, we have regularly combined clearly erroneous and substantial evidence principles, but the latter is not the proper test. SDCL 1-26-36 was amended effective July 1, 1978, changing the standard of review for sufficiency of the evidence from "unsupported by substantial evidence on the whole record" to "clearly erroneous." (For reasons unknown the definition remains unrepealed. SDCL 1-26-1(9)). The difference between the two standards should not be obscured: It is simply inaccurate to conclude, findings supported by substantial evidence are not clearly erroneous. 1 S. Childress & M. Davis, *Federal *229 Standards of Review* § 2.07 at 2-44 (2d ed. 1992) (citing cases from every federal circuit). Even when substantial evidence supports a finding, reviewing courts must consider the evidence as a whole and set it aside if they are definitely and firmly convinced a mistake has been made. *See W.R.B. Corp. v. Geer,* 313 F.2d 750, 753, (5th Cir.1963), *cert. denied* 379 U.S. 841, 85 S.Ct. 78, 13 L.Ed.2d 47 (1964). Furthermore, "[u]se of substantial evidence language, even in a technically correct comparison, is troublesome not only as a vestige of the rejected jury test, but also as a potential infringement on separate standards of review in other areas, such as administrative appeals." Childress & Davis, *supra,* § 2.07, at 2-47.

Sopko v. C & R Transfer Co., 1998 S.D. 8, ¶ 7, n.2, 575 N.W.2d 225, 228-29 ("In our view, 'substantial evidence' and 'clearly erroneous' are not synonymous.") (emphasis added).

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whether there is substantial evidence contrary to the findings, but whether there is substantial evidence to support them."); *Therkildsen v. Fisher Beverage*, 1996 S.D. 39, ¶ 8, 545 N.W.2d 834, 836 ("Our standard of review of factual issues is the clearly erroneous standard. Under this standard, we must determine whether there was substantial evidence to support the Department's finding."); *Helms v. Lynn's, Inc.,* 1996 SD 8, ¶ 10, 542 N.W.2d 764, 766.

Dakota Rural Action ("DRA") asks this court to apply the Public Trust Doctrine and hold the PUC to a higher standard, a trustee with fiduciary duties to the public to protect natural resources. DRA Initial Brief, at 19-20. DRA suggests that the PUC should have set a higher bar for TransCanada, whose activities risk damaging the State's land and water resources. As DRA cites, South Dakota adopted the Public Trust Doctrine in *Parks v. Cooper* and held, "we align ourselves with the Idaho, Iowa, Minnesota, New Mexico, Montana, North Dakota, Oregon, Utah, and Wyoming decisions that have recognized the public trust doctrine's applicability to water, independent of bed ownership." *Parks v. Cooper*, 2004 S.D. 27, ¶ 46, 676 N.W.2d 823, 838. But *Parks* was an appeal to the Supreme Court from a declaratory judgment by a circuit court, not an administrative appeal, and the Supreme Court did not apply the Doctrine as an additional standard of review to SDCL § 1-26-36, but as a legal principle that "all waters . . . are held in trust by the State for the public." There is no precedent for "review[ing] the PUC's Order through the lens of the Public Trust Doctrine[.]" DRA Initial Brief at 20.

The standard of review the circuit court will apply when examining the PUC's findings is "to decide whether they were clearly erroneous in light of the entire evidence in the record." *Sopko v. C & R Transfer Co.*, 1998 S.D. 8, ¶ 6. "If after careful review of the entire record [the court is] definitely and firmly convinced a mistake has been committed, only then will [the court] reverse." *Id.* Under the clearly erroneous standard, the question on appellate review is not whether the reviewing court would have made the same findings as the underlying court or agency, but whether on the entire evidence, the reviewing court is left with a definite and firm conviction that a mistake has been made. *Halbersma v. Halbersma*, 775 N.W.2d 210, 2009 S.D. 98.

ANALYSIS AND DECISION

I.
Whether the PUC erred in denying Appellants' Motion to Dismiss when the Presidential Permit was denied by the State Department and President Obama?

In a statement by Secretary of State John Kerry on November 6, 2015, he stated,

> "After a thorough review of the record, including extensive analysis conducted by the State Department, I have determined that the national interest of the United States would be best served by denying TransCanada a presidential permit for the Keystone XL pipeline. President Obama agrees with this determination and the

> eight federal agencies consulted under Executive Order 13337 have accepted it."

http://www.state.gov/secretary/remarks/2015/11/249249.htm.

"For proposed international petroleum pipelines (such as the Keystone XL Pipeline) the President of the United States, through Executive Order 13337, directs the Secretary of State to decide whether a project serves the national interest before granting a Presidential Permit." Dakota Rural Action Brief at 21. DRA contends that PUC fatally erred in denying the Joint Motion to Dismiss which asked the PUC to revoke the Original Permit as a result of the denial of a Presidential Permit for the Project. Id.

Condition No. 2 of the Original Permit specifically provides that TransCanada "shall obtain and shall thereafter comply with all applicable federal, state and local permits, including but not limited to: Presidential Permit from the United States Department of State". Id. DRA argues that SDCL § 49-41B-27 clearly provides that TransCanada must show it could continue to meet the conditions of the Original Permit in order to obtain certification, not that they *will meet* conditions at some point in the future. Id. (emphasis added). DRA contends that when the Presidential Permit was applied for and denied, the PUC should have immediately dismissed TransCanada's petition for certification and issued an order granting the Joint Motion to Dismiss. Id. at 22. DRA argues that the failure of the PUC to do so was in excess of its statutory authority, constituted an error of law, and was arbitrary or capricious in nature. Id.

The PUC looks to the definition of "shall" as meaning "something that *will* take place in the future," and another definition of "shall" is a "requirement". PUC Reply Brief to CRST at 17 (emphasis added). "Under KXL Condition 2, it is clear that [TransCanada] did not have the permits set forth in the condition at the time the KXL Decision was issued, but that it would be required to obtain such permits, to the extent such permits were still required, before it could proceed with the Project." Id. PUC goes on to say that TransCanada has previously had its Presidential Permit denied and it has reapplied. Id. SDCL § 49-41B-33 allows the PUC to revoke TransCanada's permit for "failure to comply with the terms or conditions of the permit". Id. However, at this point the PUC states that they have not determined that such a time has arrived. Id.

DRA also touches on an argument raised by an individual Intervenor and rancher, Paul Seamans during the hearing on the Intervenors' Joint Motion to dismiss. Id. Mr. Seamans said, "if you let this thing go on forever and ever, you have that easement hanging over your heard. And it's going to affect the salability of your land if you ever decide to sell it." Hr'g Tr. at 31600:13-16. DRA argues then that by denying the Joint Motion to Dismiss, the PUC has effectively told South Dakota landowners that title to their property is clouded in perpetuity. Dakota Rural Action Brief at 22. "A perpetual cloud on landowners' title, with a corresponding impairment of marketability of property, creates a tremendous issue with respect to due process of law and a deprivation of property rights." Id. Whatever significance that argument may have is rendered moot by the subsequent grant of the Presidential Permit, of which this Court has taken judicial notice, and is not now ripe for consideration in this proceeding.

This Court is in agreement with the PUC regarding the definition of *shall* in the Original Permit, that TransCanada could obtain the permit in the future and it would be required to do so prior to beginning construction on the Pipeline project. The PUC was not clearly erroneous in their decision to deny the Motion to Dismiss based on the denial of the Presidential Permit at the time of certification. Thus, the decision of the PUC is AFFIRMED.

II.

Whether the PUC shifted the burden of proof to Appellants during the hearing, requiring Appellants to prove TransCanada cannot comply with the Conditions instead of requiring TransCanada to prove that they can comply?

Pursuant to ARSD 20:10:01:15.01, in a contested case proceeding such as HP14-001, the "petitioner has the burden of proof going forward with presentation of evidence unless otherwise ordered by the commission". Yankton Sioux Tribe Brief at 10. Yankton argues that a plain reading of the rule required the PUC to place the burden of proof on TransCanada, and that the PUC issued no order to alter this standard. Id. However, Yankton asserts that the PUC "time and time again ruled in favor of [TransCanada] on the ground that the intervenors had failed to meet some nonexistent burden of proof". Id. Cheyenne River Sioux Tribe joins in this argument,

> "The rules are explicitly clear and dispositive in the instant matter. TransCanada was the petitioner in HP14-001. TransCanada submitted a Petition for Order

> Accepting Certification to the PUC pursuant to SDCL § 49-41B-27. TransCanada's Petition asked the PUC to make a factual determination that TransCanada can continue to meet the conditions upon which the original permit was granted. Intervening parties opposed TransCanada's Petition. As a result the PUC held a contested evidentiary hearing on the matter. During such a proceeding the rules state that TransCanada must carry the burden of proving that the proposed Keystone XL pipeline project continues to meet the conditions upon which the original permit was granted."

Cheyenne River Sioux Tribe Brief at 6.

Yankton cites to SDCL § 49-41B-22 in their brief to establish that the Applicant has the burden of proof when the PUC is acting as an adjudicator. Yankton Sioux Tribe Brief at 12. That statute reads,

> "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 sitting 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. However, this statute does not seem to be in concert with the actual issues at hand in this case.

Yankton also cites to ARSD 20:10:01:15.01, which states,

> "In any contested case proceeding, the complainant, counterclaimant, applicant, or petitioner has the burden going forward with presentation of evidence unless otherwise ordered by the commission. The complainant, counterclaimant, applicant, or petitioner has the burden of proof as to factual allegations which form the basis of the complaint, counterclaim, application, or petition. In a complaint proceeding, the respondent has the burden of proof with respect to affirmative defenses."

ARSD 20:10:01:15.01, Yankton Sioux Tribe Brief at 12. Yankton argues that this is the on-point rule, which the PUC is required to enforce. Id. at 13.

DRA also joins in this issue,

> "The PUC in its Order, erroneously shifted the burden of proof to the intervenors. For example, Finding No. 31, which relates to approximately 41 separate requirements within the 50 conditions of the Original Permit, recites that "[n]o evidence was presented that [TransCanada] cannot satisfy any of these conditions in the future". ([AR] 31686). Likewise, Findings Nos. 32, 33, 34, 27, 42, and 68 also recite, in somewhat similar language, that "no evidence was presented that [TransCanada] cannot continue to comply with this condition." ([AR] 31686-31687, 31691). The PUC went even further in Conclusion of Law No. 10, which recites that the intervenors failed to establish any reason why TransCanada cannot continue to meet conditions of the Original Permit ([AR] 31694)."

Dakota Rural Action Brief at 26. DRA argues that TransCanada had the burden of demonstrating, through substantial evidence, that it could continue to comply with the conditions of the Original Permit, and in the absence of any evidence, certification could not have been granted. Id. TransCanada failed to meet their burden, and in an attempt to rescue the company, the PUC erroneously shifted the burden to the intervenors. Id.

TransCanada, on the other hand, contends that the Commission issued no explicit orders relating to the burden of proof other than the statements by various Commissioners throughout the proceeding that Keystone had the burden of proof. TransCanada Reply Brief to Common Arguments of Several Appellants at 10. Moreover, TransCanada argues,

> "The Commission's final decision does not indicate that it shifted any burden to the Appellants other than the

> conclusion of law that [TransCanada] having met its burden, the Intervenors failed to establish any reason why [TransCanada] cannot continue to meet the conditions. That conclusion is not contrary to the administrative rule."

Id. at 10-11.

During opening remarks at the beginning of the Evidentiary Hearing on July 27, 2015, Commissioner Nelson stated, "It is the Petitioner, TransCanada, that has the burden of proof. And under SDCL 49-41B-27 that burden of proof is to establish that the proposed facility continues to meet the 50 conditions set forth in the Commission's Amended Final Decision." HP14-001 Evidentiary Hr'g Tr. at AR 23968:6-10. Mr. Taylor, one of the lawyers appearing at that hearing on behalf of TransCanada Corporation gave an opening statement in which he acknowledge this burden by stating, "We are here today to meet Keystone's burden of proof." Id. at 24025:17-18.

TransCanada does not dispute that it had the burden of proof to show that its certification is valid. TransCanada Reply Brief to Common Arguments of Several Appellants at 8-9. However, TransCanada does not believe this means that the Appellants had no burden in the proceeding. Id. at 9.

> "Rather, as the South Dakota Supreme Court has held, the term 'burden of proof' encompasses two distinct elements: 'the burden of persuasion,' i.e., which party loses if the evidence is closely balanced, and the 'burden of production,' i.e., which party bears the obligation to come forward with the evidence at different points in the proceeding."

Id. (citing *In re Estate of Duebendorfer,* 2006 S.D. 79, ¶ 42, 721 N.W.2d 438, 448). The burden of persuasion rests with the party having the affirmative side of an issue and does not change, but the burden of going forward with the evidence may shift. Id. TransCanada asserts that after they submitted their certification, accompanying documents, and testimony per SDCL § 49-41B-27, the Appellants, as challengers to TransCanada's certification bore the burden of offering sufficient evidence to show that TransCanada's certification was invalid because TransCanada could not in fact meet some of the permit conditions. Id.

This Court does not find clear error in the PUC's application of the burden of proof in this case. While Appellants point to Findings by the PUC that no evidence was presented that TransCanada cannot satisfy conditions in the future, or continue to comply with the condition, this does not negate the burden of proof. TransCanada's responsibility in meeting their burden of proof was to show that

they *can* continue to comply with the permit. If Appellant's want to show that it is impossible for TransCanada to do so or that TransCanada is not currently doing so, they must prove that affirmatively. The Court does not find that the PUC inappropriately shifted the burden of proof in this case, and that any shift that may have occurred was within their purview and not clearly erroneous.

III.

Whether the PUC committed clear error when it determined that TransCanada met its burden of proof by substantial evidence that it continues to meet the Conditions?

Yankton contends that TransCanada submitted a filing captioned "certification" with the PUC when it initiated this action. Yankton Sioux Tribe Brief at 18. "This document consists of a sworn statement by Corey Goulet, President of the Keystone Pipeline business unit, attesting that Keystone certifies that the conditions upon which the 2010 permit was granted continue to be satisfied." Id. Yankton believes this "certification" does not constitute evidence and is insufficient to prove continued compliance with the 50 conditions of the permit. Id. In fact, if filing a document labeled "certification" is sufficient to meet the burden of proof intended by SDCL 49-41B-27, then Yankton contends the burden should have shifted back to TransCanada upon Yankton's filing of a "certification" to the contrary. Id. at 20. Yankton did file a "certification" on October 30, 2015, which consisted of a sworn statement attested to by Yankton Sioux Tribal Chairman Robert Flying Hawk that TransCanada did *not* meet all 50 permit conditions. Id. (emphasis added).

Looking at the term "substantive evidence", SDCL § 1-26-1(9) provides some guidance, ". . . such relevant and competent evidence as a reasonable mind might accept as being sufficiently adequate to support a conclusion". Cheyenne River Sioux Tribe Brief at 9, SDCL § 1-26-1(9). Cheyenne asserts that there was no physical evidence presented during the hearing but that TransCanada relied solely on the testimony of the witnesses that it submitted. Id. at 9. "With regard to testimonial evidence, such testimony must be specific and substantive in order to be regarded as substantive evidence sufficient to base an administrative decision." Id. at 11 (See *In re Establishing Elec. Boundaries*, 318 N.W.2d at 122). "Vague and/or conclusory testimony cannot be used to base a decision because such testimony is not substantive evidence." Id. (See *M.G. Oil Co.*, 793 N.W.2d at 823).

Cheyenne argues that the witness' testimony was not substantive because they merely referenced which changes he or she was responsible for in the Tracking

Table of Changes and then made a statement that he or she is unaware of any reason why TransCanada cannot continue to meet the permit conditions. Id. at 12 (See Direct Testimony of Corey Goulet at 27456-59; Direct Testimony of Meera Kothari at 27467-71; Direct Testimony of Heidi Tillquist at 27484-86; Direct Testimony of Jon Schnidt at 27508-12). "Such testimony merely recites the language of SDCL § 49-41B-27. Reciting the language of SDCL § 49-41B-27 followed by a vague statement of being unaware of any reason why [TransCanada] cannot comply in the future is materially no different from the testimony proffered in *M.G. Oil Co.*" Id. at 13. Cheyenne contends that TransCanada's failure to submit specific and substantive testimonial evidence required the PUC to deny TransCanada's Petition. Id.

PUC, however, contends that the reliance on *M.G. Oil Co.*, is misplaced. PUC Reply Brief to CRST at 15.

> "The statements made by opponents of the conditional use permit in *M.G. Oil* were pure conclusory opinion statements made by persons opposed to the permit with no evidence of expertise or underlying factual justification whatsoever. The 31,000 plus pages of record, nine days of hearing, and 2,507 pages of evidentiary transcript and dozens of exhibits in this case bear no resemblance to the proceedings at issue in *M.G. Oil*."

Id.

Yankton also asserts that the Commission committed reversible error by basing its decision on whether TransCanada is "able" to meet the requirement imposed by the 2010 permit, which is the incorrect standard to make the determination. Yankton Sioux Tribe Brief at 21. SDCL § 49-41B-27 reads,

> "Utilities which have acquired a permit in accordance with the provisions of this chapter may proceed to improve, expand, or construct the facility for the intended purposes at any time, subject to the provisions of this chapter; provided, however, that if such construction, expansion and improvement commences more than four years after a permit has been issued, then the utility must certify to the Public Utilities Commission that such

> facility continues to meet the conditions upon which the permit was issued."

SDCL § 49-41B-27. Yankton argues that this statute does not permit a utility to merely show that it is *able* to meet such conditions. Yankton Sioux Tribe Brief at 21 (emphasis in original).

Cheyenne River Sioux Tribe joins in this argument that the South Dakota Supreme Court has, on numerous occasions, declared that all agency actions must meet the "substantive evidence" standard of review. Cheyenne River Sioux Tribe Brief at 5. Cheyenne states that, "because TransCanada failed to submit any substantive evidence in the instant matter it has failed to meet the minimum burden of proof. As such, the PUC could not grant TransCanada's Petition for Order Accepting Certification." Id. at 5-6.

Upon the conclusion of evidence at the evidentiary hearing, a visual aid was provided to the PUC which tracked each and every permit condition which had been the subject of testimony by TransCanada or PUC staff witnesses during the course of the proceedings. Dakota Rural Action Brief at 25, referenced at AR 27339:23-24. DRA contends that of the Original Permit, which contained 107 separate and distinct requirements, during the entire course of proceedings, TransCanada presented limited and insufficient evidence only as to its purported ability to continue to comply with six (6) of the conditions. Dakota Rural Action Brief at 25. Furthermore, DRA argues that PUC's staff's witnesses only presented evidence as to four (4) conditions. Id.

TransCanada argues that its certification, testimony, and evidence were sufficient to meet its burden to prove the validity of its certification under SDCL § 49-41B-27. TransCanada Reply Brief to Common Arguments of Several Appellants at 14. The measure of TransCanada's burden before the Commission was a preponderance of the evidence. Id. (citing *In re Setliff*, 2002 S.D. 58, ¶ 13, 645 N.W.2d 601, 605 ("The general burden of proof for administrative hearings is preponderance of the evidence.")).

In its Reply Brief to Cheyenne River Sioux Tribe, PUC contends that a central issue to the proceeding boils down to what is meant by the term "certify" in SDCL § 49-41B-27, and what effect the use of that term has on issues such as the certifying party's *prima facie* case and burden of proof. PUC Reply Brief to CRST at 6-7. PUC relies on the statutory language that the permit holder must simply

"certify" that "the facility continues to meet the conditions upon which the permit was issued." PUC Reply Brief to CRST at 8.

> "The purpose of statutory construction is to discover the true intention of the law, which is to be ascertained primarily from the language expressed in the statute. The intent of a statute is determined from what the Legislature said, rather than what the courts think it should have said, and the court must confine itself to the language used. Words and phrases in a statue must be given their plan meaning and effect."

City of Rapid City v. Estes, 2011 S.D. 75, ¶ 12, 805 N.W.2d 714, 718 (quoting *State ex rel. Dep't of Transp. v. Clark*, 2011 S.D. 20, ¶ 5, 798 N.W.2d 160, 162). "Further, the Legislature has commanded that '[w]ords used [in the South Dakota Codified Laws] are to be understood in their ordinary sense[.]'" SDCL § 2-14-1. *Peters v. Great Western Bank*, 2015 S.D. 4, ¶ 7, 859 N.W.2d 618, 621.

PUC argues that the word "certify" is a precise and narrow verb. PUC Reply Brief to CRST at 8. According to Black's Law Dictionary (10th ed. 2014), "certify" means, "to authenticate or verify in writing," or "to attest as being true or as meeting certain criteria." Id. Thus, PUC goes on, under the plain meaning of the language of the statute, TransCanada's obligation under SDCL § 49-41B-27 in this case was to verify in writing or to attest as true that it continues to meet the 50 Conditions to which the facility is subject. Id.

> "Although the Certification standing alone would seem to have met the 'must certify' requirements set forth in SDCL 49-41B-27, [TransCanada] also filed in support of the Certification a Petition for Order Accepting Certification under SDCL § 49-41B-27, with a Quarterly Report of the status of Keystone's activities in complying with the KXL Conditions set forth in the KXL Decision as required by Condition 8 and a tracking table of minor factual changes that had occurred since the Commission's issuance of the KXL Decision attached as Appendices B and C respectively. Apx 27-28, #8. SDCL 49-41B-27 does not even explicitly require the Commission to open a docket proceeding to consider whether to 'accept' the certification as compliant with the statute."

Id. at 9. PUC believes that sufficient evidence was produced at the hearing and judicially noticed by the Commission to support upholding TransCanada's Certification and the Commission's Decision. Id. at 10.

This Court agrees with the above definition of certify, and would also note, that had the legislature wanted to or meant to require a more significant burden or process to extend an already granted permit, they would have chosen more substantial language in the statute.

This Court must first look at where the "substantial evidence" test the Appellants rely on comes from, and then what "substantial evidence" means. Reviewing the record, Appellant's seem to rely upon pre-1998 cases such as: *In re Establishing Elec. Boundaries, supra*; *Therkildsen v. Fisher Beverage*, 1996 S.D. 39, ¶ 8, 545 N.W.2d 834 (S.D. 1996) ("[T]he inquiry is whether the record contains substantial evidence to support the agency's determination."); *Helms v. Lynn's, Inc.,* 1996 S.D. 8, ¶ 10, 542 N.W.2d 764 (S.D. 1996) ("The issue we must determine is whether the record contains substantial evidence to support the agency's determination."); *Abilb v. Gateway 2000, Inc.,* 1996 S.D. 50, 547 N.W.2d 556 (S.D. 1996) ("The question is not whether there is substantial evidence contrary to the findings, but whether there is substantial evidence to support them."). As noted in the Standard of Review, *supra*, in 1998 the South Dakota Supreme Court did away with the substantial evidence test on administrative appeals. However, *arguendo*, the term "substantial evidence" means such relevant and competent evidence as a reasonable mind might accept as being sufficiently adequate to support a conclusion. *In re Establishing Elec. Boundaries* at 121; SDCL § 1-26-1(8). This Court finds that 31,000 plus pages of record, nine days of hearing, and 2,507 page of evidentiary transcript and dozens of exhibits were "sufficiently adequate to support a conclusion" in this case. The PUC did not commit clear error when it determined that TransCanada met its burden of proof by substantial evidence and by a preponderance of the evidence, therefore, the PUC is AFFIRMED on this issue.

IV.
Whether the PUC erroneously limited the scope of discovery by granting Motion to Define Issues?

On December 7, 2014, the Commission issued an Order Granting Motion to Define Issues and Setting Procedural Schedule. Yankton Sioux Tribe Brief at 8. On October 30, 2014, before a prehearing scheduling conference had been ordered, TransCanada filed a Motion to Define the Scope of Discovery Under SDCL § 49-41B-27, *supra*. Id.

At the time the Order was granted, no party to the matter had sought discovery. Yankton Sioux Tribe Brief at 8. Pursuant to ARSD 20:10:01:01.02, the rules of civil procedure as used in the South Dakota circuit courts shall apply to proceedings before the Commission. Id. The scope of discovery is defined in SDCL § 15-6-26(b), which states in part,

> ". . . Parties may obtain discovery regarding any matter, not privileged, which is relevant to the subject matter involved in the pending action, whether it relates to the claim or defense of the party seeking discovery or to the claim or defense of any other party, including the existence, description, nature, custody, condition and location of any books, documents, or other tangible things and the identity and location of persons having knowledge of any discoverable matter. It is not ground for objection that the information sought will be inadmissible at the trial if the information sought appears reasonably calculated to lead to the discovery of admissible evidence."

SDCL § 15-6-26(b)(1).

However, in TransCanada's Motion to Define the Scope of Discovery under SDCL § 49-41B-27, they asked the Commission to issue an order that the scope of discovery be limited to certain matters under SDCL § 15-6-26(c)(4), which deals with protective orders. Yankton Sioux Tribe Brief at 9, SDCL § 15-6-26(c)(4). SDCL § 15-6-26(c)(4) specifically reads,

> "Upon motion by a party or by the person from whom discovery is sought or has been taken, or other person who would be adversely affected, accompanied by a certification that the movant has in good faith conferred or attempted to confer with other affected parties in an effort to resolve the dispute without court action, and for good cause shown, the court in which the action is pending, on matters relating to deposition, interrogatories, or other discovery, or alternatively, the court in the circuit where the deposition is to be taken may make any order which justice requires to protect a party or person from annoyance, embarrassment, oppression, or undue burden or expense, including one or more of the following:
>
> (4) That certain matters not be inquired into, or that the scope of the discovery be limited to certain matters."

SDCL § 15-6-26(c)(4).

Yankton argues that TransCanada did not fulfill the requirements a party seeking a protective order must fulfill before a protective order can be issued. Id. at 9. Specifically, Yankton argues that TransCanada failed to certify that it conferred in good faith or attempted to confer with other affected parties in an effort to resolve

the dispute, and that TransCanada failed to show good cause for the issuance of a protective order. Yankton Sioux Tribe Brief at 9. Further, Yankton argues that it was improper for TransCanada to seek a protective order before any party had sought discovery because no dispute existed to necessitate such an order. Id.

> "The Supreme Court has explained that 'broad construction of the discovery rules is necessary to satisfy the three distinct purposes of discovery: (1) narrow the issues; (2) obtain evidence for use at trial; (3) secure information that may lead to admissible evidence at trial.' . . . The Commission's order effectively narrowed the issues by inappropriately limiting discovery, thereby defeating one of the very purposes of discovery as identified by the Supreme Court. As a matter of law, this decision must be reversed."

Id. at 10 (internal citations omitted).

The PUC makes an argument that "[w]ith respect to statutory construction of the statute at issue in this proceeding, SDCL 49-41B-27, the Commission's construction of such statute and corresponding limitation on discovery was in accord with South Dakota statutes and case law precedent." PUC Reply Brief to Yankton Sioux Tribe at 13. Moreover, PUC believes that SDCL § 49-41B-24 must be read *in pari materia* with SDCL § 49-41B-27. Id. SDCL § 49-41B-24 reads,

> "Within twelve months of receipt of the initial application for a permit for the construction of energy conversion facilities, AC/DC conversion facilities, or transmission facilities, the commission shall make complete findings in rendering a decision regarding whether a permit should be granted, denied, or granted upon such terms, conditions or modification of the construction, operation, or maintenance as the commission deems appropriate."

SDCL § 49-41B-24. "Statutes are construed to be *in pari materia* when they relate to the same person or thing, to the same class of person or things, or have the same purpose or object." *Goetz v. State*, 2001 S.D. 138, ¶ 26, 626 N.W.2d 675, 683.

> "In this case, the statue at issue, SDCL 49-41B-27, states simply that the permit holder must 'certify' that 'the facility continues to meet the conditions upon which the permit was issued.' Therefore, limiting discovery to 1) whether the proposed Keystone XL Pipeline continues to meet the 50 permit conditions set forth in Exhibit A to the Amended Final Decision and Order; Notice of Entry issue

> on June 29, 2010, in Docket HP09-001, or 2) the identified minor factual changes from the Findings of Fact in the Decision identified in [TransCanada's] Tracking Table of Changes attached to the Petition as Appendix C was appropriate."

PUC Reply Brief to Yankton Sioux Tribe at 14.

Giving broad deference to the administrative agency, this Court does not find that it was clearly erroneous, or an abuse of discretion to limit the scope of discovery in this case. The decision of the PUC is AFFIRMED.

V.

Whether the PUC committed clear error by ordering that pre-filed testimony be submitted before discovery responses from a potential motion to compel were due?

Yankton Sioux Tribe argues that the PUC committed a blatant and prejudicial error by requiring the submission of pre-filed testimony prior to the conclusion of discovery. Yankton Sioux Tribe Brief at 7. On April 3, 2015, the PUC issued an Order Granting in Part Motion to Amend Procedural Schedule, which established a schedule in which pre-filed direct testimony was to be filed and served no later than April 2, 2015. Id. Final discovery responses were to be served by April 17, 2015, *after* the service of final discovery responses. Id. The PUC then amended the procedural schedule on May 5, 2015, but it did not alter the dates on which pre-filed direct testimony and final discovery responses were due. Id. Yankton argues that this severely limited the parties' abilities to present their case through direct testimony and violated their due process rights. Id. As such, Yankton requests this action be reversed as prejudicial error. Id.

> "When ordered by the commission in a particular proceeding, testimony and exhibits shall be prepared in written form, filed with the commission, and served on all parties prior to the commencement of hearing on such dates as the commission prescribes by order. The front page of all prefiled testimony shall show the docket number, docket name, and name of the witness."

ARSD 20:10:01:22.06. On April 23, 2015, the PUC issued an Order Granting Motion to Preclude Witnesses from Testifying at Hearing Who Did Not File Prefiled Testimony. PUC Reply Brief to Yankton Sioux Tribe at 11.

PUC argues that the record in this matter does not demonstrate error by the Commission in its conduct of a very protracted and inclusive set of proceedings. Id. at 12. PUC further contends that given the active evidentiary hearing participation, the multitude of motions and responses to motions filed by Intervenors, and the Intervenors' active participation in the numerous Commission motion hearings conducted during this proceeding that lasted more than fifteen months, neither Yankton nor any other Intervenor's due process rights or procedural rights under SDCL Chap. 1-26 were violated by the original order requiring prefiled testimony. Id. It is PUC's position that Yankton has failed to demonstrate prejudicial error resulting from the Commission's orders requiring the filing of prefiled testimony. Id. at 13.

Again, reviewing this appeal under a clearly erroneous standard of review, this Court is not left with a definite and firm conviction that a mistake was made by the PUC when it issued its Order Granting in Part Motion to Amend Procedural Schedule or its Order Amending Procedural Schedule. The Court also notes that Yankton Sioux Tribe presented no evidence in their briefs as to *how* this affected their case or caused prejudicial error to the evidence they did present at the hearing. As such, the PUC is AFFIRMED on this issue.

VI.
Whether the PUC wrongfully excluded 20 intervenors' testimony as a discovery sanction for untimely disclosure?

The PUC has broad discretion in imposing sanctions for failure to comply with discovery orders. PUC Reply Brief to Individual Intervenors at 18; SDCL § 15-6-37(c); *Schwartz v. Palachuk*, 597 N.W.2d 442, 447 (S.D. 1999) (citing *Chittenden & Eastman Co. v. Smith*, 286 N.W.2d 314, 316 (S.D. 1979). The South Dakota Supreme Court has held,

> "The severity of the sanction must be tempered with consideration of the equities. Less drastic alternatives should be employed before sanctions are imposed which hinder a party's day in court and thus defeat the very objective of the litigation, namely to seek the truth from those who have knowledge of the facts."

Haberer v. Radio Shack, a Div. of Tandy Corp., 555 N.W.2d 606, 611 (S.D. 1996) (citing *Magbahat v. Kovarik*, 382 N.W.2d 43 (S.D. 1986)).

The PUC contends that where the Commission excluded specific types of evidence, the grounds for such exclusion were based on sound evidentiary legal principles, such as relevancy or lack of jurisdiction. PUC Reply Brief to Individual Intervenors at 19.

> "With respect to the other discovery sanctions, the Commission does not believe the rights of any Intervenor were substantially prejudiced. Of the seventeen Intervenors who did not respond at all to discovery, twelve did not participate further in the case. . . With respect to the three Intervenors, John Harter, BOLD Nebraska, and Carolyn Smith, who were precluded from offering witnesses or evidence at the evidentiary hearing for inadequately responding to discovery, all of them participated in further proceedings in the case and participated in the evidentiary hearing."

Id. at 20. PUC further argues that despite the Appellant's contention that lesser sanctions could have been imposed, "a very significant process of discovery and pre-hearing motions and a nine day hearing with a large number of both individual and organizational Intervenor participants make it highly unlikely that meaningful evidence was omitted from the record in this case." Id. The authority of the PUC concerning sanctions is flexible and allows the PUC "broad discretion with regard to sanctions imposed thereunder for failure to comply with discovery orders." Id. at 20-21; *Chittenden & Eastman Co. v. Smith, supra*.

This Court recognizes that the PUC does have broad discretion to impose sanctions under SDCL §§ 15-6-37(b)(2)(A), 15-6-37(b)(2)(B), and 15-6-37(c). The Court will not reverse the PUC's decision to sanction under a clearly erroneous review of the record. The Court AFFIRMS the exclusion of this testimony.

VII.
Whether the PUC erroneously excluded DRA exhibits for untimely disclosure?

Dakota Rural Action contends that the PUC excluded numerous DRA exhibits following a Motion in Limine filed by TransCanada. Dakota Rural Action Brief at 30. A small number of excluded exhibits were permitted on reconsideration. AR at 21070-71. However, DRA argues that the PUC's order was erroneous in that it was largely based on TransCanada's complaint that the

proposed exhibits were not timely disclosed in discovery. Dakota Rural Action Brief at 30. "The PUC abused its discretion and acted arbitrarily and capriciously because the bulk of the excluded exhibits constituted documents disclosed by [TransCanada] to DRA during discovery. [TransCanada] was on notice that its own documents could be used as exhibits and PUC's exclusion of those documents was in error." Id.

TransCanada filed a Motion in Limine on July 10, 2015, prohibiting DRA from offering in evidence any exhibit disclosed on DRA's exhibit list dated July 7, 2015, that had not been timely disclosed in discovery. TransCanada Reply Brief to Dakota Rural Action at 14; AR at 9474-9450. TransCanada's basis for this motion was that DRA's exhibit list included 1,073 documents, all but 36 of which had not been produced in discovery despite TransCanada's outstanding request served on December 18, 2014, that DRA produce all documents that it intended to offer as exhibits. Id. Though DRA asserted that the rest of the documents on its exhibit list came from TransCanada's document production, TransCanada argues that disclosing these documents for the first time on July 7, 2015 was sandbagging. Id.

Under SDCL § 15-6-26(e), a party must supplement its discovery responses at appropriate intervals. Id. at 15. Under SDCL § 15-6-37(c), a party who without substantial justification failed to timely supplement its discovery responses, "is not, unless such failure is harmless, permitted to use as evidence at a trial, at a hearing, or on a motion any witness or information not so disclosed." Id.; SDCL § 15-6-37(c).

TransCanada contends that under SDCL § 15-6-37(c), DRA was required to provide substantial justification for its failure to timely supplement its document production. Id. Because DRA made no effort to do so before the PUC, and does not cite to the applicable statutory framework in their appeal, DRA's argument is entirely insufficient for this Court to conclude that the PUC abused its discretion in granting TransCanada's motion. Id.

This Court finds that late disclosure of 1000+ exhibits would not be harmless under SDCL § 15-6-37(c), and as stated above, PUC does have broad discretion to impose sanctions. DRA provided no substantial justification as required, and therefore the PUC is AFFIRMED on this issue.

VIII.

Whether the PUC erred when it admitted and considered the Tracking Table of Changes prepared by TransCanada and included in its Petition for Certification?

Yankton Sioux Tribe filed a Motion to Dismiss early in the pendency of the case before the PUC arguing TransCanada's Petitions must be dismissed pursuant to SDCL 15-6-12(b)(5) for failure to state a claim upon which relief can be granted. Yankton Sioux Tribe Brief at 3. Yankton argued that TransCanada has never received a permit from the PUC for the project described in TransCanada's Petition and therefore the relief requested in the Petition cannot be granted. Id. at 3-4. In support of its motion, Yankton stated that TransCanada,

> "asked the Commission to accept its certification that the project described in the Petition, the 2014 Project, continues to meet the conditions upon which a permit was issued in Docket No. 09-001. And although the Petition might mislead the reader to believe that the project referenced therein is the same project that was permitted in Docket 09-001, the appendix C to the Petitions clearly identifies thirty (30) differences between the two projects."

Id. at 4. Appendix C is a "Tracking Table of Changes" which lists the thirty (30) findings of fact made by the PUC regarding the 2009 Project that do not apply to the 2014 Project. Id.

Yankton argued that because the PUC went through the trouble of making the above findings of fact in regards to the 2009 Project, any deviation from those findings then constitutes a new, separate project. Id. However the Motion to Dismiss was denied by the PUC, "concluding that the Petition does not on its face demonstrate that the Project no longer meets the permit conditions set forth in the Decision and that a decision on the merits should only be made after discovery and a thorough opportunity to investigate the facts and proceed to evidentiary hearing if necessary." Id. (citing *Order Granting Motions to Join and Denying Motions to Dismiss* dated January 8, 2015, at 1).

Later, Yankton and other movants jointly filed a Motion in Limine challenging the pre-filed testimony of TransCanada's witnesses that solely reference the Tracking Table of Changes. Id. at 5. The PUC denied this motion and agreed with TransCanada, finding, that the testimony at issue, which only referenced the Tracking Table of Changes, was relevant to the proceeding. Id.

Yankton contends that when the PUC was then faced with a Motion to Strike filed by Dakota Rural Action during the evidentiary hearing, PUC Chairman Nelson questioned why no party had brought an appropriate motion timely to challenge the pre-filed testimony on the ground that it only concerned the Tracking Table of Changes, and not a single condition of the permit. Id. at 6. Yankton submits that this contrary and inconsistent ruling, along with the commentary provided by the PUC on the subject amounts to arbitrary and capricious decision making, constitutes an abuse of discretion, and are clearly unwarranted exercises of discretion. Id.

The Court finds that it is not clearly erroneous, in light of the entire record, for the PUC to find that this is in fact the same project as described in Docket No. 09-001. The Tracking Table of Changes was an acceptable and relevant illustration to rely upon during the hearing. And the Court finds no arbitrary or capricious decision making, no abuse of discretion, and no clearly unwarranted exercise of discretion. The admittance of the Tracking Table of Changes is AFFIRMED.

IX.
ICOUP appeals whether the PUC erred when it failed to admit or consider climate change testimony during this Certification hearing?

The Intertribal Council on Utility Policy argues that they were denied the opportunity to offer expert testimony on climate change, and that climate was deemed not relevant to the Keystone XL Pipeline proceedings. Intertribal Council on Utility Policy Brief at 11. Though not well stated, the argument seems to be based on the overall change, with regard to the governmental recognition worldwide of climate change and weather extremes, and that being one of the primary reasons that President Obama's State Department rejected and the President denied TransCanada's repeated application. Id.

> "On May 28, 2015, the Commission issued an Order Granting TransCanada's Motion to Preclude Witnesses precluding [ICOUP] from offering the testimony of COUP's proposed witnesses Dr. James Hansen, Dr. George Seielstand, and Dr. Robert Oglesby. The basis for the Commission's decision to grant the motion was that the testimony of these witnesses dealt with climate and climate change and that this evidence was beyond the scope of this certification proceeding."

PUC Reply Brief to ICOUP at 26. PUC asserts that none of the 50 Conditions deal with climate change, nor do any of the Findings of Fact in the KXL Decision. Id. at 27.

The PUC notes that the Presidential Permit currently required by Condition 2 was denied by the U.S. Department of State due to concerns about climate change, and that the issue of CO2 emissions and their effect on climate may affect other agency policies and permit proceedings required by Condition 2. Id. However, PUC believes these policy decisions are not with the province of this proceeding which deals with TransCanada's Certification that it continues to meet the 50 KXL Conditions. Id.

During oral arguments, Counsel for ICOUP stated that climate change is relevant because climate affects the pipeline and the pipeline affects climate. However, the Court finds that climate change is not within the necessary qualifications that PUC must certify in this case. Further, the argument that the Presidential Permit denial addressed climate change, is not relevant to this proceeding, as this Court has already ruled, *supra*, that the denial had no effect on the certification of TransCanada's permit in South Dakota. There was no error in failing to admit evidence of climate change. Moreover, the Court agrees with TransCanada's view of the issue, presented during oral arguments, that the issue of climate change was not perfected or preserved for appeal in this case. The PUC is AFFIRMED on this issue.

X.
DRA appeals whether there was bias on behalf of the PUC regarding a denial to produce documents under the attorney work product doctrine and attorney-client privilege?

On April 22, 2015, the PUC entered an order denying DRA's motion to compel discovery from PUC staff. Dakota Rural Action brief at 29; AR 4798-99. DRA was seeking copies of all communications between TransCanada and its affiliates and the PUC and its staff because of assertions on the part of DRA and other intervenors that the interests of the PUC and TransCanada were improperly aligned. Id. "Throughout the course of the proceedings, DRA and other intervenors were left with the impression that PUC staff, instead of engaging on an independent basis, appeared largely supportive of [TransCanada's] attempt to seek certification." Id.

The DRA believes the documents sought from the PUC staff were important because: (1) the government should be open and transparent, and (2) as a public interest organization, DRA is concerned about the prospect of regulatory capture with respect to the PUC's relationship with hydrocarbon pipeline operators. Id. DRA lays out their argument as follows,

> "In denying DRA's motion to compel discovery and obtain the communications between [TransCanada] and PUC staff, the PUC erroneously determined that the communications sought constituted attorney work product. The attorney work product doctrine exists for the purpose of protecting the attorney/client privilege. By adopting the position that communications between [TransCanada] and PUC staff constitute attorney work product, the PUC has inadvertently admitted that the interests of PUC staff and [TransCanada] are aligned in an almost *de facto* attorney/client relationship, constituting the essence of regulatory capture and providing clear and convincing evidence of underlying bias."

Id. at 30 (internal citations omitted).

In response, the PUC notes that the Staff does not advise the Commissioners in a contested case. PUC Brief at 24. "In order to avoid violating the ex parte communications prohibition of SDCL 1-26-26, the Commission maintains a fairly rigorous separation between the Commission, consisting of Commissioners and the Commission advisors, and the Staff." Id. Moreover,

> "The Commission determined that what DRA was seeking in the interrogatory objected to by Staff were documents and tangible things prepared in anticipation of litigation or for trial by or for another party's representative (including such other party's attorney). The Commission determined that Staff was a party to this docket, and the materials sought by DRA from Staff were documents prepared by Staff counsel in anticipation of the

> evidentiary hearing in this matter and documents obtained by Staff for hearing preparation."

Id. at 24-25. During oral arguments, counsel for PUC again addressed the "Chinese firewall" constructed to prevent any inappropriate communication between Commissioners and Staff within the PUC office.

This Court finds no evidence in the record that the denial of this discovery was clearly erroneous. As such, the PUC is AFFIRMED on this issue.

XI.
Whether the PUC erred by relying on the Final Supplemental Environmental Impact Statement in FOF 57 that TransCanada consulted with the Standing Rock Sioux Tribe?

Yankton believes, "[t]he Commission erred in its *Final Decision* by finding that page 11 of the State Department's Record of Consultation, found at Appendix E to the Final Supplemental Environmental Impact Statement ("FSEIS"), constitutes proof that the Standing Rock Sioux Tribe was consulted by the Department of State." Yankton Sioux Tribe Brief at 22. Executive Order 13175, as well as a number of federal laws, require federal agencies to conduct meaningful consultation with Indian tribes that may be affected by a proposed federal undertaking. Id. In order for the proposed project to be constructed in compliance with federal law, the State Department is required to meaningfully consult with affected tribes, including the Standing Rock Sioux Tribe. Id.

As part of the FSEIS, the State Department compiles a table which listed the dates of communication pertaining to each Tribe it interacted with during the process. Id. However, Yankton contends that this document is void of any evidence indicating that actual consultation, or meaningful consultation, occurred. Id. at 23.

In response, PUC asserts the following,

> "Appendix E to the FSEIS, which is a matter of public record of which the Commission took judicial notice on July 21, 2015, without objection from any party, contains the Record of Consultation: Indian Tribe and Nations setting forth the consultations between the Department of State and various Tribes under Section 106 of the

> National Historic Preservation Act. AR 020144. On page 11 of the Record of Consultation, all of the meetings, e-mails, telephone calls, and letters between the Department of State and the Standing Rock Sioux Tribe are listed. The record of consultation establishes that the Standing Rock Sioux Tribe was consulted by the Department of State.
>
> Furthermore, multiple witnesses testified that the Tribes in South Dakota passed resolutions opposing the Project and that [TransCanada's] representatives were not welcome on Tribal land. TR 1745-1746, 1873, 2084, 2096-2097, 2104-2105 (AR 026353-02635[4], 026481, 026888, 026900-02690[]1, 026908-026909)."

PUC Reply Brief to Yankton Sioux Tribe at 29.

The Court notes that communication was cut-off by the Tribes when they refused to communicate with TransCanada and voiced strong opposition to this project. Cheyenne River Sioux Tribe's Attorney, during oral argument, acknowledged this, but insisted that it didn't mean that TransCanada should stop trying to communicate with the Tribes. This logic is flawed. If one party is attempting to communicate and address issues, and the other party closes themselves off, it is not the responsibility of the first party to continue trying and pushing or forcing the second party to communicate with them. Further, this issue is raised by the Yankton Sioux Tribe but it is in regards to communication specifically with the Standing Rock Sioux Tribe. Standing Rock Sioux Tribe is not a party to this appeal. As independent, sovereign nations, this Court does not know of authority that would give Yankton Sioux Tribe standing in this matter, and Yankton Sioux Tribe has provided the Court with none.

XII.
Whether the PUC erred by precluding testimony of aboriginal title or usufructuary rights?

Yankton contends that the Commission erred when it precluded testimony regarding consideration of aboriginal treaty rights. Yankton Sioux Tribe Brief at 23.

> "On May 26, 2015, [TransCanada] filed *Applicant's Motion to Preclude Consideration of Aboriginal Title or Usufructuary Rights*, seeking to preclude the Commission from considering aboriginal title or usufructuary rights in its certification determination. [TransCanada] based its motion on three allegations: 1) that the Commission lacks authority to determine whether such rights exist; 2) that assertion of such rights is a challenge to the proposed route, over which the Commission lacks authority; and 3) that such rights do not exist with respect to the proposed project's route. All three of these allegations were made in error and should have been rejected."

Id.

Yankton argues that the legislature enacted SDCL § 49-41B in order to balance the welfare of the people and the environmental quality of the state with the necessity of expanding industry. Id. at 24. SDCL § 49-41B-1 reads,

> "The Legislature finds that energy development in South Dakota and the Northern Great Plains significantly affects the welfare of the population, the environmental quality, the location and growth of industry, and the use of the natural resources of the state. The Legislature also finds that by assuming permit authority, that the state must also ensure that these facilities are constructed in an orderly and timely manner so that the energy requirements of the people of the state are fulfilled. Therefore, it is 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 operate in this state without first obtaining a permit from the commission."

SDCL § 49-41B-1.

Yankton continues, that their usufructuary rights in the land at issue have existed since the Treaty at Fort Laramie was signed in 1851. Yankton Sioux Tribe

Brief at 25. Yankton believes that the PUC is authorized to consider Yankton's concerns with respect to its usufructuary rights regardless of whether those rights have been identified as such in court. Id. Moreover, Yankton believes that "[b]ecause the Commission's decision to preclude relevant testimony and evidence violated the Tribe's due process rights and severely impaired its ability to fulfill its duties under SDCL Chapter 49-41B, the Commission's decision must be reversed." Id.

PUC argues that the Commission's exclusion of specific types of evidence such as usufructuary and aboriginal rights were based on sound evidentiary legal principle, such as relevancy or lack of jurisdiction. PUC Reply Brief to Yankton Sioux Tribe at 29-30. The example PUC cites to is that the Commission determined that it has no jurisdiction to adjudicate tribal rights. Id. at 30. Such determinations are properly litigated in the courts of this state or in federal court. Id.; *South Dakota v. Yankton Sioux Tribe*, 522 U.S. 329, 118 S.Ct. 789, 139 L.Ed.2d 733 (1998); *Rosebud Sioux Tribe v. Kneip*, 430 U.S. 584, 97 S.Ct. 1361, 51 L.Ed.2d 660 (1977). PUC continues that no court has held that Native American Tribes have aboriginal title or usufructuary rights with respect to any of the real property crossed by the proposed KXL route in South Dakota. Id. at 30.

The Court would point out that the statute relied upon by Yankton Sioux Tribe, SDCL § 49-41B-1, makes no direct mention of aboriginal or usufructuary rights. The Court finds no clear error was committed when the PUC found no authority that Native American Tribes have aboriginal title or usufructuary rights with respect to the proposed route of the Keystone XL Pipeline. The decision of the PUC is AFFIRMED.

XIII.
Whether the PUC erred when it concluded that Tribes are not "local governmental units" under Condition 6?

SDCL § 49-41B-4.2 reads, in part,

> "The South Dakota Legislature before approving a proposed trans-state transmission line shall find that each of the following criteria has been met:
> . . .
> (4) That the proposed trans-state transmission line and route will not unduly

> interfere with the orderly development of the region with due consideration having been given to views of the governing bodies of effective local units of government. . ."

SDCL § 49-41B-4.2. Yankton argues that the Commission failed to treat any Tribe as local units of government and failed to include any permit condition requiring that Keystone consult with tribes about the Project. Yankton Sioux Tribe Brief at 25. Yankton contends that "[a]s a governmental unit for a region and group of people likely to be affected by the proposed pipeline, the Yankton Sioux Tribe is clearly a local unit of government for purposes of the Project." Id.

Further, Yankton argues that the PUC erred in its *Final Decision* by failing to treat Tribes as local units of government and by finding that no permit condition requires that TransCanada consult with tribes about the Project. Id. at 26.

PUC, in response, contends that TransCanada has tried to reach out to Tribes in the vicinity of the Project and employs a manager of Tribal relations, but that such consultations have not been achievable in cases such as Cheyenne River Sioux Tribe because the Tribe was not willing to speak with TransCanada's representatives and has passed legislation that forbids TransCanada or any of its contractors from entering the reservation boundaries. PUC Reply Brief to Yankton Sioux Tribe at 30-31. Further, PUC argues that no permit condition requires that TransCanada consult with the Tribes about the Project. Id. at 31. "Condition 6, Apx 27, #6, refers to 'local governmental units,' but does not specify Tribes." Id.

During oral arguments, Yankton Sioux Tribe made an argument that, although the Reservation is not near the path of the pipeline, they feel they will be affected by "man camps" that come with the building of the pipeline. Further Yankton made the statement that the "Tribe has unique knowledge" and should have therefore been consulted. The Court finds these arguments unpersuasive. It is clear that the Tribe is concerned with the possibility of negative impacts, likely crime and/or drug related issues, with which "man camps" have been stigmatized. However, this Court cannot consider any and all *remotely possible* impact this project *might* have somewhere down the line. If so, the Court would also have to look at, balance, and weigh against, the *possible positive* impacts including economic and job growth that will come once the project begins. The project itself is not within Tribal boundaries. Further, the fact that the Tribe feels it has unique knowledge of the land is not enough to warrant required discussions between

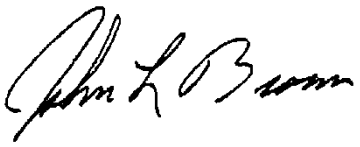
TransCanada and the Yankton Sioux Tribe when the land for which they claim knowledge is not Tribal land.

The Yankton Sioux Tribe is a sovereign nation within the bounds of the United States; it is not a local unit of government within the State of South Dakota's government structure. Further, the proposed route of the Keystone XL Pipeline does not cross any Tribal lands. The PUC is AFFIRMED.

CONCLUSION

Ultimately many of the issues raised by Appellant's would have been more properly raised following the issuance of the original permit in Docket No. 09-001. Four years lapsed between the issuance of the permit and the certification process, during which no suit was filed to challenge the petition itself. This appeal is from an already granted permit, to which the only requirement was to "certify to the Public Utilities Commission that such facility continues to meet the conditions upon which the permit was issued." While the Court recognizes there may be legitimate concerns regarding many of the issues raised, *inter alia*, potential distribution of arsenic into the river, sloughing on nearby roads, and issues of climate change, they have been adequately addressed by the Commission or are not appropriate to be addressed in this appeal.

For the foregoing reasons, the Public Utilities Commission's decision is AFFIRMED.



Honorable John L. Brown
Presiding Sixth Circuit Court Judge

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE PETITION OF TRANSCANADA KEYSTONE PIPELINE, LP FOR ORDER ACCEPTING CERTIFICATION OF PERMIT ISSUED IN DOCKET HP09-001 TO CONSTRUCT THE KEYSTONE XL PIPELINE	**FINAL DECISION AND ORDER FINDING CERTIFICATION VALID AND ACCEPTING CERTIFICATION; NOTICE OF ENTRY** **HP14-001**

PROCEDURAL HISTORY

On September 15, 2014, TransCanada Keystone Pipeline, LP (Keystone, TransCanada, or Applicant) filed with the Commission a Certification signed by Corey Goulet on September 12, 2014, in Calgary, Alberta, Canada, and a Petition for Order Accepting Certification under SDCL § 49-41B-27 (Petition). Attached to the Petition were Appendix A, Project Overview Map, Appendix B, Quarterly Report for the Quarter Ending 6/30/14, and Appendix C, Tracking Table of Changes, including Attachment A, Redlined Construction, Mitigation, and Reclamation Plan, and Attachment B, Preliminary Site-Specific Crossing Plans. The Commission opened Docket HP14-001 for consideration of the Certification and Petition.[1] The purpose of these filings was to provide the Commission with Keystone's certified statement that such facility continues to meet the conditions upon which the permit was issued and to otherwise verify that Keystone continues to meet the 50 conditions imposed in the Amended Final Decision and Order; Notice of Entry issued by the Commission on June 29, 2010, in Docket HP09-001 (Amended Final Decision) granting a permit to Keystone to construct the Keystone XL Pipeline (Project).[2] Since more than four years have elapsed since the Commission's issuance of the Amended Decision granting the permit to construct, Keystone now seeks an order from the Commission accepting Keystone's certification pursuant to SDCL 49-41B-27.

On September 18, 2014, the Commission electronically transmitted notice of the certification filing and the intervention deadline of October 15, 2014, to interested individuals and entities on the Commission's PUC Weekly Filings electronic listserv, and on October 1, 2014, the Commission issued an Order Assessing Filing Fee. Forty-three individuals and entities sought to intervene as parties by submitting applications between September 30 and October 17, 2014. On November 4, 2014, the Commission entered an Order Granting Intervention and Party Status to the following forty-two persons: John Harter, Rosebud Sioux Tribe-Tribal Utility Commission, Elizabeth Lone Eagle, Paul F. Seamans, Viola Waln, Cindy Myers, RN, Bold Nebraska, Diana L. Steskal, Cheryl Frisch, Terry Frisch, Standing Rock Sioux Indian Tribe, Byron T. Steskal, Arthur R. Tanderup, Lewis GrassRope, Carolyn P. Smith, Robert G. Allpress, Jeff Jensen, Amy Schaffer, Louis T. Genung, Nancy Hilding, Gary F. Dorr, Bruce Boettcher, Rosebud Sioux Tribe, Wrexie Lainson Bardaglio, South Dakota Wildlife Federation, Cheyenne River Sioux Tribe, Jerry D. Jones, Cody Jones, Debbie J. Trapp, Gena M. Parkhurst,

[1] The Commission's Orders in the case and all other filings and documents in the record are available on the Commission's web page for Docket HP14-001 at: http://puc.sd.gov/Dockets/HydrocarbonPipeline/2014/hp14-001.aspx

[2] The Commission's Orders in the case and all other filings and documents in the record are available on the Commission's web page for Docket HP09-001 at: http://puc.sd.gov/Dockets/HydrocarbonPipeline/2009/hp09-001.aspx

Sierra Club, Joyce Braun, 350.org, Yankton Sioux Tribe, Dakota Rural Action (DRA), Chastity Jewett, Indigenous Environmental Network, Dallas Goldtooth, RoxAnn Boettcher, Bonny Kilmurry, Ronald Fees, and Intertribal Council on Utility Policy (collectively, Intervenors). On March 4, 2015, the Commission issued an Order Granting Request to Withdraw Party Status allowing the South Dakota Wildlife Federation and the Sierra Club to withdraw as parties, and on April 21, 2015, the Commission issued an Order Granting Request to Withdraw Party Status allowing Jeff Jensen to withdraw as a party.

On October 30, 2014, Keystone filed Keystone's Motion to Define the Scope of Discovery under SDCL §49-41B-27 (Motion to Define Scope). On November 4, 2014, the Commission issued a Prehearing Scheduling Conference Order setting a telephonic scheduling conference to be conducted by General Counsel John Smith on November 13, 2014. On November 5, 2014, the Commission issued an Order for and Notice of Motion Hearing setting the Motion to Define Scope for hearing on November 25, 2014. The prehearing scheduling conference was held as scheduled on November 13, 2014. On November 14, 2014, a number of motions for extension of time to respond to the Motion to Define Scope were filed by Intervenors. Keystone did not object to the extension. On November 14, 2014, the Commission issued an Order Changing Motion Hearing Date and Order for and Notice of Scheduling Hearing setting the Motion to Define Scope and to establish a procedural schedule for hearing on December 9, 2014. Responses to the Motion to Define Scope and setting forth procedural schedule recommendations were filed by the Commission's staff (Staff) and many of the Intervenors. After hearing from the parties regarding the Motion to Define Scope and the procedural schedule, on December 17, 2014, the Commission issued an Order Granting Motion to Define Issues and Setting Procedural Schedule. In this order, the Commission decided that the scope of discovery would be limited to any matter relevant to: (1) whether the Project continues to meet the 50 conditions in Exhibit A to the Amended Final Decision; and (2) the changes in the Findings of Fact identified in the Tracking Table of Changes attached to Keystone's Certification Petition as Appendix C. The Commission also established the following deadlines: January 6, 2015, for serving initial discovery; February 6, 2015, for responding to initial discovery; February 20, 2015, for a second round of discovery; March 10, 2015, for responding to the second round of discovery; April 2, 2015, for submitting pre-filed direct testimony; April 23, 2015, for submitting pre-filed rebuttal testimony; and May 5-8, 2015, for an evidentiary hearing.

On December 2, 2014, Yankton Sioux Tribe (Yankton) filed Yankton Sioux Tribe's Motion to Dismiss, and on December 29, 2014, Rosebud Sioux Tribe (Rosebud) filed Rosebud Sioux Tribe's Motion to Dismiss and Request for Oral Argument. The motions contended that the Certification Petition on its face established that the Project was a different project than the one permitted in the Amended Final Decision in Docket HP09-001 and that Keystone could therefore not prove that it could continue to meet the conditions on which the permit was issued. A number of Intervenors filed motions to join in Yankton Sioux Tribe's Motion to Dismiss. On December 29, 2014, Keystone filed Applicant's Opposition to Yankton Sioux Tribe's Motion to Dismiss, and Staff filed Commission Staff's Response to Yankton Sioux Tribe's Motion to Dismiss. On January 2, 2015, Yankton Sioux Tribe filed Yankton Sioux Tribe's Reply in Support of Its Motion to Dismiss. After hearing from the parties at the hearing on the motions to join and dismiss on January 6, 2015, on January 8, 2015, the Commission issued an Order Granting Motions to Join and Denying Motions to Dismiss which granted the Intervenors' motions to join and to consider Rosebud's motion to dismiss together with Yankton's but denied the motions to dismiss.

On March 17, 2015, Staff filed a Motion to Amend Procedural Schedule to add to the procedural schedule a deadline by which parties must file a witness list and an exhibit list. On April 2, 2015, the Commission issued an Order Amending Procedural Schedule (Witness and Exhibit Lists) requiring that witness lists and exhibit lists must be filed and served by all parties no later than 5:00 p.m. CDT, on April 21, 2015. On March 25, 2015, Rosebud Sioux Tribe filed a Motion to Amend Order Setting Procedural Schedule requesting that the Commission amend the procedural schedule in the Order Setting Procedural Schedule to delay the date set for pre-filed testimony. The Commission heard Rosebud's motion to amend on March 31, 2015, and on April 3 issued an Order Granting in Part Motion to Amend Procedural Schedule extending the date for the filing of pre-filed rebuttal testimony to April 27, 2015, and allowing testimony regarding new information acquired as a result of any motion to compel granted by the Commission to be included in rebuttal testimony. On April 8, 2014, Rosebud Sioux Tribe filed Rosebud Sioux Tribe's Motion for Reconsideration. After hearing the Motion to Reconsider on April 9, 2015, on April 10 the Commission issued an Order Granting Motion to Reconsider and Amending In Part Procedural Schedule which granted reconsideration with respect to expert testimony, extended the deadline for Rosebud's pre-filed testimony for its expert witnesses to April 24, 2015, except to the extent it qualifies for later filing on April 27, 2015, pursuant to the Amended Scheduling Order, and extended the deadline for Keystone to file its rebuttal testimony with respect to the pre-filed testimony of Rosebud's expert witnesses to May 5, 2015. On March 27, 2015, Standing Rock Sioux Tribe (Standing Rock) filed a Motion to Amend Order Setting Procedural requesting that the Commission amend the procedural schedule to delay the dates set for close of discovery, pre-filed testimony, rebuttal testimony, filing of exhibits, and the evidentiary hearing. The Commission heard Standing Rock's motion to amend on March 31, 2015, and on April 2 issued an Order Denying Motion to Amend Order Setting Procedural Schedule as requested by Standing Rock.

The Commission decided a number of discovery-related motions. Dakota Rural Action, Standing Rock Sioux Tribe, Yankton Sioux Tribe, Gary Dorr, and Rosebud Sioux Tribe filed motions to compel discovery against Keystone and Staff. The Commission entered orders dated April 17, 2015, granting in part and denying in part the motions filed by Dakota Rural Action, Standing Rock Sioux Tribe, and Yankton Sioux Tribe, and compelling Keystone to answer certain discovery requests by April 17, 2015. The Commission denied the motions filed by Gary Dorr and Rosebud Sioux Tribe by orders dated April 22, 2015, and April 23, 2015.

On March 23, 2015, Keystone filed a Motion to Preclude Certain Intervenors (John Harter, BOLD Nebraska, Carolyn Smith, Gary Dorr, and Yankton Sioux Tribe) from Offering Evidence or Witnesses at Hearing (Motion to Preclude). On March 25, 2015, Keystone filed an Amended Motion to Preclude Certain Intervenors from Offering Evidence or Witnesses at Hearing and to Compel Discovery requesting: (1) that certain Intervenors be precluded from offering any evidence or witnesses at the hearing based on their complete failure to respond to Keystone's discovery requests (Rosebud Sioux Tribe-Tribal Utility Commission, Viola Waln, Cheryl & Terry Frisch, Louis Grass Rope, Robert Allpress, Jeff Jensen, Louis Genung, Jerry Jones, Debbie Tripp, Gina Parkhurst, Joye Braun, 350.org, Chastity Jewett, Dallas Goldtooth, and Ronald Fees); and (2) that certain Intervenors (John Harter, BOLD Nebraska, Carolyn Smith, Gary Dorr, and Yankton Sioux Tribe) be prohibited from offering evidence or witnesses at the hearing because of their failure to respond fully to Keystone's discovery requests. On April 17, 2015, the Commission issued an Order Granting In Part Keystone's Motion for Discovery Sanctions precluding the seventeen intervenors who did not respond at all to Keystone's requests for discovery from presenting evidence or witnesses at the evidentiary hearing, precluding John Harter, BOLD Nebraska, and Carolyn Smith from presenting evidence or witnesses at the evidentiary hearing for not sufficiently responding to Keystone's discovery

requests, but not precluding Yankton Sioux Tribe and Gary Dorr from presenting evidence or witnesses at the evidentiary hearing.

On April 2, 2015, Dakota Rural Action filed a Statement and Objections on behalf of Dakota Rural Action with respect to Submission of Written Testimony arguing that the Commission's pre-filed testimony rule, ARSD 20:10:01:06, violates SDCL 15-6-43(a) and 49-1-11. Several Intervenors filed statements in support of DRA's Statement and Objections. In Staff's Brief in Response to Motion to Preclude Witnesses from Offering Testimony Who Did Not File Pre-Filed Testimony filed on April 10, 2015, Staff pointed out that pre-filed testimony does not become evidence in the case unless and until it is received in evidence as an exhibit upon proper foundation by a live witness or stipulation and that ARSD 20:10:01:06 is not therefore violative of SDCL 15-6-43(a). In complex contested case proceedings, it is normal practice for the Commission to require pre-filed testimony as part of the discovery and hearing preparation process, and no court has ever ruled that such requirement is unlawful.

On April 6, 2015, Keystone filed Keystone's Motion to Preclude Witnesses from Testifying at Hearing Who Did Not File Prefile Testimony asking that the Commission preclude testimony from any witness who did not pre-file testimony as required by the Commission's procedural order. Responses to this motion were filed by Staff and numerous Intervenors. On April 23, 2015, the Commission issued an Order Granting Motion to Preclude Witnesses from Testifying at Hearing Who Did Not File Prefiled Testimony, precluding persons for whom pre-filed testimony was not filed from testifying at the hearing, subject to the condition that pre-filed rebuttal testimony would be allowed to be filed by all parties until the April 27, 2015, deadline, including testimony and exhibits addressing information obtained as a result of any order to compel discovery granted by the Commission.

On April 7, 2015, the Commission received Dakota Rural Action's, Rosebud Sioux Tribe's, Cheyenne River Sioux Tribe's and Indigenous Environmental Network's Joint Motion for Appointment of Special Master to oversee the discovery process in this docket (Special Master Motion). Responses in opposition to the Special Master Motion were filed by Staff and Keystone on April 8 and April 9, 2015, respectively. On April 22, 2015, the Commission issued an Order Denying Motion for Special Master, finding that the Commission has sufficient resources and is competent to hear and act on the discovery issues presented in this proceeding.

On April 7, 2015, the Commission received Dakota Rural Action's, Rosebud Sioux Tribe's, Standing Rock Sioux Tribe's, Cheyenne River Sioux Tribe's and Indigenous Environmental Network's Joint Motion for Stay of Proceedings (Motion for Stay) requesting a stay pending the Presidential Permit decision and the conclusion of the investigation initiated by the Canadian National Energy Board regarding allegations of pipeline safety violations. Keystone and Staff filed responses in opposition to the Motion for Stay on April 9 and 10, 2015, respectively. On April 22, 2015, the Commission issued an Order Denying Motion for Stay.

At a motion hearing on April 14, 2015, the Commission considered a number of discovery related motions filed by Keystone and a number of Intervenors. In response to objections raised by Keystone based on the confidential nature of many documents requested by intervenor parties, on April 17, 2015, the Commission issued a Protective Order imposing protective provisions on parties' discovery of materials deemed confidential, subject to the provisions of ARSD 20:10:01:40 through 20:10:01:44. On April 24, 2015, Dakota Rural Action, Rosebud Sioux Tribe, Standing Rock Sioux Tribe, Cheyenne River Sioux Tribe (Cheyenne River), Yankton Sioux Tribe, Indigenous Environmental Network, and BOLD Nebraska filed a Joint Motion to Vacate or, in the Alternative, to Clarify or Amend Protective Order. On April 27,

2015, Keystone filed Applicant's Opposition to Joint Motion to Vacate or Amend the Protective Order arguing that Keystone had in fact allowed Intervenors to provide access to confidential materials to co-counsel and experts. On April 28, 2015, Staff filed Staff's Brief in Response to Joint Motion to Vacate or, in the Alternative, to Clarify or Amend Protective Order. In response to Intervenors' motion, on May 13, 2015, the Commission issued an Amended Protective Order authorizing disclosure of confidential information to co-counsel, professional staff, and experts, in addition to attorneys of record, provided that notice of such disclosure is provided by the disclosing party and the persons receiving the information sign the non-disclosure agreement.

On April 24, 2015, Dakota Rural Action, Rosebud Sioux Tribe, Yankton Sioux Tribe, BOLD Nebraska, Cheyenne River Sioux Tribe, and Standing Rock Sioux Tribe filed a Joint Motion for Continuance and Relief from Scheduling Order requesting a later date for the evidentiary hearing to allow additional time for consideration of discovery documents and preparation for hearing. Indigenous Environmental Network joined the motion on April 27, 2015. On April 24, 2015, the Commission received Keystone's Opposition to Joint Motion for Continuance. On April 27, 2015, the Commission issued an Order Granting Joint Motion for Continuance and Relief from Scheduling Order in which the Commission granted the Joint Motion for Continuance and instructed Staff to propose a revised schedule at the next regularly scheduled Commission meeting. On May 5, 2015, the Commission issued an Order Amending Procedural Schedule establishing the following deadlines and dates: (1) substantive motions filed by May 26, 2015; (2) responses to substantive motions filed by June 2, 2015; (3) hearing on substantive motions on June 11, 2015; (4) rebuttal testimony filed by June 26, 2015; (5) witness and exhibit lists filed by July 7, 2015; (6) motions *in limine* filed by July 10, 2015; (7) responses to motions *in limine* filed by July 17, 2015; (8) motion hearing on motions *in limine* on July 21, 2015; and (5) an evidentiary hearing from July 27-31, and continuing August 3-4, 2015.

On April 27, 2015, the Commission received Standing Rock, Cheyenne River, Rosebud Sioux, and Yankton Sioux Tribes, Dakota Rural Action, Indigenous Environmental Network, Intertribal COUP and BOLD Nebraska Motion to Exclude Evidence and Testimony by Transcanada seeking to preclude Keystone from offering testimony or witnesses at the hearing based on its alleged failure to comply with discovery. On May 1, 2015, Intervenor Gary Dorr filed Gary Dorr's Motion to Join Joint Motion by Standing Rock, Cheyenne River, Rosebud, and Yankton Sioux Tribes, Dakota Rural Action, Indigenous Environmental Network, Intertribal COUP, and BOLD Nebraska to Exclude Evidence and Testimony by Transcanada. On April 27, 2015, Keystone filed Keystone's Opposition to Joint Motion to Exclude Evidence and Testimony. On May 18, 2015, Staff filed Staff's Brief in Response to Joint Motion to Exclude Evidence and Testimony. On May 19, 2015, Keystone filed Keystone's Supplemental Opposition to Joint Motion to Exclude Testimony and Evidence. Finding that TransCanada had produced a very large volume of documents in response to intervenor discovery requests and the Commission's Orders to Compel and that movants had not demonstrated that TransCanada had acted in bad faith or with willfulness or fault, on May 28, 2015, the Commission issued an Order Granting Motion to Join and Denying Joint Motion to Exclude Evidence and Testimony by Transcanada, granting Gary Dorr's motion to join and denying the joint motion to exclude.

On April 27, 2015, Intertribal Council on Utility Policy (COUP) filed a Notice of Request for a Time Certain for an Expert Rebuttal Witness for the Intertribal Council on Utility Policy asking for a time certain for testimony of three of its experts, namely Dr. James Hansen, Dr. George Seielstad, and Dr. Robert Oglesby. On April 27, 2015, Keystone filed Keystone's Objection to Coup's Request for a Time Certain and Motion to Preclude Witnesses. Keystone opposed Intertribal COUP's motion on the grounds that Intertribal COUP had not submitted pre-filed testimony for these experts and their proposed testimony was not rebuttal testimony. On

May 18, 2015, Intertribal COUP filed Intertribal COUP's Response to Keystone's Objection to COUP's Request for a Time Certain and Motion to Preclude Witnesses. On May 18, 2015, Staff filed Staff's Brief in Response to Keystone's Objection to COUP's Request for a Time Certain and Motion to Preclude Witness. In its brief, Staff argued that denial of a time certain and preclusion were appropriate, but for the reasons that the hearing dates have changed so the time certain is no longer at issue and that the testimony of Intertribal COUP's three witnesses is not relevant to the issues before the Commission in this proceeding. On May 19, 2015, Intertribal COUP filed Intertribal COUP's Amended Response to Keystone's Objection to COUP's Request for a Time Certain and Motion to Preclude Witnesses. On May 28, 2015, the Commission issued an Order Granting TransCanada's Motion to Preclude Witnesses on the grounds that the testimony of COUP's proposed witnesses was beyond the scope of the certification proceeding and took no action on COUP's Request for a Time Certain for an Expert Witness, finding that such issue was moot given the Commission's April 27, 2015 Order Granting Joint Motion for Continuance and Relief from Scheduling Order.

On May 26, 2015, the Commission received Yankton Sioux Tribe's and Indigenous Environmental Network's Motion to Preclude Improper Relief or, in the Alternative, to Amend Findings of Fact seeking to have certain findings of fact contained in the Amended Final Decision amended. Alternatively, the motion asked that the Commission amend Findings of Fact numbers 113 and 114. On May 26, 2015, Staff filed Staff's Brief in Response to Motion to Preclude Improper Relief or, in the Alternative, to Amend Findings of Fact. On June 2, 2015, DRA filed Dakota Rural Action's Joinder of Yankton Sioux Tribe's Motion to Preclude Improper Relief. On June 2, 2015, Keystone filed Keystone's Opposition to Joint Motion to Preclude Improper Relief. On June 6, 2015, the Commission received Yankton Sioux Tribe's And Indigenous Environmental Network's Reply in Support of Motion to Preclude Improper Relief or, in the Alternative, to Amend Findings of Fact. Finding that TransCanada did not seek to amend the Findings of Fact in the Amended Final Decision and that there exists no legal authority for the Commission to amend the Amended Final Decision at this time, on June 15, 2015, the Commission issued an Order Denying Yankton Sioux Tribe's and Indigenous Environmental Network's Motion to Preclude Improper Relief or, in the Alternative, to Amend Findings Of Fact.

On May 26, 2015, Keystone filed Keystone's Motion to Exclude Testimony of Richard Kuprewicz requesting that the Commission exclude all of Kuprewicz's testimony except for his opinion on pages 2-3 of Exhibit 9 that the Project will not pose a substantial risk to the Rosebud Sioux Tribe's water supply. On June 2, 2015, Staff filed a Corrected Staff's Brief in Response to Applicant's Motion to Exclude Testimony of Richard Kuprewicz. On June 2, 2015, the Commission received Rosebud Sioux Tribe's Response to Keystone's Motion to Exclude Testimony of Richard Kuprewicz. On June 2, 2015, DRA filed Dakota Rural Action's Joinder of Rosebud Sioux Tribe's Response to TransCanada's Motion to Exclude Testimony of Richard Kuprewicz, and Cheyenne River Sioux Tribe filed Cheyenne River Sioux Tribe's Response to Keystone's Motion to Exclude the Testimony of Richard Kuprewicz. On June 10, 2015, the Commission received Rosebud Sioux Tribe's Supplemental Response to Motion to Exclude Testimony of Richard Kuprewicz. On June 8, 2015, Keystone filed Applicant's Reply in Support of Motion to Limit Testimony of Richard Kuprewicz. On June 15, 2015 the Commission issued an Order Granting in Part and Denying in Part Keystone's Motion to Exclude Testimony of Richard Kuprewicz, in which the Commission ordered the exclusion of that portion of the testimony dealing with re-routing the Project as beyond the Commission's jurisdiction pursuant to SDCL 49-41B-36 and denying the motion with respect to the rest of Mr. Kuprewicz's testimony.

On May 26, 2015, Keystone filed a Motion to Preclude Testimony Regarding Mni Wiconi Pipeline Easements, on the grounds that Keystone has already entered into easement agreements for such crossings from the U.S. Bureau of Reclamation and the affected landowners. On June 2, 2015, Intervenor Gary Dorr filed Gary Dorr's Response to Motion by TransCanada to Preclude Testimony Regarding Mni Wiconi Pipeline Easements. On June 9, 2015, Keystone filed a Reply Brief in Support of Transcanada's Motion to Preclude Testimony Regarding Mni Wiconi Pipeline Easements and up-dated supporting documentation. On June 15, 2015, the Commission issued an Order Granting Motion to Preclude Testimony Regarding Mni Wiconi Pipeline Easements, finding that tribal consent to the proposed Keystone XL Pipeline's crossing of the Mni Wiconi pipeline(s) is not relevant to this proceeding, because the Commission does not have jurisdiction over property rights.

On May 26, 2015, Keystone filed Applicant's Motion to Preclude Consideration of Aboriginal Title or Usufructuary Rights as beyond the Commission's jurisdiction and the scope of this proceeding. On June 2, 2015, the Commission received Standing Rock Sioux Tribe Opposition to Motion to Preclude Consideration of Aboriginal Title or Usufructuary Rights, Yankton Sioux Tribe's Response to Applicant's Motion to Preclude Consideration of Aboriginal Title or Usufructuary Rights, and Cheyenne River Sioux Tribe's Response to Keystone's Motion to Preclude Considertion of Aboriginal Title or Usufructuary Rights. On June 8, 2015, Keystone filed Applicant's Reply Brief - Motion to Preclude Consideration of Aboriginal Title or Usufructuary Rights. Finding that the Commission does not have jurisdiction over aboriginal title or usufructuary rights, on June 15, 2015, the Commission issued an Order Granting Motion to Preclude Consideration of Aboriginal Title or Usufructuary Rights.

On or before July 7, 2015, exhibit and/or witness lists were filed by Keystone, Staff, and Intervenors Cindy Myers, Cheyenne River Sioux Tribe, Dakota Rural Action, Standing Rock Sioux Tribe, Yankton Sioux Tribe, Chastity Jewett, and Rosebud Sioux Tribe.

On July 9, 2015, Staff filed a Motion for Judicial Notice requesting that the Commission take judicial notice of: the evidentiary record in Docket No. HP09-001; the Department of State's Final Environmental Impact Statement involving the Project; the Final Supplemental Environmental Impact Statement; and SDCL Chapter 49-41B in its entirety. On July 22, 2015, the Commission issued an Order Granting Judicial Notice of these documents.

On July 10, 2015, the Rosebud Sioux Tribe filed Rosebud Sioux Tribe's Motion *in Limine* asking that certain rebuttal testimony filed by Keystone in response to Rosebud's expert witnesses Richard Kuprewicz, Ian Goodman, and Brigid Rowan be excluded because it had elected not to call these persons as witnesses. At the hearing on the motion on July 21, 2015, Keystone and Rosebud agreed that the issue was moot because Kuprewicz, Goodman, and Rowan would not be called as witnesses at the hearing. On July 22, 2015, the Commission accordingly issued an Order Denying Rosebud Sioux Tribe's Motion to Exclude Testimony.

On July 10, 2015, Staff filed a Motion for Time Certain for Witness Testimony requesting that August 3, 2015, or such time as necessary on such date be set aside for the testimony of at least one of Staff's witnesses, Dan Flo, and witnesses for Standing Rock Sioux Tribe who will be traveling some distance from out of town. On July 22, 2015, the Commission issued an Order Granting Motion for Time Certain for Witness Testimony. On July 16, Diana Steskal filed a request for time certain for her testimony on either July 29 or 30, 2015. On July 22, 2015, the Commission issued an Order Granting Motion for Time Certain for Witness Testimony as requested by Ms. Steskal.

On July 10, 2015, Keystone filed the following motions *in limine*: (1) to strike the proposed testimony of Linda Black Elk, consisting of an article on Native American plants; (2) to strike Paula Antoine's rebuttal testimony; (3) to exclude the testimony of Kevin E. Cahill, Ph.D.; (4) to restrict the testimony of Leonard Crow Dog; (5) to preclude the testimony of Dr. Hansen and Dr. Oglesby; (6) to restrict the testimony of Faith Spotted Eagle and an unnamed member of the Yankton Sioux Tribe Business and Claims Committee; (7) to preclude the testimony of Chris Sauncosi; (8) to preclude the rebuttal testimony of Jennifer Galindo and Waste Win Young; and (9) to preclude the rebuttal testimony of Ian Goodman and Brigid Rowan. Staff and Intervenors filed responses With respect to these motions, the Commission by separate orders dated July 22, 2015, granted the motions concerning Linda Black Elk, Kevin Cahill, Leonard Crow Dog, Dr. Hansen and Dr. Oglesby, Faith Spotted Eagle and an unnamed member of the Business and Claims Committee, Chris Sauncosi, and Jennifer Galindo and Waste Win Young. The Commission granted in part the motion to strike Paula Antoine's testimony as it related to the Spirit Camp located in Tripp County, but otherwise denied the motion in its July 22, 2015 Order Granting in Part and Denying in Part Motion *in Limine* to Strike Paula Antoine's Rebuttal Testimony. Also on July 22, 2015, the Commission issued an Order Denying Motion *in Limine* to Preclude Rebuttal Testimony of Ian Goodman and Brigid Rowan finding the issue to be moot.

On July 24, 2015, Standing Rock Sioux Tribe filed motions for reconsideration of the orders excluding the testimony of Kevin E. Cahill and Jennifer Galindo and Waste Win Young. On August 31, 2015, the Commission issued an Order Denying Motion for Reconsideration of Order Granting Motion *in Limine* to Preclude Rebuttal Testimony of Jennifer Galindo and Waste Win Young. On September 1, 2015, the Commission issued an Order Granting in Part Motion for Reconsideration of Order Granting Motion to Exclude Testimony of Kevin E. Cahill, Ph.D. allowing that part of Cahill's testimony responsive to the testimony of Staff witness Brian Walsh.

On July 10, 2015, Keystone filed Keystone's Protective Motion *in Limine* Regarding Dakota Rural Action's Exhibit List Dated July 7, 2015, seeking to preclude those documents or portions of documents on DRA's Exhibit List that were not timely disclosed to Keystone in DRA's responses to Keystone's discovery requests. After considering Keystone's motion at an ad hoc meeting, on July 17, 2015, the Commission issued an Order Granting in Part and Denying in Part Motion *in Limine* (DRA Exhibits) precluding exhibits 29-37, 39-65, 67-128, 397-409, 1058-1062, and 1063-1073. On July 21, 2015, DRA filed Dakota Rural Action's Motion and Memorandum for Reconsideration of Partial Granting of Motion *in Limine* to Exclude Exhibits. On July 23, 2015, the Commission issued an Order Granting in Part Motion for Reconsideration of Partial Granting of Motion *in Limine* to Exclude Exhibits, allowing exhibits 29-37, 39-65, and 1058-1062 to be offered in evidence.

On July 10, 2015, Yankton Sioux Tribe, Cheyenne River Sioux Tribe, BOLD Nebraska, Rosebud Sioux Tribe, Indigenous Environmental Network, and Dakota Rural Action filed a Joint Motion *in Limine* to Exclude Evidence Pertaining to Keystone's Proposed Changes to Findings of Fact requesting that Keystone be prohibited from submitting any evidence related to changes in facts as reflected in the Tracking Table of Changes attached as Appendix C to its Certification Petition. On July 17, 2015, Keystone filed Applicant's Response to Joint Motion *in Limine* arguing that the Tracking Table of Changes is merely a reference to minor changes in facts that have occurred since the issuance of the Amended Final Decision in 2010. Finding that the testimony at issue is relevant to the proceeding and that amending the findings of fact in Docket HP09-001 is not requested, on July 23, 2015, the Commission issued an Order Denying Joint Motion *in Limine* to Exclude Evidence Pertaining to Keystone's Proposed Changes to Findings of Fact.

On July 10, 2015, Keystone filed Applicant's Motion Concerning Procedural Issues at the Evidentiary Hearing (Procedural Motion) requesting that the Commission issue several directives to expedite the evidentiary hearing and ensure that it operates efficiently given the number of parties and witnesses involved, namely: (1) limiting Intervenors with a common interest to one lawyer conducting cross-examination; (2) requiring written rather than oral opening statements; (3) precluding friendly cross examination; (4) limiting cross-examination to counsel if a party was represented by counsel; (5) limiting cross examination to the scope of direct examination; and (6) precluding argument on evidentiary objections unless requested by the Hearing Examiner. Responses to the Procedural Motion were filed by Staff and several Intervenors. On July 22, 2015, the Commission issued Order Denying in Part and Granting in Part Applicant's Motion Concerning Procedural Issues at the Evidentiary Hearing denying all of Keystone's requests except for limiting cross examination to the scope of direct examination and matters affecting the credibility of a witness and limiting cross-examination to counsel if a party was represented by counsel.

On July 6, 2015, a public input hearing was held before the Commission beginning at 5:30 p.m. in Room 414 of the State Capitol Building. The Commission heard public comment from 52 persons. The Commission also received written comments from a number of persons, which are included in the docket.

An evidentiary hearing was held beginning on Monday, July 27, 2015, in Room 414 of the State Capitol Building. On July 30, 2015, the Commission issued a Notice of Additional Hearing dates extending the hearing to include Saturday, August 1, 2015, and then continuing from August 3-5 and 6-7, 2015, if necessary. The hearing concluded near the end of the business day on August 5, 2015. The evidentiary hearing was conducted by Commission General Counsel John J. Smith, who acted as Hearing Examiner. Commissioners Chris Nelson and Gary Hanson attended the hearing in person. Due to medical treatment, Commissioner Kristie Fiegen elected to participate by reviewing the hearing transcript as allowed under SDCL § 1-26-24. TR 46-50.[3] On October 5, 2015, Commissioner Fiegen filed a Certification attesting to the fact that she had read the entirety of the hearing transcripts.

At the conclusion of the hearing, the Commission established a briefing schedule. TR 2502-2503. On August 12, 2015, the Commission issued an Order Establishing Post-Hearing Briefing Schedule in conformity with the action taken at the hearing with simultaneous initial post-hearing briefs due October 1, 2015, and simultaneous reply briefs due October 31, 2015, with reply briefs limited to parties who submitted initial briefs.

At the evidentiary hearing, non-attorney Intervenor Cindy Myers testified on her own behalf. Keystone objected to much of Ms. Myers's testimony and exhibits; however, in the interest of time, it was agreed at the hearing that Keystone would submit its objections in writing to be ruled on at a later date. On September 21, 2015, Keystone filed Applicant's Motion to Strike Testimony and Exhibits of Cindy Myers requesting that the Commission issue an order striking certain portions of Intervenor Cindy Myers's hearing testimony and exhibits. The motion was heard on October 29, 2015. During the discussion on the motion, the following clarifications were made involving Keystone's references to specific items identified in the motion: 1) TransCanada's request to strike transcript testimony 1659:6-1660:13 should be 1659:6-

[3] References to the June 10-11, 2014, Hearing Transcript are in the format "TR" followed by the Hearing Transcript page number(s) referenced, and references to Hearing Exhibits are in the format Ex followed by the exhibit number and, where applicable, the page number(s) referenced or other identifying reference and, where applicable, the appendix, attachment or sub-exhibit identifier and page number(s) referenced.

1660:15; 2) TransCanada's request to strike the first paragraph under "Aquifers" applies to the entire paragraph; the request to strike the second paragraph under "Aquifers" excludes the first sentence of the second paragraph; 3) the request to strike the third paragraph under "Aquifers" refers to the entire paragraph; and 4) the request to strike the third paragraph under "Waterways" should be the second paragraph. Chairman Chris Nelson moved to grant TransCanada's Motion to Strike, subject to the clarifications made during the hearing. Commissioner Gary Hanson moved to amend the motion to exclude Exhibit 6001 from the Motion to Strike, which motion failed. The Commission then voted unanimously to grant Keystone's motion subject to the clarifications made at the hearing. On November 4, 2015, Commissioner Hanson filed a request for reconsideration of the Commission action taken on October 29, 2015, in order to separately address Exhibit 6001. On November 6, 2015, the Commission issued an Order Granting Keystone's Motion to Strike Testimony and Exhibits of Cindy Myers. In response to Commissioner Hanson's request for reconsideration, on November 19, 2015, the Commission issued an Order Granting Reconsideration of Order Granting Keystone's Motion to Strike Testimony and Exhibits of Cindy Myers in which the Commission bi-furcated the Motion to Strike in order to consider Exhibit 6001 separately. With Commissioner Hanson dissenting, a majority of the Commission voted to exclude Exhibit 6001. The Commission then voted unanimously to exclude the remaining testimony and exhibits addressed in the October 29 Commission action.

On November 4, 2015, Yankton Sioux Tribe, Rosebud Sioux Tribe, Cheyenne River Sioux Tribe, Standing Rock Sioux Tribe, Indigenous Environmental Network, Dakota Rural Action, Intertribal Council on Utility Policy, and BOLD Nebraska submitted a Joint Motion to Strike Proposed Findings of Fact and Conclusions of Law requesting that the Commission strike Keystone's Proposed Findings of Fact and Conclusions of law submitted as an attachment to Applicant's Post-Hearing Brief on the grounds that ARSD 20:10:01:25 states that "[i]f requested by the commission, the parties shall file proposed findings of fact." Finding that nothing in the statutes or rules precludes a party from filing proposed findings of fact and conclusions of law, on November 18, 2015, the Commission issued an Order Denying Joint Motion to Strike Proposed Findings of Fact and Conclusions of Law.

On November 9, 2015, John H. Harter, Elizabeth Lone Eagle, Paul F. Seamans, Cindy Myers, Diana L. Steskal, Byron T. Steskal, Arthur R. Tanderup, Lewis GrassRope, Carolyn P. Smith, Nancy Hilding, Gary F. Dorr, Wrexie L. Bardaglio, Joye Braun, Chastity Jewett, Dallas Goldtooth, Bonny J. Kilmurry, Viola Waln, Louis T. Genung, Terry Frisch, Cheryl Frisch, Dakota Rural Action, Indigenous Environmental Network, Intertribal Council on Utility Policy, BOLD Nebraska, Rosebud Sioux Tribe, Yankton Sioux Tribe, Cheyenne River Sioux Tribe, and Standing Rock Sioux Tribe filed Intervenors' Joint Motion to Dismiss requesting that the Commission enter an order (a) dismissing the petition for certification filed by TransCanada Keystone Pipeline, LP, and (b) revoking the permit for construction of the proposed Keystone XL Pipeline through South Dakota which was granted by the Commission on June 29, 2010, in the Amended Final Decision. On December 29, 2015, the Commission issued an Order Denying Motion to Dismiss denying both of these requests.

On December 9, 2015, Yankton Sioux Tribe filed Yankton Sioux Tribe's Proposed Findings of Fact and Conclusions of Law and Objections to Applicant's Proposed Findings of Fact and Conclusions of Law. On December 21, 2015, Keystone filed Applicant's Objections to Yankton Sioux Tribe's Proposed Findings of Fact and Conclusions of Law.

On December 18, 2015, the Commission received Dakota Rural Action's Motion to Supplement Administrative Record. In its motion, DRA asks the Commission to take

administrative notice of a Notice of Probable Violation, Proposed Civil Penalty, and Proposed Compliance Order filed by the United States Pipeline and Hazardous Materials Safety Administration (PHMSA) on November 20, 2015, and supplement the administrative record with the same. On December 21, 2015, Keystone filed Applicant's Response to DRA's Motion to Supplement the Record in which Keystone requests that the Commission also supplement the record with Keystone's response to the Notice of Probable Violation. On December 29, 2015, the Commission issued an Order Granting Motion for Administrative Notice and Supplementing the Administrative Record taking administrative notice of the Notice of Probable Violation, Proposed Civil Penalty, and Proposed Compliance Order as official documents of PHMSA, an agency of the government of the United States, and supplementing the record with these documents, but denying Keystone's request to supplement the record with its response on the grounds that such response is not an official record of a governmental agency and would therefore be hearsay without an opportunity for adjudicatory challenge by other parties.

At its regular meeting on January 5, 2016, the Commission took this matter up for decision. Commissioner Fiegen moved to accept Keystone's Certification in accordance with SDCL 49-41B-27 and find that the Certification is valid. After discussion by the Commissioners, the Commission voted unanimously in favor of the motion.

Having considered the evidence of record, applicable law, and the briefs and arguments of the parties, the Commission makes the following Findings of Fact, Conclusions of Law, and Decision.

FINDINGS OF FACT

Parties

1. The permit holder and Applicant in this docket is TransCanada Keystone Pipeline, LP, a limited partnership organized under the laws of the State of Delaware and owned by affiliates of TransCanada Corporation, a Canadian public company organized under the laws of Canada. Amended Final Decision, Finding of Fact 1.

2. On November 4, 2014, the Commission issued an Order Granting Intervention and Party Status granting intervention and party status to all persons who had requested party status, namely: John H. Harter, Rosebud Sioux Tribe-Tribal Utility Commission, Elizabeth Lone Eagle, Paul F. Seamans, Viola Waln, Cindy Myers, RN, BOLD Nebraska, Diana L. Steskal, Cheryl Frisch, Terry Frisch, Standing Rock Sioux Indian Tribe, Byron T. Steskal, Arthur R. Tanderup, Lewis GrassRope, Carolyn P. Smith, Robert G. Allpress, Jeff Jensen, Amy Schaffer, Louis T. Genung, Nancy Hilding, Gary F. Dorr, Bruce Boettcher, Rosebud Sioux Tribe, Wrexie Lainson Bardaglio, South Dakota Wildlife Federation, Cheyenne River Sioux Tribe, Jerry D. Jones, Cody Jones, Debbie J. Trapp, Gena M. Parkhurst, Sierra Club, Joye Braun, 350.org, Yankton Sioux Tribe, Dakota Rural Action, Chastity Jewett, Indigenous Environmental Network, Dallas Goldtooth, RoxAnn Boettcher, Bonny Kilmurry, Ronald Fees, and Intertribal Council on Utility Policy. On March 4, 2015, the Commission issued an Order Granting Request to Withdraw Party Status allowing the South Dakota Wildlife Federation and the Sierra Club to withdraw as parties, and on April 21, 2015, the Commission entered an Order Granting Request to Withdraw Party Status allowing Jeff Jensen to withdraw as a party.

3. Staff participated fully as a party, represented by Kristen Edwards and Karen Cremer.

Procedural Findings

4. The Procedural History set forth above is hereby incorporated by reference in its entirety in these Procedural Findings. The procedural findings set forth in the Procedural History are a substantially complete and accurate description of the material documents filed in this docket and the proceedings conducted and orders issued by the Commission in this matter. In addition to the procedural findings set forth in the Procedural History, the following Procedural Findings deal with the hearing process itself.

5. The following testimony was pre-filed on April 2, 2015, April 23, 2015, April 24, 2015, June 25, 2015, June 26, 2015, and August 4, 2015 in advance of the formal evidentiary hearing held July 27 through August 1, and August 3-5, 2015, in Room 414 of the State Capitol Building in Pierre, South Dakota:

Pre-filed Direct Testimony and Exhibits

Keystone

Heidi Tillquist's Testimony and Exhibit A - Resume
Corey Goulet's Testimony and Exhibit A - Resume
Jon Schmidt, Ph.D.'s Testimony and Exhibit A - Resume
Meera Kothari, P.E.'s Testimony and Exhibits A and B – Resume and Media Advisory (August 5, 2010)
David Diakow's Testimony and Exhibit A - Resume

Staff

Brian Walsh's Testimony and Exhibit____BW-1
Derric Iles' Testimony and Exhibit____DI-1
Kimberly McIntosh's Testimony and Exhibit____KM-1
Tom Kirschenmann's Testimony and Exhibit____TK-1
Daniel Flo's Testimony and Exhibit____DF-1, Exhibit____DF-2, and Exhibit____DF-2 Revised
David Schramm's Testimony and Exhibit____DS-1
Jenny Hudson's Testimony and Exhibit____JH-1
Christopher Hughes' Testimony and Exhibit____CH-1
Supplemental Pre-filed Testimony of Christopher Hughes
Paige Olson's Testimony and Exhibit____PO-1
Darren Kearney's Testimony and Exhibit____DK-1
Darren Kearney's Testimony (Amended July 23, 2015)

Intervenors

Gary F. Dorr's Testimony and Exhibit
Wayne Frederick's Testimony and Exhibit A - Resume
Cindy Myers' Testimony
Diana Steskal's Testimony (will file exhibits later)
Paul F. Seamans' Testimony
Dakota Rural Action's Testimony
Evan Vokes' Testimony

Dr. Arden D. Davis, Ph.D, P.E.'s Testimony and Attachment (Figures 1, 2, 3, 4, 5, 6, 7, 8, and 9)

Sue Sibson's Testimony

Cheyenne River Sioux Tribe's Testimony

Carlyle Ducheneaux's Testimony

Steve Vance's Testimony

Yankton Sioux Tribe's Testimony

Faith Spotted Eagle's Testimony

Supplement to Faith Spotted Eagle Pre-filed Testimony and Attachment – International Treaty to Protect the Sacred From Tar Sands Projects

Standing Rock Sioux Tribe's Testimony

Waste Win Young's Testimony

Phyllis Young's Testimony

Doug Crow Ghost's Testimony

Linda Black Elk's Testimony

Rosebud Sioux Tribe's Testimony

Richard Kuprewicz's Testimony Confidential (removed at the request of the party)

RST Exhibit 8 - Richard B. Kuprewicz's Resume Confidential (removed at the request of the party)

RST Exhibit 9 - Accufacts Inc.'s Letter to Rosebud Sioux Tribe Confidential (removed at the request of the party)

RST Exhibit 10 - Figure 1 - South Dakota Elevation Profile with Valves and Additional Information Confidential (removed at the request of the party)

Ian Goodman's Testimony Confidential (removed at the request of the party)

RST Exhibit 1 – Ian Goodman's Resume Confidential (removed at the request of the party)

RST Exhibit 3 – Changes to the Economic Costs and Benefits of the Keystone XL Pipeline for South Dakota Confidential (removed at the request of the party)

Brigid Rowan's Testimony Confidential (removed at the request of the party)

RST Exhibit 2 – Brigid Rowan's Resume (removed at the request of the party)

RST Exhibit 3 – Changes to the Economic Costs and Benefits of the Keystone XL Pipeline for South Dakota (removed at the request of the party)

RST Exhibit 4 – Landslide Hazard Areas Confidential (removed at the request of the party)

RST Exhibit 5 – Spill Costs Per Barrel from Comparable Crude Pipelines Confidentia l(removed at the request of the party)

RST Exhibit 6 – Range of Worst-Case Scenario Costs for Keystone XL Using Spill Costs for Comparable Crude Oil Pipelines (with 15-minute valve shutoff) Confidential (removed at the request of the party)

RST Exhibit 7 - Range of Worst-Case Scenario Costs for Keystone XL Using Spill Costs for Comparable Crude Oil Pipelines (with 30-minute valve shutoff) Confidential (removed at the request of the party)

Pre-Filed Rebuttal Testimony and Exhibits

Staff

Darren Kearney's Rebuttal Testimony

Standing Rock Sioux Tribe

Kevin E. Cahill, Ph.D.'s Rebuttal Testimony and Rebuttal Expert Report of Economist Kevin E. Cahill, PH.D. on Behalf of the Standing Rock Sioux Tribe

Rosebud Sioux Tribe

Jennifer Galindo's Rebuttal Testimony
- Exhibit 11 - Curriculum Vitae Jennifer Galindo Archeologist
- Exhibit 12 - Map from Programmatic Agreement
- Exhibit 13 - RST Email and Letter to Paige Olson
- Exhibit 14 - TransCanada's Policy regarding Native American Relations

Ian Goodman and Brigid Rowan's Rebuttal Testimony Confidential (removed at the request of the party)
- Exhibit 15 - Changes to the Economic Costs and Benefits of the Keystone XL Pipeline for South Dakota Confidential (removed at the request of the party)

Paula Antoine's Rebuttal Testimony
- Exhibit 16 - Rosebud Sioux Tribe's Resolution No. 2014-42 - Amended: Petition
- Exhibit 17 - South Dakota Codified Laws 49-41B-1, 49-41B-11 and 49-41B-22

Amended Rebuttal Testimony of Paula Antoine

Chief Leonard Crow Dog's Rebuttal Testimony

Keystone

Corey Goulet's Rebuttal Testimony

Dan King's Rebuttal Testimony and Resume

F.J. (Rick) Perkins' Rebuttal Testimony and Resume

Meera Kothari's Rebuttal Testimony

Jon Schmidt's Rebuttal Testimony

Heidi Tillquist's Rebuttal Testimony
- Exhibit List
- Exhibit 1: Diluted Bitumen-Derived Crude Oil: Relative Pipeline Impacts (Battelle 2012)
- Exhibit 2: Comparison of the Corrosivity to Dilbit and Conventional Crude (Been 2011) Confidential (not available to the public)
- Exhibit 3: Effects of Diluted Bitumen on Crude Oil Pipelines (National Academy of Sciences 2013)
- Exhibit 4: Crude Oil at the Bemidji Site: 25 Years of Monitoring, Modeling, and Understanding (Essaid et al. 2011)
- Exhibit 5: Use of Long-Term Monitoring Data to Evaluate Benzene, MTBE and TBA Plume Behavior in Groundwater at Retail Gasoline Sites (Kamath et al. 2012)

Exhibit 6: Review of Quantitative Surveys of the Length and Stability of MTBE, TBA, and Benzene Plumes in Groundwater at UST Sites (Connor et al. 2015)
Exhibit 7: Characteristics of Dissolved Petroleum Hydrocarbon Plumes: Results from Four Studies (Newell and Connor 1998)
Exhibit 8: A Comparison of Benzene and Toluene Plume Lengths for Sites Contaminated with Regular vs. Ethanol-Amended Gasoline (Ruiz-Aguilar et al. 2003)
Exhibit 9: Evaluation of the Impact of Fuel Hydrocarbons and Oxygenates on Groundwater Resources (Shih et al. 2004)
Exhibit 10: Leukemia Risk Associated With Low-Level Benzene Exposure (Glass et al. 2003)
Exhibit 11: United States Department of State 12.1: Keystone XL Project, Risk Analysis (Kothari, Bajnok, Tillquist)

Jeff Mackenzie's Rebuttal Testimony
Appendix A - Jeff Mackenzie's Resume
Appendix B - Final EIS 3.13.5.3 and 3.13.5.4

Amended Rebuttal Testimony of Heidi Tillquist
Exhibit List
Exhibit 1: Comparison of the Corrosivity of Dilbit and Conventional Crude
Exhibit 2: Effects of Diluted Bitumen on Crude Oil Pipelines
Exhibit 3: Leukemia Risk Associated With Low-Level Benzene Exposure
Exhibit 4: Characteristics of Dissolved Petroleum Hydrocarbon Plumes
Exhibit 5: Use of Long-Term Monitoring Data to Evaluate Benzene, MTBE, and TBA Plume Behavior in Groundwater at Retail Gasoline Sites
Exhibit 6: Review of Quantitative Surveys of the Length and Stability of MTBE, TBA, and Benzene Plumes in Groundwater at UST Sites
Exhibit 7: A Comparison of Benzene and Toluene Plume Lengths for Sites Contaminated with Regular vs. Ethanol-Amended Gasoline
Exhibit 8: Evaluation of the Impact of Fuel Hydrocarbons and Oxygenates on Groundwater Resources
Exhibit 9: United States Department of State 12.1 -Keystone XL Project Risk Analysis

Amended Rebuttal Testimony of Meera Kothari

Dakota Rural Action

Evan Vokes' Rebuttal Testimony
John Harter's Rebuttal Testimony

Yankton Sioux Tribe

Member of the Yankton Sioux Tribe Business & Claims Committee Consisting of Elected Members: Robert Flying Hawk, Quentin JB Brugier, Jr., Mona Wright, Justin Songhawk, Leo O'Conner, Jean Archambeau, Glenford Sam Sully, Jason Cooke, and Everdale Song Hawk's Rebuttal Testimony
Exhibit A - Keystone's Responses to Yankton Sioux Tribe's First Interrogatories and Request for Production of Documents
Exhibit B - Appendix S - Programmatic Agreement and Record of Tribal Contact

Exhibit C - Appendix E - Amended Programmatic Agreement and Record of Consultation
Faith Spotted Eagle's Rebuttal Testimony
Exhibit A - Appendix S - Programmatic Agreement and Record of Tribal Contact
Exhibit B - Appendix E - Amended Programmatic Agreement and Record of Consultation
Chris Sauncosi's Rebuttal Testimony

Intertribal Council On Utility Policy

Prefiled Testimony of Dr. Robert Oglesby
Comments of Dr. James E. Hansen
Appendix: James E. Hansen Comments Charts
Exhibit 1 - James E. Hansen's Resume
Exhibit 2 - Assessing "Dangerous Climate Change": Required Reduction of Carbon Emissions to Protect Young People, Future Generations and Nature

Surrebuttal Testimony

Cindy Myers' Surrebuttal Testimony

Keystone

Surrebuttal Testimony of Corey Goulet
Surrebuttal Testimony of Dan King and Certificate of Service

6. A nine-day evidentiary hearing was held on July 27 through August 1 and August 3 through August 5, 2015. In addition to Keystone and Staff, the following Intervenors attended and participated in the hearing: Dakota Rural Action, BOLD Nebraska, Standing Rock Sioux Tribe, Rosebud Sioux Tribe, Yankton Sioux Tribe, Intertribal COUP, Cheyenne River Sioux Tribe, Indigenous Environmental Network, Paul Seamans, Cindy Myers, Elizabeth Lone Eagle, John Harter, Gary Dorr, Joye Braun, Louis GrassRope, Diana Steskal, Carolyn Smith, Dallas Goldtooth, Chastity Jewett, Wrexie Lainson Bardaglio, and Bonny Kilmurry. Dakota Rural Action, BOLD Nebraska, Intertribal COUP, Indigenous Environmental Network, and the Tribes were all represented by counsel.

7. The following witnesses testified at the hearing and were subject to cross examination: Corey Goulet, Meera Kothari, Rick Perkins, Jon Schmidt, Heidi Tillquist, Dan King, Diana Steskal, Carlyle Ducheneaux, David Schramm, Steve Vance, Evan Vokes, Cindy Myers, Kevin Cahill, Phyllis Young, Arden Davis, Faith Spotted Eagle, Jon Schmidt, Christopher Hughes, Jenny Hudson, Sue Sibson, Doug Crow Ghost, Daniel Flo, Wayne Frederick, Paula Antoine, Brian Walsh, and John Harter.

Applicable Statute

8. The governing statute is SDCL § 49-41B-27, which requires that if construction has not started within four years of the permit being granted, then the permittee must "certify to the Public Utilities Commission that such facility continues to meet the conditions upon which the permit was issued."

9. There are no other statutes, regulations, or South Dakota cases directly addressing SDCL § 49-41B-27 and its application in this docket.

Updates to the Project since June 29, 2010

10. On March 12, 2009, Keystone filed an application for a permit pursuant to SDCL Chapter 49-41B to construct the South Dakota portion of the Project. The application was docketed as HP09-001. On June 29, 2010, after a three-day hearing, the Commission entered an Amended Final Decision and Order; Notice of Entry granting Keystone a permit to construct and operate the project subject to 50 conditions attached to the Decision as Exhibit A.

11. The Project, as proposed in Keystone's application for a permit in Docket HP09-001, was delayed. A Presidential Permit required by Executive Order 11423 of August 16, 1968, and Executive Order 13337 of April 30, 2004, allowing the pipeline to cross the border between Canada and the United States, was still under review by the United States Department of State at the time of the hearing. On November 6, 2015, the Presidential Permit was denied.

12. As originally proposed, the Project was to be developed in three segments: the Steele City Segment from Hardisty, Alberta, to Steele City, Nebraska; the Gulf Coast Segment from Cushing, Oklahoma, to Liberty County, Texas; and the Houston Lateral Segment from Liberty County, Texas, to refinery markets near Houston, Texas.

13. The Gulf Coast Segment has been constructed and was placed into operation as a stand-alone project on January 22, 2014. The Houston Lateral Segment has also been constructed as a stand-alone project. Ex 2001, ¶ 15. The Project therefore currently consists of only the Steele City segment. The Steele City Segment extends from Hardisty, Alberta, Canada, southeast to Steele City, Nebraska. It will interconnect with the previously-approved and constructed Keystone Cushing Extension segment of the Keystone Pipeline. The route in South Dakota has not changed in any material respect. Ex 2001, ¶ 7; Ex 2013.

14. The maximum capacity of the Project is 830,000 barrels per day. TR 186; Ex 2001, ¶ 6.

15. The Bakken Marketlink project was developed after Keystone's permit application in HP09-001. Ex 2001, ¶ 5. It includes a five-mile pipeline, pumps, meters, and storage tanks near Baker, Montana, to deliver light sweet crude oil from the Williston Basin in Montana and North Dakota for transportation through the Project. Bakken Marketlink will deliver up to 100,000 bpd of domestically-produced crude oil into the Keystone XL Pipeline. TR 184-187; 241-248.

16. Because the Project is only the Steele City segment, the mileage has decreased from approximately 1,707 miles to 1,202 miles with about 876 miles in the United States. Ex 2001, ¶ 7. The South Dakota portion of the Project will be approximately 315 miles in length and

crosses the South Dakota counties of Harding, Butte, Perkins, Meade, Pennington, Haakon, Jones, Lyman, and Tripp. TR 291; Ex. 2005, ¶ 9; Petition, App. C, Finding 16.

17. There is no current construction schedule for the Project, pending issuance of a Presidential Permit. Ex 2001, ¶ 8.

18. The Pipeline will be constructed using API 5L X70M high-strength steel. This was one of the design options presented in the original permit application. Petition, App. C, ¶ 18; Ex. 2003, ¶ 5. Keystone withdrew its application to PHMSA for a special permit and adopted 59 special conditions developed by PHMSA as set forth in Appendix Z to the Department of State Final Supplemental Environmental Impact Statement (FSEIS). Petition ¶¶ 60, 90; TR 215, 302. As a result of this change, Keystone will construct the Pipeline using the as-proposed stronger steel, but will operate the Pipeline at a lower maximum pressure, 1,307 psig. Ex. 2003, ¶ 8; Petition, App. C, ¶¶ 18, 19, 63.

19. As part of the 59 special conditions, valves on the Pipeline must be located based on the worst-case discharge as calculated by 49 CFR 195.260 and by taking into consideration elevation, population, and environmentally-sensitive locations, or no more than 20 miles apart, whichever is less. As a result of this change, the number of mainline valves in South Dakota will be 20 instead of 16. Petition, App. C, ¶ 20; Ex. 2001, ¶ 9, 10, 11; FSEIS, App. Z, Condition 32; TR 215.

20. Keystone has committed to meet the 59 special conditions proposed by PHMSA as set forth in Appendix Z to the FSEIS. TR 215; Ex. 2001, ¶ 12.

21. The estimated cost of the Project in South Dakota has increased from $921.4 million to $1.974 billion due to new technical requirements, inflation, and additional costs due to the delay in receipt of federal approval and commencing construction. Ex. 2001, ¶ 13.

22. Keystone has continued to update its Construction, Mitigation, and Reclamation Plan (CMR Plan). A current, redlined version of the CMR Plan is attached to the Petition as Appendix C, Attachment A. Ex. 2005, ¶ 5; Petition, App. C, Attachment A.

23. In Docket HP09-001, Keystone submitted soil type maps as Exhibit TC-14. The maps are still generally consistent with the Project, but Keystone has committed to submit updated maps before construction begins as required by Condition No. 6. TR 575-640; Ex 2005, ¶ 6; Petition, App. C, ¶ 33.

24. Keystone will use horizontal directional drilling (HDD) to cross two additional rivers or streams—Bridger Creek and the Bad River. TR 335-336, 531, 537-538, 545, 547, 588-589, 633-634, 870, 1205, 1286-1287, 1886; Ex 2003 ¶ 10; Ex. 2005, ¶ 7; Ex. 2009 ¶ 6; Petition, App. C., ¶¶ 41, 83. The preliminary site-specific crossing plans for these additional HDD crossings are included with the Petition as Attachment B to Appendix C.

25. The projected total length of Project pipe with the potential to affect a High Consequence Area (HCA) is 15.8 miles, which is less than the 34.3 miles stated in the Amended Final Decision's findings of fact. TR 670, 1119; Ex. 2005 ¶ 4; Petition, App. C, ¶ 50. As a result of the change in mileage, it is estimated that a spill that could affect an HCA would occur no more than once in 460 years, rather than once in 250 years. TR 670.

26. Due to minor route refinements, all but 27.9 miles of the Project route in South Dakota are privately owned, an increase from 21.5 miles in the original application. Ex. 2005, ¶ 9; Petition, App. C, ¶ 54.

27. No Indian reservation or trust lands are crossed by the Project route. TR 394; Petition, App. C, ¶ 54.

28. TransCanada has thousands of miles of the same grade of pipeline steel, which has been coated with fusion bonded epoxy (FBE) installed and in operation. There has been no evidence of external corrosion except for one instance in Missouri in which an adjacent foreign utility interfered with the active cathodic protection system. Ex. 2003, ¶ 9; Petition, App. C, ¶ 68. The corrosion incident in Missouri was detected by Keystone during an in-line inspection of the pipe. TR 293-94, 2315-16. Keystone has since then started installing passive anodes to protect the pipeline during construction, which goes beyond what is required by federal regulation. TR 265, 309-310.

29. Since the Amended Final Decision was issued in 2010, Keystone has completed the process of consulting with the National Resource Conservation Service to create construction/reclamation units for the different soils along the pipeline route. TR 617; Petition, App. C, ¶ 80.

30. Other than these updates stated in Appendix C to the Petition, the parties did not present evidence of any other factual changes to the Project.

Keystone's Ability to Meet the Permit Conditions

31. None of the updates identified in Appendix C to Keystone's Certification Petition affects Keystone's ability to meet the conditions on which the permit was issued. As identified in Petition Appendix C, Conditions 1-3, 5, 6.a-6.f, 11-14, 16.a-16.p, 17, 18, 19.a, 20-34.a, 35-40, 41.b, and 42-48 are prospective. No evidence was presented that Keystone cannot satisfy any of these conditions in the future.

32. Condition 4 provides that the permit is not transferable without the consent of the Commission. No evidence was presented that Keystone cannot continue to comply with this condition.

33. Conditions 7-9 require that Keystone appoint a public liaison officer, which has been done, and submit quarterly reports to the Commission, which has also been done and is ongoing. No evidence was introduced that Keystone cannot continue to meet these conditions.

34. Condition 10 requires that not later than six months before construction, Keystone, must commence a program of contacts with local emergency responders. Keystone presented evidence that it has already started making such contacts and will continue. TR 317-318. No evidence was introduced that Keystone cannot continue to meet this condition.

35. Condition 10 does not specifically refer to Tribal governments or officials. To the extent that Tribes may be affected by construction and operation of the Project, Keystone presented evidence that it will contact Tribal emergency responders as well. TR 317-318.

36. Condition 15 requires consultation with the NRCS to develop the con/rec units, which Keystone established has been done. TR 617; Petition, App. C, ¶ 80; FSEIS, App. R.

37. Condition 19 requires that landowners be compensated for tree removal, which Keystone indicated is done as part of the process of acquiring easements. Petition, App. B, Condition 19. No evidence was presented that Keystone cannot continue to meet this condition.

38. Condition 34 requires that Keystone continue to evaluate and perform assessment activities regarding high consequence areas. Keystone presented evidence that this process is ongoing. TR 662-663. No witness testified to the contrary.

39. Condition 41 requires that Keystone follow all protection and mitigation efforts recommended by the U.S. Fish and Wildlife Service and the South Dakota Department of Game, Fish, and Parks (SDGFP). Keystone presented evidence that this process is ongoing. TR 630, 636-637; Petition, App. B, Condition 19. No witness testified to the contrary.

40. Condition 41 requires that Keystone consult with SDGFP to identify greater prairie chicken and greater sage and sharp-tailed grouse leks. In support of its Certification, Keystone submitted its Quarterly Report stating that this process is ongoing. Petition, App. B, Condition 41.a. No witness testified to the contrary.

41. Condition 16(m) requires that Keystone must re-seed all lands with comparable crops to be approved by the landowner, or with comparable grass or native species mix to be approved by the landowner for pasture, and that Keystone must actively monitor revegetation on all disturbed areas for at least two years. Condition 49 provides that Keystone must pay commercially reasonable costs and indemnify and hold harmless landowners for any loss or damage resulting from Keystone's use of the easement. The only evidence related to these conditions came from Sue Sibson, who testified that reclamation on her property after construction of the Keystone Pipeline has not been satisfactory. TR 1965. Sibson's testimony does not, however, establish that Keystone cannot meet these conditions with Keystone XL. She testified that it takes "quite a while" for native grasses to re-establish, and that her property has been reseeded at her request four or five times since 2009. TR 1977. She also testified that she has been paid damages for loss of use of the easement area, and she did not state that Keystone has failed to pay reasonable damages. The process of reclaiming her property is ongoing, and it is undisputed that Keystone has continued to work with Sibson. TR 1975, 1978, 306-307. Corey Goulet testified that Keystone was committed to continue reclamation efforts on the Sibson property until the Sibsons were satisfied. He also testified that out of 535 tracts on the Keystone Pipeline, all but 9 had been reclaimed to the satisfaction of the landowner. TR 306.

42. Condition 50 provides that the Commission's complaint process be available to landowners threatened with damage or the consequences of Keystone's failure to comply with any of the conditions. No evidence was presented that Keystone cannot comply with this condition.

43. Multiple Intervenors testified to their concerns about the possible adverse effects of the pipeline on groundwater resources, shallow aquifers, rivers, and streams. None of this testimony related to Keystone's ability to meet any permit condition. Rather, this testimony related to Keystone's burden of proof under SDCL § 49-41B-22.

44. Dr. Arden Davis testified to concerns that the Project right of way crosses the recharge areas of several shallow aquifers, including the Ogallala aquifer, Sand Hills-type material, gravel aquifers, eolian and alluvial aquifers, and the Fox Hills aquifer. Ex. 1003, p. 1.

Dr. Davis also testified that the Project right of way would cross the Little Missouri River, the Grand River and its tributaries, the Moreau River, the Cheyenne River, the Bad River, and the White River, and that dissolved hydrocarbon contaminants could be transported downgradient in surface water, in groundwater within the aquifers, or both. Dr. Davis also testified that the Cheyenne River, which drains much of the Black Hills, flows into the Missouri River and has exposed Pierre Shale along steep sides that are prone to slope failures. Ex. 1003, p. 2. These concerns do not specifically address any permit condition.

45. Heidi Tillquist testified on behalf of Keystone that adverse impacts to all of these areas are highly unlikely. Ex. 2017, ¶¶ 4-8. Dr. Davis did not respond to Tillquist, address the likelihood of adverse impacts, or conduct an independent risk assessment related to the Project. TR 1808-1809. The Commission addressed the likelihood of such adverse impacts in the Amended Final Decision in Findings of Fact 43-45 and 52. Dr. Davis's testimony is insufficient to warrant any change to those findings.

46. With respect to Dr. Davis's testimony about the Ogallala aquifer in Tripp County and the wind-blown Sand Hills type material crossed by the Project right of way, the Commission has required Keystone to treat that area as a hydrologically sensitive area. Amended Final Decision, Finding of Fact 53 and Condition 35; Ex. 2017, ¶ 9. Dr. Davis did not testify that such treatment was inappropriate or insufficient or that Keystone could not meet the condition.

47. Dr. Davis testified to his concern about possible benzene exposures from a leak or spill, especially since benzene is soluble in water and can be transported downstream, potentially affecting water intakes. Ex. 1003, pp. 3-4. Tillquist testified, however, that benzene exposures at a level that would cause health concerns would not be expected following a crude oil spill due to the low persistence of benzene and expected emergency response measures, and that a potential release would likely not threaten groundwater sources or public water intakes. Ex. 2017, ¶¶ 11-12. This testimony was undisputed.

48. Dr. Davis relied in his testimony on the Stansbury report from 2011 that was considered by the Department of State in connection with the FSEIS. Ex. 1003, p. 5. In her rebuttal testimony, Heidi Tillquist addressed flaws in Stansbury's analysis. Ex. 2017, ¶¶ 13-14. Dr. Davis did not address the Stansbury report in his hearing testimony, and Tillquist was not cross-examined about the Stansbury report.

49. John Harter testified to his concerns about the location of the Project right of way in relation to the City of Colome's water wells. TR 2209-2210. The proximity of the Project to the City of Colome's wells was addressed in Docket HP09-001. The Commission found that the risk of a spill affecting public or private water wells is low because the components of crude oil are unlikely to travel more than 300 feet from the spill site and there are no private or public wells within 200 or 400 feet, respectively, of the right of way and that the route was refined near Colome to avoid a groundwater protection area. Amended Final Decision, Findings 49 and 105. In this proceeding, Brian Walsh from the South Dakota Department of Environment and Natural Resources (DENR) testified that the route had been moved at DENR's request before the Amended Final Decision, and that the current route had been determined in consultation with DENR. TR 2155-2156. The route was moved 175 feet from the edge of the surface water protection area and 1,000 feet from the wellhead itself. TR 1323. Keystone also met at the time the route was changed with the mayor and an engineer for the City of Colome. TR 1384. This is not an issue that affects Keystone's ability to meet any permit condition.

50. Doug Crow Ghost, the Director of the Department of Water Resources for the Standing Rock Sioux Tribe, testified about the Winters Doctrine, tribal water rights, and his concern that the Keystone XL Pipeline presented a threat to tribal water supplies given long-term drought. TR 2015-2020. He testified that the Tribe is working with the State to quantify the Tribe's water rights. TR 2016-2017. His testimony was rebutted by Dr. Jon Schmidt, who explained in his rebuttal testimony that Keystone cannot use water if the use would adversely affect prior appropriations or vested rights, and that SDCL 46-5-40.1, which governs temporary water use permits for construction purposes, protects the Tribe, even in cases of long-term drought. Ex. 2009, ¶¶ 4-5, 7. Crow Ghost's testimony did not establish that Keystone is unable to meet any permit conditions.

51. Carlyle Ducheneaux is the Section 106 Coordinator for the Cheyenne River Sioux Tribe. TR 990. He testified that construction of the pipeline would disturb contaminated sediments in the Cheyenne River and its tributaries and that pipeline failure was likely to occur because of the sloughing of river banks and the movement of highly erodible soils. Ex. 7001, ¶¶ 8-14. Jon Schmidt testified that construction would not cause any disturbance of contaminated sediments in the Cheyenne River because Keystone will use HDD for the crossing. Schmidt also testified that sloughing of river banks is not an issue for the same reason and because Keystone can take other mitigation measures during construction. Ex. 2009, ¶¶ 8-9. Ducheneaux's testimony did not establish that Keystone is unable to meet any permit condition.

52. Cindy Myers testified to her concerns: (1) that emergency responders may not have adequate information about the chemical composition of the crude oil in case of a spill, TR 1658-1660; (2) the dangers of exposure to benzene, TR 1661-1663; (3) her opinion that benzene can permeate polyethelene and polyvinyl cloride water pipe and waterlines like the Mni Wiconi water pipeline, TR 1663-1664; (4) that, according to her, 62% of South Dakotans get their drinking water from the Missouri River, which is at risk from a spill, TR 1666-1667; and (5) because of the threat to drinking water resources, the Project "could substantially impair the health, safety, and welfare of South Dakotans." TR 1673. Tillquist's testimony established that the risks posed by possible benzene exposure due to a spill are low, and the Commission previously determined that the risk of any significant pipeline release was low. Amended Final Decision, Findings 43-45 and 52; Ex. 2017, ¶¶ 4, 6, 7, 8, 11, 12. Corey Goulet testified that studies have established that the amount of benzene present in crude oil is not a threat to PVC pipe. TR 950-951. Myers' testimony does not establish that Keystone is unable to meet any permit condition and essentially addresses SDCL 49-41B-22, the permitting statute, not SDCL 49-41B-27.

53. Faith Spotted Eagle testified to concerns about safe drinking water and the availability of water from the Missouri River for spiritual ceremonies. Ex. 9011, ¶¶ 21-23; TR 1855-1857. Spotted Eagle's testimony does not contain any factual basis for the Commission to find either that the Project poses a threat to the Tribe's drinking water or that water will not be available from the Missouri River for the Tribe's spiritual ceremonies.

54. Two Intervenors testified about their concerns that Keystone had not consulted with Tribal officials about the Project. Phyllis Young testified on behalf of the Standing Rock Sioux Tribe as an at-large Tribal Council Member that Keystone did not consult with the Tribe and, similarly, that the Department of State failed to consult with the Tribe in preparing the FSEIS. Ex. 8001, last page; TR 1722, 1732-1733. The Honorable Wayne Frederick testified on behalf of the Rosebud Sioux Tribe as a member of the Council that the Rosebud Sioux Tribe was not consulted by TransCanada. TR 2088. This testimony does not establish that Keystone

cannot meet any permit conditions because, as stated in the conclusions of law, it is not Keystone's legal obligation to consult with the Tribes in connection with the FSEIS.

55. No permit condition requires that Keystone consult with the Tribes about the Project. Condition 6 refers to "local governmental units," but does not specify Tribes. Condition 34 requires that Keystone must "consider local knowledge" in assessing and evaluating environmentally sensitive and high consequence areas. In support of its Certification, Keystone submitted its Quarterly Report in which Keystone's public liaison officer stated that Keystone has sought out local knowledge. Petition, App. B, Condition 34(b).

56. None of the Tribes who intervened in this proceeding were parties to Docket HP09-001, although all could have been.

57. Appendix E to the FSEIS, which is a matter of public record of which the Commission has taken judicial notice, contains the record of consultation between the Department of State and various Tribes under Section 106 of the National Historic Preservation Act. On page 11 of the record of consultation, all of the meetings, e-mails, telephone calls, and letters between the Department of State and the Standing Rock Sioux Tribe are listed. The record of consultation establishes that the Standing Rock Sioux Tribe was consulted by the Department of State.

58. Multiple witnesses testified that the Tribes in South Dakota passed resolutions opposing the Project and that Keystone representatives were not welcome on Tribal land. TR 1745-1746, 1873, 2084, 2096-2097, 2104-2105.

59. John Harter testified that Keystone acquired an easement on his property through the use of eminent domain. TR 2199. The court file in *TransCanada v. Harter*, Civ. 11-62 (6th Jud. Cir.), of which the Commission takes judicial notice, demonstrates that Keystone acquired an easement pursuant to a judgment entered by the court that enforces a settlement agreement between Keystone and Harter. TR 2214. Even if Keystone had acquired an easement on Harter's property by eminent domain, that would not establish that Keystone is unable to meet any permit condition.

60. Kevin E. Cahill, Ph.D., is an economist with ECONorthwest from Portland, Oregon. TR 1681-1682. Cahill testified that in his opinion the socio-economic analysis that was done as part of the FSEIS was "seriously flawed" because it was supposed to be a cost-benefit analysis, but it failed to consider any costs or potential indirect costs of the Project. TR 1685-1688. He testified that any benefits of the Project had not been measured against the costs as part of the analysis done in the FSEIS. TR 1690. The socioeconomic analysis in the FSEIS was conducted by the Department of State, not Keystone. No permit condition relates to the socioeconomic analysis in the FSEIS. Dr. Cahill's testimony does not establish that Keystone does not, or is unable to, meet any permit condition.

61. Paula Antoine testified about socioeconomic issues as a rebuttal witness on behalf of the Rosebud Sioux Tribe. Ex. 11000. Ms. Antoine is the Director of the Sicangu Oyate Land Office. TR 2131. She testified that in her opinion Keystone failed to present sufficient evidence related to Amended Final Decision Findings of Fact 107, 108, 109, and 110. Ex. 11000, pp. 2-4; TR 2133. Antoine's testimony is not based on her personal knowledge and does not relate to any permit condition.

62. Faith Spotted Eagle testified on behalf of the Yankton Sioux Tribe. Ex. 9011; TR 1848. She is a counselor and a PTSD therapist. TR 1848-1849. She testified as to her concerns about the proposed work camps in South Dakota and the effect they might have on the safety of Native American communities and tribal members. Ex. 9011, ¶¶ 14, 18, 19; TR 1850-1852. Spotted Eagle testified that the Commission should "anticipate a surge in crime, especially violent crime, in the communities near the man camps" and that because the camps are inhabited by young and single men who have financial means and are away from their families, "[t]he result is easy to predict and does not require any scientific analysis." Ex. 9011, ¶¶ 14, 18. Spotted Eagle cited no studies of crime associated with work camps, no crime statistics from work camps, and no personal experience with either work camps like those proposed for the Keystone XL Pipeline or with Target Logistics, Keystone's contractor.

63. Rick Perkins testified on behalf of Keystone about the work camps, and testified that Target Logistics, the contractor that will operate the camps, does not have a documented history of behavior problems associated with the camps. Ex. 2007, ¶¶ 5-6, 12-13; TR 2400. Perkins testified that Keystone expects no increase in crime associated with the camps. TR 2409. Workers who live in the camps must sign a code of conduct and may be expelled if they violate the code. TR 2413.

64. There are three proposed work camps in South Dakota - one in Harding County near Buffalo, one in Meade County near Howes, and one in Tripp County near Colome. Ex. 2007, ¶4. Keystone has talked to local law enforcement about the camps and is willing to supplement local law enforcement officers at Keystone's expense. Ex. 2007, ¶ 14; TR 2406. Keystone has obtained a conditional use permit from Harding County for the Buffalo camp. No such permit is required in Meade County or Tripp County, although Keystone will obtain an occupancy permit for the camp in Meade County. Ex. 2007, ¶ 15.

65. There is no permit condition related to the work camps. The testimony of Faith Spotted Eagle does not establish either that the work camps pose any particular threat to any South Dakota citizens, or that Keystone cannot meet any permit condition.

66. The Keystone XL pipeline route does not cross any reservation land or land held in trust for Indians. TR 254.

67. Steve Vance testified on behalf of the Cheyenne River Sioux Tribe. He is the Tribal Historic Preservation Officer. Ex. 7002, ¶ 2; TR 1524. Vance testified to his concern that the Project falls within the view shed of several cultural sites, like the Slim Buttes; that during construction, access to cultural and historic sites could be hindered; that operation and maintenance of the pipeline could disrupt spiritual practitioners requiring solitude; and that the Project will have long term negative effects emotionally and spiritually on many Tribal members. Ex. 7002, ¶¶ 7-10.

68. Vance's testimony is insufficient to establish that Keystone cannot meet any permit condition. Permit Condition 43 addresses the protection of cultural resources and provides that Keystone must follow the Unanticipated Discoveries Plan as approved by the Department of State. If Keystone finds any cultural resources during construction, Keystone must notify the Department of State and the State Historic Preservation Office, and, if appropriate, develop a plan to address the resource. Vance offered no testimony that Keystone cannot or will not comply with this condition.

69. Dakota Rural Action called Evan Vokes, a former TransCanada employee, to testify about welding and other safety issues that he perceived from his tenure. TR 1768; Ex. 1003-A. Vokes, who is no longer a licensed professional engineer, was employed by TransCanada from 2007 until May, 2012, although he did not actively work at TransCanada after October 26, 2011. TR 1544-1554. He started in the welding group as an engineer in training, and became a professional engineer in 2009. His rank from 2009 until October, 2011, was junior engineer. TR 1549-1552. When he started at TransCanada, he had no previous experience with pipeline welding. TR 1572.

70. Vokes testified that TransCanada inspects 100% of the welds in its mainline pipe, even though applicable federal regulations require that only 15% of the welds be inspected. TR 1578.

71. Vokes testified that he thought that TransCanada had problems with automated ultrasonic testing (AUT) of welds on the Cutbank Project in Canada. Vokes testified that he found defects in welding procedures used by TransCanada and that he notified his superiors. TR 1594-1597. He testified that the National Energy Board in Canada (NEB) sent a letter related to nine welding procedures not meeting minimum qualifications. TR 1594. Vokes testified that he thought that a pipeline rupture that occurred near Otterburne, Manitoba, was an example of a problem caused by a defective weld. TR 1598-9159. Dan King, TransCanada's Chief Engineer and Vice President for Asset Reliability, testified that the concerns that the NEB raised about AUT on the Cutbank Project were administrative in nature, not technical. He testified that they did not affect the safety of any welds. TR 2264-2265. He testified that the rupture on a natural gas pipeline near Otterburne was caused by a failure on a weld that was completed in 1960 under different procedures and standards. TR 2265-2266. In addition, he testified that TransCanada worked with the NEB to look at the other welds on the same pipeline and found no issues. TR at 2266-2267.

72. Vokes testified that he was aware of pipe intended for the Keystone Pipeline that had manufacturing defects. TR 1602-1603. Dan King testified that there was pipe manufactured for the Canadian portion of the project that had problems, and it was rejected by TransCanada and never shipped or installed. TR 2267-2268.

73. Vokes testified that he was involved in testing the integrity of the welds along a segment of the Keystone Pipeline. TR at 1600-1601. There were issues with peaked pipe, which is the result of a manufacturing problem. TR 1610-1611. Vokes thought that the pipe should not have been used because it could fatigue over time. TR 1611-1614. He thought, however, that "[w]e did a very good job, actually very good pipe, other than the fact of the peaking." TR 1613. Dan King testified that there was no pipe installed on the Keystone Pipeline that was inspected in a manner that did not come within the tolerances permitted by code, and that the pipe met TransCanada's tolerances, which are stricter than code. TR 2269-2270.

74. Vokes testified that he thought there were problems with gas metal arc welding causing lack-of-fusion defects. TR 1603-1605. Dan King testified that lack-of-fusion defects can occur with gas metal arc welding, which is typically used with larger diameter pipe, but that the defects are generally found during the inspection process, and then removed or repaired. TR 2271-2272.

75. Vokes testified that he worked on the Bison Project, that there were problems with the welding, and that while TransCanada wanted to use AUT for the welds, it was technically a problem. TR 1614-1619. As a result of the problems, Vokes testified that there

were 1,200 or 1,300 welds on the project that went into the ground that never had a code inspection. TR 1621. Vokes also testified that there were dents associated with welds on the Bison project. TR 1623-1624. Dan King testified that there was an in-service failure on the Bison Pipeline, which is a natural gas line. The failure was caused by some external force, but the source of the external force, which appeared to be some sort of heavy equipment strike, could not be determined. TR 2273-2274. PHMSA was involved in the investigation and, after investigation and a corrective action order, allowed the project back into service and cleared the corrective action order. TR 2274. As a result of the failure, TransCanada increased the number of inspectors on projects and improved inspector training. TR 2274-2275. King also testified that he disagreed with Vokes's testimony that there could be 1,200 to 1,300 welds in the ground that have not been subject to an inspection that meets code on the Bison project. He testified that PHMSA's involvement and inspection of 100% of the welds was thorough and complete. TR 2275-2276.

76. Vokes testified that in connection with the Keystone XL Pipeline, he worked on one section in Canada and maybe the Gulf Coast Project in the United States. TR 1754. He testified that he was concerned that TransCanada was using Weldsonix, a nondestructive examination company to inspect welds, because there had been issues with Weldsonix in the past. TR 1754-1756. He testified that he was told to qualify Weldsonix. TR 1756. Dan King testified that TransCanada was dissatisfied with the performance of Weldsonix on a project in 2004, but that Weldsonix U.S.A., which did work on the Keystone Pipeline, passed a qualification process and performed very well on that project. TR 2276-2277. After an anonymous person raised issues about inspection on the Keystone Pipeline, TransCanada did a 100% audit and found no issues with the work that Weldsonix had done. TR 2277.

77. Vokes's testimony is insufficient to establish that Keystone cannot meet any permit condition. His testimony did not directly relate to any permit condition. Moreover, it is undisputed that Vokes has no first-hand knowledge of any welding or inspection defects on the Keystone Pipeline, the Gulf Coast Project, or the Houston Lateral Project. It is also undisputed that he has no knowledge of any welding or inspection defects in South Dakota. TR 1773, 1775, 1777-1778.

Conclusion

78. At its regularly scheduled meeting on January 5, 2016, the Commission considered this matter. The Commission unanimously voted to approve the Company's request for an order accepting its certification. The Commission finds that the Company certified that it remains eligible to construct the project under the terms of 2010 permit, subject to the provisions of 49-41B. The Commission finds that the Company certified that the Project continues to meet the conditions upon which the 2010 permit was issued.

CONCLUSIONS OF LAW

1. The Commission has jurisdiction over the subject matter and parties to this proceeding under SDCL Chapter 49-41B and ARSD Chapter 20:10:22. The Commission has the legal authority to decide whether to accept Keystone's Certification under SDCL § 49-41B-27.

2. The Amended Final Decision and Order dated June 30, 2010, in Docket HP09-001 was not appealed and constitutes a final order of the Commission.

3. Even though more than four years have elapsed since the permit was issued in Docket HP09-001, the permit has not lapsed or expired. Keystone therefore has no legal obligation to again prove that it meets the requirements of SDCL § 49-41B-22, which the Commission concluded in the Amended Final Decision entered in Docket HP09-001 it had met. Keystone's burden of proof under SDCL § 49-41B-27 is distinct from its burden under SDCL § 49-41B-22.

4. Under SDCL § 49-41B-27, Keystone has the burden of proof to show that its certification is valid.

5. "Conditions" as used in SDCL § 49-41B-27 means the 50 Conditions attached as Exhibit A to the Decision.

6. The Commission has no authority over condemnation or eminent domain. SDCL 21-35-1 requires that these issues be brought before the circuit court.

7. The Keystone XL pipeline route does not cross any reservation land or land held in trust for Indian Tribes. The Commission has no jurisdiction to adjudicate aboriginal or usufructory rights with respect to lands that were formerly Indian country under the Treaties of 1851 or 1868 prior to diminishment.

8. Keystone met its burden of proof through the Certification signed by Corey Goulet, the documents filed with its Certification Petition, and the direct testimony of its witnesses establishing that despite some updates related to the Project since June 30, 2010, none of these updates affects Keystone's ability to meet the conditions on which the permit was granted.

9. With respect to prospective conditions that are unaffected by the updates since June 29, 2010, Keystone is as able today to meet the conditions as it was when the permit was issued as certified to in the Certification signed by Corey Goulet. No evidence was offered demonstrating that Keystone will be unable to meet the conditions in the future. Keystone offered sufficient evidence to establish that Keystone can continue to meet the conditions.

10. The Intervenors failed to establish any reason why Keystone cannot continue to meet the conditions on which the permit was issued.

11. Under Section 106 of the National Historic Preservation Act, it is the legal obligation of the Department of State to consult with the Tribes in South Dakota. 16 U.S.C. § 470f; 36 C.F.R. Part 800.

12. The Commission granted party status to every person or entity who sought it. The Intervenors were afforded a full and fair opportunity to be heard. The proceedings in this docket were substantially longer, more in-depth, and more involved than in HP09-001, even though Keystone's burden of proof was more limited in scope. The Commission needs no additional information to determine whether to accept Keystone's Certification under SDCL § 49-41B-27.

13. The Commission concludes that the Certification and all required filings have been filed with the Commission in conformity with South Dakota law and that all procedural

requirements under South Dakota law, including public hearing requirements, notice, and an opportunity to be heard, have been met.

It is therefore

ORDERED that Keystone's Certification under SDCL § 49-41B-27 is accepted by the Commission and found to be valid and Keystone is authorized to proceed with the construction and operation of the Keystone XL Pipeline subject to the conditions attached as Exhibit A to the Amended Final Decision and Order dated June 30, 2010.

NOTICE OF ENTRY AND OF RIGHT TO APPEAL

PLEASE TAKE NOTICE that this Final Decision and Order was duly issued and entered on the 21st day of January, 2016. Pursuant to SDCL 1-26-32, this Final Decision and Order will take effect 10 days after the date of receipt or failure to accept delivery of the decision by the parties. Pursuant to ARSD 20:10:01:30.01, an application for a rehearing or reconsideration may be made by filing a written petition with the Commission within 30 days from the date of issuance of this Final Decision and Order; Notice of Entry. Pursuant to SDCL 1-26-31, the parties have the right to appeal this Final Decision and Order to the appropriate Circuit Court by serving notice of appeal of this decision to the circuit court within thirty (30) days after the date of service of this Notice of Decision.

Dated at Pierre, South Dakota, this 21st day of January, 2016.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that this document has been served today upon all parties of record in this docket, as listed on the docket service list, electronically or by mail.

By: Karen E. Cremer

Date: 1-21-16

(OFFICIAL SEAL)

BY ORDER OF THE COMMISSION:

CHRIS NELSON, Chairman

KRISTIE FIEGEN, Commissioner

GARY HANSON, Commissioner

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	))))))	**AMENDED FINAL DECISION AND ORDER; NOTICE OF ENTRY** **HP09-001**

PROCEDURAL HISTORY

On March 12, 2009, TransCanada Keystone Pipeline, LP ("Applicant" or "Keystone") filed an application with the South Dakota Public Utilities Commission ("Commission") for a permit as required by SDCL Chapter 49-41B to construct the South Dakota portion of the Keystone XL Pipeline ("Project")[1]. The originally filed application described the Project as proposed to be an approximately 1,702 mile pipeline for transporting crude oil from Alberta, Canada, to the greater Houston area in Texas, with approximately 1,375 miles to be located in the United States and 313 miles located in South Dakota.

On April 6, 2009, the Commission issued its Notice of Application; Order for and Notice of Public Input Hearings; and Notice of Opportunity to Apply for Party Status. The notice provided that pursuant to SDCL 49-41 B-17 and ARSD 20:10:22:40, each municipality, county, and governmental agency in the area where the facility is proposed to be sited; any nonprofit organization, formed in whole or in part to promote conservation or natural beauty, to protect the environment, personal health or other biological values, to preserve historical sites, to promote consumer interests, to represent commercial and industrial groups, or to promote the orderly development of the area in which the facility is to be sited; or any interested person, may be granted party status in this proceeding by making written application to the Commission on or before May 11, 2009.

Pursuant to SDCL 49-41B-15 and 49-41B-16, and its Notice of Application; Order for and Notice of Public Hearings and Notice of Opportunity to Apply for Party Status, the Commission held public hearings on Keystone's application as follows: Monday, April 27, 2009, 12:00 noon CDT at Winner Community Playhouse, 7th and Leahy Boulevard, Winner, SD, at which 26 persons presented comments or questions; Monday, April 27, 2009, 7:00 p.m. MDT at Fine Arts School, 330 Scottie Avenue, Philip, SD, at which 17 persons presented comments or questions; and Tuesday, April 28, 2009, 6:00 p.m. MDT at Harding County Recreation Center, 204 Hodge Street, Buffalo, SD, at which 16 persons presented comments or questions. The purpose of the public input hearings was to hear public comment regarding Keystone's application. At the public input hearings, Keystone presented a brief description of the project, following which interested persons appeared and presented their views, comments and questions regarding the application.

On April 29, 2009, Mary Jasper (Jasper) filed an Application for Party Status. On May 4, 2009, Paul F. Seamans (Seamans) filed an Application for Party Status. On May 5, 2009, Darrell Iversen (D. Iversen) filed an Application for Party Status. On May 8, 2009, the City of Colome (Colome) and Glen Iversen (G. Iversen) filed Applications for Party Status. On May 11, 2009, Jacqueline Limpert (Limpert), John H. Harter (Harter), Zona Vig (Vig), Tripp County Water User District (TCWUD), Dakota Rural Action (DRA) and David Niemi (David Niemi) filed Applications for

[1]The Commission's Orders in the case and all other filings and documents in the record are available on the Commission's web page for Docket HP09-001 at: http://puc.sd.gov/dockets/hydrocarbonpipeline/2009/hp09-001.aspx

Party Status. On May 11, 2009, the Commission received a Motion for Extension of Time to File Application for Party Status from DRA requesting that the intervention deadline be extended to June 10, 2009. On May 12, 2009, Debra Niemi (Debra Niemi) and Lon Lyman (Lyman) filed Applications for Party Status. On May 15, 2009, the Commission received a Response to Motion to Extend Time from DRA and a Motion to Establish a Procedural Schedule from the Commission's Staff ("Staff").

At its regularly scheduled meeting of May 19, 2009, the Commission voted unanimously to grant party status to Jasper, Seamans, D. Iversen, Colome, G. Iversen, Limpert, Harter, Vig, TCWUD, DRA, David Niemi, Debra Niemi and Lyman. The Commission also voted to deny the Motion for Extension of Time to File Application for Party Status, and in the alternative, the Commission extended the intervention deadline to May 31, 2009. On May 29, 2009, Ruth M. Iversen (R. Iversen) and Martin R. Lueck (Lueck) filed Applications for Party Status. At its regularly scheduled meeting of June 9, 2009, the Commission voted unanimously to grant the Motion to Establish a Procedural Schedule and granted intervention to R. Iversen and Lueck.

On August 26, 2009, the Commission received a revised application from Keystone. On September 3, 2009, the Commission received a Motion for Extension of Time to Submit Testimony from DRA. At its regularly scheduled meeting of September 8, 2009, the Commission voted unanimously to grant the Motion for Extension of Time to Submit Testimony to extend DRA's time for filing and serving testimony until September 22, 2009.

On September 18, 2009, Keystone filed Applicant's Response to Dakota Rural Action's Request for Further Discovery. On September 21, 2009, DRA filed a Motion to Compel Responses and Production of Documents Addressed to TransCanada Keystone Pipeline, LP Propounded by Dakota Rural Action. At an ad hoc meeting on September 23, 2009, the Commission considered DRA's Motion to Compel and on October 2, 2009, issued its Order Granting in Part and Denying in Part Motion to Compel Discovery. By letter filed on September 29, 2009, Chairman Johnson requested reconsideration of the Commission's action with respect to DRA's Request 6 regarding Keystone documents pertaining to development of its Emergency Response Plan for the Project. At its regularly scheduled meeting on October 6, 2009, the Commission voted two to one, with Commissioner Hanson dissenting, to require Keystone to produce to DRA via email the References for the Preparation of Emergency Response Manuals before the close of business on October 6, 2009, that DRA communicate which documents on the list it wished Keystone to produce on or before the close of business on October 8, 2009, and that Keystone produce such documents to DRA on or before October 15, 2009.

On October 2, 2009, Staff filed a letter requesting the Commission to render a decision as to whether the hearing would proceed as scheduled commencing on November 2, 2009. Staff's letter stated that rescheduling the hearing would result in significant scheduling complications for Staff's expert witnesses whose scheduling and travel arrangements had been made months earlier based on the Commission's Order Setting Procedural Schedule issued on June 30, 2009. At its regular meeting on October 6, 2009, the Commission considered Staff's request. At the meeting, all parties agreed that the hearing could proceed on the scheduled dates. DRA requested that its date for submission of pre-filed testimony be extended from October 14, 2009, until October 22, if possible, or at least until October 20, 2009. After discussion, the parties agreed on an extension for DRA's pre-filed testimony until October 20, 2009, with Applicant's rebuttal to be filed by October 27, 2009. The Commission voted unanimously to approve such dates and issued its Order Setting Amended Procedural Schedule on October 8, 2009.

On October 15, 2009, the Commission issued its Order for and Notice of Hearing setting the matter for hearing on November 2-6, 2009, and its Order for and Notice of Public Hearing for an

additional informal public input hearing to be held in Pierre on November 3, 2009, commencing at 7:00 p.m. CST. On October 19, 2009, DRA requested that the time for commencement of the public hearing be changed from 7:00 p.m. CST to 6:00 p.m. CST to better accommodate the schedules of interested persons. On October 21, 2009, the Commission issued an Amended Order for and Notice of Public Hearing amending the start time for the public hearing to 6:00 p.m. CST.

On October 19, 2009, Keystone filed a second revised application ("Application") containing minor additions and amendments reflecting refinements to the route and facility locations and the most recent environmental and other planning evaluations.

In accordance with the scheduling and procedural orders in this case, Applicant, Staff and Intervenors David and Debra Niemi filed pre-filed testimony. The hearing was held as scheduled on November 2-4, 2009, at which Applicant, DRA and Staff appeared and participated. The informal hearing was held as scheduled on the evening of November 3, 2009, at which 23 persons presented comments and/or questions. A combined total of 326 persons attended the public input hearings in Winner, Phillip, Buffalo and Pierre. As of February 26, 2009, the Commission had received 252 written comments regarding this matter from the public.

On December 31, 2009, the Commission issued its Amended Order Establishing Briefing Schedule setting the following briefing schedule: (i) initial briefs and proposed findings of fact and conclusions of law from all parties wishing to submit them due by January 20, 2010; and (ii) reply briefs and objections and revisions to proposed findings of fact and conclusions of law due from all parties wishing to submit them on or before February 2, 2010.

On January 13, 2009, Intervenor David Niemi filed a letter with the Commission requesting and recommending a series of conditions to be included in the order approving the permit, if granted. On January 20, 2010, initial briefs were filed by the Applicant and Staff. On January 20, 2010, Applicant also filed and served proposed findings of fact and conclusions of law. On January 21, 2010, DRA filed an initial brief and Motion to Accept Late-Filed Brief. On January 21 and 26, 2010, respectively, Keystone and Staff filed letters of no objection to acceptance of DRA's late-filed initial brief. On February 2, 2010, reply briefs were filed and served by Applicant, DRA and Staff, and Keystone filed Applicant's Response to David Niemi's Letter filed on January 13, 2010.

At an ad hoc meeting on February, 18, 2010, after separately considering each of a set of draft conditions prepared by Commission Counsel from inputs from the individual Commissioners and a number of Commissioner motions to amend the draft conditions, the Commission voted unanimously to approve conditions to which a permit to construct the Project would be subject, if granted, and to grant a permit to Keystone to construct the Project, subject to the approved conditions.

On April 14, 2010, Keystone filed Applicant's Motion for Limited Reconsideration of Certain Permit Conditions ("Motion"). On April 19, 2010, intervenors David Niemi and Seamans filed responses to the Motion. On April 19, 2010, Peter Larson ("Larson") filed two comments responsive to the Motion. On April 27, 2010, Keystone filed Applicant's Reply Brief In Support of Motion for Limited Reconsideration responding to the responses and comments filed by Niemi, Seamans and Larson. On April 28, 2010, Staff filed a response to the Motion. On April 29, 2010, DRA filed the Answer of Dakota Rural Action in Opposition to Applicant's Motion for Limited Reconsideration of Certain Permit Conditions.

At its regularly scheduled meeting on May 4, 2010, the Commission considered the Motion and the responses and comments filed by the parties and Larson. Applicant, Staff, intervenor John

H. Harter, DRA and Larson appeared and participated in the hearing on the Motion. After an extensive discussion among the Commission and participants, the Commission made rulings on the specific requests in the Motion and voted to grant the Motion in part and deny in part and amend certain of the Conditions as set forth in the Commission's Order Granting in Part Motion to Reconsider and Amending Certain Conditions In Final Decision And Order, which was issued by the Commission on June 29, 2010.

Having considered the evidence of record, applicable law and the arguments of the parties, the Commission makes the following Findings of Fact, Conclusions of Law and Decision:

FINDINGS OF FACT

Parties

1. The permit applicant is TransCanada Keystone Pipeline, LP, a limited partnership, organized under the laws of the State of Delaware, and owned by affiliates of TransCanada Corporation ("TransCanada"), a Canadian public company organized under the laws of Canada. Ex TC-1, 1.5, p. 4.

2. On May 19, 2009, the Commission unanimously voted to grant party status to all persons that had requested party status prior to the commencement of the meeting. On June 9, 2009, the Commission unanimously voted to grant party status to all persons that had requested party status after the commencement of the meeting on May 19, 2009, through the intervention deadline of May 31, 2009. Fifteen persons intervened, including: Mary Jasper, Paul F. Seamans, Darrell Iversen, the City of Colome, Glen Iversen, Jacqueline Limpert, John H. Harter, Zona Vig, Tripp County Water User District ("TCWUD"), Dakota Rural Action, David Niemi, Debra Niemi, Ruth M. Iversen, Martin R. Lueck, and Lon Lyman. Minutes of May 19, 2009, and June 9, 2009, Commission Meetings; Applications for Party Status.

3. The Staff also participated in the case as a full party.

Procedural Findings

4. The application was signed on behalf of the Applicant on February 26, 2009, in Calgary, Alberta, Canada, and was filed with the Commission on March 12, 2009. Ex TC -1, 9.0, p. 116.

5. The Commission issued the following notices and orders in the case as described in greater detail in the Procedural History above, which is hereby incorporated by reference in these Findings of Fact and Conclusions of Law:

- Order of Assessment of Filing Fee
- Notice of Application; Order for and Notice of Public Input Hearings; and Notice of Opportunity to Apply for Party Status
- Order Granting Party Status; Order Denying Motion for Extension of Time to File Application for Party Status; Order Extending Intervention Deadline
- Order Granting Motion to Establish Procedural Schedule and Order Granting Party Status
- Order Setting Procedural Schedule
- Order Granting Motion for Extension of Time to Submit Testimony

- Order Granting in Part and Denying in Part Motion to Compel Discovery
- Order Amending Order Granting in Part and Denying in Part Motion to Compel Discovery
- Order Setting Amended Procedural Schedule
- Order for and Notice of Hearing
- Order for and Notice of Public Hearing
- Amended Order for and Notice of Public Hearing
- Order Establishing Briefing Schedule
- Amended Order Establishing Briefing Schedule
- Order Granting in Part Motion to Reconsider and Amending Certain Conditions In Final Decision And Order

6. Pursuant to SDCL 49-41B-15 and 49-41B-16 and its Notice of Application; Order for and Notice of Public Hearings; and Notice of Opportunity to Apply for Party Status, the Commission held public hearings on Keystone's application at the following times and places (see Public Hearing Transcripts):

- Monday, April 27, 2009, 12:00 noon CDT at Winner Community Playhouse, 7th and Leahy Boulevard, Winner, SD
- Monday, April 27, 2009, 7:00 p.m. MDT at Fine Arts School, 330 Scottie Avenue, Philip, SD
- Tuesday, April 28, 2009, 6:00 p.m. MDT at Harding County Recreation Center, 204 Hodge Street, Buffalo, SD.

7. The purpose of the public hearings was to afford an opportunity for interested persons to present their views and comments to the Commission concerning the Application. At the hearings, Keystone presented a brief description of the project after which interested persons presented their views, comments and questions regarding the application. Public Hearing Transcripts.

8. The following testimony was prefiled in advance of the formal evidentiary hearing held November 2, 3 and 4, 2009, in Room 414, State Capitol, Pierre, South Dakota:

A. Applicant's March 12, 2009, Direct Testimony.
- Robert Jones
- John Phillips
- Richard Gale
- Jon Schmidt
- Meera Kothari
- John Hayes
- Donald Scott
- Heidi Tillquist
- Tom Oster

B. Supplemental Direct Testimony of August 31, 2009.
- John Phillips

C. Intervenors' Direct Testimony of September 11, 2009.
- David Niemi
- Debra Niemi

D. Staff's September 25, 2009, Direct Testimony.
- Kim McIntosh
- Brian Walsh
- Derric Iles
- Tom Kirschenmann
- Paige Hoskinson Olson
- Michael Kenyon
- Ross Hargove
- Patrick Robblee
- James Arndt
- William Walsh
- Jenny Hudson
- David Schramm
- William Mampre
- Michael K. Madden
- Tim Binder

E. Applicant's Updated Direct and Rebuttal Testimony.
- Robert Jones Updated Direct (10/23/09)
- Jon Schmidt Updated Direct and Rebuttal (10/19/09)
- Meera Kothari Updated Direct and Rebuttal (10/19/09)
- Donald M. Scott Updated Direct (10/19/09)
- John W. Hayes Updated Direct (10/19/09)
- Heidi Tillquist Updated Direct (10/20/09)
- Steve Hicks Direct and Rebuttal (10/19/09)

F. Staff's Supplemental Testimony of October 29, 2009.
- William Walsh
- William Mampre
- Ross Hargrove

9. As provided for in the Commission's October 21, 2009, Amended Order for and Notice of Public Hearing, the Commission held a public input hearing in Room 414 of the State Capitol beginning at 6:00 p.m. on November 3, 2009, at which 23 members of the public presented comments and/or questions. Transcript of November 3, 2009 Public Input Hearing.

Applicable Statutes and Regulations

10. The following South Dakota statutes are applicable: SDCL 49-41B-1 through 49-41B-2.1, 49-41B-4, 49-41B-11 through 49-41B-19, 49-41B-21, 49-41B-22, 49-41B-24, 49-41B-26 through 49-41B-38 and applicable provisions of SDCL Chs. 1-26 and 15-6.

11. The following South Dakota administrative rules are applicable: ARSD Chapter 20:10:01, ARSD 20:10:22:01 through ARSD 20:10:22:25 and ARSD 20:10:22:36 through ARSD 20:10:22:40.

12. Pursuant to SDCL 49-41B-22, the Applicant for a facility construction permit 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.

The Project

13. The Project will be owned, managed and operated by the Applicant, TransCanada Keystone Pipeline, LP. Ex TC-1, 1.5 and 1.7, p. 4.

14. The purpose of the Project is to transport incremental crude oil production from the Western Canadian Sedimentary Basin ("WCSB") to meet growing demand by refineries and markets in the United States ("U.S."). This supply will serve to replace U.S. reliance on less stable and less reliable sources of offshore crude oil. Ex TC-1, 1.1, p. 1; Ex TC-1, 3.0 p. 23; Ex TC-1, 3.4 p. 24.

15. The Project will consist of three segments: the Steele City Segment, the Gulf Coast Segment, and the Houston Lateral. From north to south, the Steele City Segment extends from Hardisty, Alberta, Canada, southeast to Steele City, Nebraska. The Gulf Coast Segment extends from Cushing, Oklahoma south to Nederland, in Jefferson County, Texas. The Houston Lateral extends from the Gulf Coast Segment in Liberty County, Texas southwest to Moore Junction, Harris County, Texas. It will interconnect with the northern and southern termini of the previously approved 298-mile-long, 36-inch-diameter Keystone Cushing Extension segment of the Keystone Pipeline Project. Ex TC-1, 1.2, p. 1. Initially, the pipeline would have a nominal capacity to transport 700,000 barrels per day ("bpd"). Keystone could add additional pumping capacity to expand the nominal capacity to 900,000 bpd. Ex TC-1, 2.1.2, p. 8.

16. The Project is an approximately 1,707 mile pipeline with about 1,380, miles in the United States. The South Dakota portion of the pipeline will be approximately 314 miles in length and will extend from the Montana border in Harding County to the Nebraska border in Tripp County. The Project is proposed to cross the South Dakota counties of Harding, Butte, Perkins, Meade, Pennington, Haakon, Jones, Lyman and Tripp. Ex TC-1, 1.2 and 2.1.1, pp. 1 and 8. Detailed route maps are presented in Ex TC-1, Exhibits A and C, as updated in Ex TC-14.

17. Construction of the Project is proposed to commence in May of 2011 and be completed in 2012. Construction in South Dakota will be conducted in five spreads, generally proceeding in a north to south direction. The Applicant expects to place the Project in service in 2012. This in-service date is consistent with the requirements of the Applicant's shippers who have made the contractual commitments that underpin the viability and need for the project. Ex TC-1, 1.4, pp. 1 and 4; TR 26.

18. The pipeline in South Dakota will extend from milepost 282.5 to milepost 597, approximately 314 miles. The pipeline will have a 36-inch nominal diameter and be constructed using API 5L X70 or X80 high-strength steel. An external fusion bonded epoxy ("FBE") coating will be applied to the pipeline and all buried facilities to protect against corrosion. Cathodic protection will be provided by impressed current. The pipeline will have batching capabilities and will be able to transport products ranging from light crude oil to heavy crude oil. Ex TC-1, 2.2, 2.2.1, 6.5.2, pp. 8-9, 97-98; Ex TC-8, ¶ 26.

19. The pipeline will operate at a maximum operating pressure of 1,440 psig. For location specific low elevation segments close to the discharge of pump stations, the maximum operating pressure will be 1,600 psig. Pipe associated with these segments of 1,600 psig MOP are excluded from the Special Permit application and will have a design factor of 0.72 and pipe wall thickness of 0.572 inch (X-70) or 0.500 inch (X-80). All other segments in South Dakota will have a MOP of 1,440 psig. Ex TC-1, 2.2.1, p. 9.

20. The Project will have seven pump stations in South Dakota, located in Harding (2), Meade, Haakon, Jones and Tripp (2) Counties. TC-1, 2.2.2, p. 10. The pump stations will be electrically driven. Power lines required for providing power to pump stations will be permitted and constructed by local power providers, not by Keystone. Initially, three pumps will be installed at each station to meet the nominal design flow rate of 700,000 bpd. If future demand warrants, pumps may be added to the proposed pump stations for a total of up to five pumps per station, increasing nominal throughput to 900,000 bpd. No additional pump stations will be required to be constructed for this additional throughput. No tank facilities will be constructed in South Dakota. Ex TC-1, 2.1.2, p.8. Sixteen mainline valves will be located in South Dakota. Seven of these valves will be remotely controlled, in order to have the capability to isolate sections of line rapidly in the event of an emergency to minimize impacts or for operational or maintenance reasons. Ex TC-1, 2.2.3, pp. 10-11.

21. The pipeline will be constructed within a 110-foot wide corridor, consisting of a temporary 60-foot wide construction right-of-way and a 50-foot permanent right-of-way. Additional workspace will be required for stream, road, and railroad crossings, as well as hilly terrain and other features. The Applicant committed to reducing the construction right-of-way to 85 feet in certain wetlands to minimize impacts. Ex TC-1, 2.2.4, pp. 11-12; Ex TC-7, ¶ 20. FERC guidelines provide that the wetland construction right-of-way should be limited to 75 feet except where conditions do not permit, and Staff witness Hargrove's Construction, Mitigation and Reclamation Plan Review states that industry practice is to reduce the typical construction right-of-way width to 75 feet in non-cultivated wetlands, although exceptions are sometimes made for larger-diameter pipelines or where warranted due to site-specific conditions. Ex S-5, p. 2 and Attachment 2, 6.2; TR 335, 353. The Commission finds that the construction right-of-way should be limited to 75 feet, except where site-specific conditions require use of Keystone's proposed 85-foot right-of-way or where special circumstances are present, and the Commission accordingly adopts Condition 22(a), subject to the special circumstance provisions of Condition 30.

22. The Project will be designed, constructed, tested, and operated in accordance with all applicable requirements, including the U.S. Department of Transportation, Pipeline Hazardous Materials and Safety Administration (PHMSA) regulations set forth at 49 CFR Part 195, as modified by the Special Permit requested for the Project from PHMSA (see Finding 71). These federal regulations are intended to ensure adequate protection for the public and the environment and to prevent crude oil pipeline accidents and failures. Ex TC-1, 2.2, p. 8.

23. The current estimated cost of the Keystone Project in South Dakota is $921.4 million. Ex TC-1, 1.3, p. 1.

Demand for the Facility

24. The transport of additional crude oil production from the WCSB is necessary to meet growing demand by refineries and markets in the U.S. The need for the project is dictated by a number of factors, including increasing WCSB crude oil supply combined with insufficient export pipeline capacity; increasing crude oil demand in the U.S. and decreasing domestic crude supply;

the opportunity to reduce U.S. dependence on foreign off-shore oil through increased access to stable, secure Canadian crude oil supplies; and binding shipper commitments to utilize the Keystone Pipeline Project. Ex TC-1, 3.0, p. 23.

25. According to the U.S. Energy Information Administration ("EIA"), U.S. demand for petroleum products has increased by over 11 percent or 2,000,000 bpd over the past 10 years and is expected to increase further. The EIA estimates that total U.S. petroleum consumption will increase by approximately 10 million bpd over the next 10 years, representing average demand growth of about 100,000 bpd per year (EIA Annual Energy Outlook 2008). Ex TC-1, 3.2, pp. 23-24.

26. At the same time, domestic U.S. crude oil supplies continue to decline. For example, over the past 10 years, domestic crude production in the United States has declined at an average rate of about 135,000 bpd per year, or 2% per year. Ex TC-1, 3.3, p. 24. Crude and refined petroleum product imports into the U.S. have increased by over 3.3 million bpd over the past 10 years. In 2007, the U.S. imported over 13.4 million bpd of crude oil and petroleum products or over 60 percent of total U.S. petroleum product consumption. Canada is currently the largest supplier of imported crude oil and refined products to the U.S., supplying over 2.4 million bpd in 2007, representing over 11 percent of total U.S. petroleum product consumption (EIA 2007). Ex TC-1, 3.4, p. 24.

27. The Project will provide an opportunity for U.S. refiners in Petroleum Administration for Defense District III, the Gulf Coast region, to further diversify supply away from traditional offshore foreign crude supply and to obtain direct access to secure and growing Canadian crude supplies. Access to additional Canadian crude supply will also provide an opportunity for the U.S. to offset annual declines in domestic crude production and, specifically, to decrease its dependence on other foreign crude oil suppliers, such as Mexico and Venezuela, the top two heavy crude oil exporters into the U.S. Gulf Coast. Ex TC-1, 3.4, p. 24.

28. Reliable and safe transportation of crude oil will help ensure that U.S. energy needs are not subject to unstable political events. Established crude oil reserves in the WCSB are estimated at 179 billion barrels (CAPP 2008). Over 97 percent of WCSB crude oil supply is sourced from Canada's vast oil sands reserves located in northern Alberta. The Alberta Energy and Utilities Board estimates there are 175 billion barrels of established reserves recoverable from Canada's oil sands. Alberta has the second largest crude oil reserves in the world, second only to Saudi Arabia. Ex TC-1, 3.1, p. 23.

29. Shippers have already committed to long-term binding contracts, enabling Keystone to proceed with regulatory applications and construction of the pipeline once all regulatory, environmental, and other approvals are received. These long-term binding shipper commitments demonstrate a material endorsement of support for the Project, its economics, proposed route, and target market, as well as the need for additional pipeline capacity and access to Canadian crude supplies. Ex TC-1, 3.5, p. 24.

Environmental

30. In order to construct the Project, Keystone is required to obtain a Presidential Permit from the U.S. Department of State ("DOS") authorizing the construction of facilities across the international border. Ex TC-1, 1.8, pp. 4-5; 5.1, p. 30.

31. Because Keystone is required to obtain a Presidential Permit from the DOS, the National Environmental Policy Act requires the DOS to prepare an Environmental Impact Statement

("EIS"). Ex TC-1, 1.8, pp. 4-5; Ex TC-4; Ex S-3. In support of its Presidential Permit application, Keystone has submitted studies and other environmental information to the DOS. Ex TC-1, 1.8, pp. 4-5; 5.1, p. 30.

32. Table 6 to the Application summarizes the environmental impacts that Keystone's analysis indicates could be expected to remain after its Construction Mitigation and Reclamation Plan is implemented. Ex TC-1, pp. 31-37.

33. The pipeline will cross the Unglaciated Missouri Plateau. This physiographic province is characterized by a dissected plateau where river channels have incised into the landscape. Elevations range from just over 3,000 feet above mean sea level in the northwestern part of the state to around 1,800 feet above mean sea level in the White River valley. The major river valleys traversed include the Little Missouri River, Cheyenne River, and White River. Ex TC-1, 5.3.1, p. 30; Ex TC-4, ¶15. Exhibit A to the Application includes soil type maps and aerial photograph maps of the Keystone pipeline route in South Dakota that indicate topography, land uses, project mileposts and Section, Township, Range location descriptors. Ex TC-1, Exhibit A. Updated versions of these maps were received in evidence as Exhibit TC-14.

34. The surficial geologic deposits along the proposed route are primarily composed of Quaternary alluvium, colluvium, alluvial terraces, and eolian deposits (sand dunes). The alluvium primarily occurs in modern stream channels and floodplains, but also is present in older river terraces. The bedrock geology consists of Upper Cretaceous and Tertiary rocks. The Upper Cretaceous units include the Pierre Shale, Fox Hills Formation, and the Hell Creek Formation. The Ogallala Group, present in the far southern portion of the Project in South Dakota, was deposited as a result of uplift and erosion of the Rocky Mountains. Material that was eroded from the mountains was transported to the east by streams and wind. Ex TC-1, 5.3.2, p. 37.

35. Sand, gravel, crushed stone, oil, natural gas, coal and metallic ore resources are mineral resources existing along the proposed route. The route passes through the Buffalo Field in Harding County. Construction will have very minor and short-term impact on current mineral extraction activities due to the temporary and localized nature of pipeline construction activities. Several oil and gas wells were identified within or close to the Project construction ROW. Prior to construction, Keystone will identify the exact locations of active, shut-in, and abandoned wells and any associated underground pipelines in the construction ROW and take appropriate precautions to protect the integrity of such facilities. Ex TC-1, 5.3.3, pp. 38-39.

36. Soil maps for the route are provided in Exhibit A to Ex TC-1. In the northwestern portions of South Dakota, the soils are shallow to very deep, generally well drained, and loamy or clayey. Soils such as the Assiniboine series formed in fluvial deposits that occur on fans, terraces, and till plains. Soils such as the Cabbart, Delridge, and Blackhall series formed in residuum on hills and plains. Fertile soils and smooth topography dominate Meade County. The soils generally are shallow to very deep, somewhat excessively drained to moderately well drained, and loamy or clayey. Cretaceous Pierre Shale underlies almost all of Haakon, Jones, and portions of Tripp counties. This shale weathers to smectitic clays. These clays shrink as they dry and swell as they get wet, causing significant problems for road and structural foundations. From central Tripp County to the Nebraska state line, soils typically are derived from shale and clays on the flatter to moderately sloping, eroded tablelands. In southern Tripp County, the route also crosses deep, sandy deposits on which the Doger, Dunday, and Valentine soils formed. These are dry, rapidly permeable soils. Topsoil layers are thin and droughty, and wind erosion and blowouts are a common hazard. Ex TC-1, 5.3.4, p. 40.

37. Grading and excavating for the proposed pipeline and ancillary facilities will disturb a variety of agricultural, rangeland, wetland and forestland soils. Prime farmland soils may be altered temporarily following construction due to short-term impact such as soil compaction from equipment traffic, excavation and handling. However, potential impacts to soils will be minimized or mitigated by the soil protection measures identified in the Construction Mitigation and Reclamation Plan (CMR Plan) to the extent such measures are fully implemented. The measures include procedures for segregating and replacing top soil, trench backfilling, relieving areas compacted by heavy equipment, removing surface rock fragments and implementing water and wind erosion control practices. Ex TC-1, 5.3.4, p. 41; TC-1 Ex. B.

38. To accommodate potential discoveries of contaminated soils, Keystone made a commitment in the Application to develop, in consultation with relevant agencies, procedures for the handling and disposal of unanticipated contaminated soil discovered during construction. These procedures will be added to the CMR Plan. If hydrocarbon contaminated soils are encountered during trench excavation, the appropriate federal and state agencies will be contacted immediately. A remediation plan of action will be developed in consultation with that agency. Depending on the level of contamination found, affected soil may be replaced in the trench or removed to an approved landfill for disposal. Ex TC-1, 5.3.4, p. 42.

39. The USGS ground motion hazard mapping indicates that potential ground motion hazard in the Project area is low. South Dakota historically has had little earthquake activity. No ground subsidence or karst hazards are present in the vicinity of the route. Ex TC-1, 5.3.6, p. 43.

40. Cretaceous and Tertiary rocks in the Missouri River Plateau have high clay content and upon weathering can be susceptible to instability in the form of slumps and earth flows. Landslide potential is enhanced on steeper slopes. Formations that are especially susceptible are the Cretaceous Hell Creek and Pierre Shale as well as shales in the Tertiary Fort Union Formation mainly on river banks and steep slopes. These units can contain appreciable amounts of bentonite, a rock made up of montmorillonite clay that has deleterious properties when exposed to moisture. The bentonite layers in the Pierre Shale may present hazards associated with swelling clays. These formations are considered to have "high swelling potential." Bentonite has the property whereby when wet, it expands significantly in volume. When bentonite layers are exposed to successive cycles of wetting and drying, they swell and shrink, and the soil fluctuates in volume and strength. Ex TC-1, 5.3.4, pp. 43.

41. Fifteen perennial streams and rivers, 129 intermittent streams, 206 ephemeral streams and seven man-made ponds will be crossed during construction of the Project in South Dakota. Keystone will utilize horizontal directional drilling ("HDD") to cross the Little Missouri, Cheyenne and White River crossings. Keystone intends to use open-cut trenching at the other perennial streams and intermittent water bodies. The open cut wet method can cause the following impacts: loss of in-stream habitat through direct disturbance, loss of bank cover, disruption of fish movement, direct disturbance to spawning, water quality effects and sedimentation effects. Alternative techniques include open cut dry flume, open cut dam-and-pump and horizontal directional drilling. Exhibit C to the Application contains a listing of all water body crossings and preliminary site-specific crossing plans for the HDD sites. Ex TC-14. Permitting of water body crossings, which is currently underway, will ultimately determine the construction method to be utilized. Keystone committed to mitigate water crossing impacts through implementation of procedures outlined in the CMR Plan. Ex TC-1, 5.4.1, pp. 45-46.

42. The pipeline will be buried at an adequate depth under channels, adjacent flood plains and flood protection levees to avoid pipe exposure caused by channel degradation and lateral scour. Determination of the pipeline burial depth will be based on site-specific channel and hydrologic investigations where deemed necessary. Ex TC-1, 5.4.1, p. 46.

43. Although improvements in pipeline safety have been made, the risk of a leak cannot be eliminated. Keystone's environmental consulting firm for the Project, AECOM, estimated the chances of and the environmental consequences of a leak or spill through a risk assessment. Ex TC-1, 6.5.2, pp. 96-102; Table 6; TC-12, 10, 24.

44. Keystone's expert estimated the chance of a leak from the Project to be not more than one spill in 7,400 years for any given mile of pipe. TR 128-132, 136-137; Ex TC-12, ¶10; TC-1, 5.5.1, p. 54; 6.1.2.1, p. 87. The frequency calculation found the chance to be no more than one release in 24 years in South Dakota. TR 137.

45. Keystone's spill frequency and volume estimates are conservative by design, overestimating the risk since the intent is to use the assessment for planning purposes. The risk assessment overestimates the probable size of a spill to ensure conservatism in emergency response and other planning objectives. If a spill were to occur on the Keystone pipeline, PHMSA data indicate that the spill is likely to be three barrels or less. Ex TC-12, ¶10; TR 128-132, 137; TC-1, 6.1.2.1, p. 87.

46. Except for a few miles in the far southern reach of the Project in southern Tripp County which will be located over the permeable Sand Hills and shallow High Plains Aquifer, the Project route in South Dakota does not cross geologic units that are traditionally considered as aquifers. TR 440. Where aquifers are present, at most locations they are more than 50 feet deep, which significantly reduces the chance of contamination reaching the aquifer. Additionally, the majority of the pipeline is underlain by low permeability confining materials (e.g., clays, shales) that inhibit the infiltration of released crude oil into aquifers. TR 158; Ex TC-12, ¶13, EX TC-1, 5.4.2, pp. 47-48. Keystone consulted with the DENR during the routing process to identify and subsequently avoid sensitive aquifers and recharge areas, e.g., Source Water Protection Areas (SWPAs) in order to minimize risk to important public groundwater resources, and no groundwater SWPAs are crossed by the Project in South Dakota. EX TC-1, 5.4.2, pp. 47-48. Except for the Sand Hills area, no evidence was offered of the existence of a shallow aquifer (i.e. less than 50 feet in depth) crossed by the Project.

47. Because of their high solubility and their very low Maximum Contaminant Levels ("MCLs"), the constituents of primary concern in petroleum, including crude oil, are benzene, toluene, ethyl benzene and xylene. These constituents are commonly referred to as BTEX. TR 142, 146. The crude oil to be shipped through the Project will be similar in composition to other crude oils produced throughout the world and currently shipped in the United States. TR 155-56. The BTEX concentration in the crude oil to be shipped through the Project is close to 1 % to 1.5%. TR 151.

48. The Project will pass through areas in Tripp County where shallow and surficial aquifers exist. Since the pipeline will be buried at a shallow depth, it is unlikely that the construction or operation of the pipeline will alter the yield from any aquifers that are used for drinking water purposes. Keystone will investigate shallow groundwater when it is encountered during construction to determine if there are any nearby livestock or domestic wells that might be affected by construction activities. Appropriate measures will be implemented to prevent groundwater contamination and steps will be taken to manage the flow of any ground water encountered. Ex TC-

1, 5.4.2, pp. 47-48. The Tripp County Water User District is up-gradient of the pipeline and therefore would not be affected by a spill. TR 441, 449-50.

49. The risk of a spill affecting public or private water wells is low because the components of crude oil are unlikely to travel more than 300 feet from the spill site. TR 142-43. There are no private or public wells within 200 or 400 feet, respectively, of the right of way. TC-16, Data Response 3-46.

50. The total length of Project pipe with the potential to affect a High Consequence Area ("HCA") is 34.3 miles. A spill that could affect an HCA would occur no more than once in 250 years. TC-12, ¶ 24.

51. In the event that soils and groundwater are contaminated by a petroleum release, Keystone will work with state agency personnel to determine what type of remediation process would be appropriate. TR 148. Effective emergency response can reduce the likelihood and severity of contamination. TC-12, ¶ 10, 14, 24. Soils and groundwater contaminated by a petroleum release can be remediated. TR 499-500. The experience of DENR is that pipeline facilities have responded immediately to the incident in every case. TR 502.

52. The Commission finds that the risk of a significant release occurring is low and finds that the risk that a release would irremediably impair a water supply is very low and that it is probable that Keystone, in conjunction with state and federal response agencies, will be able to and will be required to mitigate and successfully remediate the effects of a release.

53. The Commission nevertheless finds that the Sand Hills area and High Plains Aquifer in southeastern Tripp County is an area of vulnerability that warrants additional vigilance and attention in Keystone's integrity management and emergency response planning and implementation process. The evidence demonstrates that the shallow Sand Hills groundwater or High Plains Aquifer is used by landowners in the Project area, that many wells are developed into the aquifer, including TCWUD 's, that the very high permeability of both the sandy surficial soils and deeper soils render the formation particularly vulnerable to contamination and that rapid discovery and response can significantly lessen the impact of a release on this vulnerable groundwater resource. The Commission further finds that if additional surficial aquifers are discovered in the course of pipeline construction, such aquifers should have similar treatment. The Commission accordingly finds that Condition 35 shall be adopted.

54. Of the approximately 314-mile route in South Dakota, all but 21.5 miles is privately owned. 21.5 miles is state-owned and managed. The list is found in Table 14. No tribal or federal lands are crossed by the proposed route. Ex TC-1, 5.7.1, p. 75.

55. Table 15 of the Application identifies the land uses affected by the pipeline corridor. Among other things, it shows that the project will not cross or be co-located with any major industrial sites, the pipeline will not cross active farmsteads, but may cross near them and the pipeline will not cross suburban and urban residential areas. The project will not cross municipal water supplies or water sources for organized rural water districts. Ex TC-1, 5.7.1, pp. 76-78.

56. The pipeline will be compatible with the predominant land use, which is rural agriculture, because the pipeline will be buried to a depth of four feet in fields and will interfere only minimally with normal agricultural operations. In most locations, the pipeline will be placed below agricultural drain tiles, and drain tiles that are damaged will be repaired. The only above-ground

facilities will be pump stations and block valves located at intervals along the pipeline. Ex TC-1, 5.7.3, pp.78-79.

57. The Project's high strength X70 steel will have a puncture resistance of 51 tons of digging force. Ex TC-8, ¶ 28. Keystone will have a public awareness program in place and an informational number to call where landowners and others can obtain information concerning activities of concern. TC-1, 6.3.4, pp. 93-94. The Commission finds that the risk of damage by ordinary farming operations is very low and that problems can be avoided through exercise of ordinary common sense.

58. If previously undocumented sites are discovered within the construction corridor during construction activities, all work that might adversely affect the discovery will cease until Keystone, in consultation with the appropriate agencies such as the SHPO, can evaluate the site's eligibility and the probable effects. If a previously unidentified site is recommended as eligible to the National Registry of Historic Places, impacts will be mitigated pursuant to the Unanticipated Discovery Plan submitted to the SHPO. Treatment of any discovered human remains, funerary objects, or items of cultural patrimony found on federal land will be handled in accordance with the Native American Grave Protection and Repatriation Act. Construction will not resume in the area of the discovery until the authorized agency has issued a notice to proceed. If human remains and associated funerary objects are discovered on state or private land during construction activities, construction will cease within the vicinity of the discovery and the county coroner or sheriff will be notified of the find. Treatment of any discovered human remains and associated funerary objects found on state or private land will be handled in accordance with the provisions of applicable state laws. TR 40; Ex TC-1, 6.4, pp. 96; Ex TC-16, 3-54. In accordance with these commitments, the Commission finds that Condition 43 should be adopted.

59. Certain formations to be crossed by the Project, such as the Fox Hills, Ludlow and particularly the Hell Creek Formation are known to contain paleontological resources of high scientific and monetary value. TR 438-439, 442-444. In northwest South Dakota, the Hell Creek Formation has yielded valuable dinosaur bones including from a triceratops, the South Dakota State fossil. Ex TC-1, 5.3.2, p. 38. Protection of paleontological resources was among the most frequently expressed concerns at the public input hearings held by the Commission. There is no way for anyone to know with any degree of certainty whether fossils of significance will be encountered during construction activities. TR 439. Because of the potential significance to landowners of the encounter by construction activities with paleontological resources and the inability to thoroughly lessen the probability of such encounter through pre-construction survey and avoidance, the Commission adopts Condition 44 to require certain special procedures in high probability areas, including the Hell Creek formation, such as the presence of a monitor with training in identification of a paleontological strike of significance.

Design and Construction

60. Keystone has applied for a special permit ("Special Permit") from PHMSA authorizing Keystone to design, construct, and operate the Project at up to 80% of the steel pipe specified minimum yield strength at most locations. TC-1, 2.2, p. 8; TR 62. In Condition 2, the Commission requires Keystone to comply with all of the conditions of the Special Permit, if issued.

61. TransCanada operates approximately 11,000 miles of pipelines in Canada with a 0.8 design factor and requested the Special Permit to ensure consistency across its system and to reduce costs. PHMSA has previously granted similar waivers adopting this modified design factor for natural gas pipelines and for the Keystone Pipeline. Ex TC-8, ¶¶ 13, 17.

62. The Special Permit is expected to exclude pipeline segments operating in (i) PHMSA-defined HCAs described as high population areas and commercially navigable waterways in 49 CFR Section 195.450; (ii) pipeline segments operating at highway, railroad, and road crossings; (iii) piping located within pump stations, mainline valve assemblies, pigging facilities, and measurement facilities; and (iv) areas where the MOP is greater than 1,440 psig. Ex TC-8, ¶ 16.

63. Application of the 0.8 design factor and API 5L PSL2 X70 high-strength steel pipe results in use of pipe with a 0.463 inch wall thickness, as compared with the 0.512 inch wall thickness under the otherwise applicable 0.72 design factor, a reduction in thickness of .050 inches. TR 61. PHMSA previously found that the issuance of a waiver is not inconsistent with pipeline safety and that the waiver will provide a level of safety equal to or greater than that which would be provided if the pipeline were operated under the otherwise applicable regulations. Ex TC-8, ¶ 15.

64. In preparation for the Project, Keystone conducted a pipeline threat analysis, using the pipeline industry published list of threats under ASME B31.8S and PHMSA to determine threats to the pipeline. Identified threats were manufacturing defects, construction damage, corrosion, mechanical damage and hydraulic event. Safeguards were then developed to address these threats. Ex TC-8, ¶ 22.

65. Steel suppliers, mills and coating plants were pre-qualified using a formal qualification process consistent with ISO standards. The pipe is engineered with stringent chemistry to ensure weldability during construction. Each batch of pipe is mechanically tested to prove strength, fracture control and fracture propagation properties. The pipe is hydrostatically tested. The pipe seams are visually and manually inspected and also inspected using ultrasonic instruments. Each piece of pipe and joint is traceable to the steel supplier and pipe mill shift during production. The coating is inspected at the plant with stringent tolerances on roundness and nominal wall thickness. A formal quality surveillance program is in place at the steel mill and at the coating plant. Ex TC-8, ¶ 24; TR 59-60.

66. All pipe welds will be examined around 100 percent of their circumferences using ultrasonic or radiographic inspection. The coating is inspected and repaired if required prior to lowering into the trench. After construction the pipeline is hydrostatically tested in the field to 125 percent of its maximum operating pressure, followed by caliper tool testing to check for dents and ovality. Ex TC-8, ¶ 25.

67. A fusion-bonded epoxy ("FBE") coating will be applied to the external surface of the pipe to prevent corrosion. Ex TC- 8, ¶ 26.

68. TransCanada has thousands of miles of this particular grade of pipeline steel installed and in operation. TransCanada pioneered the use of FBE, which has been in use on its system for over 29 years. There have been no leaks on this type of pipe installed by TransCanada with the FBE coating and cathodic protection system during that time. When TransCanada has excavated pipe to validate FBE coating performance, there has been no evidence of external corrosion. Ex TC-8, ¶ 27.

69. A cathodic protection system will be installed comprised of engineered metal anodes, which are connected to the pipeline. A low voltage direct current is applied to the pipeline, resulting in corrosion of the anodes rather than the pipeline. Ex TC-8, ¶ 27. FBE coating and cathodic protection mitigate external corrosion. Ex TC-8, ¶ 26.

70. A tariff specification of 0.5 percent solids and water by volume will be utilized to minimize the potential for internal corrosion. This specification is half the industry standard of one percent. In Condition 32, the Commission requires Keystone to implement and enforce its crude oil specifications in order to minimize the potential for internal corrosion. Further, the pipeline is designed to operate in turbulent flow to minimize water drop out, another potential cause of internal corrosion. During operations, the pipeline will be cleaned using in-line inspection tools, which measure internal and external corrosion. Keystone will repair areas of pipeline corrosion as required by federal regulation. Ex TC-8, ¶ 26. Staff expert Schramm concluded that the cathodic protection and corrosion control measures that Keystone committed to utilize would meet or exceed applicable federal standards. TR 407-427; Ex S-12.

71. To minimize the risk of mechanical damage to the pipeline, it will be buried with a minimum of four feet of cover, one foot deeper than the industry standard, reducing the likelihood of mechanical damage. The steel specified for the pipeline is high-strength steel with engineered puncture resistance of approximately 51 tons of force. Ex TC-8, ¶ 28.

72. Hydraulic damage is caused by over-pressurization of the pipeline. The risk of hydraulic damage will be minimized through the SCADA system's continuous, real-time pressure monitoring systems and through operator training. Ex TC-8, ¶ 29.

73. The Applicant has prepared a detailed CMR Plan that describes procedures for crossing cultivated lands, grasslands, including native grasslands, wetlands, streams and the procedures for restoring or reclaiming and monitoring those features crossed by the Project. The CMR Plan is a summary of the commitments that Keystone has made for environmental mitigation, restoration and post-construction monitoring and compliance related to the construction phase of the Project. Among these, Keystone will utilize construction techniques that will retain the original characteristics of the lands crossed as detailed in the CMR Plan. Keystone's thorough implementation of these procedures will minimize the impacts associated with the Project. A copy of the CMR Plan was filed as Exhibit B to Keystone's permit application and introduced into evidence as TC-1, Exhibit B.

74. The CMR Plan establishes procedures to address a multitude of construction-related issues, including but not limited to the following:

- Training
- Advance Notice of Access
- Depth of Cover
- Noise Control
- Weed Control
- Dust Control
- Fire Prevention and Control
- Spill Prevention and Containment
- Irrigation Systems
- Clearing
- Grading
- Topsoil Removal and Storage
- Temporary Erosion and Sediment Control
- Clean-Up
- Reclamation and Revegetation
- Compaction Relief

- Rock Removal
- Soil Additives
- Seeding
- Construction in Residential and Commercial/Industrial Areas
- Drain Tile Damage Mitigation and Repair

Ex TC-1, Exhibit B.

75. The fire prevention and containment measures outlined in the CMR Plan will provide significant protection against uncontrolled fire in the arid region to be crossed by the Project. The Commission finds, however, that these provisions are largely centered on active construction areas and that certain additional fire prevention and containment precautions are appropriate as well for vehicles performing functions not in proximity to locations where fire suppression equipment will be based, such as route survey vehicles and vehicles involved in surveillance and inspection activities whether before, during and after construction. The Commission accordingly adopts Conditions 16(p) and the last sentence of Condition 30 to address these situations.

76. Keystone's CMR Plan includes many mitigation steps designed to return the land to its original production. These include topsoil removal and replacement, compaction of the trench line, decompaction of the working area, and tilling the topsoil after replacement. Ex TC-1, Exhibit B; Ex TC-6, ¶ 27; Ex TC-1, 6.1.2.2, pp. 87-88.

77. In areas where geologic conditions such as ground swelling, or slope instability, could pose a potential threat, Keystone will conduct appropriate pre-construction site assessments and subsequently will design facilities to account for various ground motion hazards as required by federal regulations. The main hazard of concern during construction of the pipeline will be from unintentional undercutting of slopes or construction on steep slopes resulting in instability that could lead to landslides. Other hazards may result from construction on Cretaceous shales that contain bentonite beds. The high swelling hazard may cause slope instability during periods of precipitation. Ex TC-1, 5.3.6, p. 44.

78. When selecting the proposed pipeline route, Keystone has attempted to minimize the amount of steep slopes crossed by the pipeline. Special pipeline construction practices described in the CMR Plan will minimize slope stability concerns during construction. Landslide hazards can be mitigated by:

- Returning disturbed areas to pre-existing conditions or, where necessary, reducing steep grades during construction;
- Preserving or improving surface drainage;
- Preserving or improving subsurface drainage during construction;
- Removing overburden where necessary to reduce weight of overlying soil mass; and
- Adding fill at toe of slope to resist movement.

Ex TC-1, 5.3.6, pp. 43-44.

79. Slope instability poses a threat of ground movement responsible for approximately 1 percent of liquid pipeline incidents (PHMSA 2008). Keystone will monitor slope stability during routine surveillance. Areas where slope stability poses a potential threat to the pipeline will be incorporated into Keystone's Integrity Management Plan. If ground movement is suspected of having caused abnormal movement of the pipeline, federal regulations (49 CFR Part 195) require

Keystone to conduct an internal inspection. Consequently, damage to the pipeline would be detected quickly and spills would be averted or minimized. Ex TC-1, 5.3.6, p. 44

80. Keystone is in the process of preparing, in consultation with the area National Resource Conservation Service, construction/reclamation unit ("Con/Rec Unit") mapping to address differing construction and reclamation techniques for different soils conditions, slopes, vegetation, and land use along the pipeline route. This analysis and mapping results in the identification of segments called Con/Rec Units. Ex. TC-5; TC-16, DR 3-25.

81. The Applicant will use special construction methods and measures to minimize and mitigate impacts where warranted by site specific conditions. These special techniques will be used when constructing across paved roads, primary gravel roads, highways, railroads, water bodies, wetlands, sand hills areas, and steep terrain. These special techniques are described in the Application. Ex TC-1, 2.2.6, p. 17; TC-6, ¶ 11.

82. Of the perennial streams that are crossed by the proposed route, the Cheyenne River is the largest water body and is classified as a warm water permanent fishery. Of the other streams that have been classified, habitat is considered more limited as indicated by a warm water semi-permanent or warm water marginal classification. Ex TC-1, 5.6.2, pp. 71-72, Table 13.

83. Keystone will utilize HDD for the Little Missouri, Cheyenne and White River crossings, which will aid in minimizing impacts to important game and commercial fish species and special status species. Open-cut trenching, which can affect fisheries, will be used at other perennial streams. Keystone will use best practices to reduce or eliminate the impact of crossings at the perennial streams other than the Cheyenne and White Rivers. Ex TC-1, 5.4.1, p. 46; 5.6.2, p. 72; TC-16, DR 3-39.

84. Water used for hydrostatic testing during construction and subsequently released will not result in contamination of aquatic ecosystems since the pipe is cleaned prior to testing and the discharge water is monitored and tested. Ex TC-1, 5.4.3.1, pp. 48-50. In Conditions 1 and 2, the Commission has required that Keystone comply with DENR's regulations governing temporary use and discharge of water and obtain and comply with the DENR General Permits for these activities.

85. During construction, Keystone will have a number of inspectors on a construction spread, including environmental inspectors, who will monitor erosion control, small spills, full tanks, and any environmental issues that arise. TR. 37-38. In Condition 14, the Commission requires that Keystone incorporate such inspectors into the CMR Plan.

86. The Pipeline corridor will pass through areas where shallow and surficial aquifers exist. Appropriate measures will be implemented to prevent groundwater contamination and steps will be taken to manage the flow of any ground water encountered. Ex TC-1, 5.4.2, p. 47-48.

87. In addition to those recommendations of Staff and its expert witnesses referenced specifically in these Findings, Staff expert witnesses made a number of recommendations which the Commission has determined will provide additional protections for affected landowners, the environment and the public, and has included Conditions in this Order requiring certain of these measures. These recommendations encompassed matters such as sediment control at water body crossings, soil profile analysis, topsoil, subsoil and rock segregation and replacement, special procedures in areas of bentenitic, sodic, or saline soils, noise, etc. Staff's final recommendations are set forth in its Brief. See also Staff Exhibits and testimony in Transcript Vols. II and III.

88. Keystone will be required to acquire permits authorizing the crossing of county roads and township roads. These permits will typically require Keystone to restore roads to their pre-construction condition. If its construction equipment causes damage to county or township roads, Keystone will be responsible for the repair of those roads to pre-construction condition. Pursuant to SDCL 49-41B-38, Keystone will be required to post a bond to ensure that any damage beyond normal wear to public roads, highways, bridges or other related facilities will be adequately compensated. Staff witness Binder recommended that the bond amount under SDCL 49-41B-38 for damage to highways, roads, bridges and other related facilities be set at $15,600,000 for 2011 and $15,600,000 for 2012. TR 224. Keystone did not object to this requirement.

89. The Commission finds that the procedures in the CMR Plan and the other construction plans and procedures that Keystone has committed to implement, together with the Conditions regarding construction practices adopted by the Commission herein, will minimize impacts from construction of the Project to the environment and social and economic condition of inhabitants and expected inhabitants in the Project area.

Operation and Maintenance

90. The Keystone pipeline will be designed constructed, tested and operated in accordance with all applicable requirements, including the PHMSA regulations set forth at 49 CFR Parts 194 and 195, as modified by the Special Permit. These federal regulations are intended to ensure adequate protection for the public and the environment and to prevent crude oil pipeline accidents and failures. Ex TC-8, ¶ 2.

91. The safety features of Keystone's operations are governed by 49 CFR Part 195 and include aerial inspection 26 times per year, with any interval not to exceed three weeks, right-of-way maintenance for accessibility, and continual monitoring of the pipeline to identify potential integrity concerns. A Supervisory Control and Data Acquisition ("SCADA") system will be used to monitor the pipeline at all times. Ex TC-8, ¶ 9.

92. The Project will have a SCADA system to remotely monitor and control the pipeline. The SCADA system will include: (i) a redundant, fully functional back-up Operational Control Center available for service at all times; (ii) automatic features within the system to ensure operation within prescribed limits; and (iii) additional automatic features at the pump stations to provide pipeline pressure protection in the event that communications with the SCADA host are interrupted. Ex TC-10, ¶ 8.

93. The pipeline will have a control center manned 24 hours per day. A backup control center will also be constructed and maintained. A backup communications system is included within the system design and installation. Keystone's SCADA system should have a very high degree of reliability. TR 82-83.

94. Keystone will use a series of complimentary and overlapping SCADA-based leak detection systems and methods at the Operational Control Center, including: (i) remote monitoring; (ii) software-based volume balance systems that monitor injection and delivery volumes; (iii) Computational Pipeline Monitoring or model-based leak detection systems that break the pipeline into smaller segments and monitor each segment on a mass balance basis; and (iv) computer-based, non-real-time, accumulated gain/(loss) volume trending to assist in identifying low rate or seepage releases below the 1.5 percent by volume detection threshold. The SCADA and other monitoring and control systems to be implemented by Keystone for the Project are state of the art

and consistent with the best commercially available technology. Ex TC-10, ¶ 8. Staff witness, William Mampre, testified that Keystone's SCADA system was one he probably would have selected himself. TR 431.

95. Additionally, Keystone will implement and utilize direct observation methodologies, which include aerial patrols, ground patrols and public and landowner awareness programs designed to encourage and facilitate the reporting of suspected leaks and events that may suggest a threat to the integrity of the pipeline. Ex TC10, ¶ 8. Remote sensing technologies that could be employed in pipeline surveillance such as aerial surveillance are in their infancy and practical systems are not currently available. Keystone would consider using such technology if it becomes commercially available. TR 89-90.

96. Keystone will implement abnormal operating procedures when necessary and as required by 49 CFR 195.402(d). Abnormal operating procedures will be part of the written manual for normal operations, maintenance activities, and handling abnormal operating and emergencies. Ex TC-1, 2.3.2, p. 20.

97. As required by US DOT regulations, Keystone will prepare an emergency response plan ("ERP") for the system. Ex TC-11, ¶ 13. The ERP will be submitted to PHMSA for review prior to commencement of pipeline operations. Ex TC-11, ¶ 13. The Commission finds that the ERP and manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies as required under 49 CFR195.402 should also be submitted to the Commission at the time it is submitted to PHMSA to apprise the Commission of its details. Keystone has agreed to do this. The Commission has so specified in Condition 36.

98. Keystone will utilize the ERP approved by PHMSA for the Keystone Pipeline as the basis for its ERP for the Project. Under the ERP, Keystone will strategically locate emergency response equipment along the pipeline route. The equipment will include trailers, oil spill containment and recovery equipment, boats, and a communication office. Keystone will also have a number of local contractors available to provide emergency response assistance. Ex TC-11, ¶ 15. Keystone's goal is to respond to any spill within six hours. TR 102-103. Additional details concerning the ERP and the ERP process are set forth in the Application at Section 6.5.2 and in the pre-filed and hearing testimony of John Hayes. Ex TC-11; EX TC-1, 6.5.2, pp. 96-101. Keystone has consulted with DENR in developing its ERP. TR 111-12.

99. If the Keystone pipeline should experience a release, Keystone would implement its ERP. TC-11, ¶ 10; S-18, p. 4. DENR would be involved in the assessment and abatement of the release, and require the leak to be cleaned up and remediated. S-18, p. 5. DENR has been successful in enforcing remediation laws to ensure the effects of any pipeline releases are mitigated. TR 488-89, 497, 502-03.

100. Local emergency responders may be required to initially secure the scene and ensure the safety of the public, and Keystone will provide training in that regard. Ex TC-11, ¶ 17; TR 105-107.

101. If ground movement is suspected of having caused abnormal movement of the pipeline, federal regulations (49 CFR Part 195) require Keystone to conduct an internal inspection. Consequently, damage to the pipeline would be detected quickly and spills would be averted or minimized. Ex TC-1, 5.3.6, p. 44.

102. In addition to the ERP, hazardous materials pipeline segments through High Consequence Areas ("HCAs") are subject to the Integrity Management Rule. 49 CFR 195.452. Pipeline operators are required to develop a written Integrity Management Plan ("IMP") that must include methods to measure the program's effectiveness in assessing and evaluating integrity and protecting HCAs. Keystone will develop and implement an IMP for the entire pipeline including the HCAs. The overall objective of the IMP is to establish and maintain acceptable levels of integrity and having regard to the environment, public and employee safety, regulatory requirements, delivery reliability, and life cycle cost. The IMP uses advanced in-line inspection and mitigation technologies applied with a comprehensive risk-based methodology. 49 CFR Part 195 also requires pipeline operators to develop and implement public awareness programs consistent with the API's Recommended Practice 1162, Public Awareness Programs for Pipeline Operators. Staff witness Jenny Hudson testified that Keystone's planning and preparation of the IMP were fully compliant with the PHMSA regulations and had no recommendations for conditions. Ex S-9, p.5.

103. The Commission finds that the threat of serious injury to the environment or inhabitants of the State of South Dakota from a crude oil release is substantially mitigated by the integrity management, leak detection and emergency response processes and procedures that Keystone is continuing to plan and will implement.

Rural Water Crossings

104. The route crosses through two rural water system districts, the West River/Lyman-Jones Rural Water District and the Tripp County Water User District. Keystone met with these rural water districts to discuss the Project and will continue to coordinate with these districts. During construction and maintenance, Keystone will coordinate with the One Call system to avoid impacts to underground utilities, including water lines. Ex TC-4.

Alternative Routes

105. The proposed Project route was developed through an, iterative process. TC-1, 4.1, p. 25. During the course of the route evaluation process, Keystone held public meetings, open houses, and one-on-one meetings with stakeholders to discuss and review the proposed routing through South Dakota. TC-1, 4.1.5, p. 27. The route was refined in Mellette County to avoid environmentally sensitive areas and reduce wetland crossings, and near Colome to avoid groundwater protection areas. Ex TC-3; TC-1, 4.2.1-4.2.2, p. 28.

106. SDCL 49-41B-36 explicitly states that Chapter 49-41B "shall not be construed as a delegation to the Public Utilities Commission of the authority to route a facility." The Commission accordingly finds and concludes that it lacks authority to compel the Applicant to select an alternative route or to base its decision on whether to grant or deny a permit for a proposed facility on whether the selected route is the route the Commission itself might select.

Socio-Economic Factors

107. Socio-economic evidence offered by both Keystone and Staff demonstrates that the welfare of the citizens of South Dakota will not be impaired by the Project. Staff expert Dr. Michael Madden conducted a socio-economic analysis of the Keystone Pipeline, and concluded that the positive economic benefits of the project were unambiguous, while most if not all of the social impacts were positive or neutral. S-2, Madden Assessment at 21. The Project, subject to compliance with the Special Permit and the Conditions herein, would not, from a socioeconomic standpoint: (i) pose a threat of serious injury to the socioeconomic conditions in the project area; (ii)

substantially impair the health, safety, or welfare of the inhabitants in the project area; or (iii) unduly interfere with the orderly development of the region.

108. The Project will pay property taxes to local governments on an annual basis estimated to be in the millions of dollars. Ex TC-2, ¶ 24, TC-13, S-13; TR 584. An increase in assessed, taxable valuation for school districts is a positive development. TR 175.

109. The Project will bring jobs, both temporary and permanent, to the state of South Dakota and specifically to the areas of construction and operation. Ex TC-1 at 6.1.1, pp. 85-86.

110. The Project will have minimal effect in the areas of agriculture, commercial and industrial sectors, land values, housing, sewer and water, solid waste management, transportation, cultural and historical resources, health services, schools, recreation, public safety, noise, and visual impacts. Ex TC-1. It follows that the project will not substantially impair the health, safety, or welfare of the inhabitants.

General

111. Applicant has provided all information required by ARSD Chapter 20:10:22 and SDCL Chapter 49-41B. S-1.

112. The Commission finds that the Conditions attached hereto as Exhibit A and incorporated herein by reference are supported by the record, are reasonable and will help ensure that the Project will meet the standards established for approval of a construction permit for the Project set forth in SDCL 49-41B-22 and should be adopted.

113. The Commission finds that subject to the conditions of the Special Permit and the Conditions set forth as Exhibit A hereto, the Project will (i) comply with all applicable laws and rules; (ii) 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; (iii) not substantially impair the health, safety or welfare of the inhabitants; and (iv) 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.

114. The Commission finds that a permit to construct the Project should be granted subject to the Conditions set forth in Exhibit A.

115. To the extent that any Conclusion of Law set forth below is more appropriately a finding of fact, that Conclusion of Law is incorporated by reference as a Finding of Fact.

Based on the foregoing Findings of Fact, the Commission hereby makes the following:

CONCLUSIONS OF LAW

1. The Commission has jurisdiction over the subject matter and parties to this proceeding pursuant to SDCL Chapter 49-41B and ARSD Chapter 20:10:22. Subject to the findings made on the four elements of proof under SDCL 49-41B-22, the Commission has authority to grant,

deny or grant upon reasonable terms, conditions or modifications, a permit for the construction, operation and maintenance of the TransCanada Keystone Pipeline.

2. The TransCanada Keystone Pipeline Project is a transmission facility as defined in SDCL 49-41B-2.1(3).

3. Applicant's permit application, as amended and supplemented through the proceedings in this matter, complies with the applicable requirements of SDCL Chapter 49-41B and ARSD Chapter 20:10:22.

4. The Project, if constructed and operated in accordance with the terms and conditions of this decision, will comply with all applicable laws and rules, including all requirements of SDCL Chapter 49-41B and ARSD 20:10:22.

5. The Project, if constructed and operated in accordance with the terms and conditions of this decision, will not pose an unacceptable threat of serious injury to the environment nor to the social and economic conditions of inhabitants or expected inhabitants in the siting area.

6. The Project, if constructed and operated in accordance with the terms and conditions of this decision, will not substantially impair the health, safety or welfare of the inhabitants in the siting area.

7. The Project, if constructed and operated in accordance with the terms and conditions of this decision, 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.

8. The standard of proof is by the preponderance of evidence. The Applicant has met its burden of proof pursuant to SDCL 49-41B-22 and is entitled to a permit as provided in SDCL 49-41B-25.

9. The Commission has authority to revoke or suspend any permit granted under the South Dakota Energy Facility Permit Act for failure to comply with the terms and conditions of the permit pursuant to SDCL 49-41B-33 and must approve any transfer of the permit granted by this Order pursuant to SDCL 49-41B-29.

10. To the extent that any of the Findings of Fact in this decision are determined to be conclusions of law or mixed findings of fact and conclusions of law, the same are incorporated herein by this reference as a Conclusion of Law as if set forth in full herein.

11. Because a federal EIS will be required and completed for the Project and because the federal EIS complies with the requirements of SDCL Chapter 34A-9, the Commission appropriately exercised its discretion under SDCL 49-41B-21 in determining not to prepare or require the preparation of a second EIS.

12. PHMSA is delegated exclusive authority over the establishment and enforcement of safety-orientated design and operational standards for hazardous materials pipelines. 49 U.S.C. 60101, et seq.

13. SDCL 49-41B-36 explicitly states that SDCL Chapter 49-41B "shall not be construed as a delegation to the Public Utilities Commission of the authority to route a facility." The

Commission accordingly concludes that it lacks authority (i) to compel the Applicant to select an alternative route or (ii) to base its decision on whether to grant or deny a permit for a proposed facility on whether the selected route is the route the Commission might itself select.

14. The Commission concludes that it needs no other information to assess the impact of the proposed facility or to determine if Applicant or any Intervenor has met its burden of proof.

15. The Commission concludes that the Application and all required filings have been filed with the Commission in conformity with South Dakota law and that all procedural requirements under South Dakota law, including public hearing requirements, have been met or exceeded.

16. The Commission concludes that it possesses the authority under SDCL 49-41B-25 to impose conditions on the construction, operation and maintenance of the Project, that the Conditions set forth in Exhibit A are supported by the record, are reasonable and will help ensure that the Project will meet the standards established for approval of a construction permit for the Project set forth in SDCL 49-41B-22 and that the Conditions are hereby adopted.

It is therefore

ORDERED, that a permit to construct the Keystone Pipeline Project is granted to TransCanada Keystone Pipeline, LP, subject to the Conditions set forth in Exhibit A.

NOTICE OF ENTRY AND OF RIGHT TO APPEAL

PLEASE TAKE NOTICE that this Amended Final Decision and Order was duly issued and entered on the ____ day of June, 2010. Pursuant to SDCL 1-26-32, this Final Decision and Order will take effect 10 days after the date of receipt or failure to accept delivery of the decision by the parties. Pursuant to ARSD 20:10:01:30.01, an application for a rehearing or reconsideration may be made by filing a written petition with the Commission within 30 days from the date of issuance of this Final Decision and Order; Notice of Entry. Pursuant to SDCL 1-26-31, the parties have the right to appeal this Final Decision and Order to the appropriate Circuit Court by serving notice of appeal of this decision to the circuit court within thirty (30) days after the date of service of this Notice of Decision.

Dated at Pierre, South Dakota, this 29th of June, 2010.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that this document has been served today upon all parties of record in this docket, as listed on the docket service list, electronically.

By: _____

Date: 06/29/10

(OFFICIAL SEAL)

BY ORDER OF THE COMMISSION:

DUSTIN M. JOHNSON, Chairman

STEVE KOLBECK, Commissioner

GARY HANSON, Commissioner

Exhibit A

AMENDED PERMIT CONDITIONS

I. Compliance with Laws, Regulations, Permits, Standards and Commitments

1. Keystone shall comply with all applicable laws and regulations in its construction and operation of the Project. These laws and regulations include, but are not necessarily limited to: the federal Hazardous Liquid Pipeline Safety Act of 1979 and Pipeline Safety Improvement Act of 2002, as amended by the Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006, and the various other pipeline safety statutes currently codified at 49 U.S.C. § 60101 et seq. (collectively, the "PSA"); the regulations of the United States Department of Transportation implementing the PSA, particularly 49 C.F.R Parts 194 and 195; temporary permits for use of public water for construction, testing or drilling purposes, SDCL 46-5-40.1 and ARSD 74:02:01:32 through 74:02:01:34.02 and temporary discharges to waters of the state, SDCL 34A-2-36 and ARSD Chapters 74:52:01 through 74:52:11, specifically, ARSD § 74:52:02:46 and the General Permit issued thereunder covering temporary discharges of water from construction dewatering and hydrostatic testing.

2. Keystone shall obtain and shall thereafter comply with all applicable federal, state and local permits, including but not limited to: Presidential Permit from the United States Department of State, Executive Order 11423 of August 16, 1968 (33 Fed. Reg. 11741) and Executive Order 13337 of April 30, 2004 (69 Fed. Reg. 25229), for the construction, connection, operation, or maintenance, at the border of the United States, of facilities for the exportation or importation of petroleum, petroleum products, coal, or other fuels to or from a foreign country; Clean Water Act § 404 and Rivers and Harbors Act Section 10 Permits; Special Permit if issued by the Pipeline and Hazardous Materials Safety Administration; Temporary Water Use Permit, General Permit for Temporary Discharges and federal, state and local highway and road encroachment permits. Any of such permits not previously filed with the Commission shall be filed with the Commission upon their issuance. To the extent that any condition, requirement or standard of the Presidential Permit, including the Final EIS Recommendations, or any other law, regulation or permit applicable to the portion of the pipeline in this state differs from the requirements of these Conditions, the more stringent shall apply.

3. Keystone shall comply with and implement the Recommendations set forth in the Final Environmental Impact Statement when issued by the United States Department of State pursuant to its Amended Department of State Notice of Intent To Prepare an Environmental Impact Statement and To Conduct Scoping Meetings and Notice of Floodplain and Wetland Involvement and To Initiate Consultation Under Section 106 of the National Historic Preservation Act for the Proposed Transcanada Keystone XL Pipeline; Notice of Intent--Rescheduled Public Scoping Meetings in South Dakota and extension of comment period (FR vol. 74, no. 54, Mar. 23, 2009). The Amended Notice and other Department of State and Project Documents are available on-line at: http://www.keystonepipeline-xl.state.gov/clientsite/keystonexl.nsf?Open.

4. The permit granted by this Order shall not be transferable without the approval of the Commission pursuant to SDCL 49-41B-29.

5. Keystone shall undertake and complete all of the actions that it and its affiliated entities committed to undertake and complete in its Application as amended, in its testimony and

exhibits received in evidence at the hearing, and in its responses to data requests received in evidence at the hearing.

II. Reporting and Relationships

6. The most recent and accurate depiction of the Project route and facility locations is found on the maps in Exhibit TC-14. The Application indicates in Section 4.2.3 that Keystone will continue to develop route adjustments throughout the pre-construction design phase. These route adjustments will accommodate environmental features identified during surveys, property-specific issues, and civil survey information. The Application states that Keystone will file new aerial route maps that incorporate any such route adjustments prior to construction. Ex TC-1.4.2.3, p. 27. Keystone shall notify the Commission and all affected landowners, utilities and local governmental units as soon as practicable if material deviations are proposed to the route. Keystone shall notify affected landowners of any change in the route on their land. At such time as Keystone has finalized the pre-construction route, Keystone shall file maps with the Commission depicting the final pre-construction route. If material deviations are proposed from the route depicted on Exhibit TC-14 and accordingly approved by this Order, Keystone shall advise the Commission and all affected landowners, utilities and local governmental units prior to implementing such changes and afford the Commission the opportunity to review and approve such modifications. At the conclusion of construction, Keystone shall file detail maps with the Commission depicting the final as-built location of the Project facilities.

7. Keystone shall provide a public liaison officer, approved by the Commission, to facilitate the exchange of information between Keystone, including its contractors, and landowners, local communities and residents and to promptly resolve complaints and problems that may develop for landowners, local communities and residents as a result of the Project. Keystone shall file with the Commission its proposed public liaison officer's credentials for approval by the Commission prior to the commencement of construction. After the public liaison officer has been approved by the Commission, the public liaison officer may not be removed by Keystone without the approval of the Commission. The public liaison officer shall be afforded immediate access to Keystone's on-site project manager, its executive project manager and to contractors' on-site managers and shall be available at all times to the Staff via mobile phone to respond to complaints and concerns communicated to the Staff by concerned landowners and others. Keystone shall also implement and keep an up-dated web site covering the planning and implementation of construction and commencement of operations in this state as an informational medium for the public. As soon as the Keystone's public liaison officer has been appointed and approved, Keystone shall provide contact information for him/her to all landowners crossed by the Project and to law enforcement agencies and local governments in the vicinity of the Project. The public liaison officer's contact information shall be provided to landowners in each subsequent written communication with them. If the Commission determines that the public liaison officer has not been adequately performing the duties set forth for the position in this Order, the Commission may, upon notice to Keystone and the public liaison officer, take action to remove the public liaison officer.

8. Until construction of the Project, including reclamation, is completed, Keystone shall submit quarterly progress reports to the Commission that summarize the status of land acquisition and route finalization, the status of construction, the status of environmental control activities, including permitting status and Emergency Response Plan and Integrity Management Plan development, the implementation of the other measures required by these conditions, and the overall percent of physical completion of the project and design changes of a substantive nature. Each report shall include a summary of consultations with the South Dakota Department of Environment and Natural Resources and other agencies concerning the issuance of permits. The

reports shall list dates, names, and the results of each contact and the company's progress in implementing prescribed construction, land restoration, environmental protection, emergency response and integrity management regulations, plans and standards. The first report shall be due for the period ending June 30, 2010. The reports shall be filed within 31 days after the end of each quarterly period and shall continue until the project is fully operational.

9. Until one year following completion of construction of the Project, including reclamation, Keystone's public liaison officer shall report quarterly to the Commission on the status of the Project from his/her independent vantage point. The report shall detail problems encountered and complaints received. For the period of three years following completion of construction, Keystone's public liaison officer shall report to the Commission annually regarding post-construction landowner and other complaints, the status of road repair and reconstruction and land and crop restoration and any problems or issues occurring during the course of the year.

10. Not later than six months prior to commencement of construction, Keystone shall commence a program of contacts with state, county and municipal emergency response, law enforcement and highway, road and other infrastructure management agencies serving the Project area in order to educate such agencies concerning the planned construction schedule and the measures that such agencies should begin taking to prepare for construction impacts and the commencement of project operations.

11. Keystone shall conduct a preconstruction conference prior to the commencement of construction to ensure that Keystone fully understands the conditions set forth in this order. At a minimum, the conference shall include a Keystone representative, Keystone's construction supervisor and Staff.

12. Once known, Keystone shall inform the Commission of the date construction will commence, report to the Commission on the date construction is started and keep the Commission updated on construction activities as provided in Condition 8.

III. Construction

13. Except as otherwise provided in the conditions of this Order and Permit, Keystone shall comply with all mitigation measures set forth in the Construction Mitigation and Reclamation Plan (CMR Plan) as set forth in Exhibit TC-1, Exhibit B. If modifications to the CMR Plan are made by Keystone as it refines its construction plans or are required by the Department of State in its Final EIS Record of Decision or the Presidential Permit, the CMR Plan as so modified shall be filed with the Commission and shall be complied with by Keystone.

14. Keystone shall incorporate environmental inspectors into its CMR Plan and obtain follow-up information reports from such inspections upon the completion of each construction spread to help ensure compliance with this Order and Permit and all other applicable permits, laws, and rules.

15. Prior to construction, Keystone shall, in consultation with area NRCS staff, develop specific construction/reclamation units (Con/Rec Units) that are applicable to particular soil and subsoil classifications, land uses and environmental settings. The Con/Rec Units shall contain information of the sort described in response to Staff Data Request 3-25 found in Exhibit TC-16.

a) In the development of the Con/Rec Units in areas where NRCS recommends, Keystone shall conduct analytical soil probing and/or soil boring and analysis in areas of

particularly sensitive soils where reclamation potential is low. Records regarding this process shall be available to the Commission and to the specific land owner affected by such soils upon request.

b) Through development of the Con/Rec Units and consultation with NRCS, Keystone shall identify soils for which alternative handling methods are recommended. Alternative soil handling methods shall include but are not limited to the "triple-lift" method where conditions justify such treatment. Keystone shall thoroughly inform the landowner regarding the options applicable to their property, including their respective benefits and negatives, and implement whatever reasonable option for soil handling is selected by the landowner. Records regarding this process shall be available to the Commission upon request.

c) Keystone shall, in consultation with NCRS, ensure that its construction planning and execution process, including Con/Rec Units, CMR Plan and its other construction documents and planning shall adequately identify and plan for areas susceptible to erosion, areas where sand dunes are present, areas with high concentrations of sodium bentonite, areas with sodic, saline and sodic-saline soils and any other areas with low reclamation potential.

d) The Con/Rec Units shall be available upon request to the Commission and affected landowners. Con/Rec Units may be evaluated by the Commission upon complaint or otherwise, regarding whether proper soil handling, damage mitigation or reclamation procedures are being followed.

e) Areas of specific concern or of low reclamation potential shall be recorded in a separate database. Action taken at such locations and the results thereof shall also be recorded and made available to the Commission and the affected property owner upon request.

16. Keystone shall provide each landowner with an explanation regarding trenching and topsoil and subsoil/rock removal, segregation and restoration method options for his/her property consistent with the applicable Con/Rec Unit and shall follow the landowner's selected preference as documented on its written construction agreement with the landowner, as modified by any subsequent amendments, or by other written agreement(s).

a) Keystone shall separate and segregate topsoil from subsoil in agricultural areas, including grasslands and shelter belts, as provided in the CMR Plan and the applicable Con/Rec Unit.

b) Keystone shall repair any damage to property that results from construction activities.

c) Keystone shall restore all areas disturbed by construction to their preconstruction condition, including their original preconstruction topsoil, vegetation, elevation, and contour, or as close thereto as is feasible, except as is otherwise agreed to by the landowner.

d) Except where practicably infeasible, final grading and topsoil replacement and installation of permanent erosion control structures shall be completed in non-residential areas within 20 days after backfilling the trench. In the event that seasonal or other weather conditions, extenuating circumstances, or unforeseen developments beyond Keystone's control prevent compliance with this time frame, temporary erosion controls shall be maintained until conditions allow completion of cleanup and reclamation. In the event

Keystone can not comply with the 20-day time frame as provided in this Condition, it shall give notice of such fact to all affected landowners, and such notice shall include an estimate of when such restoration is expected to be completed.

e) Keystone shall draft specific crop monitoring protocols for agricultural lands. If requested by the landowner, Keystone shall provide an independent crop monitor to conduct yield testing and/or such other measurements of productivity as he shall deem appropriate. The independent monitor shall be a qualified agronomist, rangeland specialist or otherwise qualified with respect to the species to be restored. The protocols shall be available to the Commission upon request and may be evaluated for adequacy in response to a complaint or otherwise.

f) Keystone shall work closely with landowners or land management agencies to determine a plan to control noxious weeds. Landowner permission shall be obtained before the application of herbicides.

g) Keystone's adverse weather plan shall apply to improved hay land and pasture lands in addition to crop lands.

h) The size, density and distribution of rock within the construction right-of-way following reclamation shall be similar to adjacent undisturbed areas. Keystone shall treat rock that cannot be backfilled within or below the level of the natural rock profile as construction debris and remove it for disposal offsite except when the landowner agrees to the placement of the rock on his property. In such case, the rock shall be placed in accordance with the landowner's directions.

i) Keystone shall utilize the proposed trench line for its pipe stringing trucks where conditions allow and shall employ adequate measures to decompact subsoil as provided in its CMR Plan. Topsoil shall be decompacted if requested by the landowner.

j) Keystone shall monitor and take appropriate mitigative actions as necessary to address salinity issues when dewatering the trench, and field conductivity and/or other appropriate constituent analyses shall be performed prior to disposal of trench water in areas where salinity may be expected. Keystone shall notify landowners prior to any discharge of saline water on their lands or of any spills of hazardous materials on their lands of one pint or more or of any lesser volume which is required by any federal, state, or local law or regulation or product license or label to be reported to a state or federal agency, manufacturer, or manufacturer's representative.

k) Keystone shall install trench and slope breakers where necessary in accordance with the CMR Plan as augmented by Staff's recommendations in Post Hearing Commission Staff Brief, pp. 26-27.

l) Keystone shall apply mulch when reasonably requested by landowners and also wherever necessary following seeding to stabilize the soil surface and to reduce wind and water erosion. Keystone shall follow the other recommendations regarding mulch application in Post Hearing Commission Staff Brief, p. 27.

m) Keystone shall reseed all lands with comparable crops to be approved by landowner in landowner's reasonable discretion, or in pasture, hay or native species areas with comparable grass or forage crop seed or native species mix to be approved by landowner in

landowner's reasonable discretion. Keystone shall actively monitor revegetation on all disturbed areas for at least two years.

n) Keystone shall coordinate with landowners regarding his/her desires to properly protect cattle, shall implement such protective measures as are reasonably requested by the landowner and shall adequately compensate the landowner for any loss.

o) Prior to commencing construction, Keystone shall file with the Commission a confidential list of property owners crossed by the pipeline and update this list if route changes during construction result in property owner changes.

p) Except in areas where fire suppression resources as provided in CMR Plan 2.16 are in close proximity, to minimize fire risk, Keystone shall, and shall cause its contractor to, equip each of its vehicles used in pre-construction or construction activities, including off-road vehicles, with a hand held fire extinguisher, portable compact shovel and communication device such as a cell phone, in areas with coverage, or a radio capable of achieving prompt communication with Keystone's fire suppression resources and emergency services.

17. Keystone shall cover open-bodied dump trucks carrying sand or soil while on paved roads and cover open-bodied dump trucks carrying gravel or other materials having the potential to be expelled onto other vehicles or persons while on all public roads.

18. Keystone shall use its best efforts to not locate fuel storage facilities within 200 feet of private wells and 400 feet of municipal wells and shall minimize and exercise vigilance in refueling activities in areas within 200 feet of private wells and 400 feet of municipal wells.

19. If trees are to be removed that have commercial or other value to affected landowners, Keystone shall compensate the landowner for the fair market value of the trees to be cleared and/or allow the landowner the right to retain ownership of the felled trees. Except as the landowner shall otherwise agree in writing, the width of the clear cuts through any windbreaks and shelterbelts shall be limited to 50 feet or less, and he width of clear cuts through extended lengths of wooded areas shall be limited to 85 feet or less. The environmental inspection in Condition 14 shall include forested lands.

20. Keystone shall implement the following sediment control practices:

a) Keystone shall use floating sediment curtains to maintain sediments within the construction right of way in open water bodies with no or low flow when the depth of non-flowing water exceeds the height of straw bales or silt fence installation. In such situations the floating sediment curtains shall be installed as a substitute for straw bales or silt fence along the edge or edges of each side of the construction right-of-way that is under water at a depth greater than the top of a straw bale or silt fence as portrayed in Keystone's construction Detail #11 included in the CMR Plan.

b) Keystone shall install sediment barriers in the vicinity of delineated wetlands and water bodies as outlined in the CMR Plan regardless of the presence of flowing or standing water at the time of construction.

c) The Applicant should consult with South Dakota Game, Fish and Parks (SDGFP) to avoid construction near water bodies during fish spawning periods in which in-stream

construction activities should be avoided to limit impacts on specific fisheries, if any, with commercial or recreational importance.

21. Keystone shall develop frac-out plans specific to areas in South Dakota where horizontal directional drilling will occur. The plan shall be followed in the event of a frac-out. If a frac-out event occurs, Keystone shall promptly file a report of the incident with the Commission. Keystone shall also, after execution of the plan, provide a follow-up report to the Commission regarding the results of the occurrence and any lingering concerns.

22. Keystone shall comply with the following conditions regarding construction across or near wetlands, water bodies and riparian areas:

a) Unless a wetland is actively cultivated or rotated cropland or unless site specific conditions require utilization of Keystone's proposed 85 foot width and the landowner has agreed to such greater width, the width of the construction right-of-way shall be limited to 75 feet in non-cultivated wetlands unless a different width is approved or required by the United States Army Corps of Engineers.

b) Unless a wetland is actively cultivated or rotated cropland, extra work areas shall be located at least 50 feet away from wetland boundaries except where site-specific conditions render a 50-foot setback infeasible. Extra work areas near water bodies shall be located at least 50 feet from the water's edge, except where the adjacent upland consists of actively cultivated or rotated cropland or other disturbed land or where site-specific conditions render a 50-foot setback infeasible. Clearing of vegetation between extra work space areas and the water's edge shall be limited to the construction right-of-way.

c) Water body crossing spoil, including upland spoil from crossings of streams up to 30 feet in width, shall be stored in the construction right of way at least 10 feet from the water's edge or in additional extra work areas and only on a temporary basis.

d) Temporary in-stream spoil storage in streams greater than 30 feet in width shall only be conducted in conformity with any required federal permit(s) and any applicable federal or state statutes, rules and standards.

e) Wetland and water body boundaries and buffers shall be marked and maintained until ground disturbing activities are complete. Keystone shall maintain 15-foot buffers where practicable, which for stream crossings shall be maintained except during the period of trenching, pipe laying and backfilling the crossing point. Buffers shall not be required in the case of non-flowing streams.

f) Best management practices shall be implemented to prevent heavily silt-laden trench water from reaching any wetland or water body directly or indirectly.

g) Erosion control fabric shall be used on water body banks immediately following final stream bank restoration unless riprap or other bank stabilization methods are utilized in accordance with federal or state permits.

h) The use of timber and slash to support equipment crossings of wetlands shall be avoided.

i) Subject to Conditions 37 and 38, vegetation restoration and maintenance adjacent to water bodies shall be conducted in such manner to allow a riparian strip at least 25 feet wide as measured from the water body's mean high water mark to permanently re-vegetate with native plant species across the entire construction right-of way.

23. Keystone shall comply with the following conditions regarding road protection and bonding:

a) Keystone shall coordinate road closures with state and local governments and emergency responders and shall acquire all necessary permits authorizing crossing and construction use of county and township roads.

b) Keystone shall implement a regular program of road maintenance and repair through the active construction period to keep paved and gravel roads in an acceptable condition for residents and the general public.

c) Prior to their use for construction, Keystone shall videotape those portions of all roads which will be utilized by construction equipment or transport vehicles in order to document the pre-construction condition of such roads.

d) After construction, Keystone shall repair and restore, or compensate governmental entities for the repair and restoration of, any deterioration caused by construction traffic, such that the roads are returned to at least their preconstruction condition.

e) Keystone shall use appropriate preventative measures as needed to prevent damage to paved roads and to remove excess soil or mud from such roadways.

f) Pursuant to SDCL 49-41B-38, Keystone shall obtain and file for approval by the Commission prior to construction in such year a bond in the amount of $15.6 million for the year in which construction is to commence and a second bond in the amount of $15.6 million for the ensuing year, including any additional period until construction and repair has been completed, to ensure that any damage beyond normal wear to public roads, highways, bridges or other related facilities will be adequately restored or compensated. Such bonds shall be issued in favor of, and for the benefit of, all such townships, counties, and other governmental entities whose property is crossed by the Project. Each bond shall remain in effect until released by the Commission, which release shall not be unreasonably denied following completion of the construction and repair period. Either at the contact meetings required by Condition 10 or by mail, Keystone shall give notice of the existence and amount of these bonds to all counties, townships and other governmental entities whose property is crossed by the Project.

24. Although no residential property is expected to be encountered in connection with the Project, in the event that such properties are affected and due to the nature of residential property, Keystone shall implement the following protections in addition to those set forth in its CMR Plan in areas where the Project passes within 500 feet of a residence:

a) To the extent feasible, Keystone shall coordinate construction work schedules with affected residential landowners prior to the start of construction in the area of the residences.

b) Keystone shall maintain access to all residences at all times, except for periods when it is infeasible to do so or except as otherwise agreed between Keystone and the occupant. Such periods shall be restricted to the minimum duration possible and shall be coordinated with affected residential landowners and occupants, to the extent possible.

c) Keystone shall install temporary safety fencing, when reasonably requested by the landowner or occupant, to control access and minimize hazards associated with an open trench and heavy equipment in a residential area.

d) Keystone shall notify affected residents in advance of any scheduled disruption of utilities and limit the duration of such disruption.

e) Keystone shall repair any damage to property that results from construction activities.

f) Keystone shall separate topsoil from subsoil and restore all areas disturbed by construction to at least their preconstruction condition.

g) Except where practicably infeasible, final grading and topsoil replacement, installation of permanent erosion control structures and repair of fencing and other structures shall be completed in residential areas within 10 days after backfilling the trench. In the event that seasonal or other weather conditions, extenuating circumstances, or unforeseen developments beyond Keystone's control prevent compliance with this time frame, temporary erosion controls and appropriate mitigative measures shall be maintained until conditions allow completion of cleanup and reclamation.

25. Construction must be suspended when weather conditions are such that construction activities will cause irreparable damage, unless adequate protection measures approved by the Commission are taken. At least two months prior to the start of construction in South Dakota, Keystone shall file with the Commission an adverse weather land protection plan containing appropriate adverse weather land protection measures, the conditions in which such measures may be appropriately used, and conditions in which no construction is appropriate, for approval of or modification by the Commission prior to the start of construction. The Commission shall make such plan available to impacted landowners who may provide comment on such plan to the Commission.

26. Reclamation and clean-up along the right-of-way must be continuous and coordinated with ongoing construction.

27. All pre-existing roads and lanes used during construction must be restored to at least their pre-construction condition that will accommodate their previous use, and areas used as temporary roads during construction must be restored to their original condition, except as otherwise requested or agreed to by the landowner or any governmental authority having jurisdiction over such roadway.

28. Keystone shall, prior to any construction, file with the Commission a list identifying private and new access roads that will be used or required during construction and file a description of methods used by Keystone to reclaim those access roads.

29. Prior to construction, Keystone shall have in place a winterization plan and shall implement the plan if winter conditions prevent reclamation completion until spring. The plan shall be provided to affected landowners and, upon request, to the Commission.

30. Numerous Conditions of this Order, including but not limited to 16, 19, 24, 25, 26, 27 and 51 relate to construction and its effects upon affected landowners and their property. The Applicant may encounter physical conditions along the route during construction which make compliance with certain of these Conditions infeasible. If, after providing a copy of this order, including the Conditions, to the landowner, the Applicant and landowner agree in writing to modifications of one or more requirements specified in these conditions, such as maximum clearances or right-of-way widths, Keystone may follow the alternative procedures and specifications agreed to between it and the landowner.

IV. Pipeline Operations, Detection and Emergency Response

31. Keystone shall construct and operate the pipeline in the manner described in the application and at the hearing, including in Keystone's exhibits, and in accordance with the conditions of this permit, the PHMSA Special Permit, if issued, and the conditions of this Order and the construction permit granted herein.

32. Keystone shall require compliance by its shippers with its crude oil specifications in order to minimize the potential for internal corrosion.

33. Keystone's obligation for reclamation and maintenance of the right-of-way shall continue throughout the life of the pipeline. In its surveillance and maintenance activities, Keystone shall, and shall cause its contractor to, equip each of its vehicles, including off-road vehicles, with a hand held fire extinguisher, portable compact shovel and communication device such as a cell phone, in areas with coverage, or a radio capable of achieving prompt communication with emergency services.

34. In accordance with 49 C.F.R. 195, Keystone shall continue to evaluate and perform assessment activities regarding high consequence areas. Prior to Keystone commencing operation, all unusually sensitive areas as defined by 49 CFR 195.6 that may exist, whether currently marked on DOT's HCA maps or not, should be identified and added to the Emergency Response Plan and Integrity Management Plan. In its continuing assessment and evaluation of environmentally sensitive and high consequence areas, Keystone shall seek out and consider local knowledge, including the knowledge of the South Dakota Geological Survey, the Department of Game Fish and Parks and local landowners and governmental officials.

35. The evidence in the record demonstrates that in some reaches of the Project in southern Tripp County, the High Plains Aquifer is present at or very near ground surface and is overlain by highly permeable sands permitting the uninhibited infiltration of contaminants. This aquifer serves as the water source for several domestic farm wells near the pipeline as well as public water supply system wells located at some distance and upgradient from the pipeline route. Keystone shall identify the High Plains Aquifer area in southern Tripp County as a hydrologically sensitive area in its Integrity Management and Emergency Response Plans. Keystone shall similarly treat any other similarly vulnerable and beneficially useful surficial aquifers of which it becomes aware during construction and continuing route evaluation.

36. Prior to putting the Keystone Pipeline into operation, Keystone shall prepare, file with PHMSA and implement an emergency response plan as required under 49 CFR 194 and a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies as required under 49 CFR 195.402. Keystone shall also prepare and implement a written integrity management program in the manner and at such time as required under 49 CFR 195.452. At such time as Keystone files its Emergency Response Plan and

Integrity Management Plan with PHMSA or any other state or federal agency, it shall also file such documents with the Commission. The Commission's confidential filing rules found at ARSD 20:10:01:41 may be invoked by Keystone with respect to such filings to the same extent as with all other filings at the Commission. If information is filed as "confidential," any person desiring access to such materials or the Staff or the Commission may invoke the procedures of ARSD 20:10:01:41 through 20:10:01:43 to determine whether such information is entitled to confidential treatment and what protective provisions are appropriate for limited release of information found to be entitled to confidential treatment.

37. To facilitate periodic pipeline leak surveys during operation of the facilities in wetland areas, a corridor centered on the pipeline and up to 15 feet wide shall be maintained in an herbaceous state. Trees within 15 feet of the pipeline greater than 15 feet in height may be selectively cut and removed from the permanent right-of-way.

38. To facilitate periodic pipeline leak surveys in riparian areas, a corridor centered on the pipeline and up to 10 feet wide shall be maintained in an herbaceous state.

V. Environmental

39. Except to the extent waived by the owner or lessee in writing or to the extent the noise levels already exceed such standard, the noise levels associated with Keystone's pump stations and other noise-producing facilities will not exceed the L10=55dbA standard at the nearest occupied, existing residence, office, hotel/motel or non-industrial business not owned by Keystone. The point of measurement will be within 100 feet of the residence or business in the direction of the pump station or facility. Post-construction operational noise assessments will be completed by an independent third-party noise consultant, approved by the Commission, to show compliance with the noise level at each pump station or other noise-producing facility. The noise assessments will be performed in accordance with applicable American National Standards Institute standards. The results of the assessments will be filed with the Commission. In the event that the noise level exceeds the limit set forth in this condition at any pump station or other noise producing facility, Keystone shall promptly implement noise mitigation measures to bring the facility into compliance with the limits set forth in this condition and shall report to the Commission concerning the measures taken and the results of post-mitigation assessments demonstrating that the noise limits have been met.

40. At the request of any landowner or public water supply system that offers to provide the necessary access to Keystone over his/her property or easement(s) to perform the necessary work, Keystone shall replace at no cost to such landowner or public water supply system, any polyethylene water piping located within 500 feet of the Project with piping that is resistant to permeation by BTEX. Keystone shall not be required to replace that portion of any piping that passes through or under a basement wall or other wall of a home or other structure. At least forty-five (45) days prior to commencing construction, Keystone shall publish a notice in each newspaper of general circulation in each county through which the Project will be constructed advising landowners and public water supply systems of this condition.

41. Keystone shall follow all protection and mitigation efforts as identified by the US Fish and Wildlife Service ("USFWS") and SDGFP. Keystone shall identify all greater prairie chicken and greater sage and sharp-tailed grouse leks within the buffer distances from the construction right of way set forth for the species in the FEIS and Biological Assessment (BA) prepared by DOS and USFWS. In accordance with commitments in the FEIS and BA, Keystone shall avoid or restrict

construction activities as specified by USFWS within such buffer zones between March 1 and June 15 and for other species as specified by USFWS and SDGFP.

42. Keystone shall keep a record of drain tile system information throughout planning and construction, including pre-construction location of drain tiles. Location information shall be collected using a sub-meter accuracy global positioning system where available or, where not available by accurately documenting the pipeline station numbers of each exposed drain tile. Keystone shall maintain the drain tile location information and tile specifications and incorporate it into its Emergency Response and Integrity Management Plans where drains might be expected to serve as contaminant conduits in the event of a release. If drain tile relocation is necessary, the applicant shall work directly with landowner to determine proper location. The location of permanent drain tiles shall be noted on as-built maps. Qualified drain tile contractors shall be employed to repair drain tiles.

VI. Cultural and Paleontological Resources

43. In accordance with Application, Section 6.4, Keystone shall follow the "Unanticipated Discoveries Plan," as reviewed by the State Historical Preservation Office ("SHPO") and approved by the DOS and provide it to the Commission upon request. Ex TC-1.6.4, pp. 94-96; Ex S-3. If during construction, Keystone or its agents discover what may be an archaeological resource, cultural resource, historical resource or gravesite, Keystone or its contractors or agents shall immediately cease work at that portion of the site and notify the DOS, the affected landowner(s) and the SHPO. If the DOS and SHPO determine that a significant resource is present, Keystone shall develop a plan that is approved by the DOS and commenting/signatory parties to the Programmatic Agreement to salvage avoid or protect the archaeological resource. If such a plan will require a materially different route than that approved by the Commission, Keystone shall obtain Commission and landowner approval for the new route before proceeding with any further construction. Keystone shall be responsible for any costs that the landowner is legally obligated to incur as a consequence of the disturbance of a protected cultural resource as a result of Keystone's construction or maintenance activities.

44. Keystone shall implement and comply with the following procedures regarding paleontological resources:

a) Prior to commencing construction, Keystone shall conduct a literature review and records search, and consult with the BLM and Museum of Geology at the S.D. School of Mines and Technology ("SDSMT") to identify known fossil sites along the pipeline route and identify locations of surface exposures of paleontologically sensitive rock formations using the BLM's Potential Fossil Yield Classification system. Any area where trenching will occur into the Hell Creek Formation shall be considered a high probability area.

b) Keystone shall at its expense conduct a pre-construction field survey of each area identified by such review and consultation as a known site or high probability area within the construction ROW. Following BLM guidelines as modified by the provisions of Condition 44, including the use of BLM permitted paleontologists, areas with exposures of high sensitivity (PFYC Class 4) and very high sensitivity (PFYC Class 5) rock formations shall be subject to a 100% pedestrial field survey, while areas with exposures of moderately sensitive rock formations (PFYC Class 3) shall be spot-checked for occurrences of scientifically or economically significant surface fossils and evidence of subsurface fossils. Scientifically or economically significant surface fossils shall be avoided by the Project or mitigated by collecting them if avoidance is not feasible. Following BLM guidelines for the assessment

and mitigation of paleontological resources, scientifically significant paleontological resources are defined as rare vertebrate fossils that are identifiable to taxon and element, and common vertebrate fossils that are identifiable to taxon and element and that have scientific research value; and scientifically noteworthy occurrences of invertebrate, plant and trace fossils. Fossil localities are defined as the geographic and stratigraphic locations at which fossils are found.

c) Following the completion of field surveys, Keystone shall prepare and file with the Commission a paleontological resource mitigation plan. The mitigation plan shall specify monitoring locations, and include BLM permitted monitors and proper employee and contractor training to identify any paleontological resources discovered during construction and the procedures to be followed following such discovery. Paleontological monitoring will take place in areas within the construction ROW that are underlain by rock formations with high sensitivity (PFYC Class 4) and very high sensitivity (PFYC Class 5), and in areas underlain by rock formations with moderate sensitivity (PFYC Class 3) where significant fossils were identified during field surveys.

d) If during construction, Keystone or its agents discover what may be a paleontological resource of economic significance, or of scientific significance, as defined in subparagraph (b) above, Keystone or its contractors or agents shall immediately cease work at that portion of the site and, if on private land, notify the affected landowner(s). Upon such a discovery, Keystone's paleontological monitor will evaluate whether the discovery is of economic significance, or of scientific significance as defined in subparagraph (b) above. If an economically or scientifically significant paleontological resource is discovered on state land, Keystone will notify SDSMT and if on federal land, Keystone will notify the BLM or other federal agency. In no case shall Keystone return any excavated fossils to the trench. If a qualified and BLM-permitted paleontologist, in consultation with the landowner, BLM, or SDSMT determines that an economically or scientifically significant paleontological resource is present, Keystone shall develop a plan that is reasonably acceptable to the landowner(s), BLM, or SDSMT, as applicable, to accommodate the salvage or avoidance of the paleontological resource to protect or mitigate damage to the resource. The responsibility for conducting such measures and paying the costs associated with such measures, whether on private, state or federal land, shall be borne by Keystone to the same extent that such responsibility and costs would be required to borne by Keystone on BLM managed lands pursuant to BLM regulations and guidelines, including the BLM Guidelines for Assessment and Mitigation of Potential Impacts to Paleontological Resources, except to the extent factually inappropriate to the situation in the case of private land (e.g. museum curation costs would not be paid by Keystone in situations where possession of the recovered fossil(s) was turned over to the landowner as opposed to curation for the public). If such a plan will require a materially different route than that approved by the Commission, Keystone shall obtain Commission approval for the new route before proceeding with any further construction. Keystone shall, upon discovery and salvage of paleontological resources either during pre-construction surveys or construction and monitoring on private land, return any fossils in its possession to the landowner of record of the land on which the fossil is found. If on state land, the fossils and all associated data and documentation will be transferred to the SDSM; if on federal land, to the BLM.

e) To the extent that Keystone or its contractors or agents have control over access to such information, Keystone shall, and shall require its contractors and agents to, treat the locations of sensitive and valuable resources as confidential and limit public access to this information.

VII. Enforcement and Liability for Damage

45. Keystone shall repair or replace all property removed or damaged during all phases of construction and operation of the proposed transmission facility, including but not limited to, all fences, gates and utility, water supply, irrigation or drainage systems. Keystone shall compensate the owners for damages or losses that cannot be fully remedied by repair or replacement, such as lost productivity and crop and livestock losses or loss of value to a paleontological resource damaged by construction or other activities.

46. In the event that a person's well is contaminated as a result of construction or pipeline operation, Keystone shall pay all costs associated with finding and providing a permanent water supply that is at least of similar quality and quantity; and any other related damages, including but not limited to any consequences, medical or otherwise, related to water contamination.

47. Any damage that occurs as a result of soil disturbance on a persons' property shall be paid for by Keystone.

48. No person will be held responsible for a pipeline leak that occurs as a result of his/her normal farming practices over the top of or near the pipeline.

49. Keystone shall pay commercially reasonable costs and indemnify and hold the landowner harmless for any loss, damage, claim or action resulting from Keystone's use of the easement, including any resulting from any release of regulated substances or from abandonment of the facility, except to the extent such loss, damage claim or action results from the gross negligence or willful misconduct of the landowner or its agents.

50. The Commission's complaint process as set forth in ARSD 20:10:01 shall be available to landowners, other persons sustaining or threatened with damage or the consequences of Keystone's failure to abide by the conditions of this permit or otherwise having standing to obtain enforcement of the conditions of this Order and Permit.

Exhibit B

RULINGS ON PROPOSED FINDINGS OF FACT

Rulings on Applicants' Proposed Findings of Fact

As Applicant is the prevailing party, most of Applicant's Proposed Findings of Fact have been accepted in their general substance and incorporated in the Findings of Fact, with additions and modifications to reflect the Commission's understanding of the record.

Appendix: Cited Statutes

SDCL § 1-26-36

1-26-36. Weight given to agency findings--Disposition of case--Grounds for reversal or modification--Findings and conclusions--Costs

The court shall give great weight to the findings made and inferences drawn by an agency on questions of fact. The court may affirm the decision of the agency or remand the case for further proceedings. The court may reverse or modify the decision if substantial rights of the appellant have been prejudiced because the administrative findings, inferences, conclusions, or decisions are:

(1) In violation of constitutional or statutory provisions;

(2) In excess of the statutory authority of the agency;

(3) Made upon unlawful procedure;

(4) Affected by other error of law;

(5) Clearly erroneous in light of the entire evidence in the record; or

(6) Arbitrary or capricious or characterized by abuse of discretion or clearly unwarranted exercise of discretion.

A court shall enter its own findings of fact and conclusions of law or may affirm the findings and conclusions entered by the agency as part of its judgment. The circuit court may award costs in the amount and manner specified in chapter 15-17.

Credits

Source: SL 1966, ch 159, § 15 (7); SL 1972, ch 8, § 29; SL 1977, ch 13, § 16; SL 1978, ch 13, § 10; SL 1978, ch 17; SL 1983, ch 6, § 2.

SDCL § 15-6-26(b)

15-6-26(b). Scope of discovery

Unless otherwise limited by order of the court in accordance with these rules, the scope of discovery is as follows:

(1) In general. Parties may obtain discovery regarding any matter, not privileged, which is relevant to the subject matter involved in the pending action, whether it relates to the claim or defense of the party seeking discovery or to the claim or defense of any other party, including the existence, description, nature, custody, condition and location of any books, documents, or other tangible things and the identity and location of persons having knowledge of any discoverable matter. It is not ground for objection that the information sought will be inadmissible at the trial if the information sought appears reasonably calculated to lead to the discovery of admissible evidence.

The frequency or extent of use of the discovery methods set forth in § 15-6-26(a) shall be limited by the court if it determines that:

(A)(i) the discovery sought is unreasonably cumulative or duplicative, or is obtainable from some other source that is more convenient, less burdensome, or less expensive;

(ii) the party seeking discovery has had ample opportunity by discovery in the action to obtain the information sought; or

(iii) discovery is unduly burdensome or expensive, taking into account the needs of the case, the amount in controversy limitations on the party's resources, and the importance of the issues at stake in the litigation.

The court may act upon its own initiative after reasonable notice or pursuant to a motion under § 15-6-26(c).

(2) Insurance agreements. A party may obtain discovery of the existence and contents of any insurance agreement under which any person carrying on an insurance business may be liable to satisfy part or all of a judgment which may be entered in the action or to indemnify or reimburse for payments made to satisfy the judgment. Information concerning the insurance agreement is not by reason of disclosure admissible in evidence at trial. For purposes of this paragraph, an application for insurance shall not be treated as part of an insurance agreement.

(3) Trial preparation: materials. Subject to the provisions of subdivision (4) of this section, a party may obtain discovery of documents and tangible things otherwise discoverable under subdivision (1) of this section and prepared in anticipation of litigation or for trial by or for another party or by or for that other party's representative (including such other party's attorney, consultant, surety, indemnitor, insurer, or agent) only upon a showing that the party seeking discovery has substantial need of the materials in the preparation of the party's case and that the party is unable without undue hardship to obtain the substantial equivalent of the materials by other means. In ordering discovery of such materials when the required showing has been made, the court shall protect against disclosure of the mental impressions, conclusions, opinions, or legal theories of an attorney or other representative of a party concerning the litigation.

A party may obtain without the required showing a statement concerning the action or its subject matter previously made by that party. Upon request, a person not a party may obtain without the required showing a statement concerning the action or its subject matter previously made by that person. If the request is refused, the person may move for a court order. The provisions of subdivision 15-6-37(a)(4) apply to award of expenses incurred in relation to the motion. For purposes of this paragraph, a statement previously made is (A) a written statement signed or otherwise adopted or approved by the person making it, or (B) a stenographic, mechanical, electrical, or other recording, or a transcription thereof, which is a substantially verbatim recital of an oral statement by the person making it and contemporaneously recorded.

(4) Trial preparation: experts. Discovery of facts known and opinions held by experts, otherwise discoverable under the provisions of subdivision (1) of this rule and acquired or developed in anticipation of litigation or for trial may be obtained only as follows:

(A)(i) A party may through interrogatories require any other party to identify each person whom the other party expects to call as an expert witness at trial, to state the subject matter on which the expert is expected to testify, and to state the substance of the facts and opinions to which the expert is expected to testify and a summary of the grounds for each opinion.

(ii) Upon motion, the court may order further discovery by other means, subject to such restrictions as to scope and such provisions, pursuant to subdivision (4)(C) of this section, concerning fees and expenses as the court may deem appropriate.

(B) Trial-preparation for draft reports or disclosures. Subdivision 15-6-26(b)(3) protects drafts of any report prepared by any witness who is retained or specially employed to provide expert testimony in the case or one whose duties as the party's employee regularly involves giving expert testimony, regardless of the form in which the draft is recorded.

(C) Trial preparation protection for communication between a party's attorney and expert witnesses. Subdivision 15-6-26(b)(3) protects communications between the party's attorney and any witness who is

retained or specially employed to provide expert testimony in the case or one whose duties as the party's employee regularly involve giving expert testimony, regardless of the form of the communications, except to the extent that the communications:

(i) Relate to compensation for the expert's study or testimony;

(ii) Identify facts or data that the party's attorney provided and that the expert considered in forming the opinion to be expressed; or

(iii) Identify assumptions that the party's attorney provided and that the expert relied on in forming the opinions to be expressed.

(D) A party may discover facts known or opinions held by an expert who has been retained or specially employed by another party in anticipation of litigation or preparation for trial and who is not expected to be called as a witness at trial, only as provided in § 15-6-35(b) or upon a showing of exceptional circumstances under which it is impracticable for the party seeking discovery to obtain facts or opinions on the same subject by other means.

(E) Unless manifest injustice would result, (i) the court shall require that the party seeking discovery pay the expert a reasonable fee for time spent in responding to discovery under subdivisions (4)(A)(ii) and (4)(B) of this section; and (ii) with respect to discovery obtained under subdivision (4)(A) (ii) of this section the court may require, and with respect to discovery obtained under subdivision (4)(B) of this section the court shall require, the party seeking discovery to pay the other party a fair portion of the fees and expenses reasonably incurred by the latter party in obtaining facts and opinions from the expert.

(5) Claims of privilege or protection of trial preparation materials. When a party withholds information otherwise discoverable under these rules by claiming that it is privileged or subject to protection as trial preparation material, the party shall make the claim expressly and shall describe the nature of the documents, communications, or things not produced in a manner that, without revealing information itself privileged or protected, will enable other parties to assess the applicability of the privilege or protection.

Credits

Source: SDC 1939 & Supp 1960, § 36.0505; SD RCP, Rule 26 (b), as adopted by Sup. Ct. Order March 29, 1966, effective July 1, 1966; Supreme Court Rule 76-3, § 2; SL 1993, ch 385 (Supreme Court Rule 93-2); SL 2006, ch 288 (Supreme Court Rule 06-14), eff. July 1, 2006; SL 2011, ch 244 (Supreme Court Rule 11-01), eff. July 1, 2011.

SDCL § 15-26A-3

15-26A-3. Judgments and orders of circuit courts from which appeal may be taken

Appeals to the Supreme Court from the circuit court may be taken as provided in this title from:

(1) A judgment;

(2) An order affecting a substantial right, made in any action, when such order in effect determines the action and prevents a judgment from which an appeal might be taken;

(3) An order granting a new trial;

(4) Any final order affecting a substantial right, made in special proceedings, or upon a summary application in an action after judgment;

(5) An order which grants, refuses, continues, dissolves, or modifies any of the remedies of arrest and bail, claim and delivery, injunction, attachment, garnishment, receivership, or deposit in court;

(6) Any other intermediate order made before trial, any appeal under this subdivision, however, being not a matter of right but of sound judicial discretion, and to be allowed by the Supreme Court in the manner provided by rules of such court only when the court considers that the ends of justice will be served by determination of the questions involved without awaiting the final determination of the action or proceeding; or

(7) An order entered on a motion pursuant to § 15-6-11.

Credits

Source: SDC 1939 & Supp 1960, § 33.0701; SDCL § 15-26-1; SL 1971, ch 151, § 2; SL 1986, ch 160, § 2.

SDCL § 49-41B-22

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.

Credits

Source: SL 1977, ch 390, § 17; SL 1981, ch 340, § 3; SL 1991, ch 386, § 6.

SDCL § 49-41B-27

49-41B-27. Construction, expansion, and improvement of facilities

Utilities which have acquired a permit in accordance with the provisions of this chapter may proceed to improve, expand, or construct the facility for the intended purposes at any time, subject to the provisions of this chapter; provided, however, that if such construction, expansion and improvement commences more than four years after a permit has been issued, then the utility must certify to the Public Utilities Commission that such facility continues to meet the conditions upon which the permit was issued.

Credits

Source: SL 1977, ch 390, § 29.

SDCL § 49-41B-33

49-41B-33. Revocation or suspension of permit--Grounds

Appendix: Cited Statutes

A permit may be revoked or suspended by the Public Utilities Commission for:

(1) Any misstatement of a material fact in the application or in accompanying statements or studies required of the applicant, if a correct statement would have caused the commission to refuse to grant a permit; or

(2) Failure to comply with the terms or conditions of the permit; or

(3) Violation of any material provision of this chapter or the rules promulgated thereunder.

Credits

Source: SL 1977, ch 390, § 27.

Appendix – Cited Regulations

49 C.F.R. § 195.452

§ 195.452 Pipeline integrity management in high consequence areas.

(a) Which pipelines are covered by this section? This section applies to each hazardous liquid pipeline and carbon dioxide pipeline that could affect a high consequence area, including any pipeline located in a high consequence area unless the operator effectively demonstrates by risk assessment that the pipeline could not affect the area. (Appendix C of this part provides guidance on determining if a pipeline could affect a high consequence area.) Covered pipelines are categorized as follows:
(1) Category 1 includes pipelines existing on May 29, 2001, that were owned or operated by an operator who owned or operated a total of 500 or more miles of pipeline subject to this part.
(2) Category 2 includes pipelines existing on May 29, 2001, that were owned or operated by an operator who owned or operated less than 500 miles of pipeline subject to this part.
(3) Category 3 includes pipelines constructed or converted after May 29, 2001.
(4) Low stress pipelines as specified in § 195.12.

(b) What program and practices must operators use to manage pipeline integrity? Each operator of a pipeline covered by this section must:
(1) Develop a written integrity management program that addresses the risks on each segment of pipeline in the first column of the following table not later than the date in the second column:

Pipeline	Date
Category 1	March 31, 2002.
Category 2	February 18, 2003.
Category 3	1 year after the date the pipeline begins operation.

(2) Include in the program an identification of each pipeline or pipeline segment in the first column of the following table not later than the date in the second column:

Pipeline	Date
Category 1	December 31, 2001.
Category 2	November 18, 2002.
Category 3	Date the pipeline begins operation.

(3) Include in the program a plan to carry out baseline assessments of line pipe as required by paragraph (c) of this section.
(4) Include in the program a framework that—
(i) Addresses each element of the integrity management program under paragraph (f) of this section, including continual integrity assessment and evaluation under paragraph (j) of this section; and
(ii) Initially indicates how decisions will be made to implement each element.
(5) Implement and follow the program.
(6) Follow recognized industry practices in carrying out this section, unless—
(i) This section specifies otherwise; or
(ii) The operator demonstrates that an alternative practice is supported by a reliable engineering evaluation and provides an equivalent level of public safety and environmental protection.

(c) What must be in the baseline assessment plan?
(1) An operator must include each of the following elements in its written baseline assessment plan:
(i) The methods selected to assess the integrity of the line pipe. An operator must assess the integrity of the line pipe by any of the following methods. The methods an operator selects to assess low frequency electric

resistance welded pipe or lap welded pipe susceptible to longitudinal seam failure must be capable of assessing seam integrity and of detecting corrosion and deformation anomalies.
(A) In–Line Inspection tool or tools capable of detecting corrosion and deformation anomalies, including dents, gouges, and grooves. For pipeline segments that are susceptible to cracks (pipe body and weld seams), an operator must use an in-line inspection tool or tools capable of detecting crack anomalies. When performing an assessment using an In–Line Inspection Tool, an operator must comply with § 195.591;
(B) Pressure test conducted in accordance with subpart E of this part;
(C) External corrosion direct assessment in accordance with § 195.588; or
(D) Other technology that the operator demonstrates can provide an equivalent understanding of the condition of the line pipe. An operator choosing this option must notify the Office of Pipeline Safety (OPS) 90 days before conducting the assessment, by sending a notice to the address or facsimile number specified in paragraph (m) of this section.
(ii) A schedule for completing the integrity assessment;
(iii) An explanation of the assessment methods selected and evaluation of risk factors considered in establishing the assessment schedule.
(2) An operator must document, prior to implementing any changes to the plan, any modification to the plan, and reasons for the modification.

(d) When must operators complete baseline assessments? Operators must complete baseline assessments as follows:
(1) Time periods. Complete assessments before the following deadlines:

If the pipeline is:	Then complete baseline assessments not later than the following date according to a schedule that prioritizes assessments:	And assess at least 50 percent of the line on an expedited basis, beginning with t highest risk pipe, not later than:
Category 1	March 31, 2008	September 30, 2004.
Category 2	February 17, 2009	August 16, 2005.
Category 3	Date the pipeline begins operation	Not applicable.

(2) Prior assessment. To satisfy the requirements of paragraph (c)(1)(i) of this section for pipelines in the first column of the following table, operators may use integrity assessments conducted after the date in the second column, if the integrity assessment method complies with this section. However, if an operator uses this prior assessment as its baseline assessment, the operator must reassess the line pipe according to paragraph (j)(3) of this section. The table follows:

Pipeline	Date
Category 1	January 1, 1996.
Category 2	February 15, 1997.

(3) Newly-identified areas.
(i) When information is available from the information analysis (see paragraph (g) of this section), or from Census Bureau maps, that the population density around a pipeline segment has changed so as to fall within the definition in § 195.450 of a high population area or other populated area, the operator must incorporate the area into its baseline assessment plan as a high consequence area within one year from the date the area is identified. An operator must complete the baseline assessment of any line pipe that could affect the newly-identified high consequence area within five years from the date the area is identified.
(ii) An operator must incorporate a new unusually sensitive area into its baseline assessment plan within one year from the date the area is identified. An operator must complete the baseline assessment of any line pipe that could affect the newly-identified high consequence area within five years from the date the area is identified.

(e) What are the risk factors for establishing an assessment schedule (for both the baseline and continual integrity assessments)?
(1) An operator must establish an integrity assessment schedule that prioritizes pipeline segments for assessment (see paragraphs (d)(1) and (j)(3) of this section). An operator must base the assessment schedule on all risk factors that reflect the risk conditions on the pipeline segment. The factors an operator must consider include, but are not limited to:
(i) Results of the previous integrity assessment, defect type and size that the assessment method can detect, and defect growth rate;
(ii) Pipe size, material, manufacturing information, coating type and condition, and seam type;
(iii) Leak history, repair history and cathodic protection history;
(iv) Product transported;
(v) Operating stress level;
(vi) Existing or projected activities in the area;
(vii) Local environmental factors that could affect the pipeline (e.g., corrosivity of soil, subsidence, climatic);
(viii) Geo-technical hazards; and
(ix) Physical support of the segment such as by a cable suspension bridge.
(2) Appendix C of this part provides further guidance on risk factors.

(f) What are the elements of an integrity management program? An integrity management program begins with the initial framework. An operator must continually change the program to reflect operating experience, conclusions drawn from results of the integrity assessments, and other maintenance and surveillance data, and evaluation of consequences of a failure on the high consequence area. An operator must include, at minimum, each of the following elements in its written integrity management program:
(1) A process for identifying which pipeline segments could affect a high consequence area;
(2) A baseline assessment plan meeting the requirements of paragraph (c) of this section;
(3) An analysis that integrates all available information about the integrity of the entire pipeline and the consequences of a failure (see paragraph (g) of this section);
(4) Criteria for remedial actions to address integrity issues raised by the assessment methods and information analysis (see paragraph (h) of this section);
(5) A continual process of assessment and evaluation to maintain a pipeline's integrity (see paragraph (j) of this section);
(6) Identification of preventive and mitigative measures to protect the high consequence area (see paragraph (i) of this section);
(7) Methods to measure the program's effectiveness (see paragraph (k) of this section);
(8) A process for review of integrity assessment results and information analysis by a person qualified to evaluate the results and information (see paragraph (h)(2) of this section).

(g) What is an information analysis? In periodically evaluating the integrity of each pipeline segment (paragraph (j) of this section), an operator must analyze all available information about the integrity of the entire pipeline and the consequences of a failure. This information includes:
(1) Information critical to determining the potential for, and preventing, damage due to excavation, including current and planned damage prevention activities, and development or planned development along the pipeline segment;
(2) Data gathered through the integrity assessment required under this section;
(3) Data gathered in conjunction with other inspections, tests, surveillance and patrols required by this Part, including, corrosion control monitoring and cathodic protection surveys; and
(4) Information about how a failure would affect the high consequence area, such as location of the water intake.

(h) What actions must an operator take to address integrity issues?—
(1) General requirements. An operator must take prompt action to address all anomalous conditions the operator discovers through the integrity assessment or information analysis. In addressing all conditions, an operator must evaluate all anomalous conditions and remediate those that could reduce a pipeline's integrity.

An operator must be able to demonstrate that the remediation of the condition will ensure the condition is unlikely to pose a threat to the long-term integrity of the pipeline. An operator must comply with § 195.422 when making a repair.

(i) Temporary pressure reduction. An operator must notify PHMSA, in accordance with paragraph (m) of this section, if the operator cannot meet the schedule for evaluation and remediation required under paragraph (h)(3) of this section and cannot provide safety through a temporary reduction in operating pressure.
(ii) Long-term pressure reduction. When a pressure reduction exceeds 365 days, the operator must notify PHMSA in accordance with paragraph (m) of this section and explain the reasons for the delay. An operator must also take further remedial action to ensure the safety of the pipeline.
(2) Discovery of condition. Discovery of a condition occurs when an operator has adequate information about the condition to determine that the condition presents a potential threat to the integrity of the pipeline. An operator must promptly, but no later than 180 days after an integrity assessment, obtain sufficient information about a condition to make that determination, unless the operator can demonstrate that the 180–day period is impracticable.
(3) Schedule for evaluation and remediation. An operator must complete remediation of a condition according to a schedule prioritizing the conditions for evaluation and remediation. If an operator cannot meet the schedule for any condition, the operator must explain the reasons why it cannot meet the schedule and how the changed schedule will not jeopardize public safety or environmental protection.
(4) Special requirements for scheduling remediation—
(i) Immediate repair conditions. An operator's evaluation and remediation schedule must provide for immediate repair conditions. To maintain safety, an operator must temporarily reduce the operating pressure or shut down the pipeline until the operator completes the repair of these conditions. An operator must calculate the temporary reduction in operating pressure using the formulas referenced in paragraph (h)(4)(i)(B) of this section. If no suitable remaining strength calculation method can be identified, an operator must implement a minimum 20 percent or greater operating pressure reduction, based on actual operating pressure for two months prior to the date of inspection, until the anomaly is repaired. An operator must treat the following conditions as immediate repair conditions:
(A) Metal loss greater than 80% of nominal wall regardless of dimensions.
(B) A calculation of the remaining strength of the pipe shows a predicted burst pressure less than the established maximum operating pressure at the location of the anomaly. Suitable remaining strength calculation methods include, but are not limited to, ASME/ANSI B31G (incorporated by reference, see § 195.3) and PRCI PR–3–805 (R–STRENG) (incorporated by reference, see § 195.3).
(C) A dent located on the top of the pipeline (above the 4 and 8 o'clock positions) that has any indication of metal loss, cracking or a stress riser.
(D) A dent located on the top of the pipeline (above the 4 and 8 o'clock positions) with a depth greater than 6% of the nominal pipe diameter.
(E) An anomaly that in the judgment of the person designated by the operator to evaluate the assessment results requires immediate action.
(ii) 60–day conditions. Except for conditions listed in paragraph (h)(4)(i) of this section, an operator must schedule evaluation and remediation of the following conditions within 60 days of discovery of condition.
(A) A dent located on the top of the pipeline (above the 4 and 8 o'clock positions) with a depth greater than 3% of the pipeline diameter (greater than 0.250 inches in depth for a pipeline diameter less than Nominal Pipe Size (NPS) 12).
(B) A dent located on the bottom of the pipeline that has any indication of metal loss, cracking or a stress riser.
(iii) 180–day conditions. Except for conditions listed in paragraph (h)(4)(i) or (ii) of this section, an operator must schedule evaluation and remediation of the following within 180 days of discovery of the condition:
(A) A dent with a depth greater than 2% of the pipeline's diameter (0.250 inches in depth for a pipeline diameter less than NPS 12) that affects pipe curvature at a girth weld or a longitudinal seam weld.
(B) A dent located on the top of the pipeline (above 4 and 8 o'clock position) with a depth greater than 2% of the pipeline's diameter (0.250 inches in depth for a pipeline diameter less than NPS 12).
(C) A dent located on the bottom of the pipeline with a depth greater than 6% of the pipeline's diameter.

(D) A calculation of the remaining strength of the pipe shows an operating pressure that is less than the current established maximum operating pressure at the location of the anomaly. Suitable remaining strength calculation methods include, but are not limited to, ASME/ANSI B31G and PRCI PR–3–805 (R–STRENG).
(E) An area of general corrosion with a predicted metal loss greater than 50% of nominal wall.
(F) Predicted metal loss greater than 50% of nominal wall that is located at a crossing of another pipeline, or is in an area with widespread circumferential corrosion, or is in an area that could affect a girth weld.
(G) A potential crack indication that when excavated is determined to be a crack.
(H) Corrosion of or along a longitudinal seam weld.
(I) A gouge or groove greater than 12.5% of nominal wall.
(iv) Other conditions. In addition to the conditions listed in paragraphs (h)(4)(i) through (iii) of this section, an operator must evaluate any condition identified by an integrity assessment or information analysis that could impair the integrity of the pipeline, and as appropriate, schedule the condition for remediation. Appendix C of this part contains guidance concerning other conditions that an operator should evaluate.
(i) What preventive and mitigative measures must an operator take to protect the high consequence area?—
(1) General requirements. An operator must take measures to prevent and mitigate the consequences of a pipeline failure that could affect a high consequence area. These measures include conducting a risk analysis of the pipeline segment to identify additional actions to enhance public safety or environmental protection. Such actions may include, but are not limited to, implementing damage prevention best practices, better monitoring of cathodic protection where corrosion is a concern, establishing shorter inspection intervals, installing EFRDs on the pipeline segment, modifying the systems that monitor pressure and detect leaks, providing additional training to personnel on response procedures, conducting drills with local emergency responders and adopting other management controls.
(2) Risk analysis criteria. In identifying the need for additional preventive and mitigative measures, an operator must evaluate the likelihood of a pipeline release occurring and how a release could affect the high consequence area. This determination must consider all relevant risk factors, including, but not limited to:
(i) Terrain surrounding the pipeline segment, including drainage systems such as small streams and other smaller waterways that could act as a conduit to the high consequence area;
(ii) Elevation profile;
(iii) Characteristics of the product transported;
(iv) Amount of product that could be released;
(v) Possibility of a spillage in a farm field following the drain tile into a waterway;
(vi) Ditches along side a roadway the pipeline crosses;
(vii) Physical support of the pipeline segment such as by a cable suspension bridge;
(viii) Exposure of the pipeline to operating pressure exceeding established maximum operating pressure.
(3) Leak detection. An operator must have a means to detect leaks on its pipeline system. An operator must evaluate the capability of its leak detection means and modify, as necessary, to protect the high consequence area. An operator's evaluation must, at least, consider, the following factors—length and size of the pipeline, type of product carried, the pipeline's proximity to the high consequence area, the swiftness of leak detection, location of nearest response personnel, leak history, and risk assessment results.
(4) Emergency Flow Restricting Devices (EFRD). If an operator determines that an EFRD is needed on a pipeline segment to protect a high consequence area in the event of a hazardous liquid pipeline release, an operator must install the EFRD. In making this determination, an operator must, at least, consider the following factors—the swiftness of leak detection and pipeline shutdown capabilities, the type of commodity carried, the rate of potential leakage, the volume that can be released, topography or pipeline profile, the potential for ignition, proximity to power sources, location of nearest response personnel, specific terrain between the pipeline segment and the high consequence area, and benefits expected by reducing the spill size.

(j) What is a continual process of evaluation and assessment to maintain a pipeline's integrity?—
(1) General. After completing the baseline integrity assessment, an operator must continue to assess the line pipe at specified intervals and periodically evaluate the integrity of each pipeline segment that could affect a high consequence area.
(2) Evaluation. An operator must conduct a periodic evaluation as frequently as needed to assure pipeline integrity. An operator must base the frequency of evaluation on risk factors specific to its pipeline, including

the factors specified in paragraph (e) of this section. The evaluation must consider the results of the baseline and periodic integrity assessments, information analysis (paragraph (g) of this section), and decisions about remediation, and preventive and mitigative actions (paragraphs (h) and (i) of this section).
(3) Assessment intervals. An operator must establish five-year intervals, not to exceed 68 months, for continually assessing the line pipe's integrity. An operator must base the assessment intervals on the risk the line pipe poses to the high consequence area to determine the priority for assessing the pipeline segments. An operator must establish the assessment intervals based on the factors specified in paragraph (e) of this section, the analysis of the results from the last integrity assessment, and the information analysis required by paragraph (g) of this section.
(4) Variance from the 5–year intervals in limited situations—
(i) Engineering basis. An operator may be able to justify an engineering basis for a longer assessment interval on a segment of line pipe. The justification must be supported by a reliable engineering evaluation combined with the use of other technology, such as external monitoring technology, that provides an understanding of the condition of the line pipe equivalent to that which can be obtained from the assessment methods allowed in paragraph (j)(5) of this section. An operator must notify OPS 270 days before the end of the five-year (or less) interval of the justification for a longer interval, and propose an alternative interval. An operator must send the notice to the address specified in paragraph (m) of this section.
(ii) Unavailable technology. An operator may require a longer assessment period for a segment of line pipe (for example, because sophisticated internal inspection technology is not available). An operator must justify the reasons why it cannot comply with the required assessment period and must also demonstrate the actions it is taking to evaluate the integrity of the pipeline segment in the interim. An operator must notify OPS 180 days before the end of the five-year (or less) interval that the operator may require a longer assessment interval, and provide an estimate of when the assessment can be completed. An operator must send a notice to the address specified in paragraph (m) of this section.
(5) Assessment methods. An operator must assess the integrity of the line pipe by any of the following methods. The methods an operator selects to assess low frequency electric resistance welded pipe or lap welded pipe susceptible to longitudinal seam failure must be capable of assessing seam integrity and of detecting corrosion and deformation anomalies.
(i) In–Line Inspection tool or tools capable of detecting corrosion and deformation anomalies, including dents, gouges, and grooves. For pipeline segments that are susceptible to cracks (pipe body and weld seams), an operator must use an in-line inspection tool or tools capable of detecting crack anomalies. When performing an assessment using an In–Line Inspection tool, an operator must comply with § 195.591;
(ii) Pressure test conducted in accordance with subpart E of this part;
(iii) External corrosion direct assessment in accordance with § 195.588; or
(iv) Other technology that the operator demonstrates can provide an equivalent understanding of the condition of the line pipe. An operator choosing this option must notify OPS 90 days before conducting the assessment, by sending a notice to the address or facsimile number specified in paragraph (m) of this section.

(k) What methods to measure program effectiveness must be used? An operator's program must include methods to measure whether the program is effective in assessing and evaluating the integrity of each pipeline segment and in protecting the high consequence areas. See Appendix C of this part for guidance on methods that can be used to evaluate a program's effectiveness.
(l) What records must an operator keep to demonstrate compliance?
(1) An operator must maintain, for the useful life of the pipeline, records that demonstrate compliance with the requirements of this subpart. At a minimum, an operator must maintain the following records for review during an inspection:
(i) A written integrity management program in accordance with paragraph (b) of this section.
(ii) Documents to support the decisions and analyses, including any modifications, justifications, deviations and determinations made, variances, and actions taken, to implement and evaluate each element of the integrity management program listed in paragraph (f) of this section.
(2) See Appendix C of this part for examples of records an operator would be required to keep.
(m) How does an operator notify PHMSA? An operator must provide any notification required by this section by:

(1) Sending the notification by electronic mail to InformationResourcesManager@dot.gov; or
(2) Sending the notification by mail to ATTN: Information Resources Manager, DOT/PHMSA/OPS, East Building, 2nd Floor, E22–321, 1200 New Jersey Ave SE., Washington, DC 20590.

Credits

[Amdt. 195–70, 65 FR 75406, Dec. 1, 2000; 66 FR 9532, Feb. 8, 2001; Amdt. 195–74, 67 FR 1660, 1661, Jan. 14, 2002; Amdt. 195–76, 67 FR 2143, Jan. 16, 2002; 67 FR 46911, July 17, 2002; 70 FR 11140, March 8, 2005; Amdt. 195–85, 70 FR 61576, Oct. 25, 2005; Amdt. 195–87, 72 FR 39017, July 17, 2007; 73 FR 16571, March 28, 2008; 73 FR 31646, June 3, 2008; Amdt. 195–94, 75 FR 48607, Aug. 11, 2010; Amdt. 195–99, 80 FR 188, Jan. 5, 2015; Amdt. 195–100, 80 FR 12781, March 11, 2015; Amdt. 195–101, 82 FR 7999, Jan. 23, 2017]
SOURCE: Amdt. 195–22, 46 FR 38360, July 27, 1981; 53 FR 24950, July 1, 1988; 59 FR 17281, April 12, 1994; 59 FR 41260, Aug. 11, 1994; Amdt. 195–54, 60 FR 14650, March 20, 1995; Amdt. 195–55, 61 FR 18518, April 26, 1996; Amdt. 195–70, 65 FR 75405, Dec. 1, 2000; 66 FR 9532, Feb. 8, 2001; 70 FR 8302, Feb. 18, 2005; Amdt. 195–92, 74 FR 62506, Nov. 30, 2009; Amdt. 195–93, 74 FR 63328, Dec. 3, 2009; Amdt. 195–100, 80 FR 12779, March 11, 2015, unless otherwise noted.
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Current through Sept. 14, 2017; 82 FR 43194.

ARSD 20:10:01:15.01

20:10:01:15.01. Burden in contested case proceeding.

In any contested case proceeding, the complainant, counterclaimant, applicant, or petitioner has the burden of going forward with presentation of evidence unless otherwise ordered by the commission. The complainant, counterclaimant, applicant, or petitioner has the burden of proof as to factual allegations which form the basis of the complaint, counterclaim, application, or petition. In a complaint proceeding, the respondent has the burden of proof with respect to affirmative defenses.

Credits

Source: 2 SDR 56, effective February 2, 1976; transferred from § 20:10:14:16, 12 SDR 85, effective November 24, 1985; 12 SDR 151, 12 SDR 155, effective July 1, 1986; 33 SDR 107, effective December 26, 2006.

General Authority: SDCL 49-1-11(2),(4), 49-34A-4.

Law Implemented: SDCL 49-1-11(2),(4), 49-34A-61.

Current through rules published in the South Dakota register dated July 31, 2017.

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The theory of economic regulation

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The potential uses of public resources and powers to improve the economic status of economic groups (such as industries and occupations) are analyzed to provide a scheme of the demand for regulation. The characteristics of the political process which allow relatively small groups to obtain such regulation is then sketched to provide elements of a theory of supply of regulation. A variety of empirical evidence and illustration is also presented.

■ The state—the machinery and power of the state—is a potential resource or threat to every industry in the society. With its power to prohibit or compel, to take or give money, the state can and does selectively help or hurt a vast number of industries. That political juggernaut, the petroleum industry, is an immense consumer of political benefits, and simultaneously the underwriters of marine insurance have their more modest repast. The central tasks of the theory of economic regulation are to explain who will receive the benefits or burdens of regulation, what form regulation will take, and the effects of regulation upon the allocation of resources.

Regulation may be actively sought by an industry, or it may be thrust upon it. A central thesis of this paper is that, as a rule, regulation is acquired by the industry and is designed and operated primarily for its benefit. There are regulations whose net effects upon the regulated industry are undeniably onerous; a simple example is the differentially heavy taxation of the industry's product (whiskey, playing cards). These onerous regulations, however, are exceptional and can be explained by the same theory that explains beneficial (we may call it "acquired") regulation.

Two main alternative views of the regulation of industry are widely held. The first is that regulation is instituted primarily for the protection and benefit of the public at large or some large subclass of the public. In this view, the regulations which injure the public—as when the oil import quotas increase the cost of petroleum products to America by $5 billion or more a year—are costs of some social goal (here, national defense) or, occasionally, perversions of the regulatory philosophy. The second view is essentially that the political process defies rational explanation: "politics" is an imponderable, a constantly and unpredictably shifting mixture of forces of the most diverse nature, comprehending acts of great moral virtue (the emancipation of slaves) and of the most vulgar venality (the congressman feathering his own nest).

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why does not the powerful industry which obtained this expensive program instead choose direct cash subsidies from the public treasury? The "protection of the public" theory of regulation must say that the choice of import quotas is dictated by the concern of the federal government for an adequate domestic supply of petroleum in the event of war—a remark calculated to elicit uproarious laughter at the Petroleum Club. Such laughter aside, if national defense were the goal of the quotas, a tariff would be a more economical instrument of policy: it would retain the profits of exclusion for the treasury. The non-rationalist view would explain the policy by the inability of consumers to measure the cost to them of the import quotas, and hence their willingness to pay $5 billion in higher prices rather than the $2.5 billion in cash that would be equally attractive to the industry. Our profit-maximizing theory says that the explanation lies in a different direction: the present members of the refining industries would have to share a cash subsidy with all new entrants into the refining industry.[1] Only when the elasticity of supply of an industry is small will the industry prefer cash to controls over entry or output.

This question, why does an industry solicit the coercive powers of the state rather than its cash, is offered only to illustrate the approach of the present paper. We assume that political systems are rationally devised and rationally employed, which is to say that they are appropriate instruments for the fulfillment of desires of members of the society. This is not to say that the state will serve any person's concept of the public interest: indeed the problem of regulation is the problem of discovering when and why an industry (or other group of like-minded people) is able to use the state for its purposes, or is singled out by the state to be used for alien purposes.

1. What benefits can a state provide to an industry?

■ The state has one basic resource which in pure principle is not shared with even the mightiest of its citizens: the power to coerce. The state can seize money by the only method which is permitted by the laws of a civilized society, by taxation. The state can ordain the physical movements of resources and the economic decisions of households and firms without their consent. These powers provide the possibilities for the utilization of the state by an industry to increase its profitability. The main policies which an industry (or occupation) may seek of the state are four.

The most obvious contribution that a group may seek of the government is a direct subsidy of money. The domestic airlines received "air mail" subsidies (even if they did not carry mail) of $1.5 billion through 1968. The merchant marine has received construction and operation subsidies reaching almost $3 billion since World War II. The education industry has long shown a masterful skill in obtaining public funds: for example, universities and colleges have received federal funds exceeding $3 billion annually in recent years, as well as subsidized loans for dormitories and other construction. The veterans of wars have often received direct cash bonuses.

[1] The domestic producers of petroleum, who also benefit from the import quota, would find a tariff or cash payment to domestic producers equally attractive. If their interests alone were consulted, import quotas would be auctioned off instead of being given away.

We have already sketched the main explanation for the fact that an industry with power to obtain governmental favors usually does not use this power to get money: unless the list of beneficiaries can be limited by an acceptable device, whatever amount of subsidies the industry can obtain will be dissipated among a growing number of rivals. The airlines quickly moved away from competitive bidding for air mail contracts to avoid this problem.[2] On the other hand, the premier universities have not devised a method of excluding other claimants for research funds, and in the long run they will receive much-reduced shares of federal research monies.

The second major public resource commonly sought by an industry is control over entry by new rivals. There is considerable, not to say excessive, discussion in economic literature of the rise of peculiar price policies (limit prices), vertical integration, and similar devices to retard the rate of entry of new firms into oligopolistic industries. Such devices are vastly less efficacious (economical) than the certificate of convenience and necessity (which includes, of course, the import and production quotas of the oil and tobacco industries).

The diligence with which the power of control over entry will be exercised by a regulatory body is already well known. The Civil Aeronautics Board has not allowed a single new trunk line to be launched since it was created in 1938. The power to insure new banks has been used by the Federal Deposit Insurance Corporation to reduce the rate of entry into commercial banking by 60 percent.[3] The interstate motor carrier history is in some respects even more striking, because no even ostensibly respectable case for restriction on entry can be developed on grounds of scale economies (which are in turn adduced to limit entry for safety or economy of operation). The number of federally licensed common carriers is shown in Figure 1: the immense growth of the freight hauled by trucking common carriers has been associated with a steady secular decline of numbers of such carriers. The number of applications for new certificates has been in excess of 5000 annually in recent years: a rigorous proof that hope springs eternal in an aspiring trucker's breast.

We propose the general hypothesis: every industry or occupation that has enough political power to utilize the state will seek to control entry. In addition, the regulatory policy will often be so fashioned as to retard the rate of growth of new firms. For example, no new savings and loan company may pay a dividend rate higher than that prevailing in the community in its endeavors to attract deposits.[4] The power to limit selling expenses of mutual funds, which is soon to be conferred upon the Securities and Exchange Commission, will serve to limit the growth of small mutual funds and hence reduce the sales costs of large funds.

One variant of the control of entry is the protective tariff (and the corresponding barriers which have been raised to interstate movements of goods and people). The benefits of protection to an industry, one might think, will usually be dissipated by the entry of new domestic producers, and the question naturally arises: Why does the industry not also seek domestic entry controls? In a few industries

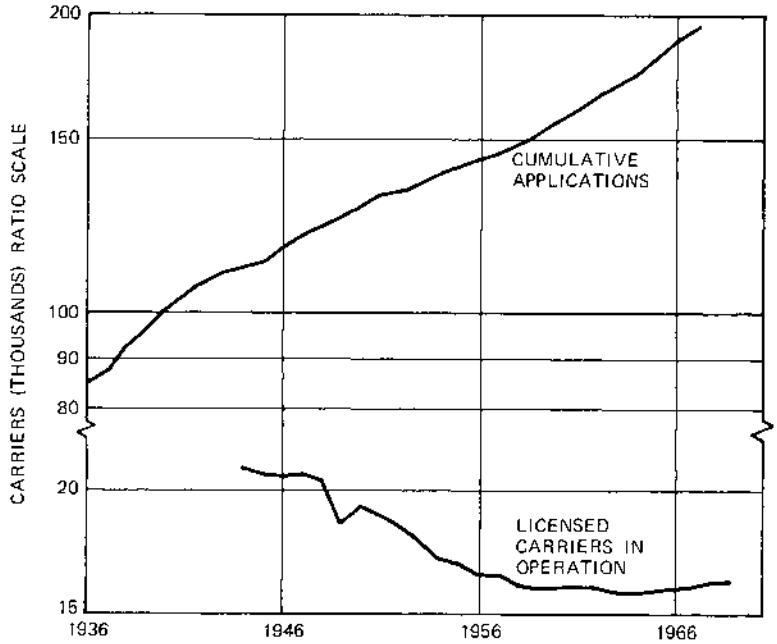
[2] See [7], pp. 60 ff.

[3] See [10].

[4] The Federal Home Loan Bank Board is the regulatory body. It also controls the amount of advertising and other areas of competition.

FIGURE 1

CERTIFICATES FOR INTERSTATE MOTOR CARRIERS



SOURCE: TABLE 5

(petroleum) the domestic controls have been obtained, but not in most. The tariff will be effective if there is a specialized domestic resource necessary to the industry; oil-producing lands is an example. Even if an industry has only durable specialized resources, it will gain if its contraction is slowed by a tariff.

A third general set of powers of the state which will be sought by the industry are those which affect substitutes and complements. Crudely put, the butter producers wish to suppress margarine and encourage the production of bread. The airline industry actively supports the federal subsidies to airports; the building trade unions have opposed labor-saving materials through building codes. We shall examine shortly a specific case of inter-industry competition in transportation.

The fourth class of public policies sought by an industry is directed to price-fixing. Even the industry that has achieved entry control will often want price controls administered by a body with coercive powers. If the number of firms in the regulated industry is even moderately large, price discrimination will be difficult to maintain in the absence of public support. The prohibition of interest on demand deposits, which is probably effective in preventing interest payments to most non-business depositors, is a case in point. Where there are no diseconomies of large scale for the individual firm (e.g., a motor trucking firm can add trucks under a given license as common carrier), price control is essential to achieve more than competitive rates of return.

□ **Limitations upon political benefits.** These various political boons are not obtained by the industry in a pure profit-maximizing form. The political process erects certain limitations upon the exercise of cartel policies by an industry. These limitations are of three sorts.

TABLE 1

IMPORT QUOTAS OF REFINERIES AS PERCENT OF DAILY INPUT OF PETROLEUM (DISTRICTS I – IV, JULY 1, 1959 – DEC. 31, 1959)

SIZE OF REFINERY (THOUSANDS OF BARRELS)	PERCENT QUOTA
0–10	11.4
10–20	10.4
20–30	9.5
30–60	8.5
60–100	7.6
100–150	6.6
150–200	5.7
200–300	4.7
300 AND OVER	3.8

SOURCE: HEARING, SELECT COMMITTEE ON SMALL BUSINESS, U. S. CONGRESS, 88th CONG., 2nd SESS., AUG. 10 AND 11, 1964, [12] P. 121.

First, the distribution of control of the industry among the firms in the industry is changed. In an unregulated industry each firm's influence upon price and output is proportional to its share of industry output (at least in a simple arithmetic sense of direct capacity to change output). The political decisions take account also of the political strength of the various firms, so small firms have a larger influence than they would possess in an unregulated industry. Thus, when quotas are given to firms, the small firms will almost always receive larger quotas than cost-minimizing practices would allow. The original quotas under the oil import quota system will illustrate this practice (Table 1). The smallest refiners were given a quota of 11.4 percent of their daily consumption of oil, and the percentage dropped as refinery size rose.[5] The pattern of regressive benefits is characteristic of public controls in industries with numerous firms.

Second, the procedural safeguards required of public processes are costly. The delays which are dictated by both law and bureaucratic thoughts of self-survival can be large: Robert Gerwig found the price of gas sold in interstate commerce to be 5 to 6 percent higher than in intrastate commerce because of the administrative costs (including delay) of Federal Power Commission reviews [5].

Finally, the political process automatically admits powerful outsiders to the industry's councils. It is well known that the allocation of television channels among communities does not maximize industry revenue but reflects pressures to serve many smaller communities. The abandonment of an unprofitable rail line is an even more notorious area of outsider participation.

These limitations are predictable, and they must all enter into the calculus of the profitability of regulation of an industry.

□ **An illustrative analysis.** The recourse to the regulatory process is of course more specific and more complex than the foregoing sketch

[5] The largest refineries were restricted to 75.7 percent of their historical quota under the earlier voluntary import quota plan.

suggests. The defensive power of various other industries which are affected by the proposed regulation must also be taken into account. An analysis of one aspect of the regulation of motor trucking will illustrate these complications. At this stage we are concerned only with the correspondence between regulations and economic interests; later we shall consider the political process by which regulation is achieved.

The motor trucking industry operated almost exclusively within cities before 1925, in good part because neither powerful trucks nor good roads were available for long-distance freight movements. As these deficiencies were gradually remedied, the share of trucks in intercity freight movements began to rise, and by 1930 it was estimated to be 4 percent of ton-miles of intercity freight. The railroad industry took early cognizance of this emerging competitor, and one of the methods by which trucking was combatted was state regulation.

By the early 1930's all states regulated the dimensions and weight of trucks. The weight limitations were a much more pervasive control over trucking than the licensing of common carriers because even the trucks exempt from entry regulation are subject to the limitations on dimensions and capacity. The weight regulations in the early 1930's are reproduced in the appendix (Table 6). Sometimes the participation of railroads in the regulatory process was incontrovertible: Texas and Louisiana placed a 7000-pound payload limit on trucks serving (and hence competing with) two or more railroad stations, and a 14,000-pound limit on trucks serving only one station (hence, not competing with it).

We seek to determine the pattern of weight limits on trucks that would emerge in response to the economic interests of the concerned parties. The main considerations appear to be the following:

(1) Heavy trucks would be allowed in states with a substantial number of trucks on farms: the powerful agricultural interests would insist upon this. The 1930 Census reports nearly one million trucks on farms. One variable in our study will be, for each state, trucks per 1000 of agricultural population.[6]

(2) Railroads found the truck an effective and rapidly triumphing competitor in the shorter hauls and hauls of less than carload traffic, but much less effective in the carload and longer-haul traffic. Our second variable for each state is, therefore, length of average railroad haul.[7] The longer the average rail haul is, the less the railroads will be opposed to trucks.

(3) The public at large would be concerned by the potential damage done to the highway system by heavy trucks. The better the state highway system, the heavier the trucks that would be permitted. The percentage of each state's highways that had a high type surface is the third variable. Of course good highways are more likely to exist where the potential contribution of trucks to a state's economy is greater, so the causation may be looked at from either direction.

[6] The ratio of trucks to total population would measure the product of (1) the importance of trucks to farmers, and (2) the importance of farmers in the state. For reasons given later, we prefer to emphasize (1).

[7] This is known for each railroad, and we assume that (1) the average holds within each state, and (2) two or more railroads in a state may be combined on the basis of mileage. Obviously both assumptions are at best fair approximations.

We have two measures of weight limits on trucks, one for 4-wheel trucks (X_1) and one for 6-wheel trucks (X_2). We may then calculate two equations,

$$X_1 \text{ (or } X_2) = a + bX_3 + cX_4 + dX_5 ,$$

where

X_3 = trucks per 1000 agricultural labor force, 1930 ,
X_4 = average length of railroad haul of freight traffic, 1930,
X_5 = percentage of state roads with high-quality surface, 1930.

(All variables are fully defined and their state values given in Table 7 on page 20.)

The three explanatory variables are statistically significant, and each works in the expected direction. The regulations on weight were less onerous; the larger the truck population in farming, the less competitive the trucks were to railroads (i.e., the longer the rail hauls), and the better the highway system (see Table 2).

□ The foregoing analysis is concerned with what may be termed the industrial demand for governmental powers. Not every industry will have a significant demand for public assistance (other than money!), meaning the prospect of a substantial increase in the present value of the enterprises even if the governmental services could be obtained gratis (and of course they have costs to which we soon turn). In some economic activities entry of new rivals is extremely difficult to control—consider the enforcement problem in restricting the supply of domestic servants. In some industries the substitute products cannot be efficiently controlled—consider the competition offered to bus lines by private car-pooling. Price fixing is not feasible where every

TABLE 2

REGRESSION ANALYSIS OF STATE WEIGHT LIMITS ON TRUCKS
(T VALUES UNDER REGRESSION COEFFICIENTS)

DEPENDENT VARIABLE	N	CONSTANT	X_3	X_4	X_5	R^2
X_1	48	12.28 (4.87)	0.0336 (3.99)	0.0287 (2.77)	0.2641 (3.04)	0.502
X_2	46	10.34 (1.57)	0.0437 (2.01)	0.0788 (2.97)	0.2528 (1.15)	0.243

X_1 = WEIGHT LIMIT ON 4-WHEEL TRUCKS (THOUSANDS OF POUNDS), 1932-33

X_2 = WEIGHT LIMIT ON 6-WHEEL TRUCKS (THOUSANDS OF POUNDS), 1932-33

X_3 = TRUCKS ON FARMS PER 1,000 AGRICULTURAL LABOR FORCE, 1930

X_4 = AVERAGE LENGTH OF RAILROAD HAUL OF FREIGHT (MILES), 1930

X_5 = PERCENT OF STATE HIGHWAYS WITH HIGH-TYPE SURFACE, DEC. 31, 1930

SOURCES: X_1 AND X_2: THE MOTOR TRUCK RED BOOK AND DIRECTORY [11], 1934 EDITION, P. 85-102, AND U.S. DEPT. OF AGRIC., BUR. OF PUBLIC ROADS, DEC. 1932 [13].

X_3: CENSUS OF AGRICULTURE, 1930, VOL. IV, [14].

X_4: A.A.R.R., BUR. OF RAILWAY ECONOMICS, RAILWAY MILEAGE BY STATES, DEC. 31, 1930 [1] AND U.S.I.C.C., STATISTICS OF RAILWAYS IN THE U.S., 1930 [18].

X_5: STATISTICAL ABSTRACT OF THE U.S., 1932 [16].

unit of the product has a different quality and price, as in the market for used automobiles. In general, however, most industries will have a positive demand price (schedule) for the services of government.

2. The costs of obtaining legislation

■ When an industry receives a grant of power from the state, the benefit to the industry will fall short of the damage to the rest of the community. Even if there were no deadweight losses from acquired regulation, however, one might expect a democratic society to reject such industry requests unless the industry controlled a majority of the votes.[8] A direct and informed vote on oil import quotas would reject the scheme. (If it did not, our theory of rational political processes would be contradicted.) To explain why many industries are able to employ the political machinery to their own ends, we must examine the nature of the political process in a democracy.

A consumer chooses between rail and air travel, for example, by voting with his pocketbook: he patronizes on a given day that mode of transportation he prefers. A similar form of economic voting occurs with decisions on where to work or where to invest one's capital. The market accumulates these economic votes, predicts their future course, and invests accordingly.

Because the political decision is coercive, the decision process is fundamentally different from that of the market. If the public is asked to make a decision between two transportation media comparable to the individual's decision on how to travel—say, whether airlines or railroads should receive a federal subsidy—the decision must be abided by everyone, travellers and non-travellers, travellers this year and travellers next year. This compelled universality of political decisions makes for two differences between democratic political decision processes and market processes.

(1) The decisions must be made simultaneously by a large number of persons (or their representatives): the political process demands simultaneity of decision. If *A* were to vote on the referendum today, *B* tomorrow, *C* the day after, and so on, the accumulation of a majority decision would be both expensive and suspect. (*A* might wish to cast a different vote now than last month.)

The condition of simultaneity imposes a major burden upon the political decision process. It makes voting on specific issues prohibitively expensive: it is a significant cost even to engage in the transaction of buying a plane ticket when I wish to travel; it would be stupendously expensive to me to engage in the physically similar transaction of voting (i.e., patronizing a polling place) whenever a number of my fellow citizens desired to register their views on railroads versus airplanes. To cope with this condition of simultaneity, the voters must employ representatives with wide discretion and must eschew direct expressions of marginal changes in preferences. This characteristic also implies that the political decision does not predict voter desires and make preparations to fulfill them in advance of their realization.

[8] If the deadweight loss (of consumer and producer surplus) is taken into account, even if the oil industry were in the majority it would not obtain the legislation if there were available some method of compensation (such as sale of votes) by which the larger damage of the minority could be expressed effectively against the lesser gains of the majority.

(2) The democratic decision process must involve "all" the community, not simply those who are directly concerned with a decision. In a private market, the non-traveller never votes on rail versus plane travel, while the huge shipper casts many votes each day. The political decision process cannot exclude the uninterested voter: the abuses of any exclusion except self-exclusion are obvious. Hence, the political process does not allow participation in proportion to interest and knowledge. In a measure, this difficulty is moderated by other political activities besides voting which do allow a more effective vote to interested parties: persuasion, employment of skilled legislative representatives, etc. Nevertheless, the political system does not offer good incentives like those in private markets to the acquisition of knowledge. If I consume ten times as much of public service A (streets) as of B (schools), I do not have incentives to acquire corresponding amounts of knowledge about the public provision of these services.[9]

These characteristics of the political process can be modified by having numerous levels of government (so I have somewhat more incentive to learn about local schools than about the whole state school system) and by selective use of direct decision (bond referenda). The chief method of coping with the characteristics, however, is to employ more or less full-time representatives organized in (disciplined by) firms which are called political parties or machines.

The representative and his party are rewarded for their discovery and fulfillment of the political desires of their constituency by success in election and the perquisites of office. If the representative could confidently await reelection whenever he voted against an economic policy that injured the society, he would assuredly do so. Unfortunately virtue does not always command so high a price. If the representative denies ten large industries their special subsidies of money or governmental power, they will dedicate themselves to the election of a more complaisant successor: the stakes are that important. This does not mean that every large industry can get what it wants or all that it wants: it does mean that the representative and his party must find a coalition of voter interests more durable than the anti-industry side of every industry policy proposal. A representative cannot win or keep office with the support of the sum of those who are opposed to: oil import quotas, farm subsidies, airport subsidies, hospital subsidies, unnecessary navy shipyards, an inequitable public housing program, and rural electrification subsidies.

The political decison process has as its dominant characteristic infrequent, universal (in principle) participation, as we have noted: political decisions must be infrequent and they must be global. The voter's expenditure to learn the merits of individual policy proposals and to express his preferences (by individual and group representation as well as by voting) are determined by expected costs and returns, just as they are in the private marketplace. The costs of comprehensive information are higher in the political arena because information must be sought on many issues of little or no direct concern to the individual, and accordingly he will know little about most matters before the legislature. The expressions of preferences in voting will be less precise than the expressions of preferences in the

[9] See [2].

marketplace because many uninformed people will be voting and affecting the decision.[10]

The channels of political decision-making can thus be described as gross or filtered or noisy. If everyone has a negligible preference for policy A over B, the preference will not be discovered or acted upon. If voter group X wants a policy that injures non-X by a small amount, it will not pay non-X to discover this and act against the policy. The system is calculated to implement all strongly felt preferences of majorities and many strongly felt preferences of minorities but to disregard the lesser preferences of majorities and minorities. The filtering or grossness will be reduced by any reduction in the cost to the citizen of acquiring information and expressing desires and by any increase in the probability that his vote will influence policy.

The industry which seeks political power must go to the appropriate seller, the political party. The political party has costs of operation, costs of maintaining an organization and competing in elections. These costs of the political process are viewed excessively narrowly in the literature on the financing of elections: elections are to the political process what merchandizing is to the process of producing a commodity, only an essential final step. The party maintains its organization and electoral appeal by the performance of costly services to the voter at all times, not just before elections. Part of the costs of services and organization are borne by putting a part of the party's workers on the public payroll. An opposition party, however, is usually essential insurance for the voters to discipline the party in power, and the opposition party's costs are not fully met by public funds.

The industry which seeks regulation must be prepared to pay with the two things a party needs: votes and resources. The resources may be provided by campaign contributions, contributed services (the businessman heads a fund-raising committee), and more indirect methods such as the employment of party workers. The votes in support of the measure are rallied, and the votes in opposition are dispersed, by expensive programs to educate (or uneducate) members of the industry and of other concerned industries.

These costs of legislation probably increase with the size of the industry seeking the legislation. Larger industries seek programs which cost the society more and arouse more opposition from substantially affected groups. The tasks of persuasion, both within and without the industry, also increase with its size. The fixed size of the political "market," however, probably makes the cost of obtaining legislation increase less rapidly than industry size. The smallest industries are therefore effectively precluded from the political process unless they have some special advantage such as geographical concentration in a sparsely settled political subdivision.

If a political party has in effect a monopoly control over the governmental machine, one might expect that it could collect most of the benefits of regulation for itself. Political parties, however, are

[10] There is an organizational problem in any decision in which more than one vote is cast. If because of economies of scale it requires a thousand customers to buy a product before it can be produced, this thousand votes has to be assembled by some entrepreneur. Unlike the political scene, however, there is no need to obtain the consent of the remainder of the community, because they will bear no part of the cost.

perhaps an ideal illustration of Demsetz' theory of natural monopoly [4]. If one party becomes extortionate (or badly mistaken in its reading of effective desires), it is possible to elect another party which will provide the governmental services at a price more closely proportioned to costs of the party. If entry into politics is effectively controlled, we should expect one-party dominance to lead that party to solicit requests for protective legislation but to exact a higher price for the legislation.

The internal structure of the political party, and the manner in which the perquisites of office are distributed among its members, offer fascinating areas for study in this context. The elective officials are at the pinnacle of the political system—there is no substitute for the ability to hold the public offices. I conjecture that much of the compensation to the legislative leaders takes the form of extra-political payments. Why are so many politicians lawyers?—because everyone employs lawyers, so the congressman's firm is a suitable avenue of compensation, whereas a physician would have to be given bribes rather than patronage. Most enterprises patronize insurance companies and banks, so we may expect that legislators commonly have financial affiliations with such enterprises.

The financing of industry-wide activities such as the pursuit of legislation raises the usual problem of the free rider.[11] We do not possess a satisfactory theory of group behavior—indeed this theory is the theory of oligopoly with one addition: in the very large number industry (e.g., agriculture) the political party itself will undertake the entrepreneurial role in providing favorable legislation. We can go no further than the infirmities of oligopoly theory allow, which is to say, we can make only plausible conjectures such as that the more concentrated the industry, the more resources it can invest in the campaign for legislation.

□ **Occupational licensing.** The licensing of occupations is a possible use of the political process to improve the economic circumstances of a group. The license is an effective barrier to entry because occupational practice without the license is a criminal offense. Since much occupational licensing is performed at the state level, the area provides an opportunity to search for the characteristics of an occupation which give it political power.

Although there are serious data limitations, we may investigate several characteristics of an occupation which should influence its ability to secure political power:

(1) *The size of the occupation.* Quite simply, the larger the occupation, the more votes it has. (Under some circumstances, therefore, one would wish to exclude non-citizens from the measure of size.)

(2) *The per capita income of the occupation.* The income of the occupation is the product of its number and average income, so this variable and the preceding will reflect the total income of the occupation. The income of the occupation is presumably an index of the probable rewards of successful political action: in the absence of specific knowledge of supply and demand functions, we expect

[11] The theory that the lobbying organization avoids the "free-rider" problem by selling useful services was proposed by Thomas G. Moore [8] and elaborated by Mancur Olson [9]. The theory has not been tested empirically.

licensing to increase each occupation's equilibrium income by roughly the same proportion. In a more sophisticated version, one would predict that the less the elasticity of demand for the occupation's services, the more profitable licensing would be. One could also view the income of the occupation as a source of funds for political action, but if we view political action as an investment this is relevant only with capital-market imperfections.[12]

The average income of occupational members is an appropriate variable in comparisons among occupations, but it is inappropriate to comparisons of one occupation in various states because real income will be approximately equal (in the absence of regulation) in each state.

(3) *The concentration of the occupation in large cities.* When the occupation organizes a campaign to obtain favorable legislation, it incurs expenses in the solicitation of support, and these are higher for a diffused occupation than a concentrated one. The solicitation of support is complicated by the free-rider problem in that individual members cannot be excluded from the benefits of legislation even if they have not shared the costs of receiving it. If most of the occupation is concentrated in a few large centers, these problems (we suspect) are much reduced in intensity: regulation may even begin at the local governmental level. We shall use an orthodox geographical concentration measure: the share of the occupation of the state in cities over 100,000 (or 50,000 in 1900 and earlier).

(4) *The presence of a cohesive opposition to licensing.* If an occupation deals with the public at large, the costs which licensing imposes upon any one customer or industry will be small and it will not be economic for that customer or industry to combat the drive for licensure. If the injured group finds it feasible and profitable to act jointly, however, it will oppose the effort to get licensure, and (by increasing its cost) weaken, delay, or prevent the legislation. The same attributes—numbers of voters, wealth, and ease of organization—which favor an occupation in the political arena, of course, favor also any adversary group. Thus, a small occupation employed by only one industry which has few employers will have difficulty in getting licensure; whereas a large occupation serving everyone will encounter no organized opposition.

An introductory statistical analysis of the licensing of select occupations by states is summarized in Table 3. In each occupation the dependent variable for each state is the year of first regulation of entry into the occupation. The two independent variables are

(1) the ratio of the occupation to the total labor force of the state in the census year nearest to the median year of regulation,

(2) the fraction of the occupation found in cities over 100,000 (over 50,000 in 1890 and 1900) in that same year.

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[12] Let n = the number of members of the profession and y = average income. We expect political capacity to be in proportion to (ny) so far as benefits go, but to reflect also the direct value of votes, so the capacity becomes proportional to $(n^a y)$ with $a > 1$.

TABLE 3

INITIAL YEAR OF REGULATION AS A FUNCTION OF
RELATIVE SIZE OF OCCUPATION AND DEGREE OF URBANIZATION

OCCUPATION	NUMBER OF STATES LICENSING	MEDIAN CENSUS YEAR OF LICENSING	REGRESSION COEFFICIENTS (AND T-VALUES)		R^2
			SIZE OF OCCUPATION (RELATIVE TO LABOR FORCE)	URBANIZATION (SHARE OF OCCUPATION IN CITIES OVER 100,000*)	
BEAUTICIANS	48	1930	−4.03 (2.50)	5.90 (1.24)	0.125
ARCHITECTS	47	1930	−24.06 (2.15)	−6.29 (0.84)	0.184
BARBERS	46	1930	−1.31 (0.51)	−26.10 (2.37)	0.146
LAWYERS	29	1890	−0.26 (0.08)	−65.78 (1.70)	0.102
PHYSICIANS	43	1890	0.64 (0.65)	−23.80 (2.69)	0.165
EMBALMERS	37	1910	3.32 (0.36)	−4.24 (0.44)	0.007
REGISTERED NURSES	48	1910	−2.08 (2.28)	−3.36 (1.06)	0.176
DENTISTS	48	1900	2.51 (0.44)	−22.94 (2.19)	0.103
VETERINARIANS	40	1910	−10.69 (1.94)	−37.16 (4.20)	0.329
CHIROPRACTORS	48	1930	−17.70 (1.54)	11.69 (1.25)	0.079
PHARMACISTS	48	1900	−4.19 (1.50)	−6.84 (0.80)	0.082

SOURCES: THE COUNCIL OF STATE GOVERNMENTS, "OCCUPATIONAL LICENSING LEGISLATION IN THE STATES", 1952 [3], AND U.S. CENSUS OF POPULATION [15], VARIOUS YEARS.

* 50,000 IN 1890 AND 1900.

We expect these variables to be negatively associated with year of licensure, and each of the nine statistically significant regression coefficients is of the expected sign.

The results are not robust, however: the multiple correlation coefficients are small, and over half of the regression coefficients are not significant (and in these cases often of inappropriate sign). Urbanization is more strongly associated than size of occupation with licensure.[13] The crudity of the data may be a large source of these disappointments: we measure, for example, the characteristics of the barbers in each state in 1930, but 14 states were licensing barbers by 1910. If the states which licensed barbering before 1910 had relatively more barbers, or more highly urbanized barbers, the predictions

[13] We may pool the occupations and assign dummy variables for each occupation; the regression coefficients then are:

size of occupation relative to labor force: -0.450 ($t = 0.59$)
urbanization : -12.133 ($t = 4.00$).

Thus urbanization is highly significant, while size of occupation is not significant.

would be improved. The absence of data for years between censuses and before 1890 led us to make only the cruder analysis.[14]

In general, the larger occupations were licensed in earlier years.[15] Veterinarians are the only occupation in this sample who have a well-defined set of customers, namely livestock farmers, and licensing was later in those states with large numbers of livestock relative to rural population. The within-occupation analyses offer some support for the economic theory of the supply of legislation.

A comparison of different occupations allows us to examine several other variables. The first is income, already discussed above. The second is the size of the market. Just as it is impossible to organize an effective labor union in only one part of an integrated market, so it is impossible to regulate only one part of the market. Consider an occupation—junior business executives will do—which has a national market with high mobility of labor and significant mobility of employers. If the executives of one state were to organize, their scope for effective influence would be very small. If salaries were raised above the competitive level, employers would often recruit elsewhere so the demand elasticity would be very high.[16] The third variable is stability of occupational membership: the longer the members are in the occupation, the greater their financial gain from control of entry. Our regrettably crude measure of this variable is based upon the number of members aged 35–44 in 1950 and aged 45–54 in 1960: the closer these numbers are, the more stable the membership of the occupation. The data for the various occupations are given in Table 4.

The comparison of licensed and unlicensed occupations is consistently in keeping with our expectations:

(1) the licensed occupations have higher incomes (also before licensing, one may assume),

(2) the membership of the licensed occupations is more stable (but the difference is negligible in our crude measure),

(3) the licensed occupations are less often employed by business enterprises (who have incentives to oppose licensing),

(4) all occupations in national markets (college teachers, engineers, scientists, accountants) are unlicensed or only partially licensed.

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[14] A more precise analysis might take the form of a regression analysis such as:

$$\text{Year of licensure} = \text{constant} + b_1(\text{year of critical size of occupation}) + b_2(\text{year of critical urbanization of occupation}),$$

where the critical size and urbanization were defined as the mean size and mean urbanization in the year of licensure.

[15] Lawyers, physicians, and pharmacists were all relatively large occupations by 1900, and nurses also by 1910. The only large occupation to be licensed later was barbers; the only small occupation to be licensed early was embalmers.

[16] The regulation of business in a partial market will also generally produce very high supply elasticities within a market: if the price of the product (or service) is raised, the pressure of excluded supply is very difficult to resist. Some occupations are forced to reciprocity in licensing, and the geographical dispersion of earnings in licensed occupations, one would predict, is not appreciably different than in unlicensed occupations with equal employer mobility. Many puzzles are posed by the interesting analysis of Arlene S. Holen in [6], pp. 492-98.

TABLE 4

CHARACTERISTICS OF LICENSED AND UNLICENSED PROFESSIONAL OCCUPATIONS, 1960

OCCUPATION	MEDIAN AGE (YEARS)	MEDIAN EDUCATION (YEARS)	MEDIAN EARNINGS (50-52 WKS.)	INSTABILITY OF MEMBERSHIP*	PERCENT NOT SELF-EMPLOYED	PERCENT IN CITIES OVER 50,000	PERCENT OF LABOR FORCE
LICENSED:							
ARCHITECTS	41.7	16.8	$ 9,090	0.012	57.8%	44.1%	0.045%
CHIROPRACTORS	46.5	16.4	6,360	0.053	5.8	30.8	0.020
DENTISTS	45.9	17.3	12,200	0.016	9.4	34.5	0.128
EMBALMERS	43.5	13.4	5,990	0.130	52.8	30.2	0.055
LAWYERS	45.3	17.4	10,800	0.041	35.8	43.1	0.308
PROF. NURSES	39.1	13.2	3,850	0.291	91.0	40.6	0.868
OPTOMETRISTS	41.6	17.0	8,480	0.249	17.5	34.5	0.024
PHARMACISTS	44.9	16.2	7,230	0.119	62.3	40.0	0.136
PHYSICIANS	42.8	17.5	14,200	0.015	35.0	44.7	0.339
VETERINARIANS	39.2	17.4	9,210	0.169	29.5	14.4	0.023
AVERAGE	43.0	16.3	8,741	0.109	39.7	35.7	0.195
PARTIALLY LICENSED:							
ACCOUNTANTS	40.4	14.9	6,450	0.052	88.1	43.5	0.698
ENGINEERS	38.3	16.2	8,490	0.023	96.8	31.6	1.279
ELEM. SCHOOL TEACHERS	43.1	16.5	4,710	(a)	99.1	18.8	1.482
AVERAGE	40.6	15.9	6,550	0.117(b)	94.7	34.6	1.153
UNLICENSED:							
ARTISTS	38.0	14.2	5,920	0.103	77.3	45.7	0.154
CLERGYMEN	43.3	17.0	4,120	0.039	89.0	27.2	0.295
COLLEGE TEACHERS	40.3	17.4	7,500	0.085	99.2	36.0	0.261
DRAFTSMEN	31.2	12.9	5,990	0.098	98.6	40.8	0.322
REPORTERS & EDITORS	39.4	15.5	6,120	0.138	93.9	43.3	0.151
MUSICIANS	40.2	14.8	3,240	0.081	65.5	37.7	0.289
NATURAL SCIENTISTS	35.9	16.8	7,490	0.264	96.3	32.7	0.221
AVERAGE	38.3	15.5	5,768	0.115	88.5	37.6	0.242

(*) 1-R, WHERE R = RATIO: 1960 AGE 45-54 TO 1950 AGE 35-44.

(a) NOT AVAILABLE SEPARATELY; TEACHERS N.E.C. (INCL. SECONDARY SCHOOL AND OTHER) = 0.276

(b) INCLUDES FIGURE FOR TEACHERS N.E.C. IN NOTE (a)

SOURCE: U.S. CENSUS OF POPULATION, [15], 1960.

The size and urbanization of the three groups, however, are unrelated to licensing. The inter-occupational comparison therefore provides a modicum of additional support for our theory of regulation.

3. Conclusion

■ The idealistic view of public regulation is deeply imbedded in professional economic thought. So many economists, for example, have denounced the ICC for its pro-railroad policies that this has become a cliché of the literature. This criticism seems to me exactly as appropriate as a criticism of the Great Atlantic and Pacific Tea Company for selling groceries, or as a criticism of a politician for currying popular support. The fundamental vice of such criticism is that it misdirects attention: it suggests that the way to get an ICC which is not subservient to the carriers is to preach to the commissioners or to the people who appoint the commissioners. The only way to get a different commission would be to change the political

support for the Commission, and reward commissioners on a basis unrelated to their services to the carriers.

Until the basic logic of political life is developed, reformers will be ill-equipped to use the state for their reforms, and victims of the pervasive use of the state's support of special groups will be helpless to protect themselves. Economists should quickly establish the license to practice on the rational theory of political behavior.

Appendix

TABLE 5

COMMON, CONTRACT AND PASSENGER MOTOR CARRIERS, 1935–1969[1]

YEAR ENDING	CUMULATIVE APPLICATIONS			OPERATING CARRIERS	
	GRAND-FATHER	NEW	TOTAL	APPROVED APPLICATIONS[3]	NUMBER IN OPERATION[2]
OCT. 1936	82,827	1,696	84,523	–	–
1937	83,107	3,921	87,028	1,114	–
1938	85,646	6,694	92,340	20,398	–
1939	86,298	9,636	95,934	23,494	–
1940	87,367	12,965	100,332	25,575	–
1941	88,064	16,325	104,389	26,296	–
1942	88,702	18,977	107,679	26,683	–
1943	89,157	20,007	109,164	27,531	–
1944	89,511	21,324	110,835	27,177	21,044
1945	89,518	22,829	112,347		20,788
1946	89,529	26,392	115,921		20,632
1947	89,552	29,604	119,156		20,665
1948	89,563	32,678	122,241		20,373
1949	89,567	35,635	125,202		18,459
1950	89,573	38,666	128,239		19,200
1951	89,574	41,889	131,463		18,843
1952	(89,574)[4]	44,297	133,870		18,408
1953	"	46,619	136,192		17,869
1954	"	49,146	138,719		17,080
1955	"	51,720	141,293		16,836
JUNE 1956	"	53,640	143,213		16,486
1957	"	56,804	146,377		16,316
1958	"	60,278	149,851		16,065
1959	"	64,171	153,744		15,923
1960	"	69,205	158,778		15,936
1961	"	72,877	162,450		15,967
1962	"	76,986	166,559		15,884
1963	"	81,443	171,016		15,739
1964	"	86,711	176,284		15,732
1965	"	93,064	182,637		15,755
1966	"	101,745	191,318		15,933
1967	"	106,647	196,220		16,003
1968	"	(6)	(6)		16,230[5]
1969	"	(6)	(6)		16,318[5]

SOURCE: U.S. INTERSTATE COMMERCE COMMISSION ANNUAL REPORTS [17].

1 EXCLUDING BROKERS AND WITHIN-STATE CARRIERS.

2 PROPERTY CARRIERS WERE THE FOLLOWING PERCENTAGES OF ALL OPERATING CARRIERS: 1944–93.4%; 1950–92.4%; 1960–93.0%; 1966–93.4%.

3 ESTIMATED.

4 NOT AVAILABLE; ASSUMED TO BE APPROXIMATELY CONSTANT.

5 1968 AND 1969 FIGURES ARE FOR NUMBER OF CARRIERS REQUIRED TO FILE ANNUAL REPORTS.

6 NOT AVAILABLE COMPARABLE TO PREVIOUS YEARS; APPLICATIONS FOR PERMANENT AUTHORITY DISPOSED OF (I.E., FROM NEW AND PENDING FILES) 1967-69 ARE AS FOLLOWS: 1967–7,049; 1968–5,724; 1969–5,186.

TABLE 6

WEIGHT LIMITS ON TRUCKS, 1932-33*, BY STATES (BASIC DATA FOR TABLE 2).

STATE	MAXIMUM WEIGHT (IN LBS.)		STATE	MAXIMUM WEIGHT (IN LBS.)	
	4-WHEEL[1]	6-WHEEL[2]		4-WHEEL[1]	6-WHEEL[2]
ALABAMA	20,000	32,000	NEBRASKA	24,000	40,000
ARIZONA	22,000	34,000	NEVADA	25,000	38,000
ARKANSAS	22,200	37,000	NEW HAMPSHIRE	20,000	20,000
CALIFORNIA	22,000	34,000	NEW JERSEY	30,000	30,000
COLORADO	30,000	40,000	NEW MEXICO	27,000	45,000
CONNECTICUT	32,000	40,000	NEW YORK	33,600	44,000
DELAWARE	26,000	38,000	NO. CAROLINA	20,000	20,000
FLORIDA	20,000	20,000	NO. DAKOTA	24,000	48,000
GEORGIA	22,000	39,600	OHIO	24,000	24,000
IDAHO	24,000	40,000	OKLAHOMA	20,000	20,000
ILLINOIS	24,000	40,000	OREGON	25,500	42,500
INDIANA	24,000	40,000	PENNSYLVANIA	26,000	36,000
IOWA	24,000	40,000	RHODE ISLAND	28,000	40,000
KANSAS	24,000	34,000	SO. CAROLINA	20,000	25,000
KENTUCKY	18,000	18,000	SO. DAKOTA	20,000	20,000
LOUISIANA	13,400	N. A.	TENNESSEE	20,000	20,000
MAINE	18,000	27,000	TEXAS	13,500	N. A.
MARYLAND	25,000	40,000	UTAH	26,000	34,000
MASSACHUSETTS	30,000	30,000	VERMONT	20,000	20,000
MICHIGAN	27,000	45,000	VIRGINIA	24,000	35,000
MINNESOTA	27,000	42,000	WASHINGTON	24,000	34,000
MISSISSIPPI	18,000	22,000	WEST VA.	24,000	40,000
MISSOURI	24,000	24,000	WISCONSIN	24,000	36,000
MONTANA	24,000	34,000	WYOMING	27,000	30,000

* RED BOOK [11] FIGURES ARE REPORTED (P. 89) AS "BASED ON THE STATE'S INTERPRETATIONS OF THEIR LAWS [1933] AND ON PHYSICAL LIMITATIONS OF VEHICLE DESIGN AND TIRE CAPACITY." PUBLIC ROADS [13] FIGURES ARE REPORTED (P. 167) AS "AN ABSTRACT OF STATE LAWS, INCLUDING LEGISLATION PASSED IN 1932."

1. 4-WHEEL: THE SMALLEST OF THE FOLLOWING 3 FIGURES WAS USED:

   (A) MAXIMUM GROSS WEIGHT (AS GIVEN IN RED BOOK, P. 90-91).

   (B) MAXIMUM AXLE WEIGHT (AS GIVEN IN RED BOOK, P. 90-91), MULTIPLIED BY 1.5 (SEE RED BOOK, P. 89).

   (C) MAXIMUM GROSS WEIGHT (AS GIVEN IN RED BOOK, P. 93).

EXCEPTIONS: TEXAS AND LOUISIANA—SEE RED BOOK, P. 91.

2. 6-WHEEL: MAXIMUM GROSS WEIGHT AS GIVEN IN PUBLIC ROADS, P. 167. THESE FIGURES AGREE IN MOST CASES WITH THOSE SHOWN IN RED BOOK, P. 93, AND WITH PUBLIC ROADS MAXIMUM AXLE WEIGHTS MULTIPLIED BY 2.5 (SEE RED BOOK, P. 93). TEXAS AND LOUISIANA ARE EXCLUDED AS DATA ARE NOT AVAILABLE TO CONVERT FROM PAYLOAD TO GROSS WEIGHT LIMITS.

TABLE 7

INDEPENDENT VARIABLES
(BASIC DATA FOR TABLE 2 – CONT'D)

STATE	TRUCKS ON FARMS PER 1,000 AGRICULTURAL LABOR FORCE	AVERAGE LENGTH OF RAILROAD HAUL OF FREIGHT (MILES)	PERCENT OF STATE HIGHWAYS WITH HIGH-TYPE SURFACE
ALABAMA	26.05	189.4	1.57
ARIZONA	79.74	282.2	2.60
ARKANSAS	28.62	233.1	1.72
CALIFORNIA	123.40	264.6	13.10
COLORADO	159.50	244.7	0.58
CONNECTICUT	173.80	132.6	7.98
DELAWARE	173.20	202.7	21.40
FLORIDA	91.41	184.1	8.22
GEORGIA	32.07	165.7	1.60
IDAHO	95.89	243.6	0.73
ILLINOIS	114.70	207.9	9.85
INDIANA	120.20	202.8	6.90
IOWA	98.73	233.3	3.39
KANSAS	146.70	281.5	0.94
KENTUCKY	20.05	227.5	1.81
LOUISIANA	31.27	201.0	1.94
MAINE	209.30	120.4	1.87
MARYLAND	134.20	184.1	12.90
MASSACHUSETTS	172.20	144.7	17.70
MICHIGAN	148.40	168.0	6.68
MINNESOTA	120.40	225.6	1.44
MISSISSIPPI	29.62	164.9	1.14
MISSOURI	54.28	229.7	2.91
MONTANA	183.80	266.5	0.09
NEBRASKA	132.10	266.9	0.41
NEVADA	139.40	273.2	0.39
NEW HAMPSHIRE	205.40	129.0	3.42
NEW JERSEY	230.20	137.6	23.30
NEW MEXICO	90.46	279.0	0.18
NEW YORK	220.50	163.3	21.50
NO. CAROLINA	37.12	171.5	8.61
NO. DAKOTA	126.40	255.1	0.01
OHIO	125.80	194.2	11.20
OKLAHOMA	78.18	223.3	1.42
OREGON	118.90	246.2	3.35
PENNSYLVANIA	187.60	166.5	9.78
RHODE ISLAND	193.30	131.0	20.40
SO. CAROLINA	20.21	169.8	2.82
SO. DAKOTA	113.40	216.6	0.04
TENNESSEE	23.98	191.9	3.97
UTAH	101.70	235.7	1.69
VERMONT	132.20	109.7	2.26
VIRGINIA	71.88	229.8	2.86
WASHINGTON	180.90	254.4	4.21
WEST VIRGINIA	62.88	218.7	8.13
WISCONSIN	178.60	195.7	4.57
WYOMING	133.40	286.7	0.08

(1) AVERAGE LENGTH OF RR HAUL OF (REVENUE) FREIGHT = AVERAGE DISTANCE IN MILES EACH TON IS CARRIED = RATIO OF NUMBER OF TON-MILES TO NUMBER OF TONS CARRIED. FOR EACH STATE, AVERAGE LENGTH OF HAUL WAS OBTAINED BY WEIGHTING AVERAGE LENGTH OF HAUL OF EACH COMPANY BY THE NUMBER OF MILES OF LINE OPERATED BY THAT COMPANY IN THE STATE (ALL FOR CLASS I RR'S).

(2) PERCENTAGE OF STATE ROADS WITH HIGH-QUALITY SURFACE: WHERE HIGH-QUALITY (HIGH-TYPE) SURFACE CONSISTS OF BITUMINOUS MACADAM, BITUMINOUS CONCRETE, SHEET ASPHALT, PORTLAND CEMENT CONCRETE, AND BLOCK PAVEMENTS. ALL STATE RURAL ROADS, BOTH LOCAL AND STATE HIGHWAYS SYSTEMS, ARE INCLUDED.

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