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 2

3

4

5 6

7 8

9 10 11

12

15

18

28

30

32

34

39

41

Q: Please state your name and business address.

A: David L. Nickel, Natural Resource Group, LLC (NRG) 1000 IDS Center, 80 S. 8th 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.

Q: By whom are you now employed?

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

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

Over 10 years' of experience in either consulting to or working in environmental, 19 A: health, and safety for the energy and general manufacturing industry. My current 20 responsibilities have been to provide clients with environmental permitting 21 services, including the preparation of the Reliability and Safety sections of 22 Environmental Assessments and Environmental Impact Statements (EISs) under 23 the National Environmental Policy Act and/or relevant state programs. I also 24 represent the company as the company's Health and Safety Representative, 25 which includes providing guidance to company employees on safe work and 26 travel planning and practices. 27

29 Q: What Professional Credentials do you hold?

31 A: None.

33 Q: What is the purpose of your testimony?

A: 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.

40 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.

Based on NRG's review of Dakota Access' Revised Application and related 9 A: interrogatories, we agree that the Project will not cross any HCAs in South 10 Dakota, except to the extent that the Project may cross several unusually 11 sensitive areas (USAs, see testimony question and response below) given that a 12 USA is included in the definition of HCA in 49 CFR 195.450. Dakota Access has 13 stated they have modified the proposed pipeline route to specifically avoid HCAs 14 as a result of their review of aerial imagery, physical site visits, and aerial 15 16 reconnaissance of the proposed route.

18Q:Based on your review of the Revised Application and any related19interrogatories, do you believe the project will cross any unusually20sensitive 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.
- 27 28

29

30

31

32

33 34

35

41

17

21

3

8

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.

1

2 3

4

5 6

7

8

9

13

19

27

33

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.

10Q:If you identified the project will cross any HCAs or USAs, do you believe11Dakota Access has the proper mitigation measures in place? Please12explain.

- 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 34 two listed aguatic species, the Topeka shiner and northern river otter. 35 The James and Big Sioux Rivers will be crossed via HDD; therefore, impacts to 36 Topeka shiner and the northern river otter within both of these rivers will be 37 avoided. Dakota Access has stated that they will continue to coordinate with the 38 USFWS regarding potential impacts to Topeka shiner within the other six suitable 39 waterbodies (i.e., Shue Creek, Pearl Creek, Middle Pearl Creek, Redstone 40 Creek, Rock Creek, and the East Fork Vermillion River) that will not be crossed 41 via HDD and identify suitable construction and/or mitigation measures. NRG has 42 recommended additional avoidance and mitigation measures in our testimony 43 regarding threatened and endangered species. 44

1Q:Based on NRG's review of Dakota Access's Revised Application, do you2conclude that the pipeline will not pose a threat of serious injury to the3environment?

5 A: Based on NRG's review of Dakota Access' Revised Application, we agree that 6 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.

- 32Q:Based on NRG's review of Dakota Access's Revised Application, do you33conclude that the facility will not substantially impair the health, safety or34welfare of the inhabitants?
- A: Baséd 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.

40 See the response to the above question regarding the pipeline posing a threat or 41 serious injury to the environment. Dakota Access has stated that the pipeline is 42 being designed, routed, and will be constructed and operated in a manner to 43 meet or exceed all state and Federal requirements which will minimize and avoid 44 any substantial impairments to the health, safety, or welfare of the inhabitants 45 adjacent to the proposed pipeline.

46

4

7 8

9

10

11

12

13 14

15

22 23

24 25

26

27

28 29

30 31

35

39

1 Q: Does this conclude your testimony?

2 3 A: Yes.

= 2

Dave Nickel



an ERM Group company

Email: david.nickel@NRG-LLC.com

Dave is a Consultant in Natural Resource Group, LLC's (NRG) Minneapolis office. He has been working in the industry since 2002 and specializes in Health, Safety, and Environmental (HSE) Compliance and is a project manager for NRG's Operational Compliance services. Dave is also a member of NRG's Corporate HSE Compliance Team serving as an Environmental, Health, and Safety Representative. As a part of the Corporate HSE Compliance Team, Dave has contributed to writing NRG's Corporate HSE Program. His previous experience have been both facility and pipeline based. Dave's most recent experience was with Northern Natural Gas Company serving as a Division Environmental Specialist, which provided him with natural gas pipeline operations experience.

Selected Project Experience

- Plains LPG Services, L.P., 2013 to 2014, environmental compliance services: Project team member responsible for drafting Compliance Matrices detailing compliance requirements for the U.S. Environmental Protection Agency (EPA), state, and local regulatory programs for multiple propane terminals; hazardous waste reporting and guidance; drafted/revised National Pollution Discharge Elimination System (NDPES) Stormwater Pollution Prevention Plans; and drafted/revised Spill Prevention, Control, and Countermeasure Plans (SPCC Plans).
- Plains All American Pipeline, L.P., 2013 to 2014, environmental compliance services for facilities located in Louisiana and Mississippi: Project team member responsible for drafting SPCC Plans; Indiana Department of Natural Resources underground storage cavern permitting and registration; and provided regulatory guidance for facility compliance.
- Petrogas Terminals, LLC, 2013 to 2014, environmental and safety compliance services for facilities located in Indiana and Washington: Project team member responsible for drafting a U.S. Department of Transportation (DOT) Site Security Plan and completing the associated Risk Assessment; and providing SPCC regulatory guidance for facility compliance.
- Big River Resources Boyceville, LLC, 2013 to 2014, environmental compliance services: Project team member responsible for requirements for EPA, state, and local regulatory programs for the facility; NPDES annual reporting and sampling; water well permitting; NDPES Stormwater Pollution Prevention Plan; and drafted/revised SPCC Plan.
- ONEOK, 2013 to 2014, Arsenal Road Federal Energy Regulatory Commission (FERC) Prior Notice project: Project team member responsible for assisting with drafting and preparing resource reports; Illinois NPDES construction storm water permitting; and prepared construction guidance documents for managing waste disposal, soil sampling, and restoration.
- BP Remediation, 2014, asbestos remediation and integrity management project for a BP terminal in Wood River, Illinois: Project team member responsible for drafting Health, Safety, Security, and Environmental programs to meet specific client requirements; drafting an Operations and Maintenance program for integrity management for facility assets; and interviewing subcontractors to ensure the subcontractors met the client safety requirements and metrics.
- Lake Charles LNG, 2014, FERC third-party Environmental Impact Statement (EIS): Project team member responsible for assisting with drafting the Reliability and Safety section for liquefied natural gas and pipeline operations for the EIS.

Dave Nickel Page 2 of 3



- Northern Natural Gas Company, 2010 to 2013, operational compliance and project management for pipeline and field operations in Michigan, Minnesota, North Dakota, South Dakota, and Wisconsin: Division Environmental Specialist responsible for environmental compliance of Northern Natural Gas Company's north region field operations, pipeline system, pipeline facilities, and compressor stations; air permitting and reporting; spill reporting; post incident investigations; drafting and revising SPCC Plans; project construction permitting; hazardous and non-hazardous waste management; facility auditing; NPDES permitting and reporting for wastewater discharges; and providing training for permits/plans for field operations personnel.
- Northern Natural Gas Company, 2008 to 2010 and 2013 to 2014, operation and maintenance permitting for various gas pipeline maintenance projects in lowa, Nebraska, and Wisconsin: Project Manager responsible for obtaining NPDES/construction stormwater permits; managing U.S. Army Corps of Engineer permits; U.S. Fish and Wildlife Service's threatened and endangered species consultations; and managing other site-specific agency consultations.
- BP Dome Petroleum Corp., 2008 to 2010, environmental compliance services: Project team member responsible for drafting Compliance Matrices detailing compliance requirements with DOT, U.S. Department of Homeland Security, EPA, state, and local regulatory programs for multiple propane terminals; drafting Spill Matrices detailing spill response and notification for response to facility-specific releases; providing aboveground storage tank guidance pertaining to newly implemented state rules for Michigan; drafting and revising NDPES Stormwater Pollution Prevention Plans; and drafting and revising SPCC Plans.
- BP Canada Energy Company, 2010, Environmental Health and Safety (EHS) program gap analysis: Project team member responsible for reviewing client-specific Canadian safety programs, identifying gaps in the programs when cross referenced with Occupational Safety and Health Administration (OSHA) safety regulations, and drafting a final deliverable in the form of a cross reference matrix.
- Mid-America Pipeline Company, LLC, 2009, DOT Compliance Digs located within wetlands and waterbodies in Wisconsin: Project Manager responsible for obtaining Wisconsin Department of Natural Resources Water Quality Certifications; managing Wisconsin Pollutant Discharge Elimination System Pit/Trench Dewatering Permits; and directing an environmental inspector to ensure compliance during maintenance activities.
- Alliance Pipeline L.P., 2009 to 2010, environmental compliance services and SPCC Plan for compressor stations located in North Dakota, Minnesota, Iowa, and Illinois: Task Manager responsible for reviewing and revising SPCC Plans for multiple compressor stations, and completing environmental reporting deadlines for Alliance Pipeline L.P.
- Red Trail Energy, LLC, 2010, environmental compliance services: Project team member responsible for providing EHS training for the facility, conducting a process hazard analysis for the facility's Risk Management Plan and Process Safety Management Program, and managing edits for environmental programs for facility additions.
- DENCO, LLC, 2010, EHS Training for facility start-up operations: Project team member responsible for providing EHS training for facility employees.

Dave Nickel Page 3 of 3



- OSAGE Bio-Energy, 2009 to 2010, Appomattox Bio Energy Facility, Virginia: Project team member responsible for drafting an OSHA Safety Program for ethanol facility start-up operations.
- Western Wisconsin Energy, LLC, 2010, environmental compliance services: Project team member responsible for conducting a Risk Management Plan audit, preparing an EPA Voluntary Self-Disclosure of Noncompliance Event, and managing submittal of a Risk Management Plan.
- Pioneer Trail Energy, LLC, 2007, ethanol facility start-up operations: Project team member responsible for drafting an Integrated Contingency Plan, registering the facility for DOT numbers, and SARA facility start-up notifications.
- Buffalo Lake Energy, LLC, 2009, environmental compliance services: Project team member responsible for reviewing and revising a Facility Response Plan based on noted deficiencies stemming from an EPA inspection.
- Pacific Ethanol, LLC, 2008, ethanol facility start-up operations and environmental compliance services: Project team member responsible for revising Integrated Contingency Plans and drafting Safety Programs.
- Panhandle Energy, 2008, compressor station SPCC Plan gap analysis project for several compressor stations in Texas, Kansas, and Oklahoma: Project team member responsible for performing SPCC Plan gap analysis audits and coordinating a small project team during the audit process.

Education and Training

- B.L.A., Environmental Studies, University of Minnesota, Duluth, Minnesota, 2002
- Certified Design of Construction Stormwater Pollution Prevention Plans, University of Minnesota, 2012
- FERC Environmental Review, Permitting, and Compliance, Natural Resource Group, LLC, 2010
- Certified OSHA 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training, Knutson Beyer Group, Inc., 2009