Comments of TransCanada Keystone Pipeline, LP in Support of a Determination that the Keystone XL Pipeline Project is in the National Interest of the United States

TransCanada Keystone Pipeline, LP (Keystone) hereby submits its comments in support of a determination by the United States Department of State (Department or DOS) that the proposed Keystone XL Pipeline Project (Keystone XL or the Project) would serve the national interest of the United States.

1. The Most Intensive Study of Any Trans-Boundary Pipeline Project in History Fully Supports the Conclusion that the Proposed Keystone XL Project Would Serve the National Interest of the United States

Since 2008 the Keystone XL Project has undergone the most intensive public and government agency review of any trans-boundary pipeline project in history. No fewer than five draft, final, and supplemental environmental impact studies have concluded that the Project would not have significant adverse environmental impacts. These studies have also pointed to the significant benefits that the Project would create. The comprehensive record developed over the past five and a half years demonstrates that the Project would significantly enhance the energy security of the United States, provide economic benefits to the nation through job creation and economic stimulus, and enhance foreign relations with Canada – America’s staunch ally and greatest trading partner, all without significant adverse impacts to public health, the environment, cultural or other resources. Moreover, the Project demonstrably meets the criterion announced by the President that it will not “significantly exacerbate the problem of carbon pollution.” In view of these facts, it is time for the Department to finally bring this process to a conclusion, to find that the Project would serve the National Interest, and to issue Keystone the requested Presidential Permit.
a. Review of the original Keystone XL application

On September 19, 2008, Keystone filed its application for a Presidential Permit authorizing the proposed construction, connection, operation, and maintenance of a pipeline and associated facilities at the United States border for the importation of crude oil from Canada. The Department receives and considers Presidential Permit applications for such pipelines and facilities pursuant to the President’s constitutional authority over foreign relations, which authority the President has delegated to DOS in Executive Order 13,337. That Executive Order sets forth the process that DOS is to follow in considering a Presidential Permit application and specifies that the Department should prepare a Presidential Permit if it finds that issuance of a Permit to the applicant “would serve the national interest.”

In conjunction with its review of Keystone’s 2008 Presidential Permit application, the Department elected to conduct a comprehensive environmental review of the proposed Project under the National Environmental Policy Act (NEPA). DOS and almost two dozen federal and state cooperating and assisting agencies engaged in an exhaustive environmental review of the potential environmental impacts of the proposed Project. This review included numerous environmental submissions by Keystone, responses by Keystone to voluminous data requests, intensive attention to specific issues by agencies with specialized expertise, and the commissioning and review by DOS and other agencies of a number of independent studies and reports. The NEPA review also included extensive public outreach by DOS, numerous opportunities for public comment, and unprecedented levels of public participation.
A year after commencing its NEPA review, DOS issued a Draft Environmental Impact Statement (DEIS) in April 2010. The DEIS concluded that “[t]he information assessed in this draft EIS indicates that the proposed Keystone XL Project would result in limited adverse environmental impacts during both construction and operation . . .”

After the DEIS was issued, DOS determined that new and additional information had become available on the proposed Project and on issues and resources related to the potential impacts of the Project. The Department elected to prepare a Supplemental Draft Environmental Impact Statement (SDEIS), which was issued a year later in April 2011. The SDEIS contained additional information on a number of issues, including the proposed Project facilities’ design, construction and maintenance, applicable regulatory requirements, potential connected actions, groundwater, potential spill impacts, alternatives to the proposed Project, environmental justice considerations, crude oil composition, potential refinery emissions, greenhouse gasses (GHG), and climate change considerations.

The SDEIS also included (i) an independent expert study contracted for by the Department of Energy to assist DOS in better understanding the potential impacts of the presence or absence of the proposed Project on US refining and petroleum imports and international markets; (ii) an expert report to assist in addressing concerns relative to GHG emissions; and (iii) a set of 57 Project-specific Special Conditions developed in close consultation with the Pipeline and Hazardous Materials Safety Administration (PHMSA) of the U.S. Department of Transportation. The findings in the SDEIS did not alter the conclusions reached in the original DEIS regarding the need for the Project and the limited potential impacts of the Project.
In August 2011, after further public input and almost three years of scrutiny, the Department issued a Final Environmental Impact Statement (FEIS). For a third time, the FEIS concluded that “[t]he analyses of potential impacts associated with construction and normal operation of the proposed Project suggest that there would be no significant impacts to most resources along the proposed Project corridor . . . .”

On November 10, 2011, the Department announced that it was delaying its decision on the Presidential Permit application in order to allow additional time to gather information regarding potential alternative routing in Nebraska. In late December 2011, Congress passed legislation requiring the President to make a decision on the Presidential Permit within 60 days. On January 18, 2012, the Department announced its determination that the project – as presented and analyzed at that time – did not serve the national interest. The determination was based solely on the rationale that the time provided for a decision was not adequate to complete the national interest review of the project, including specifically the assessment of potential alternative pipeline routes that avoid the Sandhills region in Nebraska. The President’s acceptance of the Department’s recommendation to deny the Permit rested on the same reasoning. In announcing the denial of Keystone’s application, the Department expressly stated that the denial did not preclude any subsequent permit application or applications for similar projects.

b. **Review of the 2012 Keystone XL application**

In February 2012, Keystone advised the Department that it considered the Gulf Coast segment of the originally proposed Project to have its own independent utility, separate from the northern or “Steele City” segment. Keystone advised that it would be
proceeding with construction of the Gulf Coast project on a stand-alone basis, as soon as the requisite permits were obtained. Keystone subsequently received all necessary permits for the Gulf Coast Project and constructed that project. The Gulf Coast Project commenced commercial service in January 2014. The Gulf Coast Project provides the capacity to deliver up to 830,000 bpd of crude oil from Cushing, Oklahoma to the Gulf Coast refinery market. The Gulf Coast project significantly relieves the pipeline bottleneck at Cushing. Development of the Gulf Coast Project was consistent with the President’s recognition of the critical need for new infrastructure to address that pipeline bottleneck.1

On May 4, 2012, Keystone filed a new application for a Presidential Permit for the more limited Keystone XL Project, which includes the former Steele City segment of the original project, as well as a commitment to incorporate a new route in Nebraska, when selected. In April 2012, the Governor of Nebraska signed into law a statute authorizing the Nebraska Department of Environmental Quality (NDEQ) to review alternative routing in the State, including collaboration with a federal agency’s environmental review. Throughout 2012 the NDEQ conducted an extensive evaluation of Keystone’s proposed alternative route in Nebraska, which avoided the Sandhills region as defined by the NDEQ. In January 2013 the Governor approved the proposed alternative route and Keystone supplemented its Presidential Permit application to include the approved Nebraska reroute.

1 President’s Memorandum for the Heads of Executive Departments and Agencies Re Expediting Review of Pipeline Projects from Cushing, Oklahoma to Port Arthur, Texas and other Domestic Pipeline Infrastructure Projects, March 22, 2012.
The Department subsequently announced its intent to prepare a Supplemental EIS (SEIS) for the new application. In March 2013, after soliciting and receiving additional public input, the Department issued a comprehensive Draft SEIS, which concluded yet again that “[t]he analyses of potential impacts associated with construction and normal operation of the proposed Project suggest that there would be no significant impacts to most resources along the proposed Project route . . . .”

On January 31, 2014, the Department issued a Final Supplemental EIS (FSEIS). The FSEIS addressed the 1.9 million public comments received by the Department since June 2012. Consistent with the four previous studies, the FSEIS once more concluded that “the analyses of potential impacts associated with construction and normal operation of the proposed Project suggest that significant impacts to most resources are not expected along the proposed Project route . . . .”

c. The National Interest review

Prior to making a National Interest Determination, Executive Order 13,337 requires that the Department of State refer a Presidential Permit application to, and request the views of, certain enumerated federal agency heads. Upon issuance of the FSEIS, the Department commenced a consultation period with the eight federal agencies. In addition to the solicitation of agency input into the National Interest Determination, DOS announced a 30-day public comment period on the National Interest, through March 7, 2014. In response, Keystone hereby submits its comments in support of an affirmative National Interest Determination.
2. The National Interest Criteria are Fully Satisfied by the Record Developed by DOS in its Review of Keystone’s Presidential Permit Application

In his June 25, 2013 speech at Georgetown University, President Obama addressed a key standard for finding that the Keystone XL Project would serve the National Interest. The President stated that the national interest will be served “only if this project does not significantly exacerbate the problem of carbon pollution. The net effects of the pipeline’s impact on our climate will be absolutely critical to determining whether this project is allowed to go forward”.

In addition to the standard announced by the President, the Supplemental Draft EIS addressed the criteria that the State Department may consider when making its determination whether the proposed Keystone XL Project is in the national interest of the United States. The SDEIS stated:

Consistent with the President’s broad discretion in the conduct of foreign affairs, DOS has significant discretion in the factors it examines in making a National Interest Determination (NID). The factors examined and the approaches to their examination are not necessarily the same from project to project. However, previous NID processes can provide insights into the factors DOS is likely to consider in evaluating the present application.2

The SDEIS then listed “some of the key factors considered in past decisions” as follows:

1. Environmental impacts of the proposed projects
2. Impacts of the proposed projects on the diversity of supply to meet U.S. crude oil demand and energy needs
3. The security of transport pathways for crude oil supplies to the U.S. through import facilities constructed at the border relative to other modes of transport
4. Stability of trading partners from whom the U.S. obtains crude oil

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2 Supplemental DEIS at p. 1-6.
5. Impact of a cross-border facility on the relations with the country to which it connects

6. Relationship between the U.S. and various foreign suppliers of crude oil and the ability of the U.S. to work with those countries to meet overall environmental and energy security goals

7. Impact of proposed projects on broader foreign policy objectives, including a comprehensive strategy to address climate change

8. Economic benefits to the U.S. of constructing and operating proposed projects

9. Relationships between proposed projects and goals to reduce reliance on fossil fuels and to increase use of alternative and renewable energy sources

Keystone submits that the standard announced by the President and each of the Department’s traditional National Interest criteria are exhaustively and positively addressed and satisfied in the record that has been amassed in this proceeding. Keystone will not further burden the record or the Department with an extensive rehash of that evidence. Nonetheless, given the critical importance of this phase of the Presidential Permit process, Keystone does believe it is important to address these criteria in summary fashion, as set forth below.  

3 Some closely related or overlapping criteria are combined for discussion.

a. The proposed Keystone XL Project will not “significantly exacerbate the problem of carbon pollution”

Through its implementation of innovative programs, regulations, and initiatives to limit greenhouse gas emissions, the United States, along with Canada, has shown leadership in addressing climate change issues. President Obama spoke to the importance of climate change related criteria in the permitting decision for the Keystone XL Project.

In his June 25, 2013 speech at Georgetown University, the President said “[a]llowing the Keystone pipeline to be built requires a finding that doing so would be in our nation’s interest. And our national interest will be served only if this project does not significantly affect our ability to meet our climate change goals.”

3 Some closely related or overlapping criteria are combined for discussion.
exacerbate the problem of carbon pollution. The net effects of the pipeline’s impact on our climate will be absolutely critical to determining whether this project is allowed to go forward”.4

The Final Supplemental Environmental Impact Statement undertook an extensive review of this issue and definitely found that the Project indisputably meets this test, consistent the findings of previous reviews. “The updated market analysis in the Supplemental EIS, similar to the market analysis sections in the 2011 Final EIS and Draft Supplemental EIS concludes that the proposed Project is unlikely to significantly affect the rate of extraction in oil sands areas (based on expected oil prices, oil-sands supply costs, transport costs, and supply–demand scenarios).5

Based on this conclusion, it is clear that the approval of the proposed Project will not have a significant impact on the GHGs released from the upstream sector in Canada and the Project, therefore, will not “significantly exacerbate the problem of carbon pollution.” Given the importance of this condition to the approval of the Keystone XL Project, Keystone provides the following comments in support of the findings from the FSEIS.6

i. Emissions associated with construction of the Project will not significantly exacerbate carbon pollution

Direct and indirect emissions from the construction of Keystone XL were calculated to be below 0.25 MMTCO₂e. These emissions will occur only during the construction phase of the pipeline and represent an increase of less than 0.004% in U.S.

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5 FSEIS at page 1.4-1.[Emphasis added].
6 Certain additional technical aspects of the GHG emissions discussion in the FSEIS are addressed in Keystone’s comments on the FSEIS being submitted under separate cover.
domestic GHG emissions.\textsuperscript{7} GHG emissions from the construction phase of Keystone XL will not significantly exacerbate carbon pollution.

\begin{enumerate}
\item \textbf{Operating emissions will not significantly exacerbate carbon pollution}

The FSEIS estimates that the operation of the Project would result in direct and indirect emissions of 1.44 million metric tonnes of CO$_2$e (MMTCO$_2$e) annually.\textsuperscript{8} Less than two metric tonnes of CO$_2$e (MTCO$_2$e) per year are estimated to be emitted directly during the operation of the Keystone XL pipeline. The remainder of the emissions occurs indirectly, as a result of using electricity derived from the combustion of fossil fuels. Greenhouse gas emissions associated with the operation of the Keystone XL pipeline would represent less than 0.03\% of the country’s annual emissions of 6,702 MMTCO$_2$e, and less than 0.005\% of the world’s annual carbon dioxide emissions of 30,326 MMTCO$_2$e.\textsuperscript{9} This represents an insignificant increase in carbon emissions. Moreover, the estimate provided by the FSEIS is conservative (high) because the assessment was conducted using static grid emissions factors derived from 2009 data. Notably, as a result of continued utility investment in renewable power generation, increased regulation, and the potential retirement of older coal-fired units, it is likely that these grid factors will decrease over time, lowering the Project’s indirect emissions over the lifespan of the project.

The FSEIS also concludes that rail transportation is capable of relieving shipping constraints in the event that Keystone XL or other pipeline projects are not constructed.\textsuperscript{10}

\begin{itemize}
\item \textsuperscript{7} U.S. Emissions: \url{http://www.epa.gov/climatechange/ghgemissions/usinventoryreport.html}
\item \textsuperscript{8} FSEIS p. 4.14-17
\item \textsuperscript{9} U.S. Emissions: \url{http://www.epa.gov/climatechange/ghgemissions/usinventoryreport.html}
\item Global Emissions: FSEIS p. 4.14-17
\item \textsuperscript{10} FSEIS p. 1.4-133
\end{itemize}
Consequently, direct and indirect emissions from the Keystone XL pipeline should not be viewed as additive to a non-growth scenario, but instead be compared to the No Action Alternatives identified. As discussed below and in Section 2.b., the GHG emissions associated with alternative transportation scenarios are significantly greater than those associated with the proposed Project.

iii. **Keystone XL construction would not be impacted by climate change and the pipeline’s design enables it to operate safely in severe weather events**

The FSEIS confirms that Keystone XL’s Construction, Mitigation, and Reclamation Plan (CMRP) is sufficient to deal with adverse and extreme weather conditions during the construction phase of this project. In addition, the report concludes that “[a]lthough the changes in climate could have an effect on pipeline integrity and the severity of a spill, modern construction design and mitigation … applied to the proposed Project, are expected to result in a substantial reduction in incident frequency.”

iv. **Emissions associated with the proposed Project are significantly lower than those of the No-Action Alternatives**

Extensive analysis was included in the FSEIS on No-Action Alternatives to Keystone XL, including the use of existing rail facilities and pipelines (No Action Rail/Pipeline Scenario), the use of existing rail and tanker infrastructure (No Action Rail/Tanker Scenario), and the use of rail facilities (No Action Rail Direct to the Gulf Coast Scenario). As Table 5.3-2 displays, emissions from the No Action Alternatives are significantly higher than those associated with the Project. Moreover, the proposed

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11 FSEIS p. 4.14-55.
12 FSEIS p. 4.14-63.
13 FSEIS p. 5.3-5
Project has a distinct carbon benefit over these alternatives because its electric pump stations position it to take advantage of the President’s call for cutting carbon pollution from power plants, thereby resulting in decreasing indirect GHG emissions from Keystone XL’s operations over the Project’s lifespan.

v. Upstream GHG emissions are likely to occur with or without Keystone XL and do not represent a significant increase when compared with upstream GHGs from displaced Venezuelan and Mexican heavy crude products.

The FSEIS concludes that “the absence of the proposed Project and all other new and expanded cross-border pipelines, east-west pipelines, and rail shipments to the Canadian West Coast for export is still unlikely to have a significant effect on the level of oil sands production due to the economic feasibility of crude-by-rail shipments.” As noted in the FSEIS, the analysis and inclusion of upstream emissions was undertaken excluding consideration of the findings of the Market Analysis that the Project will not impact development of the oil sands. Due to the results of the Market Analysis and the global lens that must be used when evaluating carbon pollution, the 1.3 MMTCO₂e to 27.4 MMTCO₂e of upstream emissions calculated in the FSEIS are largely irrelevant to an analysis of the potential impacts of the Keystone XL pipeline.

Nevertheless, to the extent that these numbers are deemed relevant, it is important to note that Keystone XL will be transporting heavy crude oil that will displace heavy oil imported from Mexico and Venezuela. According to the FSEIS, this would result in an increase in emissions associated with American oil consumption of between 1.3

15 FSEIS p. 1.4-133.
17 FSEIS 4.14-36.
MMTCO$_2$e to 18.4 MMTCO$_2$e.$^{18}$ This is an insignificant amount compared to US domestic and global emissions, representing between 0.019% to 0.28% of U.S. domestic emissions, and 0.004% to 0.061% of global carbon dioxide emissions. Moreover, the upstream analysis included in the FSEIS was conducted using 830,000 barrels of WCSB against a variety of “benchmark crudes.” Given that Keystone XL has been contracted to transport 65,000 barrels of Bakken crude, the estimated GHG impacts are overly conservative (high) as the life cycle impact of Bakken light crude will be less than that of oil sands. Consequently, emissions from lifecycle oil production associated with the pipeline are likely to be lower than the FSEIS concludes.

vi. **Canadian oil sands emissions are decreasing on a per barrel basis**

The FSEIS notes that “GHG emissions from both mining and *in situ* SAGD oil sands crude production have decreased over the last decade.”$^{19}$ According to the Canadian Association of Petroleum Producers (CAPP), “oil sands companies reduced per barrel GHG emissions by 26 percent since 1990 and continue to seek significant reductions through technology and innovation.”$^{20}$ Several emerging technologies have the potential to improve GHG emissions intensities. These technologies include: cold bitumen extraction processes; addition of infill wells; oxy-fuel steam generation; and partial upgrading of in-situ bitumen.$^{21}$ A specific example of the on-going innovation in the oil sands industry is the recently opened Kearl Oil Sands Froth Treatment Facility. This facility, operated by Imperial Oil uses a proprietary paraffinic froth treatment to

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$^{18}$ FSEIS 4.14-38. Given the Department of State’s conclusion that heavy crudes would likely be displaced in the United States by WCSB crude (FSEIS p. 4.14-24), the high end incremental lifecycle GHG estimate of 27.4 MMTCO$_2$e should not be included as it is derived from a comparison to Middle East Sour.

$^{19}$ FSEIS Appendix U, p. 91.

$^{20}$ www.capp.ca/aboutUs/mediaCentre/NewsReleases/Pages/USStateDepartment’senvironmentalstatementprovidesbasisforKeystoneapprovalonenvironmental,economic,energysecuritymerits.aspx

produce saleable crude oil without the use of an upgrader. According to a 2010 report from IHS CERA, this facility will produce petroleum products with “about the same life-cycle GHGs as the average of crudes consumed in the United States.”

The FSEIS concludes similarly, stating that “it is believed [that] the gap between these crudes is more likely to narrow than widen.” The reasoning for the narrowing of the gap between crudes is also discussed in the FSEIS:

“Conventional (deep) crude reservoirs require higher energy intensive secondary and tertiary production techniques as the reservoirs deplete and as water cut of the produced reservoir fluids increases, and even the best recovery techniques capture less than 50 percent of the original oil in place. Oil sands surface mining, given the vast aerial extent of the WCSB and that mining recovers 100 percent of the crude oil in place, is expected to have a relatively constant energy intensity long into the future.”

Lastly, it should be noted that the FSEIS found that “it is not clear whether all WCSB oil-sands derived crudes are currently more GHG intensive than other heavy crudes or crudes with high flaring rates,” and depending on the factors chosen, “the lifecycle GHG emissions of certain WCSB crudes fall within the same range as heavy Venezuelan crude oil, California heavy oil, and lighter crudes that are produced from operations that flare most of the associated gas (e.g. Nigerian light crude).”

All of these facts serve to reinforce the conclusion that the proposed Project will not exacerbate the problem of carbon pollution. The standard enunciated by the President

22 http://www.imperialoil.ca/Canada-English/community_crr2011_environmental_kcs.aspx
23 FSEIS Appendix U, p. 97.
24 FSEIS p. 96.
25 FSEIS p. 97.
is clearly satisfied, allowing the Department to make a positive National Interest Determination.26

b. **The proposed Project will not result in significant adverse environmental impacts**

The lengthy, exhaustive, and comprehensive five-year environmental review conducted by DOS and the cooperating and assisting agencies under NEPA leaves room for no conclusion but that the environmental impacts of the proposed Project support a positive National Interest Determination.

The environmental review took a hard look at the potential environmental impacts of the proposed Project, including a detailed review of the Project description, as well as certain connected actions to the proposed Project. The environmental review covered a broad scope of potential impacts, including potential impacts to the relevant geology, paleontological resources, geologic hazards; soils and sediments, potential erosion and impacts to soil productivity; water resources including groundwater and surface water; wetlands; terrestrial vegetation; wildlife; fisheries; threatened and endangered species (in consultation with the United States Fish and Wildlife Service and relevant state agencies); land use, recreation, and visual resources; socioeconomics; environmental justice; cultural resources (in consultation with the Advisory Council on Historic Preservation and state historic preservation offices); air quality and noise; pipeline safety and potential releases from Project construction and operations, including associated

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26 See also IHS CERA Special Report, “Critical Questions for the Canadian Oil Sands, October 2013, which concludes that (i) for the average oil sands product actually exported to the United States, life-cycle GHG emissions are 12 percent higher than the average crude oil consumed in the U.S., using a 2005 baseline; and (ii) sources of supply from other oil producing regions – including specifically Venezuelan crude - are in the same range as the oil sands. Again, since the production transported on the proposed Project will displace Venezuelan and Mexican crudes, the comparison to a 2005 baseline still is not reflective of the actual impact of the Project.
environmental consequences (in conjunction with PHMSA and the Environmental Protection Agency (EPA)); greenhouse gases and climate change, cumulative impacts, and extraterritorial concerns. In addition to potential impacts, the Department considered Keystone’s proposed mitigation measures to address these potential impacts and developed extensive additional mitigation measures with public and agency input.

As noted above, after five years of study, the Final Supplemental Environmental Impact Statement concluded, for yet a fifth time, that “[t]he analyses of potential impacts associated with construction and normal operation of the proposed Project suggest that significant impacts to most resources are not expected along the proposed Project route . . . .” In making this finding, the FSEIS notes that Keystone would implement the extensive environmental impact avoidance and mitigation measures described in its application and supplemental filings, the additional measures identified in the FSEIS, the Special Conditions recommended by PHMSA (including additional mitigation measures recommended in risk reports prepared by outside experts, on top of the 57 previously developed measures), and the measures and methods described in Keystone’s comprehensive Construction, Mitigation and Reclamation Plan (CMRP).

Consistent with NEPA, DOS and the cooperating agencies also conducted an analysis of alternatives to the proposed Project. The alternatives were developed based on the purpose and need for the proposed Project. The alternatives analysis relied on information provided to agencies in Keystone’s Presidential Permit and Montana Major Facilities Siting Act (MFSA) applications, information and suggestions provided during through the many scoping and public comment periods, and information obtained through
research and analyses conducted by DOS, other agencies, external experts, and its third-party contractors.

The alternatives analysis included consideration of (i) the No Action Alternative, which addressed projected beneficial and adverse environmental, social, and economic impacts that would result if the proposed Project were not implemented, and (ii) route alternatives.

The No Action Alternative included the Status Quo Baseline and three alternative scenarios, which were intended to be representative of likely oil and transportation industry responses to extended constraints in additional pipeline capacity:

- Rail Direct to the Gulf Coast Scenario;
- Rail/Pipeline Scenario; and
- Rail/Tanker Scenario

With respect to these alternative scenarios, the FSEIS found that the total annual GHG emissions (direct and indirect) attributed to each of the alternatives was significantly greater than for the entire route encompassing the proposed Project.

The major route alternatives considered included the following:

- The Keystone XL 2011 Steele City Segment Alternative [the original proposed route through the Nebraska Sandhills]; and
- the I-90 Corridor Alternative.

Detailed impact assessments were conducted for both of these alternatives. Neither alternative route was found to be preferable to the proposed project route. At the conclusion of the alternative assessment, the FSEIS indicates that the two alternatives
being presented to the decision maker for consideration are the No Action Alternative and the proposed Project.

c. **The proposed Project will have positive impacts on the diversity of supply to meet U.S. crude oil demand and energy needs**

By any measure, the impacts of the proposed Keystone XL Project on the diversity of supply to meet U.S. crude oil demand and energy needs are clear and positive. The proposed Project would provide an initial capacity of 830,000 bpd. Keystone currently has firm, long-term contracts to transport in excess of 500,000 bpd of Western Canadian Sedimentary Basin (WCSB) crude oil to existing PADD 3 delivery points. In addition, Bakken Marketlink, using facilities which form part of the proposed Project, currently has firm, long-term contracts to transport 65,000 bpd of the 100,000 bpd set aside to transport Bakken crude oil from the Williston Basin in North Dakota and Montana. The Project would serve to enhance United States energy security by connecting reliable domestic and Canadian supply sources to refinery markets in the Gulf Coast area with a demonstrated demand for these supplies. This market demand is driven by the need of refiners in PADD 3 to replace declining feed stocks of heavy crude oil obtained from offshore and other foreign sources – primarily Mexico and Venezuela.

The FSEIS includes an extensive analysis of petroleum markets. The market analysis assesses how these markets would be affected by the proposed Project and whether conclusions from previous market analyses should be altered in light of recent developments. The market analysis was informed by DOS consultation with experts from the Department of Energy, industry associations, and independent consulting
companies. It builds upon and updates the Department’s 2011 FEIS, and the 2013 Draft Supplemental EIS.

The market analysis recognizes that domestic production of crude oil has increased significantly from approximately 5 million barrels per day in 2010 to 7.5 million barrels per day in mid-2013. However, the market analysis further recognizes that refineries optimized for crude slates that use heavy crudes still have demand for heavy crude and continue to meet that demand through imports. Figure 1.4.2-10 of the FSEIS shows decreasing volumes of light crude imports while heavy crude imports remain robust. According to the DOS market analysis, refiners’ preferences for heavier crudes appear to be enduring despite rising domestic light supplies. U.S. refinery demand for WCSB heavy crude imports is likely to remain robust at least through 2035, given expected global trends (see FSEIS Table 1.4-8). PADD 3 refinery crude throughputs remain similar and relatively stable between the various scenarios considered in the market analysis. They range from 8.1 to 8.4 million bpd through 2035 (see FSEIS Figure 1.4.4-4).

The market assessment further found that, apart from the WCSB, heavy crude supply from some traditional sources may decline. In addition, some countries that produce heavy crude oil are attempting to expand domestic refining and upgrading capacity to process more of their heavy crudes at home and are either reducing their refined product imports, increasing product exports, and/or exporting a greater share of the higher-value light crudes that they produce. Meanwhile, the production of Canadian crude oil is anticipated to increase substantially through 2030. The EIA (2013) projects that total Canadian oil production will rise from 2.3 million bpd in 2012 to 5.9 million
bpd in 2030 and 6.1 million bpd in 2035. The majority of the growth comes from oil sands crudes, which rise from 1.9 million bpd to 4.2 million bpd.

The findings in the market assessment echo the information provided to DOS by the Administrator of the U.S. Energy Information Administration. In a memorandum included in Appendix C of the Draft SEIS, the Administrator advised that: (i) recent energy developments do not alter projections of continued U.S. dependence on imported crude oil supplies; (ii) the U.S. remains a significant net importer of petroleum in 2025 and beyond, with about one third of U.S. demand satisfied by net imports; (iii) U.S. domestic crude oil production is projected to increase to 7.5 million barrels per day in 2019 and then decline; (iv) U.S. Gulf Coast refineries are optimized for the use of heavy crude oil and regional demand for heavier grades of oil in the Gulf Coast remains strong through at least 2025; (v) many Gulf Coast refineries are seeking more access to Canadian oil to replace declining supplies of heavy crude from Mexico and Venezuela; and (vi) as a result of broader heavy crude production and export trends in the world that may result in declining supply of heavy crude on the export market, Gulf Coast refineries are likely to have significant incentive to meet their demand by obtaining Western Canadian crudes.

Finally, the FSEIS also addresses comments speculating that WCSB heavy crude oil supplies carried on the proposed Project would pass through the United States and be loaded onto vessels for export and ultimate sale in markets such as Asia. The FSEIS found that such an option appears unlikely to be economically justified for any significant durable trade given transport costs and market conditions. As the FSEIS further recognized, it is possible that WCSB heavy crude may be refined in the United States and
processed into petroleum products that are exported. The FSEIS found that prospects for refined product exports will be affected by domestic demand versus domestic refining capacity, the cost of natural gas, and refining capacity abroad, including in foreign markets currently importing U.S. refined products, such as Mexico, Brazil, Chile, and Europe. As the FSEIS concluded, the economic viability of exports does increase the demand for crudes in the United States, particularly in PADD 3, the source of most U.S. exports, but “this demand does not depend on the proposed Project.” “Refined product export levels have already increased and some of the crude used is from foreign sources. As this may already be occurring, it may continue with or without Keystone XL.”

All of these factors support a finding that the impacts of the proposed Keystone XL Project on the diversity of supply to meet U.S. crude oil demand and energy needs weigh heavily in favor of a positive National Interest Determination and issuance of a Presidential Permit for the Project. Indeed, such a finding would be consistent with the recent National Interest Determinations issued by the Department for the Keystone Pipeline and the Enbridge Alberta Clipper Pipeline. The National Interest Determination for each of those projects found that additional crude oil capacity between the WCSB and U.S. markets would promote advancement of U.S. strategic interests by increasing the diversity of oil supply among U.S. world oil sources. A different result here would be difficult to reconcile with these prior determinations.
d. **Consideration of the security of transport pathways for crude oil supplies to the U.S. through import facilities constructed at the border relative to other modes of transport supports approval of the proposed Project**

During the NEPA review process, the security and safety of the proposed Project received an unprecedented level of scrutiny and input from PHMSA – the government agency with specific expertise in matters of pipeline safety -- as well as from DOS, EPA, and the public. After this vigorous and thorough review, the FSEIS concluded -- consistent with the findings of the prior 2011 Final EIS -- that the extensive safety measures to be adopted by Keystone “would result in a Project that would have a degree of safety over any other typically constructed domestic oil pipeline system under current code...”

In reviewing the original application, to enhance the overall safety of the proposed Project, PHMSA developed 57 Project-specific Special Conditions. Keystone voluntarily agreed to design, construct, operate, maintain, and monitor the proposed Project in accordance not only with the generally applicable regulatory requirements at 49 CFR Parts 194 and 195, but also in compliance with this more stringent set of Project-specific Special Conditions. Keystone specifically agreed to incorporate those conditions in its manual of operations, maintenance, and emergencies. PHMSA has the legal authority to inspect and enforce any items contained in a pipeline operator’s operations, maintenance, and emergencies manual and, therefore, has the legal authority to inspect and enforce the Project-specific Special Conditions if the proposed Project is approved.

In the course of reviewing the current application, DOS engaged PHMSA and independent experts - Battelle and Exponent – to further review the safety and risk
aspects of the Project and to recommend additional safety measures. This resulted in an increase to 59 Special Conditions, as well as numerous other measures summarized in Appendix Z to the FSEIS.

The FSEIS reaches a number of important findings with respect to the safety of the Project:

- The combined implementation of industry integrity management standards and practices aid in reducing the potential for spill incidents associated with the proposed Project; these include those developed by the National Association of Corrosion Engineers International and American Society of Mechanical Engineers, PHMSA regulatory requirements as defined in Title 49 of the Code of Federal Regulations (CFR) Part 195, and the set of proposed Project-specific Special Conditions developed by PHMSA and agreed to by Keystone.

- As stated in the Final EIS, the U.S. Department of State, in consultation with PHMSA, has determined that incorporation of those conditions (the referenced industry standards and practices, combined with PHMSA regulatory requirements and the set of proposed Project-specific Special Conditions developed by PHMSA) would result in a Project that would have a degree of safety over any other typically constructed domestic oil pipeline system under current code and a degree of safety along the entire length of the pipeline system similar to that required in High Consequence Areas (HCAs), as defined in 49 CFR 195.450.

- The proposed Project would include processes, procedures, and systems to prevent, detect, and mitigate potential oil spills that could occur during operation of the pipeline. An Emergency Response Plan (ERP) would contain further detail on response procedures and would be completed and reviewed by PHMSA prior to granting permission to operate the proposed
pipeline. PHMSA would also provide the ERP to the U.S. Environmental Protection Agency for their review.

- The Keystone XL pipeline has a lower probability of experiencing a spill due to the combined application of the design standards and the addition of the Special Conditions, which add a greater degree of safety over the pipeline systems with reported spill events in the PHMSA incident database. Keystone is taking preventive actions over and above the current regulatory requirements by designing the entire pipeline to a level of protection similar to that required for an HCA.

- The Keystone Oil Pipeline System Emergency Response Plan was previously developed for the existing Keystone Mainline and Cushing Extension project and approved by PHMSA. The Keystone ERP would be used as a template for the ERP for the proposed Project and would include the necessary proposed Project-specific information.

- Federal, state, and local agencies would participate in response activities consistent with their authorities and duties under applicable regulations and in accordance with the requirements of the ERP. Additional mitigation measures have been suggested by these regulatory agencies.

- Keystone is committed to ensuring the safe operation of its pipeline system and to prevent any incidents from occurring. Should a release occur from the Keystone XL pipeline, Keystone is committed to clean up any releases that may occur. Keystone is also legally required to clean up spills under Title 118 and OPA 90.

- Keystone has stated that they would commit in their ERP to the implementation of a long-term groundwater sampling/monitoring program after a spill in the event that Keystone determines, in consultation with relevant agencies, that post cleanup and restoration and site conditions suggest an ongoing potential risk to water and/or the potential for residual contamination.

- Keystone has committed to a number of mitigation measures beyond the spill cleanup measures required by federal and state regulations. This
commitment would be formalized in a legally binding agreement, as appropriate, as a condition of the proposed Project proceeding, should it be approved.

The FSEIS further addressed concerns that have been raised regarding the alleged corrosivity of oil sands crude oil. With regard to those issues, the FSEIS found that:

- The oil that would be transported by the proposed Project would include dilbit, SCO, and Bakken crude oil;
- Dilbit, SCO, and Bakken oil total acid number values are generally consistent with those of 18 international crudes, indicating that corrosivities would be similar;
- Alberta is a source of dilbit and SCO; incident statistics from Alberta show that incident frequencies and corrosion-based incidents are similar for pipelines in the United States and Alberta;
- The anticipated positive effects of the PHMSA Special Conditions are not reflected in the historical data, as there has not been a pipeline designed to these more rigorous set of specifications to date; and
- The integrity threats identified in Section 3.13, Potential Releases, from the dilbit, SCO, and light crude oil that would be transported by the proposed Project are the same as those for a crude oil pipeline.

The FSEIS also considered the relative risk of the three alternative modes of transportation considered under the No Action Alternative – Rail/Pipeline, Rail/Tanker, and Rail Direct to the Gulf Coast. The FSEIS found that potential risk and safety concerns of these alternative modes differ from the proposed Project in terms of the types of impacts that could result, so it is more difficult to do a direct comparison. Nonetheless, the FSEIS found that:

- While pipeline transport has the highest number of barrels released per ton-mile and barrels released per barrels transported for crude oil, conversely, overall, rail
transport has the highest number of reported releases per ton-mile compared to marine or pipeline transport for crude oil and the highest number of releases per barrel transported.

- Comparing the number of incidents per ton-miles reported between 2002 and 2009, rail transport had the highest incident frequency for crude oil of all modes of transport, and pipelines have a higher incident frequency than marine.

- A projection of injury and fatality frequencies onto the crude oil transport volume for the proposed Project was also done, indicating a higher frequency of injuries and fatalities for the No Action scenarios as compared to the proposed Project (Figure 5.3.3-3). Adding 830,000 bpd to the yearly transport mode volume indicates potentially an additional 49 injuries and six fatalities for the No Action rail scenarios compared to one additional injury and no fatalities for the proposed Project on a yearly basis.

- In contrast to the number of releases, more fires and explosions were reported for crude oil pipelines between January 2002 and July 2012 than for rail transport (Figure 5.3.3-4). For crude oil transport, there were fewer reported injuries and fatalities resulting from rail fires and explosions than from pipeline fires. Marine fire and explosion data were not readily available for the FSEIS.

With respect to these findings, it should be pointed out that they include safety data from the period back to 2002 when rail transport of crude oil was insignificant, well prior to the onset of very substantial increases in rail transport of crude oil beginning around 2012. Taking account of that increase and associated safety incidents would clearly impact the comparative safety statistics for crude oil rail transport and further sway the comparison toward the benefits of pipeline transportation.

Further, the relative impacts of these alternative modes of transportation should be viewed in the context of the comparative GHG impacts addressed above. As discussed
above, total annual GHG emissions from the alternative transportation modes assessed in the FSEIS are significantly greater than from pipeline transportation.

e. **The stability of trading partners from whom the U.S. obtains crude oil and the impact of the cross-border facility on the relations with the country to which it connects strongly support approval of the Project**

Canada is the United States’ largest trading partner. The stability of the trade relationship between these two neighbors is beyond question. As the Department of State expressly found in its Record of Decision and National Interest Determination (ROD/NID) leading up to the granting of a Presidential Permit for the Keystone Pipeline Project in 2008, the granting of such a permit “increases crude oil supplies from a source region that has been a stable and reliable trading partner of the United States . . .”

Similarly, in issuing the ROD/NID leading up to the grant of a Presidential Permit for the Alberta Clipper project in 2009, the DOS (under the current Administration) found that the addition of crude oil pipeline capacity between Canada and the United States would advance a number of strategic interests of the United States. These included increasing the diversity of available supplies among the United States’ worldwide crude oil sources in a time of considerable political tension in other major oil producing countries and regions; shortening the transportation pathway for crude oil supplies; and increasing crude oil supplies from a major non-Organization of Petroleum Exporting Countries producer. The Department of State found that granting the Permit “increases crude oil supplies from a major non-Organization of Petroleum Exporting Countries producer which is a stable and reliable ally and trading partner of the United States, with which we have free trade agreements which augment the security of this energy supply.”
The DOS concluded that approval of that permit sent a positive economic signal about the future reliability and availability of a portion of United States’ energy imports.

The stability of the trading relationship between the US and Canada is as strong or stronger today, as it was when the Department of State made these findings for two recent trans-boundary crude oil pipeline projects. Construction of the Keystone XL Project will clearly facilitate the already flourishing relationship. On the other hand, denial of the pending Presidential Permit application would have a deleterious effect on the trade relationship between the two countries and could be inconsistent with existing treaties and trade agreements. Accordingly, this factor clearly weighs in favor of granting the requested Presidential Permit for the Keystone XL Project.

f. The relationship between the U.S. and various foreign suppliers of crude oil and the ability of the U.S. to work with those countries to meet overall environmental and energy security goals and the impact the proposed Project on broader foreign policy objectives, including a comprehensive strategy to address climate change, all support approval of the Project.

Clearly, by expanding its crude oil trade relationship with Canada -- rather than with other foreign crude oil suppliers -- the United States is in a far better position to work to meet overall environmental and energy security goals and broader foreign policy objectives, including a comprehensive strategy to address climate change.

By letter to Secretary Kerry dated March 4, 2014, the Government of Canada, through its Ambassador, addressed the “successful and mutually beneficial bilateral relationships” between the two countries, including the nations’ important environmental and energy relationship. As the Ambassador’s letter stated:
• Canada is the only major supplier of oil to the United States that committed to an absolute reduction in its GHG emissions at the 2009 United Nations Climate Change Conference in Copenhagen.

• Canada and the United States continue to work together to regulate emissions for light and heavy duty vehicles.

• Canada and the United States are working together as founding members of the Climate and Clean Air Coalition to address short-lived climate pollutants, notably carbon black.

• Canadian and U.S. officials are currently assessing common energy issues, including potential oil and gas issues.

• Emissions from both countries are down from 2005 base line levels and Canada is committed to further action including regulations for its oil and natural gas sectors.

• Prime Minister Harper publicly stated on December 19, 2013, that the Canadian government is prepared to work with the U.S. on a regulatory regime that will bring both countries’ emissions down.

• On a per unit basis, emissions from the oil sands have decreased by 26 percent from 1990 to 2011.

• Alberta was the first jurisdiction in North America to require large emitters to reduce their GHG emissions intensity.

• In 2012, 63 percent of Canada’s electricity was generated from renewable resources. Canada has implemented regulations for new and existing coal fired electricity plants. Canada is one of the only countries with regulations to phase out traditional coal-fired electricity. In 2012 coal accounted for less than 11 percent of Canada’s electricity.
In its 2009 ROD/NID for the Alberta Clipper project, the Department of State recognized that the United States and Canada are working across their respective energy sectors to cooperate on best practices and technology to lower the overall environmental footprint of their respective energy sectors, and that the Government of Canada and the Province of Alberta had also set greenhouse gas reduction targets and implementation programs to help them achieve them. DOS further took the position that it had considered concerns with respect to foreign policy objectives related to comprehensive climate change strategy and concluded that they are best addressed in the context of the overall set of domestic policies that Canada and the United States will take to address their respective greenhouse gas emissions.

The DOS further found that the United States will continue to reduce reliance on oil through conservation and energy efficiency measures, as well as through the pursuit of comprehensive climate legislation and an ambitious global agreement on climate change that includes substantial emission reductions for both the United States and Canada. According to the ROD/NID for the Alberta Clipper project, the Department, on behalf of the Administration, will urge ambitious action by Canada, and will cooperate with the Canadian government through the U.S.-Canada Clean Energy Dialogue and other processes to promote the deployment of technologies that reduce our respective GHG emissions.

g. **Construction and Operation of the proposed Project results in substantial economic benefits to the United States and economies along the Project route**

The Final SEIS concludes that the proposed Project would have significant socio-economic benefits for the United States and the local and regional economies along the
pipeline route. All of these benefits would come as a result solely of private investment without the expenditure of any federal funds or federal subsidies. As discussed in Section 4.10 of the FSEIS, the following economic benefits would result from development of the proposed Project.

- **Economic Activity**

  Construction of the proposed Project would contribute approximately $3.4 billion to the U.S. Gross Domestic Product. This figure includes not only earnings by workers, but all other income earned by businesses and individuals engaged in the production of goods and services demanded by the proposed Project, such as profits, rent, interest, and dividends. In addition, construction contracts, materials, and support purchased in the United States would total approximately $3.1 billion, with another $233 million spent on construction camps.

- **Jobs**

  During construction, this spending would support a combined total of approximately 42,100 average annual jobs and approximately $2 billion in earnings throughout the United States.

  - Approximately 16,100 would be direct jobs at firms that are awarded contracts for goods and services, including construction, directly by Keystone. The other approximately 26,000 jobs would result from indirect and induced spending; this would consist of goods and services purchased by the construction contractors and spending by employees working for either the construction contractor or for any supplier of goods and services required in the construction process.
• About 12,000 jobs, or 29 percent of the 42,100 jobs, would be held by residents of the four proposed Project area states; of these 12,000 jobs, approximately 5,400 would be direct jobs and approximately 6,600 would be indirect and induced jobs.

• The total direct, indirect and induced employment in the proposed Project area states (approximately 12,000 average annual jobs) would result in approximately $405 million in total earnings. This accounts for about 20 percent of all earnings supported by the proposed Project. The remaining 80 percent, or $1.6 billion, would occur in other locations around the country.

• Once the proposed Project enters service, operations would require an estimated 50 total employees: 35 permanent employees and 15 temporary contractors.

• **Tax Revenue**

  The total estimated property tax from the proposed Project in the first full year of operations would be about $55.6 million spread across 27 counties in three states. This impact to local property tax revenue receipts would be substantial for many counties, constituting a revenue impact of 10 percent or more in 17 of the 27 counties that the proposed pipeline would affect.\(^2^7\)

  The eight construction camps are estimated to generate the equivalent of 1 full year of property tax revenue for the seven counties where they would be located, which is a total of about $4 million. Short-term revenues from sources such as sales and use taxes would total approximately $66 million combined in the states that levy such a tax. Yields

\(^2^7\) Keystone believes that the property tax estimates in the FSEIS, while obviously very substantial, are also conservative, as they appear to be derived from lower effective tax rates than are expected. For example in the Montana Total Appendix O, Socioeconomics Table 45, the property tax estimate used for Montana is 2.2%. Keystone estimates that the average effective tax rate for the Montana counties which Keystone XL will cross is actually 6.00%. Keystone estimates that the property tax expense for all three states will be approximately $98 million, based on total May 2010 capital expenditure of $3.13 billion. ($62,000,000 – Montana; $15,400,000 - South Dakota; $20,600,000 - Nebraska = $98,000,000). Given increases in the CAPEX since that time, even this estimate is conservative.
from fuel and other taxes would provide some additional economic benefit to host counties and states.

- **Environmental Justice**
  
  The FSEIS found that operation of the proposed Project is not expected to disproportionately adversely impact minority or low-income populations.

- **Connected Actions**
  
  There are three connected actions to the proposed Project: the Bakken Marketlink Project, the Big Bend to Witten 230-kilovolt (kV) Transmission Line Project, and electrical distribution lines and substations. Each of the connected actions would create additional direct, indirect, and induced employment and earnings throughout the United States.

  - Construction of the Bakken Marketlink Project would support an estimated 1,000 jobs and $59.4 million in earnings.
  - The Big Bend to Witten 230-kV Transmission Line would support a total of 1,100 jobs and $47.6 million in earnings.
  - The electrical distribution lines and substations would have the largest economic effect, supporting approximately 3,100 jobs and $137 million in earnings across the United States.

  By any measure, bringing about these very significant socio-economic benefits is in the best interest of the United States. The Project would play an important role in advancing the economic recovery and these benefits come without cost to federal, state, or local governments. This important element of a National Interest Determination is satisfied in an overwhelmingly positive manner.
h. Consideration of the relationship between the proposed Project and goals to reduce reliance on fossil fuels and to increase use of alternative and renewable energy sources support approval of the Project

It is indisputable that U.S. reliance on crude oil will not end in the near term. As discussed in Section 2.c., the United States will remain a significant net importer of heavy crude oil for years to come. It would be a false choice to postulate the decision before the Department as one between a project that provides additional access to secure, reliable Canadian crude oil versus turning off reliance on oil and switching completely to alternative fuels and renewable energy. Today, while the development of alternative fuels and renewable energy is still in its relatively early stages, the need for imports of crude oil to replace declining Venezuelan and Mexican supplies is real. The choice for the United States and the Department of State is to obtain those alternative supplies from Canada or to turn to increased reliance on other foreign suppliers. For the reasons discussed above, it in the best interests of the United States to choose to enhance the existing strong energy relationship with Canada and to grant the requested Presidential Permit for the Keystone XL Project.

CONCLUSION

As set forth above, the proposed Keystone XL Pipeline Project clearly satisfies all of the stated criteria for a finding that it would serve the National Interest of the United States. The proposed Project will not “significantly exacerbate the problem of carbon pollution.” Moreover, the Project would enhance the energy security of the United States, provide economic benefits to the nation through privately funded job creation and economic stimulus, and enhance important foreign relations with Canada, all without
significant adverse impacts to public health, the environment, or cultural resources.

Therefore, as supported by the record currently before the Department of State, TransCanada Keystone Pipeline, LP respectfully requests that the Department find that the Keystone XL Pipeline Project is in the National Interest of the United States, promptly issue a positive National Interest Determination, and grant the requested Presidential Permit.

March 7, 2014