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,

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[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