## **BEFORE THE PUBLIC UTILITY COMMISSION** OF THE STATE OF SOUTH DAKOTA

## IN RE APPLICATION BY TRANSCANADA KEYSTONE PIPELINE, LP FOR A PERMIT TO CONSTRUCT KEYSTONE XL PIPELINE

DOCKET NO. HP 14-001

## REBUTTAL TESTIMONY BY KEVIN E. CAHILL, Ph.D. on behalf of STANDING ROCK SIOUX TRIBE

APRIL 28, 2015

Q. State your name and occupation.

A. My name is Kevin E. Cahill. I serve as Project Director / Senior Economist for ECONorthwest, an economics, finance, and planning consulting firm with offices in Portland and Eugene, Oregon, Seattle, Washington, and Boise Idaho. I am also a Research Economist for the Sloan Center on Aging and Work at Boston College, in Chestnut Hill, Massachusetts.

Q. Summarize your education and professional background.

A. My resume is attached as Appendix A to the REBUTTAL EXPERT REPORT OF ECONOMIST KEVIN E. CAHILL, PH.D., ON BEHALF OF THE STANDING ROCK SIOUX TRIBE.

I earned my Ph.D. in Economics from Boston College in 2000, after receiving my M.A. in Economics from Boston College in 1997, and my B.A. with honors in Mathematics and Economics from Rutgers College in 1993. Since earning my Ph.D., I have worked as a research economist both in academia (Sloan Center at Boston College, 2005-present; Center for Retirement Research, Boston College, 2003) and as a consultant providing expert reports and testimony. I specialize in applied microeconomics – including but not limited to the economics of aging, health and labor economics – applied econometrics and statistical methods and public policy. I have conducted extensive research and analysis related to patterns of labor force withdrawal, occupational changes with age and related economic issues and statistical analyses.

Q. Summarize your publications.

A. My resume lists my academic papers and publications. This includes coauthoring a forthcoming essay entitled *Evolving Patterns of Work and Retirement*, to be published in THE HANDBOOK OF SOCIAL SCIENCES (8<sup>th</sup> Edition), as well as nearly 50 published academic articles, papers and professional and expert reports. My publications have addressed a wide range of labor and health economic issues ranging from *Linking Shifts in the National Economy with Changes in Job Satisfaction, Employee Engagement and Work-Life Balance*, in 56 JOURNAL OF BEHAVIORAL AND EXPERIMENTAL ECONOMICS (2015), to *Did the 9/11 Compensation Fund Accurately Assess Economic Losses* in TOPICS IN ECONOMIC ANALYSIS AND POLICY, Vol. 6, Issue 1 (2006). Q. Describe any professional honors or awards you have received.

A. My professional activities, honors and awards are listed on my resume. They include the 2011 Lawrence R. Klein Award for Best MONTHLY LABOR REVIEW article in 2011, and Teaching Excellence Award, Boston College, Graduate School of Arts and Sciences, 1998.

Q. Describe any professional presentations you have given at professional or academic conferences.

A. I have made many professional presentations, on a wide variety of topics related to applied microeconomics and public policy. They are listed on my resume. My presentations range from *How Might the Affordable Care Act Impact Retirement Transitions?* Presentation at the 89th Annual Conference of the Western Economic Association International, Denver, CO June 28, 2014, to *The Role of the Economist in Assessing Damages for Defendants*, Presentation at Liberty Mutual Group, Marlton, NJ March 18, 2005.

Q. Do you have a leadership role in any professional associations?

A. My leadership roles and professional memberships are listed on my resume. I am a founding Editorial Board member of WORK, AGING AND RETIREMENT. I serve as an At-Large Vice President of the National Association of Forensic Economics. I am a member of the American Economics Association and the Gerontological Society of America, among other professional organizations.

Q. Describe your experience providing expert witness testimony in legal proceedings.

A. My experience providing expert witness testimony in legal proceedings is described on my resume. I have provided expert witness testimony in over a dozen court proceedings, ranging from opinions on economic loss and damages in state court contract claims, to the apportionment of damages across purchaser and product groups in federal anti-trust litigation.

Q. On whose behalf are you testifying today?

A. I am providing rebuttal testimony on behalf of the Standing Rock Sioux Tribe, to rebut testimony presented by the Staff of the Public Utilities Commission, namely the direct testimony of Kimberly Lorrene McIntosh and Brian Walsh.

Q. Are you familiar with the petition by TransCanada for re-certification under SDCL §49-41B-27 of its permit to construct the Keystone XL Pipeline in South Dakota?

A. Yes. Appendix B to my report outlines the documents that I have read and analyzed regarding the Keystone Pipeline, the Keystone XL Pipeline and the re-certification of the South Dakota permit. My review included many of the documents filed with the Public Utilities Commission in HP 14-001, the pre-filed testimony of key witnesses of the Commission Staff, as well as the U.S. Department of State *Final Supplemental Environmental Impact Statement on the Keystone XL Pipeline Project*.

Q. Is the Final SEIS relevant to this certification proceeding?

A. Yes, it is definitely relevant. It is my understanding that under the statute, "the utility must certify to the Public Utilities Commission that (it) continues to meet the conditions upon which the permit was granted." The Amended Conditions require compliance with applicable health and safety and environmental laws, including the National Environmental Protection Act of 1969 (NEPA). It is also my understanding that NEPA requires that projects affecting the quality of the human environment, such as the Keystone XL Pipeline, undergo a rigorous environmental review. The Department of State released the FSEIS in January, 2014. I respectfully strongly recommend that the PUC evaluate the FSEIS in determining whether the Keystone XL Pipeline continues to comply with all applicable health and safety laws.

Q. Did you evaluate the efficacy of the FSEIS as a complete and accurate review of the impacts of the Keystone XL Pipeline?

A. Under the Council on Environmental Quality regulations, "Environmental impact statements shall be prepared using an inter-disciplinary approach which will insure the integrated use of the natural and social sciences." 40 CFR §1502.6. Accordingly, the FSEIS contains a chapter on the Socioeconomic Impacts of the Keystone XL Pipeline. As a labor and health

economist and applied econometrician, I evaluated the socioeconomic impacts analysis in the FSEIS.

Q. Explain further.

A. I shall elaborate by reference to the pre-filed testimony of Brian Walsh, on behalf of the Commission staff. Mr. Walsh gave the opinion that pursuant to "the recommendations in the FSEIS, risks to South Dakota's natural resources is minimized." (p. 2, lines 22-23). As a labor and health economist and applied econometrician with extensive experience analyzing the economic consequences of risk, I can attest that Mr. Walsh is incorrect. The application in the FSEIS of the Impact Analysis for Planning (IMPLAN) economic forecasting model contains no quantitative analysis of non-positive socioeconomic impacts of either construction or operation of the Keystone XL Pipeline. The State Department wrote, "The economic effects of the potential pipeline spills are beyond the scope" of the FSEIS (FSEIS, p. 4.10-32). That statement, and other significant shortcomings, demonstrates the inadequacy of the FSEIS under NEPA. Mr. Walsh's assertion that the FSEIS protects the natural resources of South Dakota ignores the fact that extremely important data on negative socioeconomic factors were not factored into the IMPLAN model. My report analyzes the deficiencies in the FSEIS in more detail.

Q. Do you have any other reasoned opinions on the pre-filed testimony in this docket?

A. Yes. The pre-filed testimony of Kimberly Lorrene McIntosh highlights the same misconceptions. Her opinion that any oil spill may be totally remediated "given sufficient time and resources" and the natural environment totally protected notwithstanding the operation of an oil pipeline (p. 4) lacks grounding in reality. The relevant issue is given *limited* resources and time, can petroleum spills, in particular those that can be expected from the Keystone Pipeline, be remediated such that the expected benefits of the pipeline are greater than the expected costs to the residents and businesses in South Dakota.

Q. Do you have any opinion on the impacts of the Keystone XL Pipeline on the Standing Rock Sioux Tribe?

A. The Tribe receives negligible, if any, economic benefits from this project. According to the State Department, "Keystone estimates that only approximately 10 percent of the construction workforce would be hired from the four proposed project area states." (FSEIS, p. 4.10-2). The purported benefits associated with operations are even more negligible. So the state of South Dakota as a whole would receive little or no economic benefit from the Keystone XL Pipeline, and the net economic impact could very well be negative. The economic impacts associated with the environmental risks of the project have not been adequately evaluated for the Tribe, or for South Dakota generally, so it is not possible to ascertain the net quantitative impacts at this time.

Q. Do you have anything else to add?

A. I respectfully request that the Public Utilities Commission accept my REBUTTAL EXPERT REPORT OF ECONOMIST KEVIN E. CAHILL, PH.D., ON BEHALF OF THE STANDING ROCK SIOUX TRIBE into evidence and give it due consideration in this proceeding.

2 Y<sub>day of April, 2015</sub> Dated this

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By:

Kevin E. Cahill

STATE OF IDAHO COUNTY OF ADA

SUBSCRIBED and SWORN to before me this A has a factor of April, 2015

KAREN L. PATTERSON NOTARY PUBLIC STATE OF IDAHO

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