

Problematic Pipelines

The many obstacles facing Keystone XL

There are compelling reasons to question whether TransCanada Corporation should proceed with Keystone XL in the midst of federal and state legal challenges to permits, and escalating Indigenous and landowner opposition; in the absence of a Supplemental Environmental Impact Statement for the newly approved alternative pipeline route; and given the potentially changed political landscape in 2020. This briefing outlines various obstacles facing the construction and commercially viable operation of Keystone XL. We suggest questions institutional financiers may wish to ask TransCanada.

On January 18, 2018, TransCanada confirmed that it has secured approximately 500,000 barrels per day (bpd) of 20 year commitments. While TransCanada has described these commitments as evidence of 'strong commercial support',¹ they amount to only 60% of Keystone XL's capacity (as against a normal expectation of securing 80%), and include a subsidy from the Alberta government in the form of a 50,000 bpd commitment.²

On November 20, 2017, the Nebraska Public Service Commission (PSC) approved an alternate route for Keystone XL, and denied TransCanada's Preferred Route. The authority of the PSC to approve an alternative route is being challenged in the courts by Nebraska landowners.

The PSC decision raises further questions about the adequacy of the existing

environmental analyses conducted at the state and federal levels. TransCanada's own expert witness at the PSC hearings discussed the many ways in which the now approved route would pose greater environmental impacts than the Preferred Route.³

In November 2017, TransCanada's Keystone 1 pipeline spilled 5,000 barrels.⁴ According to Reuters, Keystone 1 has leaked more often and in greater volume than was anticipated in its original impact assessments.⁵ The November spill, which raised concerns about systemic issues with the pipeline, led the vice-chair of the South Dakota Public Service Commission to raise the prospect of revoking Keystone 1's permit.⁶

Major risks to Keystone XL

- 2014 federal Final Supplemental Environmental Impact Statement does not cover new approved route
- Legal challenge to the validity of Nebraska PSC decision and upcoming PSC elections
- Over 100 landowners in Nebraska refusing to sign over their land⁷
- Federal legal challenge to federal cross-border permit
- Escalating Indigenous and landowner opposition.
- Commercial viability

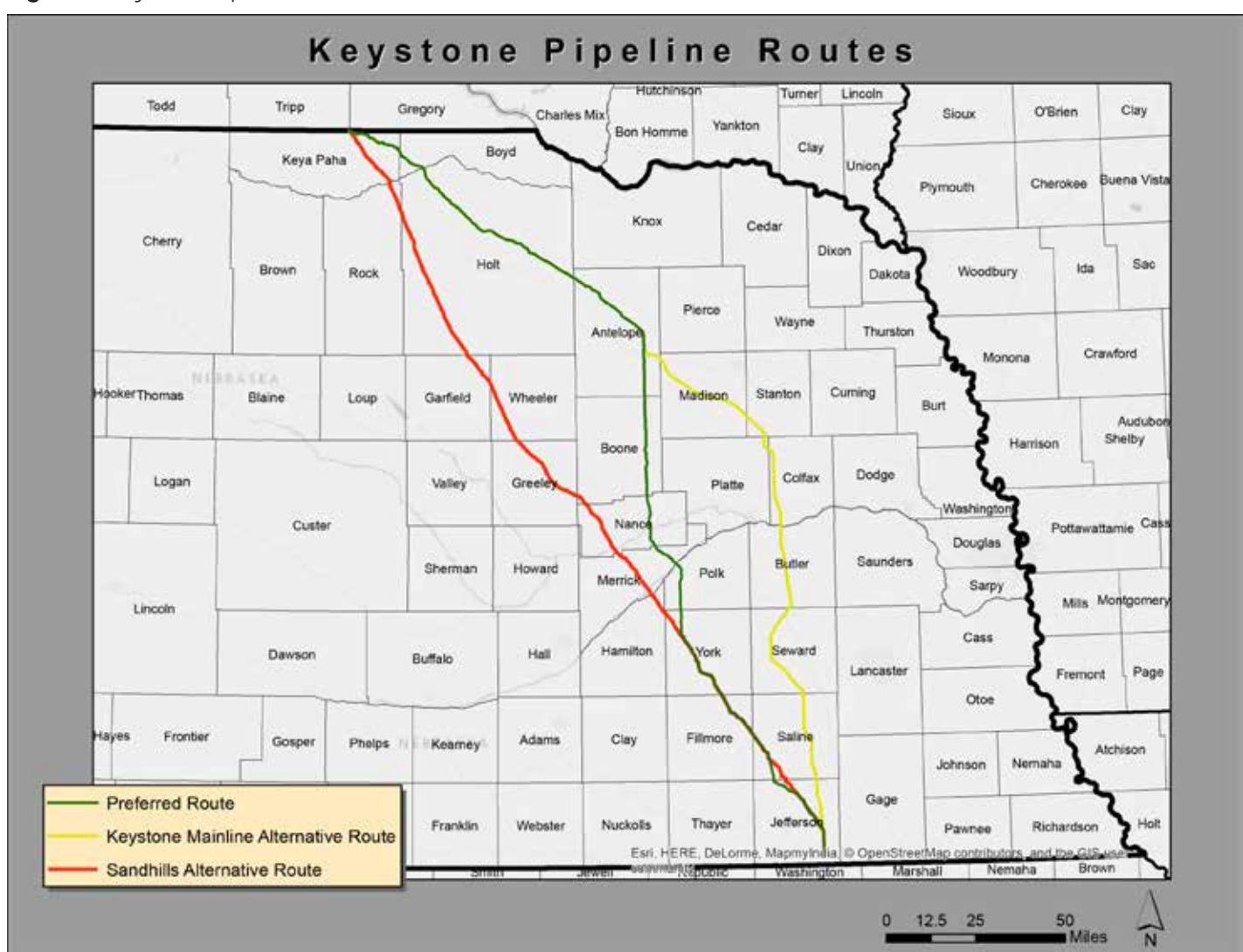
Nebraska PSC decision: Not the route TransCanada was looking for

The Nebraska Supreme Court will hear arguments in the case against the PSC’s ability to approve an alternative route in late 2018. It would be prudent for TransCanada to delay proceeding with Keystone XL pending certainty over the validity of the Nebraska pipeline route approval.

On November 20, 2017, every member of the Nebraska PSC voted to reject TransCanada’s proposed route for Keystone XL through Nebraska.⁸ In a split 3-2 decision, the Nebraska PSC instead approved an alternative route (the Mainline Alternative route).⁹

In contrast to TransCanada’s statement that “the approved route was based on a comprehensive review of the evidence submitted by all parties,”¹⁰ the Mainline Alternative route was not in fact reviewed by state regulators, TransCanada never submitted an application for the route that was approved, landowners on the route were never notified that they could be impacted by a new pipeline, and some Nebraska lawyers question whether the PSC had the authority to approve the alternative route.¹¹

Figure 1: Keystone Pipeline Routes



Acting without authority? Legal challenge to the Nebraska PSC route approval

On December 27, 2017, Nebraska landowners filed an appeal of the PSC decision to approve the Mainline Alternative route. Landowners will argue that, under the applicable Nebraska statutes, the PSC was not empowered to approve any route other than TransCanada's Preferred Route because TransCanada had only applied for and provided materials in relation to their Preferred Route, and that therefore TransCanada must file a new permit application for the as-yet-unsurveyed or reviewed route with the PSC.¹² Written arguments must be submitted by May 1, 2018 and oral hearings are likely to be scheduled by the end of 2018. If the appeal is successful, TransCanada will have to file a new application specifically for the Mainline Alternative route, the review of which by the Nebraska PSC could take from 7 months to 1 year. This review would include new environmental studies and public hearings. That new review may be decided by newly-elected Commissioners.

The Nebraska PSC, the five-member, elected pipeline route permitting agency in the state, will see two Commissioners' seats up for reelection in 2018. Several pipeline opponents have already filed to run against incumbents in these races, and a win in one or both races would expect to tilt the PSC against Keystone XL, should a new pipeline permit come before the agency again in 2018 or 2019.

Questions for financiers to ask TransCanada

- Will the company delay proceeding with Keystone XL until all challenges to the Nebraska PSC have been adjudicated?
- Given the changed route and the company's revised construction timetable, what is the company's revised cost estimate for Keystone XL?



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The need for a new Environmental Impact Statement

Federal legal challenge to federal cross-border permit

In March 2017, the Northern Plains Resource Council, Sierra Club, Bold Alliance, Natural Resources Defense Council, Center for Biological Diversity and Friends of the Earth sued the Trump administration in federal district court in Montana over what they claim was a rushed approval of the federal permit for the pipeline.¹³ The lawsuit challenges the U.S. Department of State's and other agencies' inadequate and outdated environmental review of the pipeline, which relied on an environmental impact statement completed in January 2014 and failed to consider key information on the project's impacts.

In motions filed mid-2017, the administration and TransCanada argued that, in approving the pipeline, the administration was not required to comply with the National Environmental Policy Act (NEPA) or the Endangered Species Act (ESA). These arguments were dismissed as without legal merit on November 22, 2017.

The decision of the Nebraska PSC to approve a route which federal agencies have never evaluated strengthens the plaintiffs' claim that the administration needs to do a new review under environmental laws like NEPA and, the ESA, and the Clean Water Act.

Testimony from TransCanada's own expert witness, Dr. Jon A. Schmidt to the Nebraska PSC laid out many of the additional risks of the Mainline Alternative route:¹⁴

- stating that the Mainline Alternative route would mean crossing the ranges of four more threatened and endangered species of fish not present along the Preferred Route and hence not fully evaluated: the pallid sturgeon, the Topeka shiner, the sturgeon chub, and the lake sturgeon;
- stating that the Mainline Alternative route would also disturb additional land and sensitive areas, including 5.6 additional miles crossing highly erodible soils, 2.2 additional miles crossing Ecological Unusually Sensitive Areas, and one additional mile crossing through deciduous forest and has 10 more Perennial Stream/River crossings than the Preferred Route;
- setting out a chart showing that the Mainline Alternative route would have additional impacts on the habitat of the threatened Northern Long-Eared Bat and Western Prairie Fringed Orchid as compared to TransCanada's Preferred Route; and
- stating that the Mainline Alternative route "in addition to impacting landowners with the Keystone pipeline already on their property..., would impact approximately 39 new tracts with approximately 30 new landowners."

Northern Plains Resource Council, Sierra Club, Bold Alliance, Natural Resources Defense Council, Center for Biological Diversity and Friends of the Earth claim in their lawsuit that these new impacts require the State Department to reevaluate the environmental impacts of Keystone XL in a Supplemental EIS.¹⁵

A decision on the plaintiffs' motion for summary judgment is expected to be made by September 2018. A victory for the plaintiffs - at this stage or following a more lengthy hearing - would likely invalidate the Trump Administration's cross-border permit, meaning that in addition to a new supplemental environmental impact statement being required, the US State Department would have to undertake a new National Interest Determination and issue a new permit. This process could take the permitting process into 2019 or even 2020 when political risk may be a factor to be considered.



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Mainline Alternative Route not covered by existing impact statements

In the 2014 Final Supplemental Environmental Statement (SEIS),¹⁶ the State Department originally considered eight routes, including TransCanada's proposed project route (black line, in map below). The State Department screened those alternatives¹⁷ and identified two routes for further evaluation and comparison with the proposed route:¹⁸

- 2011 Steele City Alternative (light red line), which had been the original proposal in the 2011 EIS
- I-90 Corridor Alternative (green line)

Compare this map against the Nebraska PSC map in Figure 1. The Preferred Route is the same in both maps (green for Nebraska PSC, black for the State Department), as is the 2011 Steele City Alternative (PSC calls it the Sandhills Alternative, marked in red).

However, the Mainline Alternative route does not fully correspond to any of the Final SEIS alternatives. It mirrors the Preferred Route through the north of the state, then diverges in Antelope County, crosses Madison County, and seems to meet up with the I-90 Corridor route in Stanton County. This section of the I-90 Corridor route uses the existing right-of-way for the Keystone 1 pipeline. There also seems to be a discrepancy further south in Seward County where the PSC curve juts westward. So at the very least, the Madison County crossing is entirely un-analyzed by the 2014 State Department Final SEIS.

Figure 2: Section of Figure 2.2.5-3 Major Route Alternatives Carried forward for Detailed Analysis, p. 2.2-61



The section of Mainline Alternative route that does coincide with the I-90 Corridor Alternative and the Keystone Right of Way did not receive the same level of analysis or scrutiny in the Final SEIS. Much of the analysis is of limited use because it aggregates information about the entire I-90 Corridor route (e.g. total miles of wetland crossed along route), and doesn't provide specific information about the section coincident with the Mainline Alternative route in Nebraska. The fact that this section is coincident with the existing Keystone 1 Right of Way does not mean that the 2008 EIS document for that pipeline is a substitute for a new assessment given it is ten years old, would not address any cumulative issues pertaining to placing two pipelines in the same area, and doesn't address any issues that arise from aggregating information along the route.¹⁹

Comparing the Mainline Alternative route with various routes studied in the U.S. State Department Final SEIS²⁰, we find:

- There is one section of the Mainline Alternative route (crossing Madison County) that is entirely un-studied.
- There is another longer section (along the existing Keystone Right of Way) that received only limited analysis in the Final SEIS as one segment of a separate alternative route (the I-90 Corridor). However, that I-90 Corridor analysis was considerably less detailed than the Preferred Route analysis, and is additionally of limited usefulness since much of its data is aggregated along that route and is not specific to the section coincident with the Mainline Alternative route. The applicants in the federal lawsuit challenging the federal cross-border permit do not consider the limited analysis of the I-90 corridor to be adequate, stating that the Mainline Alternative route "crosses

five counties not included in the Final SEIS, and has never been evaluated by the State Department or other federal agencies."²¹

Questions for financiers to ask TransCanada

- In light of the company's own expert's testimony on the environmental impact of the Mainline Alternative route, why does TransCanada not agree that prudent risk mitigation and management would require a new assessment of environmental impacts?
- If the legal challenge to the federal cross-border permit is successful, would TransCanada challenge that ruling? If so, what impact would such a challenge have on the project's construction timing and cost?
- What is the company's estimate of the impact on construction timing and cost if the legal challenge to the federal cross-border permit is ultimately successful? What is the company's assessment of political risk should timing slip until 2020?
- What risks (including reputational and legal risks) does the company believe arise in the event that, regardless of the outcome of ongoing litigation, a new environmental impact analysis is not undertaken? How does the company propose to address such risks?

Public opposition intensifies

Nearly 20,000 people across the US have committed to “traveling to the pipeline route to engage in peaceful, creative resistance to Keystone XL when the call is put out by frontline communities to help stop this Black Snake.”²² The “Promise to Protect” is a growing network of individuals and organizations and was initially launched following the Nebraska PSC decision in November 2017. The “Promise to Protect” coalition includes, among others, Native Organizers Alliance, 350.org, Greenpeace USA, Indigenous Environmental Network, Dakota Rural Action, as well as the Cheyenne River Sioux Tribe, the Sisseton-Wahpeton Sioux Tribe, and the Pawnee Nation. Two Indigenous resistance camps close to the proposed route in South Dakota, Wiconi Un Tipi and Wapka Was'te, are organized and active through the winter.²³ Following the Nebraska PSC decision, the Treaty Alliance Against Tar Sands Expansion, made up of more than 150 First Nations and tribes, affirmed its opposition to the project.²⁴

Nebraska landowner opposition

The Nebraska Easement Action Team (N.E.A.T.), a collective formed in 2012 of landowners who have refused to sell easements to TransCanada for Keystone XL, continue to seek out newly affected landowners on the Mainline Alternative route. NEAT and Domina Law Group are hosting community meetings in the affected counties and soliciting additional landowners to join the organization.²⁵ Several landowners have built barns and large solar installations on their property in the direct path of the proposed Keystone XL pipeline.²⁶

Questions for financiers to ask TransCanada

- How does the company intend to overcome the opposition of landowners in Nebraska who have refused to sell easements? If they continue to refuse, what would be the impact on Keystone XL in terms of construction timing and cost?
- What is the company's estimate of the costs of entering legal proceedings with over 100 landowners in Nebraska?
- Is the company conducting a thorough and independent human rights impact assessment of the project in line with the UN Guiding Principles on Business and Human Rights Reporting Framework?
- How does the company plan to address the risks arising from Indigenous opposition to Keystone XL?
- In light of the Dakota Access Pipeline controversy, what public reporting will the company do on securing free, prior and informed consent (FPIC) from affected tribes?

Keystone XL commercial viability: an open question

As stated above, TransCanada has secured commitments for only 60% of Keystone XL's capacity. The commercial success of Keystone XL relies on producers fulfilling the multi-year shipping commitments they have made. Given that evolving market conditions raise questions about the continued expansion of tar sands production, the risk to TransCanada is an oversupply of pipeline capacity. Oversupply of pipeline capacity could return the negotiating leverage to the shippers, with the possible outcome being the renegotiation of the favourable "take or pay" contracts in their favour reducing the revenue of TransCanada.

Additional volumes from tar sands projects already under construction might exceed available existing pipeline capacity only by about 250 kpd – well below what is required to profitably fill a new pipeline.²⁷

Growth in the tar sands is dependent on market conditions (in addition to market access infrastructure and a lack of climate policy), including the global demand for oil in the context of alternative supplies at lower prices. A number of factors impacting those market conditions means that growth in the tar sands is far from guaranteed suggesting that the optimism of the pipeline companies in growth is misplaced.

The Canadian oil industry has not sanctioned construction of any major new projects that would significantly increase the overall supply of crude oil available for export from Canada, since 2014.²⁸ The high prices of 2013 led to a level of optimism in the industry which has rapidly eroded. Only one small project was approved in 2015 and two in 2016.²⁹ Medium term price outlook does not provide confidence that new projects will get a green light. The exodus of some leading international oil companies^{30,31} from the tar sands supports arguments questioning the province's long-term

prospects for additional growth. Market fundamentals such as evolving supply and demand dynamics and the resulting medium to long-term prospects for oil prices have already restricted the growth in tar sands and are likely to continue to do so.

Expert evidence³² submitted to the Nebraska PSC consultation on Keystone XL highlights the conditions limiting growth in the tar sands and thus limiting the potential supply to the pipeline and the potential economic impacts. In addition, there are conditions specific to the Keystone XL pipeline and the already over-supplied refining market in the Gulf of Mexico area which, it is argued, would impact the success of Keystone XL.

Questions for financiers to ask TransCanada

- Why is the company confident that it will secure additional shipping contracts for Keystone XL given the unfavourable current market dynamics for tar sands growth?
- Has the company assessed the impact of reduced global oil demand due to factors including the rapid adoption of new technologies such as EVs?
- What would be the impact on Keystone XL's profitability if shippers sought to renegotiate contracts in the event of an oversupply of pipeline capacity?

Conclusion

While TransCanada wishes to describe recent developments as milestones on the way to constructing Keystone XL, legal challenges to federal and Nebraska approvals together with escalating Indigenous and landowner opposition suggests the company would be prudent to delay proceeding in the midst of such uncertainty. The approval of an alternative route in Nebraska, which TransCanada's own expert suggested would result in greater environmental impacts, raises doubts on the adequacy of the existing SEIS as a risk identification and mitigation measure. Potential institutional financiers of Keystone XL would be prudent to require TransCanada carry out of a new environmental impact assessment as a condition precedent to financial close.

Questions for financiers to ask TransCanada

- Will the company delay proceeding with Keystone XL until all challenges to the Nebraska PSC have been adjudicated?
- Given the changed route and the company's revised construction timetable, what is the company's revised cost estimate for Keystone XL?
- In light of the company's own expert's testimony on the environmental impact of the Mainline Alternative route, why does TransCanada not agree that prudent risk mitigation and management would require a new assessment of environmental impacts?
- If the legal challenge to the federal cross-border permit is successful, would TransCanada challenge that ruling? If so, what impact would such a challenge have on the project's construction timing and cost?
- What is the company's estimate of the impact on construction timing and cost if the legal challenge to the federal cross-border permit is ultimately successful? What is the company's assessment of political risk should timing slip until 2020?
- What risks (including reputational and legal risks) does the company believe arise in the event, regardless of the outcome of ongoing litigation, that a new environmental impact analysis is not undertaken? How does the company propose to address such risks?

- How does the company intend to overcome the opposition of landowners in Nebraska who have refused to sell easements? If they continue to refuse, what would be the impact on Keystone XL in terms of construction and cost?
 - What is the company's estimate of the costs of entering legal proceedings with over 100 landowners in Nebraska?
 - Is the company conducting a thorough and independent human rights impact assessment of the project in line with the UN Guiding Principles on Business and Human Rights Reporting Framework?
 - How does the company plan to address the risks arising from Indigenous opposition to Keystone XL?
- In light of the Dakota Access Pipeline controversy, what public reporting will the company do on securing FPIC from affected tribes?
 - Why is the company confident that it will secure additional shipping contracts for Keystone XL given the current unfavourable market dynamics for tar sands growth?
 - Has the company assessed the impact of reduced global oil demand due to factors including the rapid adoption of new technologies such as EVs on and how this would impact oil prices, potential tar sands growth and the Gulf Coast refining sector?
 - What would be the impact on Keystone XL's profitability if shippers sought to renegotiate contracts in the event of an oversupply of pipeline capacity?

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