## BEFORE THE SOUTH DAKOTA PUBLIC UTILITIES COMMISSION

DOCKET NO. HP14-002

IN THE MATTER OF THE REVISED APPLICATION OF DAKOTA ACCESS, LLC FOR AN ENERGY FACILITY PERMIT TO CONSTRUCT THE DAKOTA ACCESS PIPELINE

Direct Testimony of David Nickel
On Behalf of the Staff of the South Dakota Public Utilities Commission
July 6, 2015

1 Q: Please state your name and business address.

A: David L. Nickel, Natural Resource Group, LLC (NRG) 1000 IDS Center, 80 S. 8<sup>th</sup> St., Minneapolis, MN 55402

Q: Describe your educational background.

A: I received my Bachelor of Liberal Arts Degree in 2002 from the University of Minnesota Duluth with a major in Environmental Studies.

11 Q: By whom are you now employed?

13 A: Natural Resource Group, an ERM Company from 2008 to 2010, and from 2013 to present as a Consultant and Health and Safety Representative.

16 Q: What work experience have you had that is relevant to your involvement on this project?

A: Over 10 years' of experience in either consulting to or working in environmental, health, and safety for the energy and general manufacturing industry. My current responsibilities have been to provide clients with environmental permitting services, including the preparation of the Reliability and Safety sections of Environmental Assessments and Environmental Impact Statements (EISs) under the National Environmental Policy Act and/or relevant state programs. I also represent the company as the company's Health and Safety Representative, which includes providing guidance to company employees on safe work and travel planning and practices.

Q: What Professional Credentials do you hold?

31 A: None.

A:

Q: What is the purpose of your testimony?

 I was asked to review portions of the Dakota Access Pipeline Project (Project) application and related interrogatories that was submitted to The South Dakota Public Utilities Commission (PUC) regarding the Project's risk assessment and pipeline safety.

Q: What methodology did you employ?

A: I completed a technical review of the Dakota Access Pipeline Project application and related interrogatories that were submitted to the South Dakota PUC by Dakota Access, LLC (Dakota Access). My primary focus was on the Project's risk assessment, high consequence areas, and unusually sensitive areas and the associated management practices that will be implemented to safely operate Dakota Access' proposed pipeline.

Q:

Based on your review of the Revised Application and any related interrogatories, do you agree with Dakota Access's conclusion that the project does not cross any high consequence areas (HCAs)? If not, please explain why you disagree.

A: Based on NRG's review of Dakota Access' Revised Application and related interrogatories, we agree that the Project will not cross any HCAs in South Dakota, except to the extent that the Project may cross several unusually sensitive areas (USAs, see testimony question and response below) given that a USA is included in the definition of HCA in 49 CFR 195.450. Dakota Access has stated they have modified the proposed pipeline route to specifically avoid HCAs as a result of their review of aerial imagery, physical site visits, and aerial reconnaissance of the proposed route.

Q: Based on your review of the Revised Application and any related interrogatories, do you believe the project will cross any unusually sensitive areas (USAs)? If so, please explain.

A: Based on NRG's review of Dakota Access' Revised Application and related interrogatories, we believe that the Project may cross USAs in South Dakota. A determination of whether an area is in fact "unusually sensitive" as defined by 49 CFR 195.6 is ultimately to be made by the governmental body with regulatory authority over the drinking water or ecological resource that is being crossed.

 Dakota Access stated that they have consulted with the South Dakota Department of Environment and Natural Resources (SDDENR) during the Project's fatal flaws analysis and identified Zone A Wellhead Protection and Source Water areas within Minnehaha County. These areas define the boundaries and protection areas in which the land area contributes water to a well as a source of drinking water and could be identified as an USA drinking water source.

The Project crosses seven rural water systems within South Dakota including WEB, Mid Dakota, Kingbrook, Minnehaha, Lincoln, South Lincoln, and the Lewis and Clark system which overlaps the majority of these water districts that are located on the eastern border of South Dakota. These rural water systems could be identified as USAs.

Identified ecological USAs include eight waterbodies that will be crossed by the Project that have Topeka shiner occurrences, including the James River, Shue Creek, Pearl Creek, Middle Pearl Creek, Redstone Creek, Rock Creek, East Fork Vermillion River, and Big Sioux River. An additional waterbody, the West Fork Vermillion River, was also identified for occurrence; however, the Project crosses

at its headwaters where it is an emergent wetland with no perennial flowing water and therefore is not suitable habitat for the species. Additionally, the James and Big Sioux Rivers have been identified as habitat for the northern river otter.

The Project area is also within the migratory range of the whooping crane; however, this species is highly mobile and would likely avoid construction areas for the vast similar and suitable habitat throughout the area and region. Whooping crane habitat could be identified as an ecological USA.

Q: If you identified the project will cross any HCAs or USAs, do you believe Dakota Access has the proper mitigation measures in place? Please explain.

A: Based on NRG's review of Dakota Access' Revised Application, we believe that Dakota Access has or is working towards identifying the appropriate mitigation measures for the identified USAs. As previously noted, the Project will not cross any known HCAs in South Dakota as a result of Dakota Access modifying the proposed pipeline route to specifically avoid known HCAs.

For the identified Zone A Wellhead Protection and Source Water areas within Minnehaha County, Dakota Access, through the reroute process, has confirmed that the Project will avoid crossing this protected area. The closest point that the proposed pipeline route will be to the Minnehaha County Wellhead Protection Area is 0.43 mile. Dakota Access will continue to run spill models to ensure appropriate mitigation measures are in place to protect the Minnehaha County Wellhead Protection Area.

 Dakota Access has stated that they are working with the rural water systems regarding the appropriate methods and measures for crossing their respective lines. Potential avoidance measures could include lowering waterlines and installing protective casings within the pipeline easement and maintaining a defined separation distance below the pipeline at crossing locations, as required.

Based on current survey data, Dakota Access has identified a potential to effect two listed aquatic species, the Topeka shiner and northern river otter. The James and Big Sioux Rivers will be crossed via HDD; therefore, impacts to Topeka shiner and the northern river otter within both of these rivers will be avoided. Dakota Access has stated that they will continue to coordinate with the USFWS regarding potential impacts to Topeka shiner within the other six suitable waterbodies (i.e., Shue Creek, Pearl Creek, Middle Pearl Creek, Redstone Creek, Rock Creek, and the East Fork Vermillion River) that will not be crossed via HDD and identify suitable construction and/or mitigation measures. NRG has recommended additional avoidance and mitigation measures in our testimony regarding threatened and endangered species.

Q: Based on NRG's review of Dakota Access's Revised Application, do you conclude that the pipeline will not pose a threat of serious injury to the environment?

A: Based on NRG's review of Dakota Access' Revised Application, we agree that the Project is not likely to pose a threat of serious injury to the environment.

Dakota Access has stated that over the operational life of the proposed pipeline there is a low likelihood of a crude oil release from the pipeline that could enter a surface water or drinking water supplies. The reasoning behind this justification is described below as part of the best management practices and controls that Dakota Access will implement as required by the proposed Project. These measures will minimize any potential adverse effects to the environment and public.

Dakota Access has committed to drafting and implementing a Facility Response Plan (FRP) and Oil Spill Response Plan (OSRP) consistent with industry practice and in compliance with applicable regulations, including 49 CFR Parts 194 and 195. If correctly implemented, these plans will establish the emergency response procedures and mitigation measures that Dakota Access will implement in the event of a release.

 Dakota Access will also implement measures to prevent third-party excavation damage and corrosion issues. Examples of these measures include: pipeline constructed of high strength steel with a fusion bonded epoxy, impressed current cathodic protection systems, leak detection systems, signage, public awareness and damage prevention programs, participation in the South Dakota One Call Program, and routine aerial surveillance patrols. Lastly, Dakota Access will install isolation valves that will be remotely controlled from the Central Control Room to minimize and stop the flow of potential releases.

Q: Based on NRG's review of Dakota Access's Revised Application, do you conclude that the facility will not substantially impair the health, safety or welfare of the inhabitants?

A: Based on NRG's review of Dakota Access' Revised Application, we have concluded that the proposed Project is not likely to substantially impair the health, safety or welfare of the inhabitants of South Dakota.

See the response to the above question regarding the pipeline posing a threat or serious injury to the environment. Dakota Access has stated that the pipeline is being designed, routed, and will be constructed and operated in a manner to meet or exceed all state and Federal requirements which will minimize and avoid any substantial impairments to the health, safety, or welfare of the inhabitants adjacent to the proposed pipeline.

- Does this conclude your testimony? Q: 1 2 3
- A: Yes.