

**BEFORE THE SOUTH DAKOTA PUBLIC UTILITIES COMMISSION**

**DOCKET NO. HP14-001**

**IN THE MATTER OF THE PETITION OF TRANSCANADA KEYSTONE PIPELINE, LP  
FOR ORDER ACCEPTING CERTIFICATION OF PERMIT ISSUED IN DOCKET HP09-  
001 TO CONSTRUCT THE KEYSTONE XL PIPELINE**

**Direct Testimony of Daniel Flo on Behalf of the Staff of the  
South Dakota Public Utilities Commission  
April 2, 2015**

1 **Q: Please state your name and business address.**  
2 A: Daniel Flo, Natural Resource Group, LLC (NRG), 1500 Southwest First Avenue,  
3 Suite 885, Portland, OR, 97201; 1000 IDS Center, 80 South 8<sup>th</sup> Street,  
4 Minneapolis, MN, 55402 (Corporate Office).

5 **Q: Describe your educational background.**  
6 A: I received my Bachelor of Science Degree in 1996 from Minnesota State  
7 University, Mankato with a Major in Geography. I then received my Juris Doctor  
8 degree from Northwestern School of Law of Lew & Clark College in 2002. My  
9 educational and professional specialties are in environmental law and land use.

10 **Q: By whom are you now employed?**  
11 A: I have been employed by Natural Resource Group, LLC from 2005 to 2010, and  
12 from 2013 to present. I currently hold the position of Senior Consultant.

13 **Q: What work experience have you had that is relevant to your involvement on  
14 this project?**  
15 A: From 2005 to present, my responsibilities have been to provide clients in the  
16 energy and mining industries with environmental permitting services, including  
17 the preparation of Environmental Assessments and Environmental Impact  
18 Statements (EISs) under the National Environmental Policy Act and/or relevant  
19 state programs. My environmental permitting experience also includes the  
20 preparation of permit applications under Sections 404 and 401 of the Clean  
21 Water Act, the preparation of routing and siting applications to state utility  
22 commissions, and various other local, state, and federal environmental permits  
23 and approvals. I also provide project management services wherein I lead multi-  
24 disciplinary teams in performing route and site analysis, environmental field  
25 surveys, environmental permitting, construction compliance inspections, and  
26 post-construction restoration monitoring. A copy of my resume is appended to  
27 this testimony as Exhibit\_\_\_DF-1.

28 **Q: What Professional Credentials do you hold?**  
29 A: None.

30 **Q: What is the purpose of your testimony?**  
31 A: In 2009, NRG provided environmental consulting services in support of PUC  
32 Staff's review of Keystone's original permit application. The scope of NRG's  
33 original review included a summary of the Department of State environmental  
34 review, a review of Keystone's application to the PUC, and an evaluation of the  
35 adequacy of Keystone's state permit application with respect to alternatives,  
36 paleontology, cultural resources, soils, erosion and sedimentation, and  
37 restoration methods described in the project's Construction, Mitigation, and  
38 Reclamation Plan (CMRP). Based on this review, NRG provided hearing support  
39 to PUC Staff including the preparation of prefiled testimony and expert testimony  
40 during the PUC hearing. The purpose of this testimony is to summarize NRG's  
41 review of Keystone's September 2014 Petition for Order Accepting Certification  
42 under SDCL § 49-41B-27 and associated supporting documentation, specifically  
43 our evaluation as to whether any of the changes identified by Keystone result in a  
44 change to our original testimony.

45 **Q: What methodology did you employ?**

1 A: I evaluated materials submitted to the South Dakota Public Utilities Commission  
2 (PUC) by TransCanada Keystone Pipeline, LP (Keystone), including Keystone's  
3 Petition for Order Accepting Certification under SDCL § 49-41B-27 and  
4 associated supporting documentation. Primarily, I evaluated the Findings of Fact  
5 from the PUC's Amended Final Decision and Order that have changed since  
6 2010 as detailed in Keystone's table in Appendix C, and compared those  
7 changes to NRG's original testimony prepared in 2009. I also evaluated the red-  
8 line changes to Keystone's CMRP (dated April 2012) to determine whether the  
9 changes in that document result in changes to NRG's original testimony.

10 **Q: With respect to the changes identified by Keystone in Appendix C, South  
11 Dakota PUC Amended Final Decision and Order, Tracking Table of  
12 Changes, please summarize your review by Finding Number. Findings 14  
13 through 18:**

14 A: The updated project information provided by Keystone for Findings 14 through 18  
15 has been reviewed and results in no change to NRG's original (2009) testimony.

16 **Q: Findings 19, 20, 22, 23:**

17 A: The updated project information provided by Keystone for Findings 19, 20, 22  
18 and 23 is outside the scope of NRG's 2009 review and testimony, and therefore  
19 results in no change to NRG's original testimony.

20 **Q: Findings 24 through 29:**

21 A: The updated project information provided by Keystone for Findings 24 through 29  
22 is outside the scope of NRG's 2009 review and testimony, and therefore results  
23 in no change to NRG's original testimony.

24 **Q: Finding 32:**

25 A: I reviewed the red-line changes to Keystone's CMRP (dated April 2012) and  
26 compared those changes to NRG's original testimony from Ross Hargrove and  
27 Dr. James Arndt. My findings are summarized in Exhibit\_\_\_\_DF-2. This table  
28 lists all CMRP sections with redline changes where NRG also provided  
29 recommendations in 2009, and provides my evaluation of Keystone's change  
30 with respect to NRG's 2009 testimony. None of the redline changes to  
31 Keystone's CMRP result in a change to NRG's 2009 testimony.

32 **Q: Finding 33:**

33 A: The updated project information provided by Keystone for Finding 33 has been  
34 reviewed and results in no change to NRG's original testimony.

35 **Q: Finding 41:**

36 A: I reviewed the additional site-specific crossing plans for the HDD crossings of  
37 Bad River and Bridger Creek, and reviewed NRG's original testimony. The  
38 addition of these two waterbodies as HDD crossings, and the supporting site-  
39 specific crossing drawings, result in no change to NRG's original testimony.

40 **Q: Finding 50:**

41 A: The updated project information provided by Keystone for Finding 50 has been  
42 reviewed and results in no change to NRG's original testimony.

43 **Q: Finding 54:**

44 A: The updated project information provided by Keystone for Finding 54 has been  
45 reviewed and results in no change to NRG's original testimony.

46 **Q: Findings 60 through 63, and 68:**

1 A: The updated project information provided by Keystone for Findings 60 through 63  
2 and 68 is outside the scope of NRG's 2009 review and testimony, and therefore  
3 results in no change to NRG's original testimony.

4 **Q: Finding 73:**

5 A: See the response to Finding Number 32 above and my summarized findings in  
6 Attachment 2.

7 **Q: Finding 80:**

8 A: NRG's original recommendations included that Keystone be required to provide  
9 the final Construction/Reclamation (Con/Rec) Units and associated construction,  
10 restoration and mitigation procedures and corresponding pipeline milepost  
11 references to the PUC prior to construction. NRG also recommended that the  
12 Con/Rec classification system be developed in consultation with Natural  
13 Resources Conservation Service (NRCS) staff. NRG's recommendations were  
14 based in part on an understanding that Keystone would include Badlands  
15 (sodium bentonite) soils as a Con/Rec Unit. NRG also evaluated Keystone's  
16 examples of specific reclamation measures that may be used in areas where  
17 saline, sodic, and saline-sodic soils are encountered during construction and  
18 found the sample procedures to be adequate.

19  
20 Keystone's update to Finding 80 indicates that Con/Rec mapping was completed  
21 in consultation with area NRCS staff. Keystone's Response to Commission  
22 Staff's First Set of Interrogatories (#18) indicates that Con/Rec Units are not part  
23 of the updated CMRP but that the results are included with the Department of  
24 State's FSEIS in Appendix R.

25  
26 I reviewed Appendix R of the FSEIS on the Department of State's website and  
27 confirmed that Con/Rec Units were developed and are included as an appendix  
28 to that federal NEPA document. I also confirmed, based on the documentation  
29 provided in Appendix R including records of correspondence, that NRCS staff  
30 and other professional resources were consulted during the development of the  
31 Con/Rec classification system. Appendix R does not, however, include pipeline  
32 milepost references for the Con/Rec Units.

33  
34 Keystone's update appears largely to satisfy NRG's original recommendation in  
35 that Con/Rec Units have been developed, that NRCS staff was consulted during  
36 the Con/Rec Unit development process, and that the Con/Rec classification  
37 system is available to the PUC prior to project construction.

38  
39 To the extent that the Con/Rec Units do not specifically include a Badlands soils  
40 unit, NRG originally found that Keystone's construction, reclamation, and  
41 mitigation measures for dealing with this soil type, as discussed in the  
42 application, were appropriate and represented the tools that are typically used  
43 during construction in similar soils. The absence of a Badlands soils unit does  
44 not specifically represent a change to NRG's original testimony.

45

1 Finally, although the Con/Rec Units do not appear to specifically address  
2 construction or reclamation procedures in saline, sodic, or saline-sodic soils or  
3 saline seeps, there is no change to NRG's original testimony finding that the  
4 reclamation measures discussed in the application were adequate and  
5 appropriate for those soil types.  
6

7 **Q: Finding 83:**

8 A: See the response to Finding Number 41 above. The updated project information  
9 provided by Keystone for Finding 83 results in no change to NRG's original  
10 testimony.

11 **Q: Finding 90:**

12 A: The updated project information provided by Keystone for Finding 90 is outside  
13 the scope of NRG's 2009 review and testimony, and therefore results in no  
14 change to NRG's original testimony.

15 **Q: Finding 107:**

16 A: The updated project information provided by Keystone for Finding 107 is outside  
17 the scope of NRG's 2009 review and testimony, and therefore results in no  
18 change to NRG's original testimony.

19 **Q: Does this conclude your testimony?**

20 A: Yes.