STATE OF SOUTH DAKOTA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

WATER MANAGEMENT BOARD

IN THE MATTER OF WATER APPLICATION NO. 2793-2, TRANSCANADA KEYSTONE PIPELINE, LP

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND FINAL DECISION

This matter came before the South Dakota Water Management Board for hearing on October 3-4, 2019; October 29-31, 2019; December 17-20, 2019; and January 13-14, 2020. Board members Jim Hutmacher, Rodney Freeman, Jr., Peggy Dixon, Leo Holzbauer, Tim Bjork, and Everett Hoyt were present at the hearing and heard the evidence presented.

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The Board, having considered the testimony and exhibits presented and all records and documents on file and having entered its oral decision and rulings on the parties' submissions, now enters the following:

FINDINGS OF FACT

1. On October 15, 2018, TransCanada Keystone Pipeline, LP ("Applicant") submitted an application signed by Gayle Konik for a permit to appropriate 50.44 acre-feet of water from the Bad River. The points of diversion are to be located in the approximate center of the W¹/₂ of Section 3, T1N, R25E in Haakon County (the "Application").

2. The Applicant seeks the water for use during construction of the Keystone XL Pipeline, namely hydrostatic testing as construction is completed,

dust control, fabrication of concrete in conjunction with the construction of pump stations, and horizontal directional drilling at the Bad River.

3. The South Dakota Department of Environment and Natural Resources, Water Rights Program ("Water Rights") determined that the Application was complete and assigned it number 2793-2.

4. Mark Rath, who is employed by Water Rights as a Natural Resources Engineer III, reviewed the Application in the ordinary course of his employment duties. Mr. Rath reviewed the available flow information from USGS instream river gages and prepared a hydrograph displaying the instream flow information for the proposed points of diversion. Mr. Rath also reviewed the records of Water Rights and prepared a list of downstream water rights holders. Mr. Rath reviewed the diversions reported by downstream water rights holders. Mr. Rath determined that there was adequate unappropriated water available for the Applicant's proposed use and that the proposed diversion could be developed without unlawful impairment of existing water rights. Mr. Rath prepared a report dated December 7, 2018, stating his findings and conclusions and submitted it to the Chief Engineer as required by SDCL § 46-2A-2.

5. Under SDCL § 46-2A-2, Jeanne Goodman, the Chief Engineer, timely reviewed Mr. Rath's report. The Chief Engineer recommended approval of the Application because there is a reasonable probability that there is unappropriated water available for the Applicant's proposed use, the diversion can be developed without unlawful impairment of existing rights, the proposed

use is a beneficial use, and the proposed use is in the public interest, with the following qualifications:

A. The Permit holder shall provide engineering plans and specifications and operation plan for an instream measuring device to the Chief Engineer for approval and complete construction of the measuring device prior to diverting water.

B. Low flows as needed for downstream domestic use, including livestock water, and prior rights must be by-passed.

C. This Permit does not authorize diversion of water from the Bad River, unless at least 6 cfs is flowing past the diversion point, when pumping, unless written orders have been issued by the Chief Engineer. Diversion under this Permit shall be in accordance with any written orders issued by the Chief Engineer.

D. The Permit holder shall report to the Chief Engineer annually the amount of water withdrawn from the Bad River.

E. Water Permit No. 2793-2 authorizes a total annual diversion of 50.44 acre-feet of water.

F. After construction and reclamation of disturbed lands are complete, this water right permit shall be subject to cancellation by the Water Management Board due to no further water needs for pipeline construction purposes. The permit holder shall report to the Chief Engineer within six months of cessation of water use authorized by Water Permit No. 2793-2 for the purpose of proceeding with cancellation of the permit.

6. Under SDCL § 46-2A-4, notice of the application and hearing was timely posted on the Department's website and advertised in The Dakota Herald (Perkins County), The Murdo Coyote (Jones County), the Lyman County Herald (Lyman County), the Nation's Center News (Harding County), the Black Hills Pioneer (Lawrence County), the Rapid City Journal (Pennington County), the Winner Advocate (Tripp County), the Pioneer Review (Haakon County), the Capital Journal (Hughes County), and The Faith Independent (Meade County) on January 28, 30 or 31, 2019. In addition, on January 16, 2019, written notice of the Application was provided to the Cheyenne River Sioux Tribe, the Oglala Sioux Tribe, and the Rosebud Sioux Tribe.

7. The following persons petitioned to intervene in opposition to the Application: the Yankton Sioux Tribe, the Rosebud Sioux Tribe, Great Plains Tribal Water Alliance, Dakota Rural Action, Elizabeth Lone Eagle, Mniwakan Nakicijinpi, Cindy Myers, Paul Seamans, Jason Shald, Terry and Cheri Frisch, and Mahmud Fitil.

8. At its meeting on July 17, 2019, the Board set a hearing on the Application for October 3-4 and 29-31, 2019. The Board also set for hearing at the same time two other water permit applications filed by Applicant concerning the Cheyenne and White rivers, an application filed by Tom and Lori Wilson, and an application filed by Wink Cattle Company, all of which related to water to be used in some way during construction of the proposed Keystone XL Pipeline.

9. The Board held a contested case hearing on all five applications beginning on October 3-4 and continuing on October 29-31. The hearing continued on December 17-20, 2019, January 13, 2020, and concluded on January 14, 2020. Chairman James Hutmacher presided at the hearing, and was joined by Board members Everett Hoyt, Tim Bjork, Rodney Freeman, Jr., Leo Holzbauer, and Peggy Dixon. David M. McVey, Assistant Attorney General, served as Board Counsel. The Applicant was represented by William Taylor, John Taylor, James Moore, and Matthew Maher. Water Rights was represented by Ann Mines Bailey. The Yankton Sioux Tribe was represented by Thomasina Real Bird, Rebecca Kidder, and Jennifer Baker. Dakota Rural Action was represented by Bruce Ellison and Patricia Handlin. The Rosebud Sioux Tribe and Great Plains Tribal Water Alliance were represented by Peter Capossela. Other Intervenors appeared *pro se*. The hearing was recorded by Carla Bachand, RPR.

10. During the hearing, the Board heard testimony from Mark Rath, Jeanne Goodman (Chief Engineer), Jung-Hoe Hopgood, Kip Spotted Eagle, Joseph Brings Plenty, LaVae Red Horse, Greg Tencer, State Senator Troy Heinert, Dr. Jeffrey Short, Syed Huq, Doug Crow Ghost, Rosebud President Rodney Bordeaux, Reno Red Cloud, Kate Finn, Annita Lucchesi, Ben Rhodd, Paula Antoine, Elizabeth Wakeman, Faith Spotted Eagle, Dr. Joseph Robertson, John Harter, Cindy Myers, and Kent Moeckly.

11. With some changes made on the record and in consultation with the parties, the hearing was conducted according to the Prehearing Officer's

Order on Hearing Procedure dated August 27, 2019, and an Amended Order on Hearing Procedure dated December 11, 2019. The Board approved multiple requests by the Intervenors for witnesses to testify out of order due to their availability.

12. On the first factor stated in SDCL § 46-2A-9, which is whether there is a reasonable probability that there is unappropriated water available for the Applicant's proposed use, Water Rights presented expert testimony from Mark Rath that the Bad River is not a reliable water source based on historical flow data and his conclusions based on the hydographs contained in his recommendation to the Chief Engineer. Mr. Rath also concluded there is a reasonable probability that there is unappropriated water available for a portion of the year, and that Applicant's use should be restricted to the spring and early summer months. The Board finds that Mr. Rath's expert testimony was credible, supported by the evidence, and unrefuted.

13. Applicant offered expert testimony from Jung-Hoe Hopgood, a professional engineer who works as a hydrologist with EXP Energy Services, Inc. Mr. Hopgood conducted his own analysis of the availability of unappropriated water on the Bad River, and reviewed USGS stream gage data at 15-minute intervals. His conclusion that there was a reasonable probability of unappropriated water available for Applicant's use was credible, supported by the evidence, and unrefuted.

14. The Intervenors did not present contrary expert testimony on the subject of water availability. Syed Huq, the Director of Water Resources for the

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Rosebud Sioux Tribe, was called as a witness on water availability. Mr. Huq testified as a lay witness regarding climate change, groundwater contamination, the Mni Wiconi pipeline, Winters Doctrine rights, drought risks to the Rosebud Sioux Tribe, and the Fourth National Climate Assessment. Mr. Huq did not address the data in Mr. Rath's assessment or Mr. Hopgood's opinions. Doug Crow Ghost, the Chair of the Great Plains Tribal Water Alliance and the Water Director for the Standing Rock Sioux Tribe, also testified as a witness on water availability, and testified as a lay witness about the Winters Doctrine and tribal water uses. Mr. Crow Ghost did not address the data in Mr. Rath's assessment or Mr. Hopgood's opinions.

15. Based on the undisputed testimony of Mr. Rath and Mr. Hopgood, there is a reasonable probability that unappropriated water is available in the Bad River for Applicant's proposed use.

16. On the second factor in SDCL § 46-2A-9, whether the proposed diversion can be developed without unlawful impairment of existing rights, Mr. Rath testified that he reviewed the irrigation questionnaire data which has been required for irrigation permits since at least 1983. He concluded that there is more water appropriated than has been reported used. That testimony was unrefuted. Mr. Rath found thirteen existing water rights for irrigation appropriating 18.45 cfs and three existing rights for 6 cfs authorizing diversion from the river in the reach between the proposed diversion points and the confluence with the Missouri River. Mr. Rath did not consider tribal water

rights and uses other than as reflected in the stream gage data but testified that no South Dakota tribe has quantified rights with respect to the Bad River.

17. Jung-Hoe Hopgood testified that the only available data on water use by permit holders is what is available in the Water Rights' files, so he relied on the same data as reported in Mr. Rath's recommendation.

18. The Intervenors offered no testimony or evidence contradicting the data related to existing water rights in Mr. Rath's report and testimony.

19. Based on the undisputed testimony of Mr. Rath and Mr. Hopgood, there is a reasonable probability that the proposed diversion can be developed without unlawful impairment of existing rights.

20. The third factor in SDCL § 46-2A-9, is whether the proposed use is a beneficial use. Beneficial use is defined in SDCL § 46-1-6(3) as:

"any use of water within or outside the state that is reasonable and useful and beneficial to the appropriator, and at the same time is consistent with the interests of the public of this state in the best utilization of water supplies."

21. The Chief Engineer testified that her analysis is whether the proposed use is beneficial to the appropriator, and consistent with state policy, which is to put all water resources to full beneficial use and development by the people of South Dakota.

22. Greg Tencer, Applicant's Pipeline Execution Manager, testified that water from the Bad River would be used for dust suppression, construction of pump stations, hydrostatic testing, and horizontal directional drilling.

23. The Chief Engineer testified that it is common in South Dakota to use water for dust suppression, construction, hydrostatic testing, and

horizontal directional drilling and in her opinion such use was a beneficial use because those uses have been permitted by the Board. Her testimony was credible and undisputed.

24. Hydrostatic testing of the proposed Keystone XL Pipeline during construction is required by 49 C.F.R. Part 195, and it is undisputed that water is the preferred testing medium for the proposed Keystone XL Pipeline.

25. Water is necessary to fabricate concrete and for dust suppression as part of pump-station construction. There will be seven pump stations constructed in South Dakota for the Keystone XL Pipeline.

26. The Water Management Board has, in past applications, approved water permits for pipeline construction, dust suppression, hydrostatic testing, concrete fabrication, construction, and horizontal directional drilling.

27. The Chief Engineer testified as to her understanding of the scope of review the Board has used when determining whether the use of water is in the public interest, the fourth factor to be considered in SDCL § 46-2A-9, when they have been called to do so in previous permit applications. Her testimony is credible and unrefuted.

28. The Chief Engineer also testified that her determination of public interest was based on previous decisions of the Board and state law.

29. The use of water for dust suppression is common in South Dakota and benefits landowners, the traveling public, and the environment.

30. Water is necessary for horizontal directional drilling ("HDD"), which is environmentally less disruptive and safer than open-cut crossings of rivers.

31. The Board took judicial notice of Docket HP09-001, in which the South Dakota Public Utilities Commission issued a permit under SDCL § 49-41B-22 for construction and operation of the Keystone XL Pipeline, and concluded that if constructed the pipeline would not pose an unacceptable threat of serious injury to the environment or to the social and economic conditions of inhabitants or expected inhabitants in the siting area. The PUC also concluded that if constructed the pipeline would not substantially impair the health, safety, or welfare of the inhabitants in the siting area.

32. The PUC also reviewed the proposed Keystone XL Pipeline in Docket HP14-001, of which the Water Management Board took judicial notice. In that docket, the PUC considered extensive testimony and evidence, much of which was offered by some of the same parties in this proceeding, related to the merits of the proposed Keystone XL Pipeline, and ultimately concluded that Keystone was able to meet the conditions on which the permit in Docket HP09-001 was granted.

33. Greg Tencer testified that the Applicant would not use more water than necessary during construction of the Keystone XL Pipeline, and that water would not be wasted. The Intervenors presented no contrary testimony and did not challenge as unnecessary the volumes of water calculated in the Application. The Chief Engineer testified that the total amount of water for the Cheyenne River requested by the Applicant, 238 acre-feet, was less than the amount of water needed to irrigate one section of land on an annual basis. This Application seeks to appropriate 50.44 acre-feet from the Bad River.

34. The PUC addressed cultural resources in granting a permit for the Keystone XL Pipeline, including Condition 43 requiring that Keystone follow the Unanticipated Discoveries Plan as reviewed by the State Historical Preservation Office and approved by the United States Department of State as part of the Final Supplemental Environmental Impact Statement in January 2014 (the "FSEIS").

35. The Board took judicial notice of the 2014 FSEIS. The FSEIS concluded that the construction of the Keystone XL Pipeline would have minimal effects on the environment. The Board also took judicial notice of the Final SEIS for the proposed Keystone XL Pipeline, which was published by the Department of State on December 20, 2019.

36. There is a reasonable probability that: (a) there is unappropriated water available sufficient for the Applicant's proposed use; (b) subject to certain conditions the proposed diversion can be developed without unlawful impairment of existing water rights; (c) the Applicant's proposed uses of water are beneficial uses; and (d) the proposed uses of water are in the public interest.

37. In her recommendation, the Chief Engineer included six permit qualifications. In approving Water Permit Application No. 2793-2 at its meeting on January 21, 2020, the Board found that certain modifications to the Chief Engineer's recommended qualifications were reasonable and necessary as stated below in the Final Decision.

38. Any of the following conclusions of law that should have been stated as a finding of fact should be recharacterized as necessary.

CONCLUSIONS OF LAW

1. The Water Management Board has jurisdiction over the subject matter and parties to this proceeding pursuant to SDCL Ch. 46-2A. Subject to the findings made on the factors stated in SDCL § 46-2A-9, the Board has the authority to grant, grant the Application with qualifications, deny, or defer action on the Application pursuant to SDCL § 46-2A-7.

2. The Application is complete and in compliance with ARSD 74:02:01:06.

3. Notice of the Application and the Chief Engineer's recommendation was timely and properly made under SDCL § 46-2A-4.

4. The Yankton Sioux Tribe, the Rosebud Sioux Tribe, Dakota Rural Action, Great Plains Tribal Water Alliance, Cindy Myers, Paul Seamans, Mahmud Fitil, Jason Shald, Elizabeth Lone Eagle, Mniwakan Nakicijinpi, and Terry and Cheri Frisch filed timely petitions to intervene and participate in the proceedings. The deadline to oppose the Application was published as required by SDCL § 46-2A-4.

5. The eleven-day hearing held in October and December 2019, and in January 2020 was a contested-case hearing under South Dakota law and was conducted according to SDCL Ch. 1-26. The rules of evidence were followed as provided in SDCL § 1-29-19(1). All parties to this proceeding were presented with a full and fair opportunity to be heard.

6. The Applicant bore the burden of proof under SDCL § 46-2A-9. The Applicant met its burden of proof and is entitled to a permit subject to qualifications adopted by the Board.

7. The Chief Engineer's recommendation that Water Permit Application No. 2793-2 be granted is not binding on the Board. The Board exercised independent judgment in reaching its decision.

8. The Board finds that there is unappropriated water available for the Applicant's use.

9. The Board finds that the proposed diversion can be developed without unlawful impairment of existing rights.

10. Beneficial use is any use of water within or outside the state that is reasonable and useful and beneficial to the appropriator, and at the same time is consistent with the interests of the public in the best utilization of water supplies. SDCL § 46-1-6(3).

11. The Board finds that the proposed use constitutes a beneficial use.

12. The waters of the State should be put to beneficial use to the fullest extent of which they are capable. SDCL § 46-1-4.

13. The "public interest" under SDCL § 46-2A-9 is not defined by statute, but in this case the Board broadly considered how use of the water as proposed in the Application would affect the health, safety, and general welfare of the people of the State of South Dakota. The Intervenors were given broad latitude in their presentation of evidence on this issue.

14. For purposes of making a public interest determination pursuant to SDCL ch. 46-2A, the Board is not bound by the PUC's findings.

15. The Board finds that the proposed use of the water for dust control, horizontal directional drilling, pump station construction, and hydrostatic testing to be in the public interest.

16. Based on the entire record in this matter, including the findings stated above, Water Permit Application No. 2793-2 should be granted under SDCL § 46-2A-7 subject to the qualifications stated below because the proposed appropriation meets the standards in SDCL § 46-2A-9.

17. Any of the preceding conclusions of law that should have been stated as a finding of fact should be recharacterized as necessary.

FINAL DECISION

The Applicant and Water Rights both filed complete Proposed Findings of Fact and Conclusions of Law and Decision. The Yankton Sioux Tribe, Great Plains Tribal Water Alliance, and Dakota Rural Action filed a joint limited set of Proposed Findings of Fact and Conclusions of Law which only addressed certain facts proposed by the applicant. In compliance with SDCL § 1-26-25, the Proposed Findings of Fact and Conclusions of Law are accepted, modified, or rejected as follows:

Applicants Proposed Findings of Fact and Conclusions of Law

The proposed facts set forth in paragraphs 1, 2, 18, 20, 21, 26, 35, 36, 41, 50, 64, 65, 66, and 67 are accepted.

The proposed facts set forth in paragraphs 3, 5, 6, 8, 19, 23, 24, 25, 27, 28, 29, 31, 32, 33, 34, 37, 38, 39, 40, 47, 51, 52, and 53 are accepted as modified herein.

The proposed facts set forth in paragraphs 4, 7, 9, 10, 11, 12, 13, 14, 15, 16, 17, 22, 30, 43, 44, 45, 46, 48, 49, 54, 55, 56, 57, 58, 59, 60, 61, 62, and 63 are rejected.

Water Rights Proposed Findings of Fact and Conclusions of Law

The proposed facts set forth in paragraphs 1, 2, 3, 4, 6, 7, 8, 10, 12, 15,

16, 17, 18, 19, 21, 23, 24, 29, 30, 31, 34, 35, and 37 are accepted.

The proposed facts set forth in paragraphs 5, 9, 13, 14, 20, 22, 25, 26,

27, 28, 32, 33, and 36 are accepted as modified herein.

No facts proposed by Water Rights were fully rejected.

Yankton Sioux Tribe, Great Plains Tribal Water Alliance, and Dakota Rural Action filed a joint limited set of Proposed Findings of Fact and Conclusions of Law

All proposed facts were rejected.

Based upon the foregoing Findings of Fact and Conclusions of Law, the Board enters its determination that Water Permit Application No. 2793-2 is **GRANTED** subject to the following permit qualifications:

1. Prior to any withdrawal of water from the Bad River, the permit holder shall provide to the Chief Engineer for approval engineering plans and specifications, the operation plan, and the proposed location for a real-time instantaneous instream flow measuring device as close downstream from the pump site as reasonable and practicable. The operation and flow

measurements by the instream flow device are to be constructed utilizing appropriate telecommunications technology so as to permit monitoring of instantaneous flow readings by DENR. The permit holder shall complete construction and operation of the measuring device prior to diverting water from the Bad River.

2. Low flows as needed for downstream domestic use, including livestock water, and prior rights must be by-passed.

3. This Permit does not authorize diversion from the Bad River, unless at least 6 cfs is flowing past the diversion point, when pumping, unless written orders have been issued by the Chief Engineer. Diversions under this Permit shall be in accordance with any written orders issued by the Chief Engineer.

4. Prior to any withdrawal of water and subject to design approval by the Chief Engineer, the permit holder shall install real-time instantaneous metering of water withdrawals at the water withdrawal site which may be monitored by appropriate communications technology; and the permit holder shall report to the Chief Engineer weekly the amount of water withdrawn from the Bad River during the previous week and the previous 52 weeks.

5. Water Permit No. 2793-2 authorizes a total diversion of 50.44 acrefeet of water.

6. After construction and reclamation of disturbed lands are complete, this water right permit shall be subject to cancellation by the Water Management Board due to no further water needs for pipeline construction

purposes. The permit holder shall report to the Chief Engineer within sixty (60) days of cessation of water use authorized by Water Permit No. 2793-2 for the purpose of proceeding with cancellation of the permit.

Dated this <u>26</u> day of February 2020.

James Hutmacher, Chairman Water Management Board

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