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March 11, 2014
White Paper: TransCanada Participation in the AKLNG Project

The State has proposed, through Senate Bill 138 and House Bill 277, to take an equity interest in the AKLNG project equal in percentage to the "State Gas Share," which would be the percentage of gas production tax (taken as gas instead of as money) and royalty gas. Accordingly, the State has analyzed issues related to ownership of approximately 20% to 25% of the project.

Alaskans will see significant benefits from large-scale gas commercialization that yields new supplies of in-state gas, revenue streams and jobs. However, LNG projects of this magnitude are expensive and carry financial risks. To mitigate these risks, it is prudent for the State to bring on a partner or partners.

With passage of this legislation, TransCanada Corp. may hold the State's ownership interest in the project's Gas Treatment Plant and Pipeline. The provisions pertaining to TransCanada are based on a Memorandum of Understanding (MOU) between the commissioners of Natural Resources and Revenue, and TransCanada.

More detailed agreements between the parties will be required to advance the project and these also will be subject to legislative review and approval. These agreements will transition the State and TransCanada out of the Alaska Gasline Inducement Act (AGIA) and establish a relationship with TransCanada that is more similar to traditional pipeline/customer relationships that exist around the world.

State/TransCanada Participation Options

The State considered three options for equity participation in the GTP/Pipeline components of the project:

- State Alone:
  - The State would hold its 20%-25% interest in all components of the AKLNG Project
- State with TransCanada:
  - TC would hold the State's 20%-25% interest in the GTP/Pipeline and the State would hold its 20%-25% interest in the LNG Plant.
- State with TransCanada with buy back option:
  - TC would hold the State's 20%-25% interest in the GTP/Pipeline and the State would hold its 20%-25% interest in the LNG Plant
  - At the beginning of the Front End Engineering & Design (FEED) stage, the State would exercise an option to buy back an interest of between 30% and 40%[1] of the share held by TC in the GTP/ Pipeline, with TC's share to be maintained at a minimum of 14 percent of the total GTP and Pipeline components of the project.
  - If the State exercises this option, it will receive between 30% and 40% of the equity return TransCanada receives, but will also be responsible for between 30% and 40% of TransCanada's project costs during FEED, construction and operation.

[1] 30% of a 20% State Share of the GTP and Pipeline elements of the project would equate to 6% of the GTP and Pipeline components. 40% of a 25% State Share of the GTP and Pipeline elements of the project would equate to 10% of the GTP and Pipeline components.

	GTP	Pipeline	LNG Plant
SOA Alone	SOA : 20%	SOA: 20%	SOA: 20%
SOA + TC No Buyback	TC: 20%	TC: 20%	SOA: 20%
SOA + TC with Buyback	TC: 14% SOA: 6%	TC: 14% SOA: 6%	SOA: 20%

Exhibit 1: How the State would share its responsibility for its share of the project, under various options, assuming that the State holds 20 percent interest in project; all graphics based on analysis by Black & Veatch, unless otherwise noted.

Under the terms of the MOU, in conjunction with TransCanada's upfront investment in the AKLNG Project, the State may enter into a 25-year agreement with TransCanada wherein the company would provide the State with gas treating and transportation services for the State's share of the gas in exchange for a tariff payment from the State. Through this arrangement (See Exhibit 2), the State would reduce its upfront capital risk in this large project and defer a portion of its payments to when the project is operational and revenues are realized.

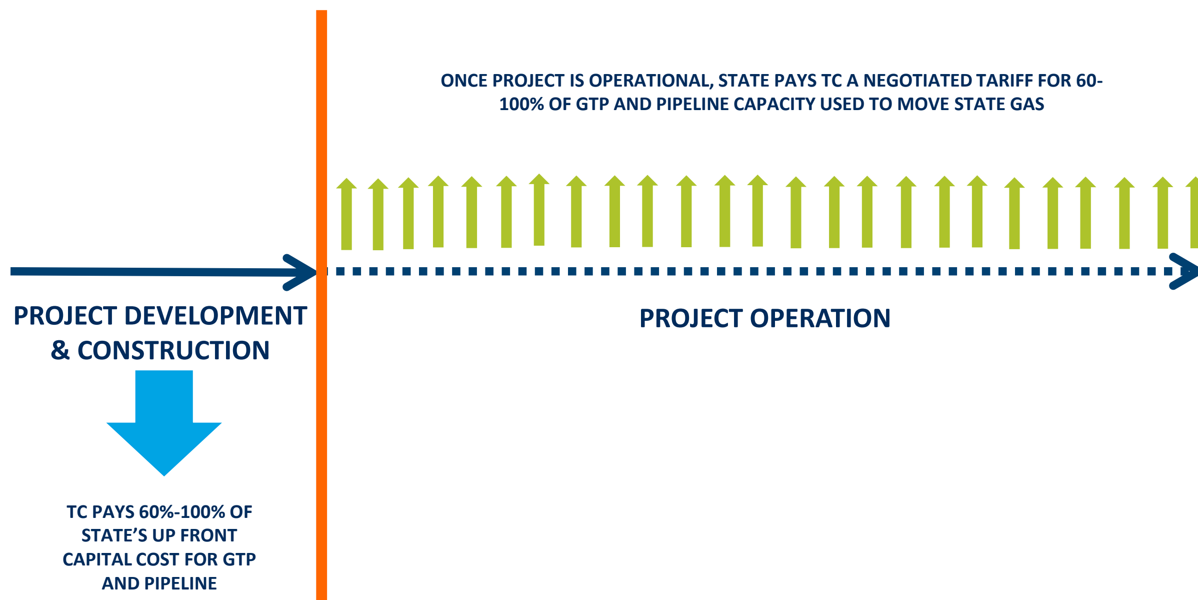


Exhibit 2: TransCanada bears upfront capital cost and receives a tariff from the State for 25 years.

Reducing Project Costs and Associated Risks

While investment in the AKLNG project is expected to bring significant benefits to the State, as with any investment, it is important for the State to prudently address risks such as cost overruns. Through its equity participation in the AKLNG project, TransCanada will help manage those risks by shouldering some of the cost obligations during construction, when cash calls will not be supported by project revenues. This will also help the State maintain sufficient cash reserves to address important public functions, such as public safety, health and education.

TransCanada's participation in the project reduces the State's investment in the project by billions of dollars, depending on the total equity stake ultimately taken by the State. Assuming that the State holds 20 percent interest in project, the range of the State's responsibility to finance project costs, based on the different options in the agreement with TransCanada, as well as the State's "go it alone" option, are shown below in Exhibit 3.

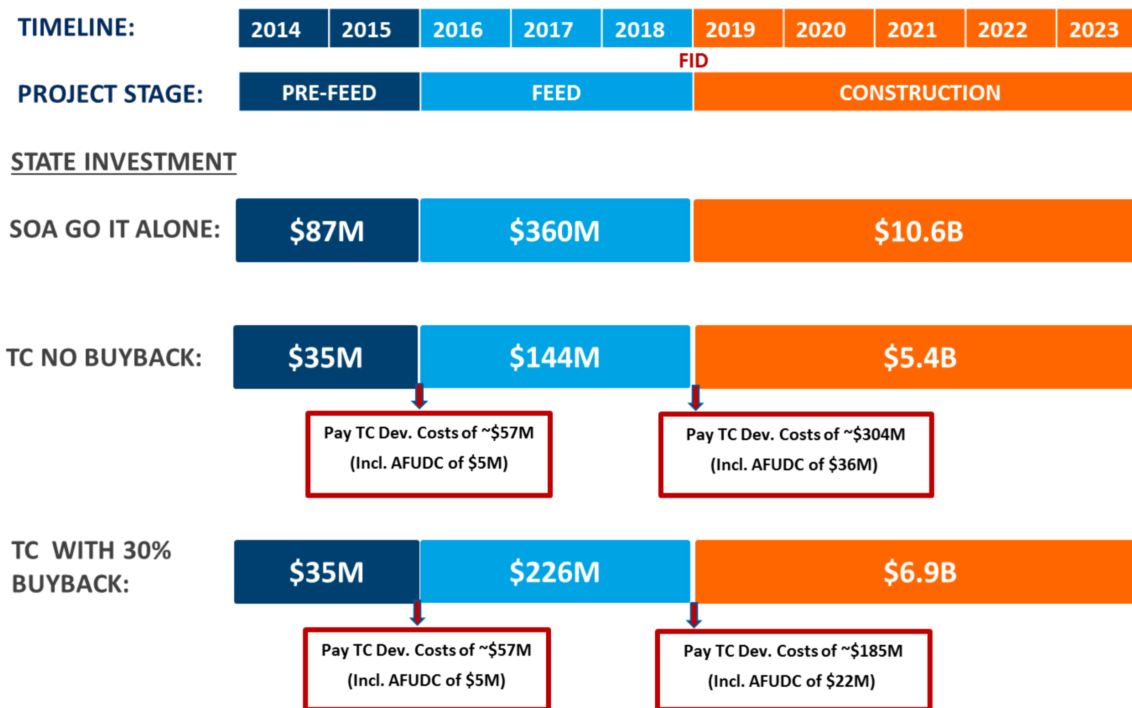


Exhibit 3: Cost implications of equity options and the "off ramps" available for the State to either move forward or withdraw from the project.

Value of Project Momentum

While the State could initiate a process to pursue other partners to assure itself of having procured the "best deal," the time necessary to complete such a process would likely have an adverse impact on the momentum of the AKLNG project.[2] From a fiscal perspective, the benefit of obtaining better terms is minimal compared with the associated cost of delaying the project to engage in that effort. As seen in Exhibit 4, the value of

[2] By way of comparison, it took approximately two years for the competitively-bid AGIA license process to be completed. Given that TransCanada was the only company to submit a complete a compliant application during the AGIA process, it is not assured that the State would readily identify other companies willing to offer better terms.

retaining momentum in the project is significant since each year's delay in the project is estimated to cost the State $800 million in net present value. In contrast, the estimated value of procuring better commercial terms – either by reducing the return on equity required by 1%, or by reducing the equity portion of the capital structure by 5% – are only $100 million and $200 million respectively in additional net present value to the State.

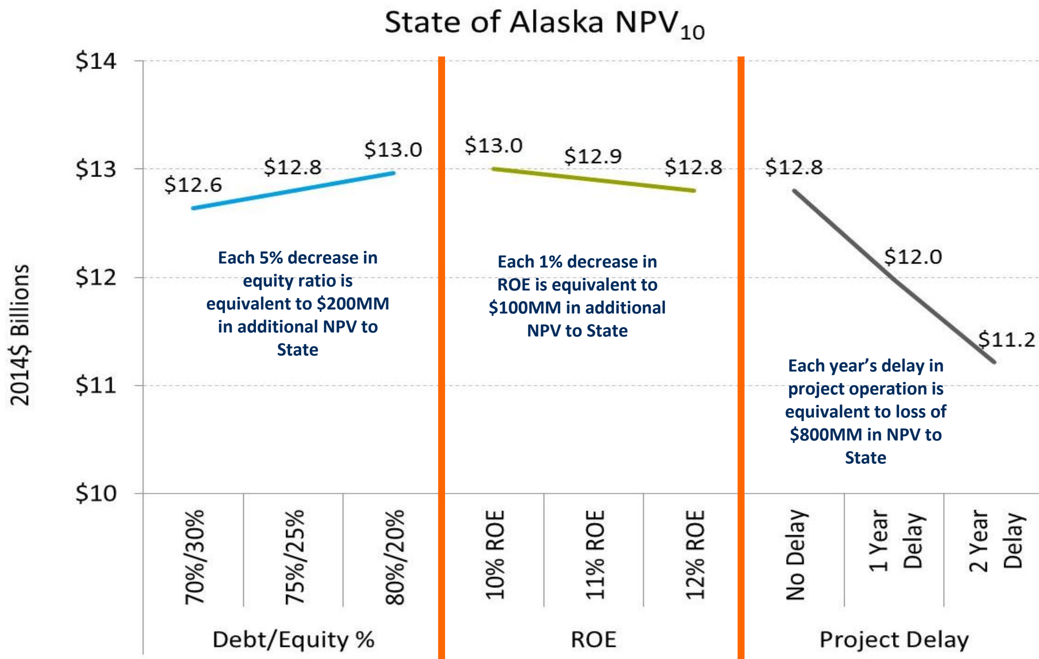


Exhibit 4: The cost to the State from project delays could outweigh the benefit of securing better commercial terms (debt/equity or ROE).[3]

Experienced Third Party

TransCanada is a pre-eminent pipeline builder in North America and brings to this project a wealth of northern pipeline experience – particularly with a detailed working knowledge of Alaska conditions.

Along with those advantages, TransCanada's participation in the AKLNG project brings into the project a partner whose sole interest lies in energy transportation. As a transportation company, TransCanada is aligned with the State's interests in project expansions that accelerate further oil and gas exploration and development in the State, and by companies other than the major producers.

[3] Assumes the State holds a 25% interest in the project.

TransCanada Capital Project Performance

Project	Capital Cost* ($ Billions)	In-Service Date	Cost Performance	Schedule Performance
Bécancour	0.5	Q3 2006	6% under	15 days late
Tamazunchale	0.2	Q4 2006	8% under	30 days early
Cartier Wind (Phases I-III)	0.6	Q4 2006/07/08	3% under	14 days early
Michigan Storage Expansion	0.1	Q4 2007/08	10% under	On time
Portland Energy Centre	0.7	Q1 2009	2% under	21 days early
Kibby Wind (Phases I & II)	0.4	Q4 2009/10	On budget	On time
Alberta Pipe	0.2	2009/10	29% under	On time
North Central Corridor	0.8	Q2 2010	15% under	On time
Halton Hills	0.7	Q3 2010	On budget	On time
Groundbirch	0.2	Q4 2010	44% under	30 days late
Keystone (Phases I & II)	6.0	Q3 2010/Q1 2011	12% over	On time
Bison	0.6	Q1 2011	11% over	60 days late
Coolidge	0.5	Q2 2011	12% under	On time
Guadalajara	0.4	Q2 2011	On budget	On time

** TransCanada share in Canadian dollars. Excludes interest during construction. Estimated Keystone (Phases I & II) costs.*

February 27, 2014

Exhibit 5: TransCanada has an exceptional record of delivering pipeline projects on time and on budget; chart furnished by TransCanada to Alaska Senate Finance Committee.

Economic Impact of TransCanada's Participation

Offsetting or sharing risks with a partner is generally accompanied by a cost to allow that partner earn a return on its investment and to compensate it for incurring the associated risks. This is the reason for the State to enter into a 25-year agreement with TransCanada wherein the company would provide the State with gas treating and transportation services in exchange for a tariff payment.

The MOU with TransCanada specifies that the tariff paid by the State to TransCanada will be calculated using a favorable capital structure consisting of 75% debt (which is generally cheaper) and 25% equity (which is generally more expensive), a competitive return on equity of 12% and a cost of debt of 5%. These terms are more favorable to the State than recent capital structures and ROEs approved by the Federal Energy Regulatory Commission for new projects, and they are competitive with the terms negotiated for TC's AGIA project, as well as the Denali project's terms.

An examination of the economic impact of the project – between now and the first 25 years of the project's operation – indicates that TransCanada's participation is expected to result in a relatively small reduction of the State's total cash flows, while having only a minimal impact on a net present value basis.

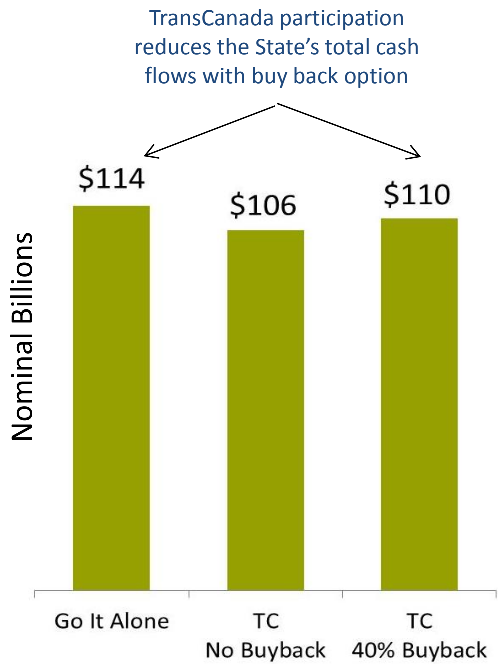
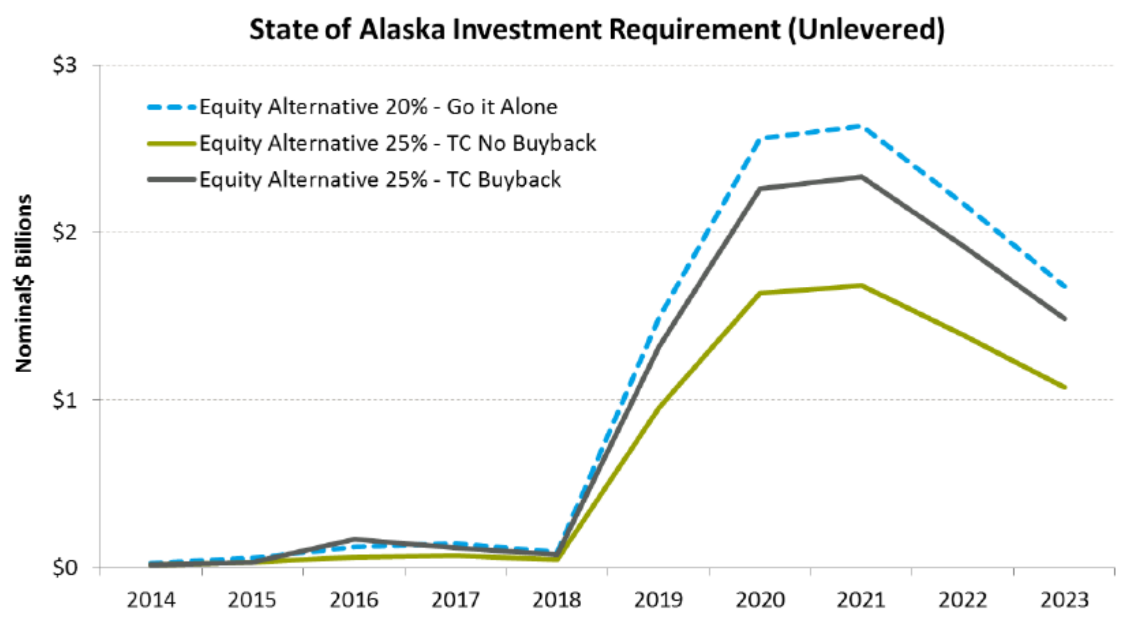


Exhibit 6: TransCanada's participation is expected to reduce the State's total cash flows but not materially impact net present value. Assumes the State holds a 25% interest in the project.

Generally speaking, the State can invest less and earn more by taking a 25% interest in the AKLNG Project with TransCanada than taking a 20% interest and "going it alone." A comparison of these options, in terms of State costs and future revenue – are provided in Exhibit 7 and Exhibit 8 below.



State Investment ($ Millions)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
20% - State Go It Alone	28	58	120	140	90	1,500	2,600	2,600	2,200	1,700	11,000
25% - TC No Buy Back	14	29	60	70	50	1,000	1,600	1,700	1,400	1,100	7,000
25% - TC with Buy Back	14	29	170	120	70	1,300	2,300	2,300	1,900	1,500	9,700

Exhibit 7: The State's costs for a 20% ownership "going it alone" are expected to be $1.3-4 billion higher than for a 25% ownership with TransCanada.

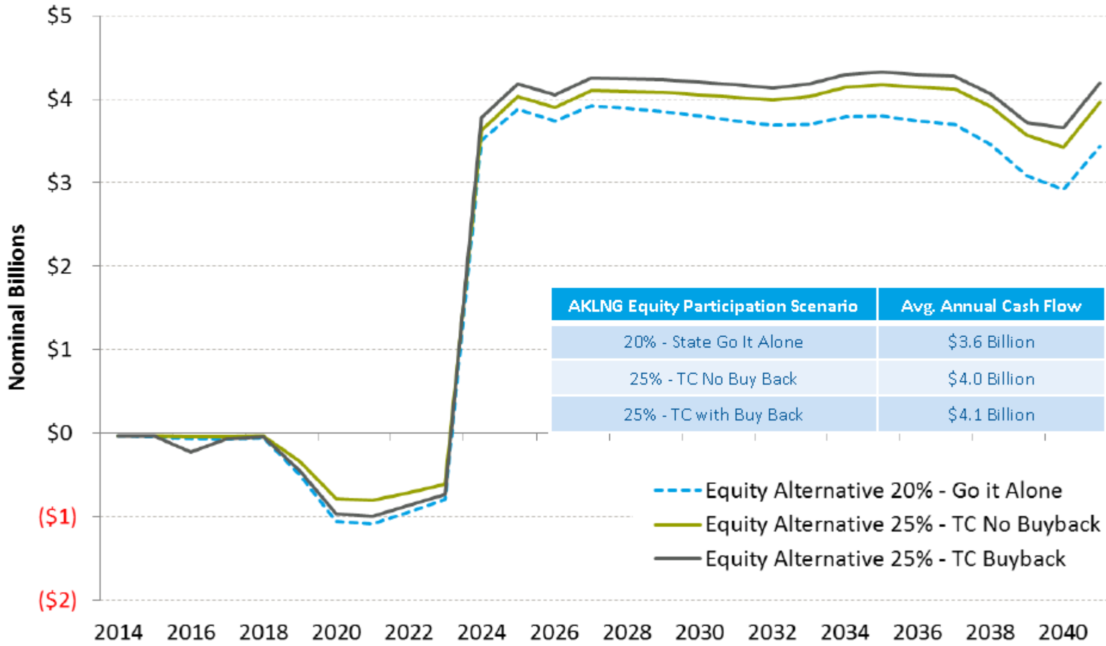


Exhibit 8: State revenues for a 20% ownership "going it alone" are expected to be $400-500 million lower annually than for a 25% ownership with TransCanada.

Summary

The AKLNG Project is a significant undertaking that is expected to reap benefits to Alaskans over the long-term. The State's equity participation in the project improves the commercial attractiveness of the project, allows the interests of the various stakeholders to be aligned and helps to advance the project through its development stages.

Bringing in TransCanada as a partner allows the State to share the project's risks while receiving the benefits of private-sector experience and expertise. The costs to the State associated with this partnership are expected to be offset by the various benefits from TransCanada's participation in the AKLNG project including:

- Reducing the State's cash outlays, protecting its cash reserves and credit rating
- Helping maintain momentum on the project
- Bringing in a preeminent pipeline company with northern pipeline experience
- Bringing in a third party whose interests lie in facilitating access and expansions