



AK LNG: A REVIEW (2014—2016)

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Point of departure

As 2017 begins, the story of commercializing North Slope gas enters a new phase. For all intents and purposes, the most recent iteration has ended—the project outlined in March 2012 and that ultimately envisioned a liquefied natural gas (LNG) project in south-central Alaska co-owned by ExxonMobil, BP, ConocoPhillips and the State of Alaska. We have a new concept. Enalytica has been a consultant to the Legislature since 2014 (and its principals have been involved in Alaska since earlier); based on that experience, this report tackles three questions:

1. Where are we now?
2. What comes next?
3. What can we learn from 2014–2016?

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Where are we now?

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By year-end 2016, the State of Alaska was in the process of “taking over” the Alaska LNG (AK LNG) project, meaning that the state would become the project lead, and the three producers would no longer be the project’s co-sponsors. How did we get here? The answer depends on who one asks—but the following are beyond dispute:

First, the market changed. In March 2012, when the three producers outlined a new concept to then Governor Sean Parnell, Brent was \$125 and had traded above \$100 for over a year. Moreover, higher-cost LNG was the norm: in late 2009, the Gorgon LNG in Australia had reached final investment decision, and its cost, at \$45 billion, was similar to what was envisioned for AK LNG (for a similarly sized project). The market seemed ready for an expensive development such as AK LNG.

In contrast, Brent averaged \$48 and has traded between \$26 and \$66 in 2015–2016. In LNG, the market has shifted from expensive projects in Australia to cheaper ones in the Lower 48, where the midstream portions of LNG projects are often half those of AK LNG. In that world, AK LNG will struggle, no matter its other assets (known resource base, proximity to market, etc.).

Second, the costs of AK LNG have not come down. From the beginning, the costs of AK LNG have been pegged at “between \$45 and \$65 billion,” and the project sponsors have tried to narrow this band and even push the cost beyond the lower boundary. Today, the cost is closer to \$45 billion—which is an improvement, but not enough.

Third, the sponsors were hesitant to move forward. The producers were not ready to authorize the next stage in the project’s development: the front-end engineering

and design (FEED) phase, which would have entailed a more substantive investment and for a longer period (2-3 years).

In short, AK LNG had reached a roadblock as we entered 2016. Different parties have different views on what could have and should have been done. To understand how we landed on the current path, two things are worth remembering.

First, the three producers are not unified. They share interests, of course, but they negotiate with each other as often as they negotiate with the state. As such, they have different approaches and priorities (in turn, those depend on internal deliberations before they become “company policy”). When an obstacle emerges, the producers are likely to see different solutions.

Second, AK LNG has competed with a state-led project. It is unfair, of course, to focus solely on the administration’s position to explain why we have reached the current path—the administration negotiated extensively over AK LNG, and many of the unresolved issues do not even involve the state (e.g. how to balance gas from Prudhoe Bay and Point Thomson to create a unified gas stream).

But since 2015, it has been rather clear that if the producers do not progress the project at a timetable acceptable to the state, the state will take it over. In early 2015, this discussion manifested itself in the form of a “Plan B.” In late 2015, there was a threat of a gas reserves tax unless the producers agreed to withdrawal terms, whereby they would make their gas available to a state-led project. In 2016, it was the approval of the plan of development for Prudhoe Bay that was caught up in the argument over gas commercialization. AK LNG has faced intense competition over the past two years.

In short: the market changed; the costs of AK LNG fell but not enough; the producers were not ready to sanction FEED; the challenging environment weakened the resolve and cohesion of the parties; and the state made it clear that delay was not an option and only a transition to a state-led project would be satisfactory. And so, the state is now taking over AK LNG.

Where comes next?

The odds of success for a state-led project, as currently envisioned, are low.¹ There are three reasons for this.

First, the market environment remains difficult. The price of oil and gas, the costs to construct AK LNG, and the intense competition that AK LNG faces from other projects—none of these have changed just because the state took over the project.

Second, the project concept put forth by the state is untested. The case for state leadership rests on the state being able to accomplish most of these objectives:

- (a) Buy the gas from the producers at a commercially reasonable price;
- (b) Find buyers for that gas also at a commercially reasonable price;
- (c) Ensure that the spread between those prices compensates for the risk taken;
- (d) Secure long-term transportation agreements for the state-owned infrastructure;
- (e) Find investors who have capital and will accept lower returns than the producers;

¹ For more: analytica, “Commentary on AK LNG June 2016 update,” July 2016 ([link](#)); analytica, “Pros and Cons of a State-Led Project, August 2016 ([link to report](#) and [PPT presentation](#)).

- (f) Accept itself a lower return than other investors desire for similar projects;
- (g) Secure attractive third-party financing and borrow heavily to cover project costs;
- (h) Insulate the state from cost overruns (without paying a huge surcharge);
- (i) Avoid paying taxes to the federal government;
- (j) Retain control so that no party other than the state can veto the project's progress;
- (k) Avoid any delays to the project.

This wish list is, at best, far fetched, especially if one surveys other LNG projects. The only possible analogs could be the projects developed in the Lower 48. But Alaska is no Lower 48, where there is a liquid market for sourcing gas, where construction and permitting are relatively simpler, and where projects have a clear cost advantage. Just because it works for the Lower 48 does not mean it will work for Alaska.

Third, the game-plan is unclear. The end-goal, described above, may be far fetched, but it is clear. What is less clear is the “why” or the “how.” The first allusions to “Plan B” as a state-led project emerged in early 2015; by mid to late 2016, it was obvious that the project was moving in this direction. Yet we know little more about the details than we did in early 2015. The AK LNG structure was based on extensive research, analysis and deliberation—with the pros and cons of various pathways explained and debated. In contrast, the present path is outlined only in the broadest terms, and using analogs, as discussed above, that do not pass muster.

In short: the state has taken over a difficult project; it has proposed a series of steps that could, in theory, advance the project but which are, in practice, unlikely; and it has offered little by way of evidence to explain why its proposed path will succeed.

Where does this leave the project? The worst outcome is this: the progress made so far in the regulatory process stalls, and the state spends months (or years) and tens (or hundreds) of million of dollars to conclude that the assumptions made to justify the “state-led” project were wrong (especially since these assumptions look implausible to begin with).

Progress from here on can be measured simply: is the regulatory process moving forward as planned; and is the state, through the Alaska Gasline Development Corporation (AGDC) that is leading the new approach, testing the assumptions that underpin the state-led project?

For the regulatory process, the metrics are clear: are reports being filed with the Federal Energy Regulatory Commission (FERC); are issues addressed thoroughly; is there a continued engagement with all the relevant stakeholders; is the timetable for securing permits on track; and so on.

For process of advancing the new structure, the metrics are different. To begin with, there is a need for robust evidence and studies to back up the state's preferred path—for example, is there proof that pension funds invest in liquefaction projects and will accept lower returns than the producers; is it typical for governance terms to not include veto rights for parties; what premium do contractors charge for accepting cost risk during construction; and so on. This body of work will help inform which aspects of the proposed path are more likely, and hence delineate what success looks like.

Besides meticulous study, the state would also need to lay out some clear metrics and a timetable for making a go-ahead/stop decision. In any project, it is easy to have good meetings that last years but lead nowhere. Meetings do not mean progress. Progress means money secured, gas bought or sold, capacity reserved for the infrastructure, contractors signed up—and all done in detailed and, ideally, binding, term sheets. Otherwise, this process may never succeed but never fail either.

What can we learn from 2014–2016?

AK LNG was designed to avoid the pitfalls that plagued past efforts. In part, it worked, making more progress towards developing North Slope gas than any project before it. But AK LNG, and any effort to commercialize North Slope gas, will need to overcome three core weaknesses.

First, North Slope gas will need all the stars to align. Any project to commercialize North Slope gas will be very expensive; as such, success will depend on serendipity. Four stars need to align:

- (a) The market must “need” this gas;
- (b) The parties must have settled on one development concept (is it pipeline or LNG; a big project or a small one; this route or that; etc.);
- (c) The parties must have settled on one project structure (who owns what; how are the pieces connected; etc.);
- (d) The parties must be willing to make concessions to each other—no one wins 100% but all prefer the end result to no deal at all.

In some ways, the stars had aligned with SB 138—although they did not stay aligned long enough for the project to enter FEED (for reasons discussed above). Throughout history, when one star has misaligned, the whole process has fallen into disarray. If the market turns, there are voices which say that the pipeline should become LNG or the LNG should become a pipeline; or that the project should be increased in scale; or that it should be made smaller; or that it needs to take a new route; or that the state should limit its role; or that the state should take it over; and so on. This is a fragile system—hit any roadblock, the whole system falls apart. It is very hard to succeed as long as this remains the case. Some fundamental building blocks are necessary.

Second, the “gasline consensus” needs to deepen. Most Alaskans really want this gas to be developed. Yet “gasline” means different things to people; there are some who believe that the project is economic and that the producers just refuse to develop it unless they extract concessions from the state; others see it as a difficult project that will require concessions in order to materialize; others still think it will never happen.

This discord makes it difficult to translate an “agreement in theory” to an “agreement in practice.” For instance, even in this iteration, there was little progress in finalizing an agreement on property taxes or on fiscal stability. Without agreement on fundamental trade-offs that the state might be called to make, it will be difficult to settle on a plan that receives widespread and deep support.

Third, the state must lead—but can only do when it has its house in order. There are too many parties, too many sources of contention, and too many complexities in order for the negotiations to naturally produce a settlement. No party can win but all parties have a veto. The state is indispensable—it wields the biggest veto, it has the

most leverage and the broadest toolkit, and it can mediate disagreements between the producers. But the state cannot achieve all it wants—it can nudge the parties, but it cannot wish away the complexity or even go it alone.

But to lead, the state needs to have its own house in order. In all gasoline negotiations, the state is represented by multiple (often contrasting) voices. Managing this “in-house” complexity is always difficult, but it is made more so by staff turnover or power struggles. This is not a unique problem to this iteration, nor is it a problem solely for the state. But in a project where all stars need to align, and where the consensus for the “gasline” is often shallow, these disputes can have compounding effects on the project’s odds of success.

In short: all the stars need to align for North Slope gas to be developed; but when they do, the state needs to be ready by knowing exactly what it wants and have a team in place that is able to lead the parties to a successful conclusion. It is hard to see success in any other way.