BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF SOUTH DAKOTA

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HP 14-001

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 PROJECT

APPLICANT'S PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW

Procedural History

On March 12, 2009, Applicant TransCanada Keystone Pipeline, LP ("Keystone"), filed an application with the South Dakota Public Utilities Commission ("Commission") for a permit under SDCL Chapter 49-41B to construct the South Dakota portion of the KXL Pipeline ("Project"). The application was docketed as HP09-001. On June 29, 2010, the Commission entered an Amended Final Decision and Order ("Decision") granting Keystone a permit to construct and operate the Project subject to 50 conditions attached to the Decision as Exhibit A.

On September 15, 2014, Keystone filed with the Commission a Petition for Order Accepting Certification under SDCL § 49-41B-27, and a Certification. The Commission opened a new docket, HP14-001 for the proceeding. The Commission entered an Order Assessing Filing Fee on October 1, 2014. Forty three individuals or 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 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, Sierra Club, Joyce 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. The South Dakota Wildlife Federation and the Sierra Club were later granted leave to withdraw on March 4, 2015. Jeff Jensen was granted leave to withdraw on April 21, 2015.

On October 30, 2014, Keystone filed a Motion to Define the Scope of Discovery Under SDCL § 49-41B-27. The Commission entered a Prehearing Scheduling Conference Order on November 4, 2014, setting a conference to be conducted by General Counsel John Smith on November 13, 2014. After the Prehearing Scheduling Conference and briefing on Keystone's motion, the Commission entered an Order Granting Motion to Define Issues and Setting Procedural Schedule on December 17, 2014. In the order, the Commission decided that the

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scope of discovery would be any matter relevant to (1) whether the Project continues to meet the 50 conditions in Exhibit A to the Decision; and (2) the changes in the Findings of Fact identified in Keystone's Tracking Table of Changes attached to its Certification Petition as Exhibit 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.

The Yankton Sioux Tribe filed a motion to dismiss on December 2, and the Rosebud Sioux Tribe filed its own motion to dismiss on December 29, 2014. The motions contended that the Certification Petition on its face established that the Project was a different project than the one permitted in HP09-001 and that Keystone could therefore not prove that it could continue to meet the conditions on which the permit was issued. The Commission denied the motions to dismiss by order dated January 8, 2015.

The Commission decided a number of discovery-related motions. Dakota Rural Action, the Standing Rock Sioux Tribe, the Yankton Sioux Tribe, Gary Dorr, and the Rosebud Sioux Tribe filed motions to compel discovery against Keystone and Commission 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 the 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 the Rosebud Sioux Tribe by orders dated April 22, 2015, and April 23, 2015.

Keystone filed a motion dated March 23, 2015, and an amended motion on March 25, 2015, asking 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 that certain Intervenors (John Harter, BOLD Nebraska, Carolyn Smith, Gary Dorr, and the 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. The Commission granted Keystone's motion as to the Intervenors who failed to respond to discovery and John Harter, BOLD Nebraska, and Carolyn Smith, but denied the motion as to the Yankton Sioux Tribe and Gary Dorr. Keystone also filed a motion dated April 6, 2015, asking that the Commission preclude testimony from any witness who did not prefile testimony as required by the Commission's procedural order. The Commission granted Keystone's motion by order dated April 23, 2015.

On April 24, 2015, Dakota Rural Action, the Rosebud Sioux Tribe, the Yankton Sioux Tribe, BOLD Nebraska, the Cheyenne River Sioux Tribe, and the Standing Rock Sioux Tribe filed a joint motion for a continuance of the evidentiary hearing. Indigenous Environmental Network joined the motion on April 27, 2015. Keystone opposed the motion. By order dated April 27, 2015, the Commission granted the motion for a continuance. By order dated May 5, 2015, the Commission amended the procedural schedule, and established the following deadlines

and dates: (1) substantive motions filed by May 26, 2015; (2) rebuttal testimony filed by June 26, 2015; (3) witness and exhibit lists filed by July 7, 2015; (4) motions in limine filed by July 10, 2015; and (5) an evidentiary hearing from July 27-31, and August 3-4, 2015.

On April 27, 2015, Intertribal COUP filed a motion asking for a time certain for testimony of three of its experts, namely Dr. James Hansen, Dr. George Seielstad, and Dr. Robert Oglesby. Keystone opposed the motion because COUP's experts had not submitted prefiled testimony and their proposed testimony was not rebuttal testimony. The Commission entered an order on May 28, 2015, precluding COUP's experts from testifying.

Also on April 27, 2015, Standing Rock, Cheyenne River, Rosebud Sioux, and Yankton Sioux Tribes, Dakota Rural Action, Indigenous Environmental Network, BOLD Nebraska, and Intertribal COUP filed a joint motion seeking to preclude Keystone from offering testimony or witnesses at the hearing based on its alleged failure to comply with discovery. Gary Dorr moved to join the motion. On May 28, 2015, the Commission granted Dorr's motion to join, and denied the joint motion to exclude evidence or testimony by Keystone.

On May 26, 2015, the Yankton Sioux Tribe filed a motion to preclude the Commission from amending the findings of fact contained in its Amended Final Decision and Order dated June 29, 2010. Alternatively, the motion asked that the Commission amend Findings of Fact numbers 113 and 114. Keystone opposed the motion, which was denied by Commission order dated June 15, 2015.

On May 26, 2015, Keystone filed motions to exclude the testimony of Richard Kuprewicz, an expert disclosed by the Rosebud Sioux Tribe; to exclude testimony regarding Mni Waconi Pipeline easements; and to exclude testimony regarding aboriginal title or usufructuary rights. The Commission heard argument on June 11, 2015, and granted these motions by separate orders dated June 15, 2015. With respect to the testimony of Richard Kuprewicz, the Commission granted the motion with respect to Kuprewicz's testimony related to rerouting the pipeline, and otherwise denied the motion.

The Rosebud Sioux Tribe filed a motion in limine on July 10, 2015, asking that certain rebuttal testimony filed by Keystone in response to its expert Richard Kuprewicz be excluded because it had elected not to call Kuprewicz. Keystone agreed to withdraw the rebuttal testimony to the extent that it was offered as rebuttal to Kuprewicz. By order dated July 22, 2015, the Commission therefore denied the Rosebud Sioux Tribe's motion in limine as moot.

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; (9) to preclude the rebuttal testimony of Ian Goodman and Brigid Rowan; and (10) to preclude Dakota Rural Action's exhibits that were not timely disclosed during

discovery. 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 by order dated July 22, 2015. By order of the same date, the Commission denied the motion concerning Ian Goodman and Brigid Rowan as moot. The 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. By order dated September 1, 2015, the Commission granted in part the motion concerning Kevin Cahill's testimony with respect to that part of Cahill's testimony that was responsive to the testimony of Staff witness Brian Walsh. By order dated August 31, 2015, the Commission denied reconsideration of its order granting the motion to preclude the rebuttal testimony of Jennifer Galindo and Waste Win Young. With respect to Dakota Rural Action's proposed exhibit list, the Commission considered Keystone's motion at an ad hoc meeting on July 17, 2015, and by order of the same date, granted the motion to preclude exhibits 29-37, 39-65, 67-128, 397-409, 1058-1062, and 1063-1073. Dakota Rural Action filed a motion for reconsideration on July 21, 2015, with respect to these exhibits. By order dated July 23, 2015, the Commission granted in part the motion for reconsideration by allowing exhibits 29-37, 39-65, and 1058-1062.

On July 10, 2015, the 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 preclude Keystone from submitting any evidence related to changes in fact as reflected in the Tracking Table of Changes attached as Exhibit C to its Certification Petition. The Commission considered the motion at its meeting on July 21, 2015, and denied the motion by order dated July 23, 2015.

Keystone filed a procedural motion dated July 10, 2015, asking that the Commission take several steps to expedite the evidentiary hearing and ensure that it operate 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. By order dated July 22, 2015, the Commission denied all of these requests except for limiting cross examination to the scope of direct examination and matters affecting credibility of a witness, and limiting cross-examination to counsel if a party was represented by counsel.

On July 6, 2015, a public input session 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. The hearing was extended to include Saturday, August 1, 2015 by order dated July 30, 2015, and then continued from August 3 to 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 under SDCL § 1-26-24 to participate by reviewing the hearing transcript. (Tr. at 46-50.)

At the conclusion of the hearing, the Commission established a briefing schedule. By order dated August 12, 2015, simultaneous initial post-hearing briefs were due October 1, and simultaneous reply briefs were due October 31, 2015.

On September 21, 2015, Keystone filed a motion to strike portions of Cindy Myers' hearing testimony and exhibits.

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 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. (Decision, Findings of Fact, ¶ 1.)
- 2. On November 4, 2014, the Commission granted 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. (Order, Nov. 4, 2014.) South Dakota Wildlife Federation and the Sierra Club were allowed to withdraw by order dated March 4, 2015. Jeff Jensen was allowed to withdraw by order dated April 21, 2015.
- 3. The Commission Staff also participated as a party, represented by Kristen Edwards and Karen Cremer.

Procedural Findings

- 4. The Certification under SDCL § 49-41B-27 was signed by Corey Goulet on September 12, 2014, in Calgary, Alberta, Canada. The Certification was filed with the Commission on September 15, 2014.
- 5. Keystone also filed a Petition for Order Accepting Certification Under SDCL § 49-41B-27 on September 15, 2014. 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)).
- 6. The Commission issued procedural orders, as more fully described in the Procedural History above, on December 17, 2014; April 2, 2015; April 3, 2015; April 10, 2015; April 17, 2015; April 21, 2015; April 23, 2015; April 27, 2015; May 5, 2015; and July 2, 2015.
- 7. The Commission considered a number of discovery disputes and issued discovery orders, as more fully described in the Procedural History above, on April 17, 2015; April 22, 2015; and May 4, 2015.
- 8. The Commission decided several substantive motions by orders dated June 15, 2015.
- 9. The Commission resolved multiple evidentiary motions, including motions in limine, by orders dated April 23, 2015; May 28, 2015; June 15, 2015; July 17, 2015; July 22, 2015; July 23, 2015; August 31, 2015; and July 1, 2015.
- 10. The Commission held a public input session on July 6, 2015, beginning at 5:30 p.m. and ending at 9:00 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.
- 11. The following testimony was prefiled 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, State Capitol, and Pierre, South Dakota:
 - A. Applicant's direct testimony
 Heidi Tillquist (Ex. 2004)
 Corey Goulet (Ex. 2001)
 Jon Schmidt (Ex. 2005)
 Meera Kothari (Ex. 2003)
 David Diakow
 - B. Staff's direct testimony Brian Walsh Derric Iles

Kimberly McIntosh

Tom Kirschenmann

Daniel Flo (Ex. 3009)

David Schramm (Ex. 3007)

Jenny Hudson (Ex. 3006)

Christopher Hughes (Ex. 3008)

Paige Olson

Darren Kearney

C. Intervenor direct testimony

Diana L. Steskal

Wayne Frederick (Gary Dorr)

Cindy Myers

Paul F. Seamans

Evan Vokes (Dakota Rural Action) (Ex. 1003-A)

Arden D. Davis (Dakota Rural Action) (Ex. 1003-B)

Sue Sibson (Dakota Rural Action) (Ex. 1003-C)

Carlyle Ducheneaux (Cheyenne River Sioux Tribe)

Steve Vance (Cheyenne River Sioux Tribe)

Faith Spotted Eagle (Yankton Sioux Tribe) (Ex. 9011)

Waste Win Young (Standing Rock Sioux Tribe)

Phyllis Young (Standing Rock Sioux Tribe) (Ex. 8001)

Doug Crow Ghost (Standing Rock Sioux Tribe) (Ex. 8010)

Linda Black Elk (Standing Rock Sioux Tribe)

Richard Kuprewicz (Rosebud Sioux Tribe)

Ian Goodman (Rosebud Sioux Tribe)

Brigid Rowan (Rosebud Sioux Tribe)

D. Keystone rebuttal testimony

Corey Goulet

Dan King (Ex. 2006)

F.J. (Rick) Perkins (Ex. 2007)

Meera Kothari

Jon Schmidt (Ex. 2009)

Heidi Tillquist (Ex. 2017)

Jeff MacKenzie

E. Staff rebuttal testimony

Darren Kearney

F. Intervenor rebuttal testimony

Kevin E. Cahill, Ph.D. (Ex. 8029)

Jennifer Galindo (Rosebud Sioux Tribe)

Ian Goodman and Brigid Rowan (Rosebud Sioux Tribe)

Paula Antoine (Rosebud Sioux Tribe) (Ex. 11000)

Chief Leonard Crow Dog (Rosebud Sioux Tribe)

Evan Vokes (Dakota Rural Action)
John Harter (Dakota Rural Action) (Ex. 1003-D)
Member of the Yankton Sioux Tribe Business & Claims Committee
Faith Spotted Eagle (Yankton Sioux Tribe)
Chris Sauncosi (Yankton Sioux Tribe)
Dr. Robert Oglesby (Intertribal COUP)
Dr. James Hansen (Intertribal COUP)

G. Surrebuttal testimony
Cindy Myers
Corey Goulet
Dan King

- 12. A nine-day evidentiary hearing was held. 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. Of these Intervenors, only Dakota Rural Action was a party in Docket HP09-001.
- 13. 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

- 14. 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."
- 15. There are no other statutes, regulations, or South Dakota cases directly addressing SDCL § 49-41B-27 and its application in this docket.

Changes in the Project since June 29, 2010

16. On March 12, 2009, Keystone filed an application for a permit under 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 granting Keystone a permit to construct and operate the project subject to 50 conditions attached to the Decision as Exhibit A.

- 17. The Project, as proposed in Keystone's application for a permit in docket HP09-001, has been 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, is still under review by the United States Department of State.
- 18. 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.
- 19. The Gulf Coast Segment has been constructed and was placed into operation as a stand-alone project on January 22, 2014. (Goulet Direct Testimony, Ex. 2001, ¶ 15.)
- 20. The Houston Lateral Segment has also been constructed as a stand-alone project. (Goulet Direct Testimony, Ex. 2001, \P 15.)
- 21. The pending Presidential Permit application, which was submitted on May 4, 2012, involves consideration of the former Steele City segment only. 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. (Certification, Ex. C, Finding 15.) The route in South Dakota has not changed in any material respect.
- 22. The maximum capacity of the Project is 830,000 barrels per day. (Goulet Direct Testimony, Ex. 2001, \P 6.)
- 23. The Bakken Marketlink project was developed after Keystone's permit application in HP09-001. 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. at 186.)
- 24. 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. (Certification Petition, App. C, ¶ 16.) 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. (Certification Petition, App. C, ¶ 16.)
- 25. There is no current construction schedule for the Project, pending issuance of the Presidential Permit. (Goulet Direct Testimony, Ex. 2001, \P 8.)

- 26. 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. (Certification Petition, App. C, ¶ 18.) Keystone withdrew its application to the Pipeline Hazardous Materials Safety Administration ("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). (*Id.* ¶¶ 18, 60, 90; Tr. at 215, 302; Kothari Direct Testimony, Ex. 2003, ¶ 5.) 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. (Kothari Direct Testimony, Ex. 2003, ¶ 8; Certification Petition, App. C, ¶¶ 19, 63.)
- 27. 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. (Certification Petition, App. C, ¶ 20; Goulet Direct Testimony, Ex. 2001, ¶ 11; FSEIS, App. Z, Condition 32; Tr. at 215.)
- 28. Keystone has committed to meet the 59 special conditions proposed by PHMSA as set forth in Appendix Z to the FSEIS. (Goulet Direct Testimony, Ex. 2001, ¶ 22.)
- 29. 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. (Goulet Direct Testimony, Ex. 2001, \P 23.)
 - 30. There is no condition in the permit related to demand for the Project.
- 31. Keystone has continued to update its Construction, Mitigation, and Reclamation Plan. A current, redlined version of the CMR Plan is attached to the Certification Petition as Appendix C, Attachment A. (Schmidt Direct Testimony, Ex. 2005, \P 5; Certification Petition, App. C, \P 32.)
- 32. 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. (Certification Petition, App. C, ¶ 33.)
- 33. Keystone will use horizontal directional drilling to cross two additional rivers or streams—Bridger Creek and the Bad River. (Certification Petition, App. C., ¶¶ 41, 83.) The preliminary site-specific crossing plans for these additional HDD crossings are included with Keystone's Certification Petition as Attachment B to Appendix C.
- 34. The total length of Project pipe with the potential to affect a High Consequence Area is 15.8 miles, which is less than the 34.3 miles stated in the Permit's findings of fact. (Tr. at 670, 1119; Certification Petition, App. C, \P 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. at 670.)

- 35. Due to minor route refinements, all but 27.9 miles of the route in South Dakota are privately owned, an increase from 21.5 miles in the original application. (Certification Petition, App. C, \P 54.)
- 36. No tribal or federal lands are crossed by the Pipeline route. (Certification Petition, App. C, \P 54.)
- 37. 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 have been no leaks on this type of pipe installed by TransCanada, and no evidence of external corrosion except for one instance in Missouri in which an adjacent foreign utility interfered with the active cathodic protection system. (Certification Petition, App. C, ¶ 68.) The corrosion incident in Missouri was detected by Keystone during an in-line inspection of the pipe. (Tr. at 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. at 265, 309-10.)
- 38. Since the Decision 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. (Certification Petition, App. C, \P 80; Tr. at 617.)
- 39. Other than these changes stated in Exhibit C to Keystone's Certification Petition, the parties did not present evidence of any other factual changes to the Project.

Keystone's ability to meet the permit conditions

- 40. None of the fact changes identified in Exhibit C to Keystone's Certification Petition affects Keystone's ability to meet the conditions on which the permit was issued.
- 41. Condition Nos. 1-3, 5, 6.a 6.f, 11-14, 16.1 16.0, 17, 18, 19.a, 20-34.a, 35-40, 41.b, and 42-48 are prospective.
- 42. The Commission heard no evidence that Keystone cannot satisfy any of these conditions in the future.
- 43. Condition 4 provides that the permit is not transferable without the consent of the Commission. The Commission heard no evidence that Keystone cannot continue to comply with this condition.
- 44. 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. The Commission heard no evidence that Keystone cannot continue to meet these conditions.

- 45. 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. at 317.) The Commission heard no evidence that Keystone cannot continue to meet this condition.
- 46. 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 Pipeline, Keystone presented evidence that it will contact Tribal emergency responders as well. (Tr. at 317-18.)
- 47. Condition 15 requires consultation with the NRCS to develop the con/rec units, which Keystone established has been done. (Certification Petition, App. C, ¶ 80; FSEIS, App. R.)
- 48. Condition 19 requires that landowners be compensated for tree removal, which Keystone indicated is done as part of the process of acquiring easements. (Certification Petition, App. B, Condition 19). The Commission heard no evidence that Keystone cannot continue to meet this condition.
- 49. 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. at 662-63, 692-93.) No witness testified to the contrary.
- 50. 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. Keystone presented evidence that this process is ongoing. (Certification Petition, App. B, Condition 19; Tr. at 630, 637.) No witness testified to the contrary.
- 51. Condition 41.a requires that Keystone consult with SDGFP to identify greater prairie chicken and greater sage and sharp-tailed grouse leks. Keystone submitted evidence that this process is ongoing. (Certification Petition, App. B, Condition 19.) No witness testified to the contrary.
- 52. 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. There was no evidence that Keystone cannot comply with this condition. The only evidence related to the condition came from Sue Sibson, who testified that reclamation on her property after construction of the Keystone Pipeline has not been satisfactory. (Tr. at 1965.) She testified, however, that she has been paid damages for loss of use of the easement area (Tr. at 1975), and she did not complain that Keystone has failed to pay reasonable damages. The process of reclaming of her property is ongoing. (Tr. at 1978, 306.)
- 53. 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. The Commission heard no evidence that Keystone cannot comply with this condition.

- 54. Multiple Intervenors testified to their concerns about the possible adverse effects of the pipeline on groundwater resources, shallow aquifers, and rivers and streams. None of this testimony related to Keystone's ability to meet any permit condition. Rather, this testimony relates to Keystone's burden of proof under SDCL § 49-41B-22.
- 55. 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. (Davis Direct Testimony, Ex. 1003, at page 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. (*Id.* at page 2.) 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. (*Id.*) These concerns do not specifically address any permit condition.
- 56. Heidi Tillquist testified on behalf of Keystone that adverse impacts to all of these areas are highly unlikely. (Tillquist Amended Rebuttal Testimony, 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. at 1808-09.) The Commission addressed the likelihood of such adverse impacts in its Findings of Fact in Docket HP09-001, Findings 43-45 and 52. Dr. Davis's testimony is insufficient to warrant any change to those findings.
- 57. 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. (Decision, Finding 53, Condition 35; Tillquist Amended Rebuttal Testimony, Ex. 2017, ¶ 9.) Dr. Davis did not testify that such treatment was inappropriate or insufficient or that Keystone could not meet the condition.
- 58. 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. (Davis Direct Testimony, Ex. 1003, at pages 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. (Tillquist Amended Rebuttal, Ex. 2017, ¶¶ 11-12.) This testimony was undisputed.
- 59. 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. (Davis Direct Testimony, Ex. 1003, at page 5.) In her rebuttal testimony, Heidi Tillquist addressed flaws in Stansbury's analysis. (Tillquist Amended Rebuttal Testimony, 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.

- 60. 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. at 2209-10.) The proximity of the Pipeline to the City of Colome's wells was addressed in Docket HP09-001. The Commission found that the Tripp County Water User District is upgradient of the Pipeline and therefore would not be affected by a spill. (Decision, Finding 48.) In this proceeding, Brian Walsh from the DENR testified that the route had been moved at DENR's request before the Amended Final Decision and Order, and that the current route had been determined in consultation with DENR. (Tr. at 2155-56.) The route was moved 175 feet from the edge of the surface water protection area and 1,000 feet from the wellhead itself. (Tr. at 1323.) Moreover, Keystone met at the time the route was changed with the mayor and an engineer for the City of Colome. (Tr. at 1384.) This is not an issue that affects Keystone's ability to meet any permit condition.
- 61. 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. at 2015-20.) He testified that the Tribe is working with the State to quantify the Tribe's water rights. (Tr. at 2016-17.) 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 ARSD 46:5:40:1, which governs temporary water use permits, protects the Tribe, even in cases of long-term drought. (Schmidt Rebuttal Testimony, Ex. 2009, ¶¶ 5-7; Tr. at 1880-82.) Crow Ghost's testimony did not establish that Keystone is unable to meet any permit conditions.
- 62. Carlyle Ducheneaux is the Section 106 Coordinator for the Cheyenne River Sioux Tribe. (Tr. at 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. (Ducheneaux Direct Testimony, 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 horizontal directional drilling for the crossing. (Schmidt Rebuttal Testimony, Ex. 2009, ¶¶ 8-9.) 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. (*Id.*) Ducheneaux's testimony did not establish that Keystone is unable to meet any permit condition.
- 63. 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. at 1658-60); (2) the dangers of exposure to benzene (Tr. at 1661-62); (3) her opinion that benzene can permeate polyethelene water pipe and waterlines like the Mni Waconi (Tr. at 1663-64); (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. at 1666-67); and (5) because of the threat to drinking water resources, the Project "could substantially impair the health, safety, and welfare of South Dakotans." (Tr. at 1673.) Tillquist's testimony establishes 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. (Decision, Findings 43-45 and 52; Tillquist Amended Rebuttal Testimony, 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. at 950-51.) Myers' testimony does not establish that Keystone is unable to meet any permit condition.

- 64. Faith Spotted Eagle testified to concerns about safe drinking water and the availability of water from the Missouri River for spiritual ceremonies. (Spotted Eagle Direct Testimony, Ex. 9011, ¶¶ 21-23; Tr. at 1855-57.) 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.
- 65. 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, the Department of State failed to consult with the Tribe in preparing the FSEIS. (Young Direct Testimony, Ex. 8001, last page; Tr. at 1722, 1732-33.) 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. at 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.
- 66. 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. Keystone offered evidence that it has sought out local knowledge, including from the Tribes. (Certification Petition, App. B, Condition 34(b).)
- 67. None of the Tribes who intervened in this proceeding were parties to Docket HP09-001, although all could have been.
- 68. Appendix E to the FSEIS, which is a matter of public record, 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.
- 69. 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. at 1745-46, 1873, 2084, 2096-97, 2104-05.)

- 70. Sue Sibson and Diana Steskal testified to reclamation issues on Sibson's property, which is located in Miner County and is crossed by the Keystone Pipeline. (Sibson Direct Testimony, Ex. 1003-C.) Steskal is a resident of Stuart, Nebraska. She testified about her observations on Sibson's property and to the reclamation history recounted to her by Sue and Mike Sibson. (Tr. at 975-978.) Sue Sibson testified that Keystone's contractor was in a hurry to do the reclamation on their property in 2010 and initially planted seed in high winds. (Tr. at 1958.) The easement area was mostly weeds after the first seeding, so Keystone sprayed the area in 2010 and then replanted it in 2011, when rocks were also hauled off the right of way. (Tr. at 1960-61.) Keystone developed a wholesale reclamation plan for the property in 2011. (Tr. at 1974.) Sibson complained that Keystone planted thickspike wheatgrass on the right of way; it was supposed to die out, but has not and populated approximately 30-40 of the right of way. (Tr. at 1961-63.) The cattle will not eat it. (Tr. at 1961-62.) Keystone sprayed it in 2013 and twice in 2014. (Tr. at 1963.) Currently, 8-9 acres of the 17-acre easement area are pasture, and Sibson is not satisfied with reclamation of the pasture. (Tr. at 1972.) Sibson testified that she has been paid for crop loss. (Tr. at 1975, 1976-77.) She agreed that the property has been seeded or reseeded five times and that someone on behalf of Keystone has been to her property every year since construction at her request. (Tr. at 1978.)
- 71. 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 revegation on all disturbed areas for at least two years. There is no evidence that Keystone has not complied with this condition.
- 72. Sibson's testimony does not establish that Keystone cannot meet this condition. She testified that it takes "quite a while" for native grasses to establish (Tr. at 1977), and that her property has been reseeded at her request four or five times since 2009. It is undisputed that Keystone has continued to work with Sibson. Corey Goulet testified that Keystone was committed to continue reclamation efforts on the Sibson property until the Sibsons were satisfied. (Tr. at 306.) He also testified that out of 535 tracts on the Keystone Pipeline, all but 9 had been reclaimed to the satisfaction of the landowner. (*Id.*)
- 73. John Harter complained that Keystone acquired an easement on his property through the use of eminent domain. (Tr. at 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. 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.
- 74. Kevin E. Cahill, Ph.D., is an economist with EcoNorthwest from Portland, Oregon. (Tr. at 1681-82.) 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 risk-benefit analysis, but it failed to consider any risks of the Project. (Tr. at 1685-88.) He testified that any benefits of the Project had not been measured against the costs as part of the analysis done in the FSEIS. (*Id.* at 1690.)

- 75. 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 is unable to meet any permit condition.
- 76. Paula Antoine testified about socioeconomic issues as a rebuttal witness on behalf of the Rosebud Sioux Tribe. (Ex. 11000.) She is the Director of the Sicangu Oyate Land Office. (Tr. at 2131.) She testified that in her opinion Keystone failed to present sufficient evidence related to Findings of Fact 107, 108, 109, and 110. (Antoine Rebuttal Testimony, Ex. 11000 at pages 2-4; Tr. at 2133.) Antoine's testimony is not based on her personal knowledge and does not relate to any permit condition.
- Faith Spotted Eagle testified on behalf of the Yankton Sioux Tribe. (Spotted Eagle Direct Testimony, Ex. 9011, Tr. at 1848.) She is a counselor and a PTSD therapist. (Tr. at 1848-49.) She testified to her concerns about the proposed work camps in South Dakota and the effect that they might have on the safety of Native American communities and tribal members. (Ex. 9011, at ¶¶ 14, 18, 19; Tr. at 1850-52.) 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, at ¶¶ 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.
- 78. 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. (Perkins Rebuttal Testimony, Ex. 2007, ¶¶ 5-6, 12-13; Tr. at 2400.) Perkins testified that Keystone expects no increase in crime associated with the camps. (Tr. at 2409.) Workers who live in the camps must sign a code of conduct and are expelled if they violate the code. (Tr. at 2413.)
- 79. 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. (Perkins Rebuttal Testimony, 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. (Perkins Rebuttal Testimony, Ex. 2007, ¶ 14; Tr. at 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. (Perkins Rebuttal Testimony, Ex. 2007, ¶ 15.)
- 80. 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.

- 81. Steve Vance testified on behalf of the Cheyenne River Sioux Tribe. He is the Tribal Historic Preservation Officer. (Vance Direct Testimony, Ex. 7002, ¶ 2; Tr. at 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. (Vance Direct Testimony, Ex. 7002, ¶¶ 7-10.)
- 82. 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.
- 83. Dakota Rural Action called Evan Vokes, a former TransCanada employee, to testify about welding and other safety issues that he perceived from his tenure. (Vokes Direct Testimony, 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. at 1550-52.) He started in the welding group as an engineer in training, and became a professional engineer in 2009. (*Id.* at 1550-51.) His rank from 2009 until October, 2011, was junior engineer. (*Id.* at 1551-52.) When he started at TransCanada, he had no previous experience with pipeline welding. (*Id.* at 1572.)
- 84. 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. at 1578.)
- 85. 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. at 1594-96.) He testified that the National Energy Board in Canada ("NEB") sent a letter related to nine welding procedures not meeting minimum qualifications. (Tr. at 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. at 1598-99.) 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. (Tr. at 2264-65.) He testified that they did not affect the safety of any welds. (*Id.* at 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. at 2265-66.) In addition, TransCanada worked with the NEB to look at the other welds on the same pipeline, and found no issues. (Tr. at 2266-67.)
- 86. Vokes testified that he was aware of pipe intended for the Keystone Pipeline that had manufacturing defects. (Tr. at 1602-03.) 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. at 2267-68.)

- 87. Vokes testified that he was involved in testing the integrity of the welds along a segment of the Keystone Pipeline. (Tr. at 1600-01.) There were issues with peaked pipe, which is the result of a manufacturing problem. (Tr. at 1610-11.) Vokes thought that the pipe should not have been used because it could fatigue over time. (Tr. at 1611-14.) He thought, however, that "[w]e did a very good job, actually very good pipe, other than the fact of the peaking." (Tr. at 1613.) Dan King testified that there was no pipe installed on the Keystone Pipeline that was inspected in a manner that did not come with the tolerances permitted by code, and that the pipe met TransCanada's tolerances, which are stricter than code. (Tr. at 2269-70.)
- 88. Vokes testified that he thought there were problems with gas metal arc welding causing lack-of-fusion defects. (Tr. at 1603-05.) 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. at 2271-72.)
- 89. 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. at 1614-19.) 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. at 1621.) Vokes also testified that there were dents associated with welds on the Bison project. (Tr. at 1623-24.) 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. at 2273-74.) 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. at 2274.) As a result of the failure, TransCanada increased the number of inspectors on projects and improved inspector training. (Tr. at 2274-75.) King also testified that he disagreed with Vokes's testimony that there could be 1,200 to 1,300 defective welds in the ground on the Bison project. (Tr. at 2276-76.) He testified that with PHMSA's involvement and inspection of 100% of the welds, it was not possible. (*Id.*)
- 90. 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. at 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. at 1574-56.) He testified that he was told to qualify Weldsonix. (Tr. at 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. at 2276-77.) 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. at 2277.)

91. 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. at 1773, 1775, 1777-78.)

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 meet the burden required under SDCL § 49-41B-22, which the Commission concluded in the Decision entered in Docket HP09-001 it had met. Keystone's burden of proof under SDCL § 49-41B-27 is narrower than its burden was to obtain the permit under SDCL § 49-41B-22.
- 4. Under SDCL § 49-41B-27, Keystone has the burden of proof to show that it can continue to meet the conditions on which the permit was issued.
- 5. "Conditions" as used in SDCL § 49-41B-27 means the conditions attached as Exhibit A to the Decision.
- 6. 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 changes in facts and circumstances related to the Project since June 30, 2010, nothing that has changed affects Keystone's ability to meet the conditions on which the permit was granted.
- 7. With respect to prospective conditions that are unaffected by factual changes since June 29, 2010, Keystone is as able today to meet the conditions as it was when the permit was issued. Keystone therefore had no burden to offer affirmative evidence that it would be able to meet the conditions in the future beyond the Certification signed by Corey Goulet.
- 8. With respect to all other conditions, Keystone offered sufficient evidence to establish that Keystone can continue to meet the conditions.
- 9. The Intervenors failed to establish any reason why Keystone cannot continue to meet the conditions on which the permit was issued.

- 10. 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.
- 11. 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 other information to determine whether to accept Keystone's Certification under SDCL § 49-41B-27.
- 12. 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 or exceeded.

It is therefore

ORDERED that Keystone's Certification under SDCL § 49-41B-27 is accepted by the Commission 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.