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ALASKA STATE LEGISLATURE
HOUSE RESOURCES STANDING COMMITTEE
January 23, 2017
1:07 p.m.

MEMBERS PRESENT

Representative Andy Josephson, Co-Chair
Representative Geran Tarr, Co-Chair
Representative Dean Westlake, Vice Chair
Representative Harriet Drummond
Representative Justin Parish
Representative Chris Birch
Representative DeLena Johnson
Representative George Rauscher
Representative David Talerico

MEMBERS ABSENT

Representative Chris Tuck (alternate)

OTHER LEGISLATORS PRESENT

Representative Mike Chenault

COMMITTEE CALENDAR

OVERVIEW: UPDATE ON THE ALASKA LNG PROJECT

- HEARD

PREVIOUS COMMITTEE ACTION

No previous action to record

WITNESS REGISTER

BILL MCMAHON, Senior Commercial Advisor
ExxonMobil Corporation
Houston, Texas
POSITION STATEMENT: On behalf of the participants of the Alaska LNG Project (AKLNG) related to progress on AKLNG, and on behalf of ExxonMobil related to its perspective on a state liquefied natural gas (LNG) project, provided testimony prior to the Alaska Gasline Development Corporation update on AKLNG, and answered questions.

DAMIEN BILBAO, Vice President
Commercial Ventures

BP
Anchorage, Alaska
POSITION STATEMENT: Provided testimony prior to the Alaska Gasline Development Corporation update on the Alaska LNG Project, and answered questions.

DARREN MEZNARICH, Manager for Alaska North Slope Gas
ConocoPhillips Alaska, Inc.
Anchorage, Alaska
POSITION STATEMENT: Provided testimony during the Alaska Gasline Development Corporation update on the Alaska LNG Project, and answered questions.

FRANK RICHARDS, P.E.
Senior Vice-President for Program Management
Alaska Gasline Development Corporation
Department of Commerce, Community & Economic Development
Anchorage, Alaska
POSITION STATEMENT: Provided a PowerPoint presentation entitled, "Alaska Moving Forward: Alaska LNG Project Update" dated 1/23/17, and answered questions.

KEITH MEYER, President
Alaska Gasline Development Corporation
Department of Commerce, Community & Economic Development
Anchorage, Alaska
POSITION STATEMENT: Provided opening remarks during the Alaska Gasline Development Corporation update on the Alaska LNG Project.

LIEZA WILCOX, Vice President
Commercial and Economics
Alaska Gasline Development Corporation
Department of Commerce, Community & Economic Development
Anchorage, Alaska
POSITION STATEMENT: Participated in the PowerPoint presentation entitled, "Alaska Moving Forward: Alaska LNG Project Update," dated 1/23/17, and answered questions.

ACTION NARRATIVE

1:07:41 PM

CO-CHAIR GERAN TARR called the House Resources Standing Committee meeting to order at 1:07 p.m. Representatives Tarr, Birch, Drummond, Parish, Rauscher, Talerico, Westlake, and Josephson were present at the call to order. Representative Johnson arrived as the meeting was in progress. Also present was Representative Chenault.

1:08:27 PM

CO-CHAIR TARR reviewed materials related to legislative briefings such as the update of the Alaska LNG Project (AKLNG).

She urged the committee to review sections of Senate Bill 138 [passed in the 28th Alaska State Legislature] specific to the responsibilities of the Alaska Gasline Development Corporation (AGDC), and direction to the Alaska Industrial Development and Export Authority (AIDEA) and the Alaska Energy Authority (AEA), Department of Commerce, Community & Economic Development (DCCED).

^OVERVIEW(S): UPDATE ON THE ALASKA LNG PROJECT
OVERVIEW(S): UPDATE ON THE ALASKA LNG PROJECT

1:12:17 PM

CO-CHAIR TARR announced that the only order of business would be a continuation of the overview of the Department of Natural Resources, including an update on the Alaska LNG Project (AKLNG).

1:12:57 PM

BILL MCMAHON, Senior Commercial Advisor, ExxonMobil Corporation, paraphrased from the following written testimony [original punctuation provided]:

> Co-Chair Tarr, Co-Chair Josephson and members of the House Resources Committee, for the record, my name is Bill McMahon. - I am a Sr. Commercial Advisor and have 34 years of experience with ExxonMobil and have worked on commercializing Alaska natural gas since 1992. • Thank you for the opportunity to address the committee this afternoon. My testimony will be given in two parts: - The first part will be on behalf the Alaska LNG Project (AKLNG) participants - AGDC, ExxonMobil, BP and ConocoPhillips. The four parties have worked hard to complete the technical and regulatory handover and the commercial transition of AKLNG to a State LNG project run by AGDC. I will be sharing our progress since September. - The second part will be sharing ExxonMobil's perspectives on a State Alaska LNG project and how our company is supporting the AGDC effort. - Following my testimony, Damian Bilbao and Darren Meznarich will be sharing BP and ConocoPhillips perspectives, respectively. - As always, we look forward to answering your questions. •
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> Following the Administration's decision to pursue a State LNG project, ExxonMobil, as Lead Party under the Pre-FEED JVA (Joint Venture Agreement), completed an extensive handover process with AGDC for all the Pre-FEED JVA work products, including the underlying technical data. In addition, on behalf of the applicants in the FERC pre-filing, ExxonMobil also met with regulators and AGDC to discuss the coming changes. On January 4th, the FERC was advised by

letter that ExxonMobil, BP and ConocoPhillips have withdrawn from the Pre-File Docket, leaving AGDC as the sole applicant. •

During testimony on August 25, the key components of the technical and regulatory handover and the commercial transition were shared. Today, I would like to list the achievements since that time: - All 77 Pre-FEED deliverables agreed under the AKLNG Joint Venture Agreement are finished and have been distributed to AGDC, ExxonMobil, BP and ConocoPhillips. - The final two draft Resource Reports (11 and 13) were submitted by the applicants to FERC, completing the draft Resource Reports required to advance the EIS pre-file process. - FERC and the other coordinating agencies have provided over 2,700 comments on the twelve Resource Reports that were submitted. - The AKLNG project team provided a summary of all of the comments and questions to all parties, including AGDC. The AKLNG project team completed dozens of project technical and regulatory handover sessions with AGDC, including weekly sessions and extended workshops. - These handover sessions, which were completed prior to year-end 2016, provided a smooth and efficient handover of activities to AGDC for a State LNG project. AGDC is now positioned to take on the full responsibility for the technical and regulatory aspects of its project. - Agreements were executed prior to year-end as part of the commercial transition from AKLNG to a State LNG project. These agreements provide for the use of historical and Pre-FEED data and information by all the Pre-FEED JVA parties for any project, including a State LNG project. •

Work continues on agreements for AGDC to acquire ownership of an LLC held by ExxonMobil, BP and ConocoPhillips affiliates and provide interim access to some of its assets. The LLC owns land in Nikiski and DOE LNG export authorizations.

Before I move on to my ExxonMobil comments, I will pause and see if there are any questions about the AKLNG accomplishments in 2016.

Changing hats, I will now share ExxonMobil's perspectives on a State Alaska LNG project and how our company is supporting the AGDC effort. •

As you know, one of the motivations for the Administration to assume control of the project was to assess the potential advantages that may only be available to a State project. •

These potential advantages, as expressed by the Administration, include reducing the cost of supply through a tax-exempt project structure and using low cost funds from third party investors willing to take a utility rate of return on a governmentbacked project. •

Both of these opportunities could potentially make a significant reduction in the cost of supply for Alaska LNG, as highlighted in the Wood MacKenzie study commissioned by AGDC, ExxonMobil and BP, and as presented to this committee by David Barrowman of Wood Mac on August 24, 2016. Cost of supply is a key measure of competitiveness in the global LNG market. •

In addition to opportunities to reduce cost of supply, a State backed LNG project also has the potential to reduce regulatory risks through government to government cooperation. •

ExxonMobil wants a project to succeed and is willing to pursue all commercially viable alternatives to develop Alaska resources on mutually-agreed terms. •

While AGDC is now responsible for advancing a State LNG project, ExxonMobil will still have a major role in the development of Alaska North Slope natural gas. First, through continued investment to develop Prudhoe Bay and Point Thomson and, second, by making gas available for sale for the project. •

To date, the Producers have invested billions of dollars at Prudhoe Bay and Point Thomson to successfully develop these fields. Investments continue at these fields to support the ongoing operations. •

ExxonMobil will continue to make its gas available to any project under bilateral, mutually-agreed and commercially-reasonable terms. - In 2015 when Governor Walker sought assurances from each producer about gas availability, ExxonMobil immediately established a negotiating team, executed a confidentiality agreement with the Administration and had several preliminary meetings. - With completion of the handover to a State LNG project, ExxonMobil remains ready to re-engage on negotiations for gas sales and purchase agreements. - These commercial and fiscal terms will need to be predictable and durable so all of the parties' involved, including potential buyers and financiers, understand the underlying framework, particularly given the magnitude of the required investments and commitments, which are measured over decades •

In closing, ExxonMobil wants to help make a State LNG project successful. - We are pleased to have participated in the successful handover from AKLNG to a State project. - ExxonMobil is committed to work towards completion of the required transactions with AGDC on the Alaska LNG Project LLC (ALPL). - We are ready to re-start bi-lateral discussions on purchasing ExxonMobil gas from PBU and PTU for a State project. - Lastly, ExxonMobil looks forward to the progress of a State LNG project. If AGDC can adequately achieve cost reductions, secure regulatory approvals, advance through the project gates to a final investment decision (FID) and complete project execution and construction, everyone will benefit. •

Before I turn the microphone over to Damian Bilbao of BP, I would be happy to answer any questions that you may have

1:22:22 PM

REPRESENTATIVE BIRCH asked whether AKLNG is a project in which Mr. McMahon would commit to invest one-half of his net personal wealth.

MR. MCMAHON responded that ExxonMobil uses a stage-gate approach to megaprojects because large sums of money are required to advance a project. For example, [pre-front end engineering and design (pre-FEED)] cost the four participants over $500 million. In order to advance large projects with confidence, one must proceed through a disciplined state-gate process and as risks are reduced, more capital can be exposed.

DAMIEN BILBAO, Vice President, Commercial Ventures, BP, paraphrased from the following written testimony [original punctuation provided]:

Co-Chair Tarr, Co-Chair Josephson and members of the House Resources Committee, for the record, my name is Damian Bilbao. I am the Vice President of Commercial Ventures for BP here in Alaska. I first arrived in Alaska to work for ARCO Alaska as an intern and fell in love with this State. My family and I have lived in Alaska for almost 10 years with interruptions for overseas assignments. I would like to first follow Bill's remarks by recognizing the great work done by the Joint Project Team under ExxonMobil's leadership. Steve Butt and the team delivered exactly what they were asked to do when the Pre-FEED JVA was signed, and then some. They did that work safely, professionally, on schedule and on budget. BP thanks them. My responsibilities within BP include Alaska LNG, our North Slope fields operated by other companies and our interest in the Trans-Alaska Pipeline. I would like to pause and recognize that along with the R1 2 Prudhoe Bay field, TAPS is celebrating a 40 year anniversary in 2017. I would also like to recognize that this past December 18th Alaska celebrated the 45th anniversary of the signing of the Alaska Native Claims Settlement Act. Without the tremendous support and license from Alaska's native communities, the State would have a much different history. I would ask that as we discuss Alaska LNG today we remember that this State only has the luxury of discussing an Alaska LNG project because of cooperation shown in establishing ANCSA. Ensuring another 40 years of economic security for Alaska will require collaboration to find common ground. It is for this reason, the future economic health of Alaska and BP's participation in that opportunity, that BP continues to support an Alaska LNG project led by the State of Alaska. BP's support derives from three important beliefs: 1) The resource opportunity in Alaska is strong, the talent is deep and there is a history of coming together to fix big problems. 2) The demand for LNG will continue to grow in Northeast Asia beyond 2025, and much of that growth will come from players like China. 3) Alaska LNG can compete for the growing demand, as was shown in the Wood Mackenzie report presented before the legislature in August 2016; however certain non-technical solutions are required for that to be achieved. R1 3 The State is positioned to lead this commercial effort in three focus areas: 1) The competitiveness of a tolling model where gas owners pay a utility-like company to transport their gas to the Cook Inlet, liquefy the gas and load it on to ships. 2) Preserve the federal regulatory schedule, because failure to do so could add years to the schedule and impact the reputation of the project, and 3) Identify options to fund both the next phase of the project, Front End Engineering and Design or FEED, as well as the most financially demanding phase, construction, which would occur after a Final Investment Decision, or FID. ·

BP does not believe these three areas will require contracting with large companies to begin the process of purchasing pipe or steel, but rather will require deep analysis by subject matter experts familiar with commercial aspects of the LNG business. Now, while BP supports a State led project, we believe it is also important for BP to do more than sit back and wait for AGDC to answer these three questions. BP must actively support AGDC. I am very pleased to share with you that AGDC and BP have signed a Cooperation Agreement that will bring together our efforts and resources on the three focus areas that I outlined above: 1) assessing a tolling model, 2) preserving regulatory progress and 3) identifying financing options for the path forward.

BP is committing people and funding to this joint effort although it will be an effort led by a much smaller group of people R1 4 than completed the Pre-FEED deliverables which Bill McMahon just summarized. BP appreciates AGDC's commitment to working together and we look forward to updating the legislature over the course of the year. This is an important year for BP in Alaska and we look forward to celebrating the anniversary of Prudhoe Bay and TAPS first 40th anniversary. While BP has worked with our co-owners to produce over 12 billion barrels of oil from Prudhoe Bay, there are still billions more in Prudhoe and across the North Slope. As the Governor's Chief Advisor on Oil and Gas, John Hendrix, said during his recent speech at Meet Alaska on January 13th, we must all pursue our future as "One Alaska". BP agrees. It is only as One Alaska that the State will continue to solve big problems. BP looks forward to continuing to work with this legislature, the administration, Alaska's native corporations, our contractors and upstream co-venturers in support of a One Alaska future. Thank you.

1:30:25 PM

DARREN MEZNARICH, Manager for Alaska North Slope Gas, ConocoPhillips Alaska, Inc., expressed the support of ConocoPhillips Alaska, Inc. for the state's effort to advance a liquefied natural gas (LNG) project. A state-led project would have attributes that enhance the competitiveness of an Alaska North Slope (ANS) gas project, and that can lower its cost of supply. For example, AGDC can structure for federal and state tax efficiencies, including seeking federal tax-exempt status. Also, AGDC can advance low-cost financing and investor options. The aforementioned key elements can be foundational to a project and important to LNG buyers, project lenders, and investors. ConocoPhillips Alaska, Inc. intends to make its gas available to a state-led project on mutually-agreed, commercially reasonable terms. ConocoPhillips Alaska, Inc. will continue to support AGDC and is working to make its gas available.

REPRESENTATIVE BIRCH asked for an estimate on the tariff cost per [thousand cubic feet of natural gas (Mcf)] to transport LNG from its source at the North Slope to Southcentral.

MR. BILBAO responded that there have been no joint efforts to define a tariff under an AGDC-led project. He referred to his previous comments related to the structure and financing of the project and work that remains to be done.

MR. MEZNARICH added that the Wood Mackenzie study of August 2016, includes aspirational targets for cost reduction.

CO-CHAIR TARR asked for closing comments from the preceding witnesses.

MR. MEZNARICH informed the committee ConocoPhillips Alaska, Inc. has entered into a memorandum of understanding (MOU) with the state and seeks to help move the project forward with AGDC. In further response to Co-Chair Tarr, he explained the MOU potentially forms a joint venture for LNG marketing and to resolve the gas supply issue.

MR. BILBAO said BP's next step is to confer with AGDC to expand on its cooperation agreement, and he offered to provide further information on the cooperation agreement. ExxonMobil Corporation has led the technical phase, ConocoPhillips Alaska, Inc. is proceeding with marketing, and BP can support the project's next step.

MR. MCMAHON said ExxonMobil Corporation is keen - now that the handover and transition are complete - to restart discussions on ExxonMobil Corporation gas that would be made available for the project.

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REPRESENTATIVE RAUSCHER asked Mr. Bilbao whether he said [AKLNG] could compete for the LNG market in Asia.

MR. BILBAO clarified that he said BP expects that LNG demand will continue to grow, and there will be unmet demand beginning in 2025. The growth of demand from Northeast Asia will be greatest in China.

REPRESENTATIVE RAUSCHER questioned whether there is a "time of no return" for [marketing ANS LNG].

MR. BILBAO said the right next step is to ensure a competitive project; however, as the August report from Wood Mackenzie indicated, the project today does not compete - not due to oil or gas prices - but because the cost to deliver [ANS] gas to Asia is not competitive with emerging sources of LNG such as sources from the U.S. Gulf Coast. Commercial structure and a financing plan have an impact on lowering the cost of ANS LNG, and after that is accomplished, investors can make the decision to advance and market the project.

REPRESENTATIVE PARISH asked whether there is another plan to bring BP LNG to market in the event AKLNG fails.

MR. BILBAO noted that Alaska gas is BP's largest undeveloped resource opportunity, thus BP seeks a successful gas project. Although a major effort has been made by BP, ConocoPhillips Alaska, Inc., and ExxonMobil Corporation to understand the viability of an Alaska LNG project, there remain unanswered questions. However, if it is confirmed that the project is not viable, BP will consider alternatives.

1:41:37 PM

FRANK RICHARDS, P.E., Senior Vice-President for Program Management, Alaska Gasline Development Corporation, Department of Commerce, Community & Economic Development, introduced staff.

1:42:07 PM

KEITH MEYER, President, Alaska Gasline Development Corporation, Department of Commerce, Community & Economic Development, said he appreciated the previous comments made by each of the producer parties, and noted AGDC enjoys a good and collaborative working relationship with each.

MR. RICHARDS introduced a PowerPoint presentation entitled, "Alaska Moving Forward: Alaska LNG Project Update" and informed the committee that today's hearing is AGDC's opportunity to provide the report to the legislature on the update of the Alaska LNG Project as required by Senate Bill 138. He began with a history of AGDC and its obligations. In 2009, there were concerns Southcentral would not have enough natural gas to meet its requirements for power generation and heating, thus the legislature began discussing the development of an instate natural gas pipeline. Related proposed legislation culminated in House Bill 369 [passed in the 26th Alaska State Legislature], which created a four-party entity comprised of the Alaska Housing Finance Corporation, Department of Revenue, the Department of Transportation & Public Facilities, the Alaska Railroad, Department of Commerce, Community & Economic Development, and the [Alaska Natural Gas Development Authority (ANGDA), created by voter initiative Measure 3, passed 11/5/02 and terminated by House Bill 4, passed in the 28th Alaska State Legislature], tasked to determine if it was economically viable to develop an instate gas pipeline. In 2011, the Alaska Stand Alone Pipeline (ASAP) plan was presented to the legislature. In 2013, House Bill 4 created AGDC as an independent state corporation, granted it powers to act as a corporation and advance a project, and funded it with approximately $355 million. Thus the ASAP project advanced through pre-FEED, front end engineering and design (FEED), a class 3 cost estimate, and a project execution plan. In 2014, Senate Bill 138 gave further authorities to AGDC to act as the state's representative in the LNG plant portion of the AKLNG export project. In 2015, during the buyout of TransCanada - representing the gas treatment plant and pipeline portion of AKLNG - AGDC was given the authority to act as the state's representative for its 25 percent interest.

1:48:36 PM

MR. RICHARDS continued, noting there was a joint venture agreement executed and pre-FEED work initiated for AKLNG, also in 2014. Now in 2017, at the termination of the agreement between the producer partners and AGDC, the responsibility for AKLNG now falls to AGDC. Mr. Richards acknowledged that the responsibility to advance AKLNG is a tremendous burden taken very seriously by AGDC (slide 3). He informed the committee AGDC has a seven-member board of directors who are Alaskans and who want to advance the project for Alaskans. He gave short background information on board members (slide 4).

MR. RICHARDS restated that update reports are due to the legislature every four months and this is the first opportunity, after the "handoff" from the AKLNG project management team, to present how the project is now to advance. He stressed that the project management team's work and the transition were well-executed. Briefly, AKLNG is an integrated project with the following components: Point Thomson pipeline; gas treatment plant at Prudhoe Bay; mainline pipeline from Prudhoe Bay to Southcentral; LNG plant at Cook Inlet. Natural gas will be sourced from the Point Thomson Unit (PTU) and the Prudhoe Bay Unit (PBU), treated on the North Slope by a gas treatment plant (GTP) at mile post zero (MP 0) of the pipeline. The pipeline will proceed from MP 0 to Nikiski, supported by eight compression stations, delivering natural gas to an LNG production facility designed to produce 20 million metric tons per annum (MMTPA) of product (slide 6).

1:53:43 PM

REPRESENTATIVE PARISH asked for the approximate cost for each of the three elements of the project.

MR. RICHARDS said the cost of the LNG facility is approximately 50 percent of the project, approximately 25 percent is represented by the pipeline, and approximately 25 percent is represented by GTP on the North Slope. In further response to Representative Parish, he said the original range of the cost estimate was $45 billion to $65 billion, and the most recent estimate is below "that low-end cost range."

REPRESENTATIVE BIRCH observed tariffs are important and the cost of producing energy in Alaska is very high. He held a question on an estimate of the range of tariffs for later in the presentation.

MR. RICHARDS returned to the status of the project, and stated that the joint venture agreement (JVA) initiated in 2014, and terminated in 2016, represented approximately $500 million worth of engineering, analyses, and information gathered to understand the construction of the project in Alaska. All of the abovementioned work and the 77 project deliverables have been provided to AGDC, BP, ConocoPhillips Alaska, Inc., and ExxonMobil Corporation. At the end of 2016, transition meetings were held to facilitate the transfer of a tremendous amount of data and work product. The project management team held meetings in Alaska and Houston that led to a better understanding of the material related to engineering and environmental licensing, which was needed as AGDC assumes the filing with the Federal Energy Regulatory Commission (FERC). The resource reports represented approximately 33,000 pages of documents submitted to agencies.

CO-CHAIR TARR surmised a lesson learned from the transition out of the Alaska Gasline Inducement Act (AGIA) [passed in the 25th Alaska State Legislature] was who would own the data. She asked whether there is related direction under Senate Bill 138.

1:59:13 PM

LIEZA WILCOX, Vice President, Commercial and Economics, AGDC, asked for clarification.

CO-CHAIR TARR stated her intent is for the committee to understand a significant factor to advancing the project is to have all of the previously gleaned information available even though the leadership structure of the project has changed.

MS. WILCOX agreed, and added that the legislation did not enable the transfer of pre-FEED data that was part of the pre-FEED JVA agreement; however, the ability to use the data to advance the project and make regulatory filings was part of the transition agreement that was negotiated.

MR. RICHARDS added that AGDC has also received all of the data through the AGIA agreement with TransCanada, thus AGDC holds all of the work done with TransCanada and ExxonMobil Corporation, all of the work done on ASAP, and all of the work product developed on AKLNG, which is a very large library of electronic data. He continued with the status of the project, relating that the $500 million investment was toward the design premise of a three-train GTP on the North Slope, feeding a 42-inch diameter pipeline, and leading to a three-train LNG plant (slide 7). One of AGDC's priorities in 2017 is to reduce regulatory risk. He explained that FERC has the responsibility to license LNG plants, thus AGDC will file a FERC Natural Gas Act (NGA) Section 3 application to acquire the right to construct and operate an LNG plant. Another priority is to reduce the overall cost of supply to the project through financing and by reducing the cost of the environmental regulatory regime. Also, efforts will be focused on reducing the cost of the project and representing an economically-viable project to buyers. Further, AGDC will "live within our means" to the point of acquiring project financing to advance the project and engage customers (slide 8).

2:03:34 PM

REPRESENTATIVE JOHNSON asked whether approval from FERC applies if AGDC reduces the scale of the project.

MR. RICHARDS said yes. The environmental impact statement (EIS) presented to FERC will be for the impacts to wetlands, flora, fauna, and air quality for the largest possible project. Continuing to FERC's responsibility under NGA to permit LNG plants and terminals, he said FERC must ensure LNG facilities are safe and reliable; therefore, FERC follows a comprehensive and well-established siting process. After an applicant has met FERC guidelines for submittals, it proceeds to the EIS process prescribed by the National Environmental Policy Act of 1969 (NEPA). Further, FERC is the lead federal agency to prepare an EIS for AKLNG and along with other agencies, such as the U.S. Army Corps of Engineers, will complete a thorough EIS (slide 9). The first of three areas of the regulatory process is pre-filing, wherein the project gets authorization to begin resource reports, dialogue, and public comments. The primary focus is developing resource reports which describe the project and its impacts and mitigation to the environment. After acceptance by FERC, the project enters the second area of the environmental process during which a third party contractor - paid by the project - drafts an EIS. This process is underway, with a timeframe of 18 months for the draft EIS. The third area is the final EIS, which is issued six months later (slide 10). Mr. Richards said 13 resource reports are required, but 12 have been submitted, because there is no [polychlorinated biphenyl (PCB)] contamination on the project.

2:10:24 PM

REPRESENTATIVE BIRCH asked what is included in resource report number "10. Alternatives".

MR. RICHARDS responded that for any EIS, the proponent must look at alternatives for routing, including not completing the project. For example, AKLNG must look at alternatives for routing into Valdez, or through Denali National Park and Preserve, in addition to the preferred route to Nikiski.

REPRESENTATIVE BIRCH inquired as to whether the Mackenzie River [Canada] route remains one of the alternatives.

MR. RICHARDS expressed his belief that the Mackenzie River option is prohibited by statute. However, there are many other options such as an offshore source for natural gas, or various locations for the LNG plant. The alternatives are wide and varied so that FERC can answer possible legal challenges. The resource reports represent 33,000 pages of description on environmental factors, engineering, and to the safety and reliability of the project, especially in reports numbered "11." and "13." (slide 11). In response to the resource reports, AGDC has received 2,943 comments categorized as editorial comments, pre-FEED comments, and FEED comments, which are being processed by AGDC and its pertinent contractors (slide 12). Over the next six months AGDC will continue to adjudicate resource reports and will file its NGA Section 3 application, complete with the required nine exhibits ranging from articles of incorporation to safety and reliability statements. The target date for the application to FERC is 6/30/17 (slide 13).

2:16:57 PM

MR. RICHARDS turned to project execution, observing that AGDC's mandate from the legislature is to be a lean, small, and competent organization that relies on contractors to augment its staff. Therefore, to address the needs of a large project, AGDC will develop a project management team which will bring in additional resources as needed to work with FERC and for the management of commercial contracts to advance the project (slide 14). Finally, the project management approach will be a strategic partnership with a lead contractor in support of its FERC application, to review design, reduce cost, and avoid delays. There will be a worldwide search for contractors to provide expertise, which will also demonstrate to financial and commercial markets that AKLNG has the resources necessary. Mr. Richards advised that AGDC is not requesting additional funding in the next fiscal year (slide 15).

REPRESENTATIVE JOHNSON, referring to a worldwide search for the "right" lead contractor, inquired as to the potential impact of the project on local businesses and instate contractors.

MR. RICHARDS acknowledged AGDC needs a lead contractor with the expertise to act as a project and program manager, augment AGDC staff, and develop the GTP, the pipeline, and the LNG facility. Wherever possible, AGDC is mandated to utilize Alaskans and Alaska resources "where economically feasible and viable." He said Alaska contractors have the knowledge and expertise to work in the Arctic. In fact, [board member Department of Labor & Workforce Development] Commissioner Drygas has stated that AGDC must ensure Alaskans are trained and ready to work on the project. The lead contractor will need to provide expertise in lump-sum, turn-key contracts.

REPRESENTATIVE BIRCH asked for an estimate of the unexpended balance of uncommitted funds within AGDC.

MR. RICHARDS responded that AGDC was authorized with two funds: the Instate Natural Gas Pipeline Fund and the AKLNG fund. The balance of those two funds is approximately $104 million, which will be used to accomplish regulatory, financial, and commercial work. Further, AGDC is developing a budget that will be presented to its board of directors for calendar year 2017 and fiscal year 2018 (FY 18). He advised that authorization will be required to expend funds for the operating portion of the budget consisting of personal services, contractual services, lights, rent, and travel.

2:24:48 PM

CO-CHAIR JOSEPHSON has heard concerns about the segregation of funds and whether funds meant for House Bill 4 are being used for [Senate] Bill 138.

MR. RICHARDS answered that there was clear language in related statutes that identified the funds and their purpose, and to which AGDC has complied. Funds used toward ASAP came from the instate pipeline fund solely. He pointed out that AGDC has accounting systems and is audited annually. Senate Bill 138 established the LNG natural gas pipeline fund which was used for cash calls to pay for the state's 25 percent representation in the project; funds from both sources are used toward operating costs such as salaries, travel, lights, and rent. Mr. Richards acknowledged concern about how funds will be used and stated that AGDC has a "clear line of demarcation between those two fund sources."

CO-CHAIR JOSEPHSON questioned whether the $104 million predates the current administration and remained available to AGDC from a prior appropriation, or from appropriations made in FY 16 and FY 17.

MR. RICHARDS further explained the Instate Natural Gas Pipeline Fund was capitalized with $355 million for a pipeline project, of which $135 million was spent on ASAP. In FY 15, the legislature appropriated $167 million for the Department of Education and Early Development, the Department of Natural Resources, and the Department of Law. Some of the AKLNG fund was appropriated in FY 15, when funds were directed to AGDC for the buyout of TransCanada, and for calendar year 2016 expenditures for AKLNG.

CO-CHAIR JOSEPHSON redirected attention to slide 14 and asked how decisions are made about what employees would be "housed within your agency and ... which exactly would be part of some new lead contractor."

2:29:07 PM

MR. RICHARDS stated AGDC has 22 employees who are augmented with Alaska contractors, thus its project management team is made up of experts with processing, engineering, geologic, and design experience. The sought lead contractor will integrate with the AGDC project management team - the goal is to have an owner's representative team - and AGDC is not "turning over the keys" but will retain oversight responsibility. The lead contractor will bring in project controls staff, contracting expertise, and environmental and regulatory expertise. He said, "It's a team approach, but again, ownership responsibilities stay with AGDC."

REPRESENTATIVE RAUSCHER surmised an operator, not the state, will operate the project after its completion.

MR. RICHARDS confirmed that AGDC will bring on "the expertise" to operate the system. At the time of ASAP, there was an operations plan to advance the project into an operations phase. For AKLNG, an operations plan has not yet been fully developed; AGDC, as a very small entity, must bring on required expertise through contracts for operations.

REPRESENTATIVE WESTLAKE said he was encouraged by the foregoing discussion. He asked for the source of the funds, which his constituency will want to know.

MS. WILCOX said, "The question of short-term versus long-term benefits for Alaska, of course, is in all of our minds at the moment." She opined AGDC's view is that the project is extremely important for the long-term fiscal health of the state, and AGDC seeks to propose a project that carries those benefits.

CO-CHAIR TARR directed the committee's attention to Senate Bill 138, Section 18, AS [31.25.110], creating the Alaska Liquefied Natural Gas Project Fund, and [AS 31.25.100], creating the Instate Natural Gas Pipeline Fund. Other relevant sections are Section 21, defining the Alaska LNG Project as including Prudhoe Bay and Point Thomson, and Section 33, defining North Slope natural gas projects.

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MR. RICHARDS returned to the presentation, noting that the value of the project to Alaska is to monetize a proven resource. Currently, the gas is cycled daily to help with oil production and because there is no way to get the gas to market. In addition, the legislature directed AGDC to develop an access point so that Alaskans can utilize the gas. Additional benefits of the project are tens of thousands of jobs for construction and maintenance of the project, and increased exploration and development on the North Slope and in other parts of the state (slide 16). Finally, Alaska's strategic advantages are: a time of seven to nine days to Asia; a proven supplier and known resource; a proven and known sovereign (slide 17).

MS. WILCOX gave a short personal history. She began her commercial update by advising the committee that at this time there is a global surplus of LNG. The LNG market is a relatively young market and has experienced a period of tremendous growth. Many projects that have come online recently are "chasing demand," as demonstrated by a growing prevalence of spot markets, and demand growth has slowed as new projects were completed, leading to a slump in the market. Spot market prices for LNG delivered to Japan have been around $6 per million British thermal units (Btus) and have risen to about $7, but the short-term surplus is prevalent. However, experts agree that the demand for LNG will continue to grow, although the rate of growth is uncertain.

REPRESENTATIVE BIRCH asked for an explanation of slide 19.

MS. WILCOX explained the bottom on the graph is a timeline, and the left axis reflects millions of metric tons per annum (MMTPA) which represents the capacity of LNG. The slide is entitled, "Global LNG Balance," but the graph is entitled "Asian LNG Supply/Demand Balance." Overall global demand is approximately 300 to 350 MMTPA. In further response to Representative Birch, she confirmed that the aforementioned graph illustrates the supply and demand of LNG that has been produced, transported, and marketed to Asia by tanker.

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MS. WILCOX pointed out that the forgoing graph illustrates that supply will be consumed by the growth in demand. The drop [in demand] indicated in the years 2021-2022, is the time at which long-term contracts lapse, and the "window in the market" becomes evident. She said, "And at the moment there are quite a few projects shopping that window ... and the buyers are approached by many ... sophisticated parties," (slide 19). She then provided a graph of global demand projected for 2025 illustrating: an increase in the number of countries that import LNG; an increase in demand from China is projected; Japan remains the largest consumer of LNG. She acknowledged there is debate about the projected growth rate and whether demand will be diverted to nuclear power (slide 20).

REPRESENTATIVE PARISH asked whether the foregoing projection aligned with that of Wood Mackenzie [consultancy group].

MS. WILCOX said the projection is not a Wood Mackenzie forecast, but was received from AGDC's marketing team. She turned to the topic of tariffs and stated that tariffs generally relate to pipelines in a similar manner as a toll. She directed attention to a graph previously provided by Wood Mackenzie (slide 21), noting that to evaluate projects, Wood Mackenzie seeks to bring each project's components to a common denominator: a discounted breakeven price over the life of the project. Thus the "current project" illustrated on the [slide 21] graph is a 12 percent overall return on capital, and what would be its breakeven price in today's dollars. The range represented by the dotted lines is the capital investment of $45 billion to $65 billion, which placed the project "at the far end of competitiveness for ... their presentation." Ms. Wilcox pointed out that the common numbers between the three projects compared are the project cost estimate of between $45 and $65 billion, the volumes, and the upstream development costs and returns. However, what brings the variability is the cost of capital that is carried by the project, thus AGDC seeks to structure a project that has promises from its customers to pay for the capacity they reserve, because that will allow for less expensive financing, and encourage investors and banks that will offer lower interest on loans. She remarked:

The engineering work that has been done on the project has a lot of influence on the tolls, but the commercial and financing considerations have almost just as much influence on them, and that is what we're working on now.

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REPRESENTATIVE BIRCH asked for the correlation between MMBTU and a thousand cubic feet of natural gas (Mcf); for example, gas on the West Coast at $2 per Mcf would equate to [$2 MMBTU].

MS. WILCOX agreed. She next presented AGDC's objectives and elaborated on the following two:

- operate as a public corporation responsible to its board and operate in an environment with private parties in a transparent manner
- structure for third-party finance is the work ongoing this year with BP and other producers and the outside market, in order to secure low-cost financing

REPRESENTATIVE JOHNSON has heard one way to getting a reduction in long-term contracts is to have a stable price for gas that is not tied to the price of oil. She asked for AGDC's position in this regard and for further information.

MS. WILCOX returned attention to slide 21, and said AGDC has not done a study, but traditionally LNG has been marketed as tied to oil price; for example, a measure for pricing LNG is called "the slope" which is basically 12 percent to 14 percent of an oil price index. Recently, the price of LNG has been tied to the Henry Hub [index price for natural gas]. Other pricing structures have been tied to "a synthetic toll" wherein a portion is tied to an upstream index and a portion is tied to a toll. For AKLNG, a very large part of the cost of supply is midstream; however, if AKLNG can lower the cost of midstream, it can also offer a stable source with a fully-developed infrastructure in place.

REPRESENTATIVE BIRCH questioned whether the project precludes the ability of municipalities, or the state, to tax property along the route of the pipeline.

MS. WILCOX explained the "no tax" option is for illustrative purposes to show that even if taxes are zero, the project is still challenged to meet the current market price.

REPRESENTATIVE PARISH surmised the upstream price is based on reasonable, commercially agreed-upon terms purchased from the three large producers.

MS. WILCOX said the upstream bar on the graph is not a price but an assumption by Wood Mackenzie on what a reasonable return on the upstream would be.

REPRESENTATIVE PARISH asked whether the state is now bound by a contract, and if not, when a "formula" would be negotiated.

MS. WILCOX said AGDC does not have any current contracts with "the upstream." If the state advances to the position of buying gas from the upstream, it "would need to land those contracts far in advance of being tens of billions of dollars in."

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ADJOURNMENT

There being no further business before the committee, the House Resources Standing Committee meeting was adjourned at 2:59 p.m.