ALASKA STATE LEGISLATURE
SENATE RESOURCES STANDING COMMITTEE
April 1, 2010
3:36 p.m.

MEMBERS PRESENT

Senator Lesil McGuire, Co-Chair
Senator Bill Wielechowski, Co-Chair
Senator Charlie Huggins, Vice Chair
Senator Hollis French
Senator Bert Stedman
Senator Gary Stevens

MEMBERS ABSENT

Senator Thomas Wagoner

COMMITTEE CALENDAR

SENATE BILL NO. 143
"An Act establishing the Greater Railbelt Energy and Transmission Corporation and relating to the corporation; relating to transition, financial plan, and reporting requirements regarding planning for the initial business operations of the Greater Railbelt Energy and Transmission Corporation; relating to a report on legislation regarding the Regulatory Commission of Alaska and the Greater Railbelt Energy and Transmission Corporation; authorizing the Alaska Energy Authority to convey the Bradley Lake Hydroelectric Project and the Alaska Intertie to the Greater Railbelt Energy and Transmission Corporation; and providing for an effective date."

- MOVED CSSB 143(RES) OUT OF COMMITTEE

OVERVIEW FROM ADMINISTRATION ON IN-STATE GAS

- HEARD

COMMITTEE SUBSTITUTE FOR HOUSE BILL NO. 369(FIN) AM
"An Act relating to an in-state natural gas pipeline, the office of in-state gasline project manager, and the Joint In-State Gasline Development Team; requiring the development of an in-state natural gas pipeline plan, to be delivered to the legislature by July 1, 2011, that provides for a gasline that is operational by December 31, 2015; directing the Joint In-State Gasline Development Team to assume responsibilities under sec.

19, ch. 14, SLA 2009; requiring expedited review and action by state agencies or entities relating to the in-state natural gas pipeline project; and providing for an effective date."

- HEARD AND HELD

PRESENTATION BY LARRY PERSILY, FEDERAL COORDINATOR FOR ALASKA NATURAL GAS TRANSPORTATION PROJECTS

- HEARD

UPDATE FROM CONOCOPHILLIPS ON GAS EXPORT FACILITY

- REMOVED FROM AGENDA

PREVIOUS COMMITTEE ACTION

BILL: SB 143
SHORT TITLE: RAILBELT ENERGY & TRANSMISSION CORP.
SPONSOR(s): RULES BY REQUEST OF THE GOVERNOR

03/09/09	(S)	READ THE FIRST TIME - REFERRALS
03/09/09	(S)	ENE, RES, FIN
03/19/09	(S)	ENE AT 11:00 AM BUTROVICH 205
03/19/09	(S)	Heard & Held
03/19/09	(S)	MINUTE(ENE)
04/06/09	(S)	ENE AT 5:00 PM BUTROVICH 205
04/06/09	(S)	OPPOSE UN DESIGNATION OF ARCTIC OCEAN
04/09/09	(S)	ENE AT 2:30 PM BUTROVICH 205
04/09/09	(S)	Heard & Held
04/09/09	(S)	MINUTE(ENE)
03/17/10	(S)	ENE AT 3:30 PM BUTROVICH 205
03/17/10	(S)	Heard & Held
03/17/10	(S)	MINUTE(ENE)
03/22/10	(S)	ENE REFERRAL WAIVED
03/24/10	(S)	RES AT 3:30 PM BUTROVICH 205
03/24/10	(S)	Heard & Held
03/24/10	(S)	MINUTE(RES)
03/25/10	(S)	RES AT 3:30 PM BUTROVICH 205
03/25/10	(S)	Heard & Held
03/25/10	(S)	MINUTE(RES)
03/29/10	(S)	RES AT 3:30 PM BUTROVICH 205
03/29/10	(S)	Heard & Held
03/29/10	(S)	MINUTE(RES)
04/01/10	(S)	RES AT 3:30 PM BUTROVICH 205

BILL: HB 369

SHORT TITLE: IN-STATE PIPELINE/ MANAGER/TEAM
SPONSOR(s): CHENAULT

02/23/10	(H)	READ THE FIRST TIME - REFERRALS
02/23/10	(H)	RES, FIN
02/26/10	(H)	RES AT 1:00 PM BARNES 124
02/26/10	(H)	Heard & Held
02/26/10	(H)	MINUTE(RES)
03/01/10	(H)	RES AT 1:00 PM BARNES 124
03/01/10	(H)	Heard & Held
03/01/10	(H)	MINUTE(RES)
03/08/10	(H)	RES AT 6:00 PM BARNES 124
03/08/10	(H)	Heard & Held
03/08/10	(H)	MINUTE(RES)
03/10/10	(H)	RES AT 1:00 PM BARNES 124
03/10/10	(H)	Moved CSHB 369(RES) Out of Committee
03/10/10	(H)	MINUTE(RES)
03/11/10	(H)	RES RPT CS(RES) NT 4DP 1NR 1AM
03/11/10	(H)	DP: OLSON, P.WILSON, JOHNSON, NEUMAN
03/11/10	(H)	NR: SEATON
03/11/10	(H)	AM: KAWASAKI
03/15/10	(H)	FIN AT 9:00 AM HOUSE FINANCE 519
03/15/10	(H)	Heard & Held
03/15/10	(H)	MINUTE(FIN)
03/22/10	(H)	FIN AT 1:30 PM HOUSE FINANCE 519
03/22/10	(H)	Heard & Held
03/22/10	(H)	MINUTE(FIN)
03/23/10	(H)	FIN AT 9:00 AM HOUSE FINANCE 519
03/23/10	(H)	Scheduled But Not Heard
03/23/10	(H)	FIN AT 1:30 PM HOUSE FINANCE 519
03/23/10	(H)	Moved CSHB 369(FIN) Out of Committee
03/23/10	(H)	MINUTE(FIN)
03/24/10	(H)	FIN RPT CS(FIN) NT 10DP
03/24/10	(H)	DP: THOMAS, GARA, DOOGAN, JOULE, KELLY, AUSTERMAN, N.FOSTER, FAIRCLOUGH,
03/24/10	(H)	STOLTZE, HAWKER
03/24/10	(H)	TRANSMITTED TO (S)
03/24/10	(H)	VERSION: CSHB 369(FIN) AM
03/25/10	(S)	READ THE FIRST TIME - REFERRALS
03/25/10	(S)	RES, FIN
04/01/10	(S)	RES AT 3:30 PM BUTROVICH 205

WITNESS REGISTER

MICHELLE SYDEMAN
Staff to Senator Wielechowski
Alaska State Legislature

Juneau, AK
POSITION STATEMENT: Commented on SB 143 for the sponsor.

ROBERT SWENSON, Project Manager
Alaska In-state Natural Gas Pipeline
Department of Natural Resources (DNR)
POSITION STATEMENT: Presented an overview entitled "Potential Infrastructure for In-State Gas Distribution."

HAROLD HEINZE, Executive Director/CEO
Alaska Natural Gas Development Authority (ANGDA)
POSITION STATEMENT: Presented update on ANGDA in-state gas activities.

HARRY NOAH [former pipeline czar], representing himself
No address provided
POSITION STATEMENT: **Gave** some background on what was intended when the in-state gas program was put together last year.

REPRESENTATIVE CHENAULT
Alaska State Legislature
Juneau, AK
POSITION STATEMENT: Sponsor of HB 369.

LARRY PERSILY, Federal Coordinator
Office of the Federal Coordinator for Alaska Natural Gas Transportation Projects
Washington, D.C.
POSITION STATEMENT: Provided presentations on rules dealing with LNG export licensing and world LNG markets.

ACTION NARRATIVE

3:36:17 PM
CO-CHAIR MCGUIRE called the Senate Resources Standing Committee meeting to order at 3:36 p.m. Present at the call to order were Senators French, Wielechowski, Huggins, and McGuire.

SB 143-RAILBELT ENERGY & TRANSMISSION CORP.

3:36:34 PM
CO-CHAIR MCGUIRE announced consideration of SB 143.

SENATOR WIELECHOWSKI moved to adopt the proposed committee substitute to SB 143, labeled 26-GS1041\C, as the working

document. There being no objection, the motion carried and version C was before the committee.

3:37:06 PM
MICHELLE SYDEMAN, staff to Senator Wielechowski, explained the only major change to this bill concerned RCA regulation. The previous version (S) provided a form of Regulatory Commission of Alaska (RCA) regulation for the first five years after GRETC was formed and then a sunset. This CS calls for a traditional form of RCA regulation for the first five years and then expresses the legislature's intent to review whether continued regulation is appropriate. In order to accomplish this, several sections of the bill had to be changed.

Also, several small changes to version S were on page 7, line 30, where a phrase was inserted that clarifies that electrical utilities can only join with the Greater Railbelt Energy Transmission Corporation (GRETC) upon approval of its board. In addition, Senator Stedman had a question regarding the 26 powers of the corporation. One of those concerns was whether their authority to acquire lands and water rights was throughout the state or just within the service area of the corporation. Another change added a phrase before all of the various 26 powers that says they have the powers only to fulfill the purposes of the corporation. So they can't buy extraneous lands and water rights in other parts of the state simply to carry out the duties for which they are established.

MS. SYDEMAN mentioned that the RCA was reviewing this bill at an emergency meeting and she had received a call from Chairman Pickett within the hour saying they unanimously took a position that some of the RCA sections they spoke of on Monday would have been difficult to administer. So they would be pleased at the action the committee is considering today.

3:40:16 PM
SENATOR WIELECHOWSKI commented that the RCA had a host of concerns with the regulation. The legislature felt this was an important bill and the committee has moved as quickly as possible. He moved to report CSSB 143 () from committee with individual recommendations and attached fiscal note(s). There being no objection, the motion carried and CSSB 143() moved from the committee.

Overview From Administration on In-State Gas

3:42:05 PM

CO-CHAIR MCGUIRE announced that the administration would provide an overview of tasks to be completed on a line to Valdez or the Southcentral area to deliver gas to Alaskans.

At ease from 3:42 until 3:43.

3:43:51 PM
ROBERT SWENSON, Project Manager, Alaska In-state Natural Gas Pipeline, Department of Natural Resources (DNR), presented an overview entitled "Potential Infrastructure for In-State Gas Distribution."

He showed various routes that were analyzed mid-year 2009: Fairbanks to Cook Inlet mile post 39, Delta Junction to Cook Inlet, and a stand-alone route from the North Slope to Delta Junction to Glennallen and into the Cook Inlet region to mile post 39.

MR. SWENSON said he would focus his discussion today on the bullet-line route from Deadhorse to Anchorage that was chosen.

Slide 2 illustrated the problem of declining production in the Cook Inlet Region. He noted the various tranches of gas into the future demand curve leveled off beyond 2013 indicated increased lifting costs associated with both discovery and access to those reserves.

3:47:08 PM
Slide 3 showed 2.5 years of daily gas usage (from DNR 2009). It shows the high swing in daily demand between the summer lows and the winter peaks. That demand goes from a little over 100 mmcf/day to 350 mmcf/day. Without a large base load to smooth out the demand curve, the producers are still required to maintain deliverability of up to 350 mmcf/day to cover just a few days during the coldest snaps in the winter, and would not be able to produce from those wells during the summer months.

Slide 4 showed a potential solution, which is access to the tremendous reserves on the North Slope. That is what he would talk about during the rest of the presentation. The USGS Survey showed proven North Slope reserves of 35 tcf in the Prudhoe Bay unit and Pt. Thomson. It pointed to the reserves that many of the projects are currently looking at.

Slide 5 showed the North Slope is a very gas rich region. Various circles and dots are associated with exploration wells and known accumulates. The green and yellow dots are wells that

had moderate gas show or in the case of the yellow dots actually recovered gas on a drill stem test. The red circles with the green outline are known gas with oil accumulations. Is

Slide 6: In 1994-2006 USGS did a resource assessment of those natural gas potential reserves and there are very large potentials of undiscovered unconventional technically recoverable reserves, an onshore portion of that being 120 tcf.

Slide 7: Those assessment numbers do not incorporate unconventional gas like shale gas, coalbed methane and tight gas sands. One of the potential unconventional natural gas sources on the North Slope are gas hydrates, and a tremendous amount of work had been done recently on that. Estimates are as much as 85 tcf of natural gas that could be available to a market if they could understand exactly how to bring them to the well bore safely. These are ongoing efforts by BP and the US Department of Energy (DOE).

3:51:00 PM
Slide 8: Another issue that has not been looked at as far as available resource is basin center over-pressured gas (shale gas) and over-pressured region fractured shale. He had not done a resource assessment on that resource in the basin, but he could say that it is certainly there. Over the next three years the state plans to work with the USGS to assess it.

Slide 9: Alaska has a tremendous base of energy resources, but the issue is the size of the state and the size of the market. He would talk today about development of that infrastructure to bring those energy resources to where they are needed. That is specifically the project he is managing right now - the stand alone bullet line that would transport natural gas from the North Slope to tidewater in the Cook Inlet area.

3:52:22 PM
MR. SWENSON said right now the work the department is doing is in parallel with the large diameter and spur line efforts, but they are keeping all of their options open. They are reducing risk to the in-state gasline projects by acquiring the major permits and determining the cost of transport and doing the economic analyses, and finally preparing the permits and data package they hope to transfer to a project pipeline developer.

3:52:53 PM
Slide 10: Showed the work completed to date: the route alternative analysis, pipeline costs were compared, and

environmental surveys were looked at. The initial project description for the permitting package has been completed.

3:53:31 PM
Slide 11: The scoping document and commercial group meetings are under way. The initial review of Enstar capital cost estimates and pipeline and all three major permits have been applied for. The work they are doing now updates all the pipeline cost estimates.

A cost of transport analysis will be one of the outcomes from this work and they are preparing detailed projects descriptions to support the EIS and right-of-way activities. They are continuing the engineering report for both the EIS and right-of-way process in both the federal and state realms and developing a data package for the cost of service analysis and working with commercial group to identify new market potential within Southcentral Alaska and along the route.

Slide 12: The cost of transport analysis has 16 different material balances.

3:54:51 PM
Slide 13: there are four scenarios with four flow rates per scenario. They are matching a facility component and cost to each one of the balances and will generate annual schedules for capital outlays, revenues and expenses and feed all that data into their economic analysis.

MR. SWENSON said the four scenarios that are being considered address:
1. The cost of North Slope gas conditioning (acquiring residue gas from the Prudhoe Bay central gas facility with North Slope gas conditioning;)

2. Using the same gas stream from the central gas facility, move the conditioning off the North Slope because of the cost associated with doing that conditioning there. But that gas would have to be treated because of the 12 percent CO_2 and H_2S associated with it. The gas conditioning would be located in Fairbanks and the Cook Inlet. One challenge associated with this scenario is sequestration of CO_2 in Cook Inlet. At the Fairbanks facility that would be put back into the pipeline and moved to the central facility for handling that CO_2.

3:56:04 PM

3. Transport of utility-grade gas from the central gas facility and conditioning and natural gas liquids extraction on the North Slope with natural gas returned to the producers. This was a request from the commercial group.

4. Transport of enriched gas to the Cook Inlet region in high btu/volume-type transport. Spike with NGL no longer needed for enhanced oil recovery at Prudhoe Bay (33,000 bpd LPG in 2008). Use that for in-state consumption and transport around the state. Any excess natural gas liquids would be available for export.

3:57:01 PM
Slide 15: Showed four flow rates for each scenario from 250 mmcf/d to 975 mmcf/d. He noted that for each flow rate you have different configurations of compressor stations as well as conditioning plants. In the 25 mmcf/d scenario, two smaller trains would be added for redundancy for both maintenance and emergency purposes on the North Slope.

3:57:39 PM
Slide 16: Provided the Cost of Service Analysis for all pipeline and facilities scenarios at various flow rates. This information would be fed into the cost of service to the residential and industrial consumers and developed from those models. He said they would use an industry standard commercial model for this analysis; it includes commodity prices, transmission and distribution costs and non-infrastructure components. Moving the conditioning plant to the Cook Inlet region, scenario 4, and sequestering that CO_2 would have costs that this analysis would attempt to capture.

MR. SWENSON said all the inputs would have to be ranges, because most scenarios won't have specific costs.

3:58:48 PM
Slide 17: Showed the costing work schedule, which shows they are exactly on track with this work. At the end of July1, 2010, they expect to have a complete report on cost of transport and cost of service analysis for the legislature.

Slide 18: Permit Status: They have applied for both the Army Corps of Engineers 404/10 permit and the State of Alaska and federal rights-of-way. They are currently in support of each one of those efforts and a significant portion of their work is answering questions and updating the files and pipeline description.

CO-CHAIR MCGUIRE asked him to go back to page 17 and asked if the costing work schedule was put in place before he took his position.

MR. SWENSON said yes.

CO-CHAIR MCGUIRE asked if all of the dates have remained the same.

MR. SWENSON said yes.

4:00:31 PM
Slide 19: Environmental Field Programs planned for this summer are in support of the EIS and right-of-way permit applications. They will do wetlands work, lake studies for water availability, stream crossings and fisheries work, and cultural resources work. They will also look at the geotechnical aspects of some of the fault crossing and permafrost issues along the route.

Slide 20: Time Line Goal: They are on schedule with first gas by 2016. The initial timeline was specifically related to 2015 and going to the Gubik gas field where conditioning was not required. He asked the engineering group to put together three timelines, the fast track and two others with extension of this timeline, one associated with permit challenges and company due diligence during the transfer of the project to a new company. Their current goal is for the 2016 timeline.

4:02:16 PM
SENATOR HUGGINS asked for the top three challenges this project faces.

MR. SWENSON answered one would be their ability to maintain the timeline, because challenges to the permit process are out of their control. Their ability to have access to North Slope lifts for any development on the North Slope and meeting those lifts associated with their permitting effort and the construction sanction date. Another challenge is establishing the costs associated with it and providing the specific costs associated with development of the pipeline.

4:03:41 PM
SENATOR HUGGINS said if he was going to ask one thing of the legislature to boost the project, what it would be.

MR. SWENSON replied that their support so far has kept the project on task and on time. They need to keep the current work ongoing. It is incredibly important to make sure there are no "hick ups" in the timelines. The costing estimates need to be finalized so the legislature can understand exactly what the costs associated with the 16 different scenarios are so reasonable decisions can be made.

4:04:46 PM
SENATOR FRENCH said he had a spreadsheet with a series of cost estimates that involved his project that he thought was prepared for ANGDA and asked if Mr. Swenson had it.

MR. SWENSON answered that he had seen it. He said he couldn't really speak to it at this time, but Mr. Heinze, CEO, ANGDA, would be discussing it later.

SENATOR FRENCH asked if he could give them a rough date when he would be able to provide comparable numbers for the Parks route or Richardson route for the stand along pipeline project.

MR. SWENSON answered that slide 17 shows when they will have various aspects done; that report will be done by July 1, 2010.

SENATOR GARY STEVENS joined the meeting.

Overview: Export License Issues

4:08:05 PM
HAROLD HEINZE, Executive Director/CEO, Alaska Natural Gas Development Authority (ANGDA), said the table before the committee was their attempt to understand costs over the past couple of years, and particularly the last six months. Last fall they presented the cost estimates by the stand alone pipeline group (ASAP) and, more recently, as a potential shipper in the big pipeline sponsored by TransCanada and ExxonMobil (Alaska Pipeline Project). They had a chance to understand some of their cost estimate information. One of their major efforts at this point is to work with the in-state electric utilities to potentially make commitments into the open season of the big pipeline and associated with that any lateral pipeline. Key to doing that is to understand costs.

4:10:29 PM
SENATOR BERT STEDMAN joined the meeting.

MR. HEINZE said there was continuing concern was that the in-state gasline case should include the possibility of Valdez, and ANGDA felt the work being done wasn't hitting that target. Part of the comparison was developed to illustrate why that is a continuing concern to them. The first four lines are straight recitals from the work presented to the legislature last September and included enough detail to give a good idea of the segments that were analyzed in the pipeline. The recital takes the work in line three and extends it to Valdez instead of going to Cook Inlet.

4:12:33 PM
MR. HEINZE said lines 1-4 use some confidential information they got as a potential shipper on the Alaska Pipeline Project. The cost comparison work that had been done last September was very limited in scope. There was no attempt to include all the cost factors that might be the same in any project, because detail cost estimates are costly. It did not include the cost of compressor stations.

They took what was described as a $4 billion pipeline cost and scaled it up for not only the compressor stations but for a very reasonable estimate of the contingencies - increasing generally the price tag but maintaining fairly accurately the relationship amongst the numbers. The Parks Highway and the Richardson Highway routes rise to $5.6 billion to $6.3 billion. Going to Valdez adds another $600 million to that.

4:14:42 PM
The other major item they looked at for comparison was what the Alaska Pipeline people had published as part of their public documents - a pipeline cost range of a 48-inch pipe to Valdez of $10.7-$14 billion. They took that estimate and divided by both the miles and pipe diameter. For the Valdez estimate associated with the ASAP work and the Alaska pipeline Project the numbers are similar at the upper range of the larger diameter project and that seems reasonable and helped give them some confidence that they can use both sets of numbers to guide them to a good set of costs that might be used to advise the utilities. Finally, they did a case that added a spur line from Glennallen into the Palmer area, which ran the cost up. However, the benefit of that shows up when you look at pipeline flow rate assumed using a proxy for a tariff. Those two columns were designed to illustrate the fact that very large diameter pipes have very low pipe tariffs. At those flow rates and size pipes you are down to $1.50-2.00 on the basis of the tariff. Small diameter pipes have smaller flow rates and those numbers quickly

go up to $10. If you can combine the Valdez affect with a spur line in, you end up with a more intermediate set of numbers.

MR. HEINZE concluded that ANGDA is pleased they can review past work and wished the ongoing work could be done sooner, but are comfortable with the numbers and feel that if technical groups could continue an interchange at a working level they would gain a better understanding and more confidence in it. This was a case where Mr. Swenson and his team presented their piece to the puzzle and ANGDA's team will continue to contribute a little different piece. In particular, they will be pursuing something related to the open season and in addition, will continue to try to understand the Valdez LNG implications as far as the in-state gas project goes.

4:18:53 PM
SENATOR WIELECHOWSKI asked what the additional cost for a gas treatment plant for the Alaska Pipeline Project going through the Parks Highway would be.

MR. HEINZE answered that they have no specific estimates, but probably the smallest plant would probably be measured as $1 billion. He expected a tariff proxy of $1.50 - $2.00 saying it is quite expensive to remove CO_2 from the gas and get it ready for shipment even with large economies of scale and putting a facility on the North Slope would have additional costs. The TransCanada numbers are $9-$11 billion for their plant.

4:20:48 PM
SENATOR WIELECHOWSKI said Enstar's chart indicated an estimated a rate of $5.97-$7.17 at 250 mmcf/d. He asked why their estimate was different.

MR. HEINZE replied that he didn't have that table, but a lot has to do with what you think the cost of the pipeline is. He has heard that the Enstar pipe is around $4 billion, but it will probably be more like $6 billion-plus $1 billion for a treatment plant.

4:22:22 PM
SENATOR WIELECHOWSKI asked why he didn't calculate using a 500 mmcf flow rate and asked what that result would be.

MR. HEINZE said he was trying to keep the figures simple, but any of them could be doubled, for instance, and come up with the same direct relationships. Making the assumptions in this case was intended to be illustrative and not a prediction.

4:24:11 PM
CO-CHAIR MCGUIRE said as they look at HB 369 and SB 379 and try to think about what to do as an in-state effort, and looking at the March 24, 2010 letter to Speaker Chenault, she asked how he would feel if they divided the activities into demand-side and financing (with AHFC) on the one hand and the routing and building assessment on the other hand. Then have the Noah/ Swenson work continue on with the Railroad.

4:26:24 PM
MR. HEINZE said his intent in that letter that was sent to all 60 legislators was to tell them what ANGDA is working on and asking how they can be of assistance. Alaska Housing Finance Corporation (AHFC) has a lot of experience in bonding and he has respect for them; but ANGDA has developed a lot of tariff studies and they will be happy to contribute that information. Also ANGDA has a strong team for pipeline management. They don't have to be in charge, but will be happy to work with others on it. The meeting Mr. Swenson described was the first effort to get together on it. He has no desire to slow down Mr. Swenson's work, but since it started almost a year ago he has been concerned that no one is looking at the Valdez part of it. ANGDA would like to do that. They will be happy to work with whatever team the legislature puts together.

4:30:15 PM
SENATOR HUGGINS said it that there is a lot of support for a pre-build to Fairbanks. He asked the advantages and disadvantages he saw to a pre-build.

MR. HEINZE answered that there are a couple of issues in the concept of pre-builds. ANGDA had looked at the spur line coming off the big pipeline from Delta Junction through Glennallen into Palmer. He believed that was more of an Alaska-sized project, and one that could be mobilized fairly quickly. It would train Alaskans to participate very effectively in the big pipe where tens of thousands of folks are going to involved and avoid the huge cost escalation associated with starting the big pipeline project. People who were here during the TAPS years remember the impact of the development of Prudhoe Bay and how costs went up because there weren't enough people to work here; it could mean as much as a 35 percent escalation in the first year. The second choice element that is envisioned in the question about pre-build is that you can also look at pre-investment in terms of the size. Getting the in-state effort started is smart.

4:33:40 PM
SENATOR HUGGINS asked what actions the legislature should be taking to get things moving.

MR. HEINZE responded that he had been working on this project for seven years and he would like to see some final action on it. He would be supportive if the legislature took some directional action if there is an understanding that they aren't going to be back talking about it in a year.

4:35:45 PM
SENATOR HUGGINS asked what he thought about ANGDA being the broker and distributor of propane throughout the state to remote communities and projects.

MR. HEINZE answered that ANGDA's interest in propane is strongly driven by an insight they gained in 2003/4, which basically said try as we may no more than two-thirds of Alaskans will ever see directly the benefit of North Slope gas through a pipeline, and that propane represented the way to share with all the rest of Alaska the benefit of North Slope gas. That is why they have pursued it. ANGDA is not interested in being the focal entity of it, but is interested in finding ways to create a wholesale facility that is commercial in nature and would allow things to happen in a quicker way. They think that propane would become more available with development of any of the gaslines, and they think it needs to start now - if for no other reason than the high oil prices. That conversation has moved over and is going on between ANGDA and the Prudhoe Bay unit owners in hopes of finding a way that makes sense for them as a unit as well as having a commercial propane facility on the North Slope.

As far as ANGDA's involvement in that, propane is one of the things that is on the edge of what they are authorized to do; and it would require resources to proceed. He also wanted them to be aware that they are doing a number of things with the electric utilities that affect Cook Inlet, but that, too, is skating on the edge of ANGDA's authority. The only basis they have for doing that is a bill in the legislature that would clarify their authority to do that. If that bill does not pass, those efforts will have to stop.

4:39:28 PM
SENATOR HUGGINS said he supported ANGDA having some resources to do some things that are important for Alaskans, but he wanted a compatible relationship amongst the players. He asked what he thought was the value of the ConocoPhillips LNG in Cook Inlet.

4:40:13 PM
MR. HEINZE responded that ANGDA hired a technical consultant that also worked for a number of banks around the world that finance LNG projects several years ago and asked him what he would do with that plant. He said it has been operating for 40 years and has been extremely well maintained. But on the other hand every day it operates, it sets a new record for LNG plant operation length of time, a very legitimate concern.

At the extremes, if that plant's export license is not extended and it shuts down, that would cost the whole Cook Inlet gas system a lot of deliverability. That plant is key to maintaining production in Cook Inlet during the summer. There is a huge swing in the seasonal heating load between the summer and winter. So, that plant provides the summer season load that keeps wells on production. Without it there would be a very rapid degradation of deliverability.

Secondly, Mr. Heinze said, they looked at whether it was possible to strike a bargain where the re-gasification capability was added to that plant as early as next winter. The plant could operate as a peak saver by drawing LNG out of its tank and converting it into gas on those very coldest days. That might be enough to make a real difference in the system.

In the longer run, if North Slope gas in good quantities finds its way into Cook Inlet, if that plant was still around, certainly the storage units and the dock would probably still be very usable in a brown field sense. The rotating machinery might need replacing with a more modern maybe electric motor driven train or something like that. That would seem to provide that large scale customer they would be look for for a spur or bullet line or any in-state line coming into Cook Inlet. ANGDA's view is that they should not shut it down.

CO-CHAIR MCGUIRE echoed Senator Huggins' statement that she envisioned their work continuing and being part of the equation. Many of them are working overtime to see how the pieces can fit together.

MR. HEINZE said they would work with the team however it's constituted.

4:43:47 PM
HARRY NOAH [former pipeline czar], representing himself, said he was asked to give some background on what was intended when the

in-state gas program was put together last year. He said the objectives used to put the initial program together were to encourage the development of an in-state pipeline by taking out some of the risk if the state could. There are two ways that risk can be removed: one is by just putting money in it, but the second more logical place to start is to reduce the uncertainty associated with pipeline development in the state. There were three legs to that effort.

1. define the cost of transportation of the gas, which is an engineering study
2. obtain the major permits
3. obtain, if possible, letters of intent to ship gas (the most important

MR. NOAH related that the second driver was timing. When Governor Palin asked to have this plan put together she wanted gas to flow in the pipeline by 2015. They tried to do that, but they did tell her very carefully that that was an extremely aggressive schedule; probably the earliest it could happen was late 2015 or early 2016.

The second objective under timing was to get detailed engineering design by June 1, 2011 in order to meet that schedule. He said the basic concept was for the state to try and take out the high initial risk factors associated with this project and that is when money is most expensive, but it was always their intent to package that information into an RFP-type of document and move it to a private developer. They would have tried to do that by the end of the first quarter of 2011 if a company was going to have any chance to gear up to start the detailed design. He restated that it was their intent to facilitate a project, not build it.

MR. NOAH said the in-state program undertook as part of the program the legislature authorized money for last year an evaluation of pipeline route alternatives from the North Slope to Cook Inlet - that was mainly the Parks Highway versus the Richardson Highway - already discussed today. It was simply a cost comparison between the two; the others considerations might be environmental impact or people served. A second task was to look at a pipeline to western Alaska terminating at Donlin Creek, and this work is pretty well done.

4:48:53 PM
MR. NOAH said the third was to look at gas supply in Cook Inlet and, as a subtask of that, LNG imports. When they started the

work, DNR said they wanted to the gas supply study, which was fine; it was done by Bob [Swenson] and the Cook Inlet utilities. Plus the Cook Inlet utilities, Enstar, ML&P, and Chugach, also looked at LNG imports and the cost associated with that. That is the scope of the work that was done.

He said he wanted to focus on the three legs of the stool that dealt with the in-state or bullet line: the cost of transport study, acquiring both federal and state right-of way permits and the Corps 404 permits, but most importantly the letters of intent to ship gas in the pipeline. Alaska is different because it is a very small market; putting everyone in the same room who want to sell or buy gas, doesn't require a large room. So, facilitating agreements between them became the focus, not necessarily a focus of the state making a decision.

He said it was always their assumption that the cost estimates would be a guideline and a help, but whoever was to take over this project would be doing their own work. When they started this program they felt the engineering work was the definitive answer; it was a guideline to help facilitate the commercial discussions. It was set up over a two-year period. The first year, last year, was to start the engineering to define the capital costs, and to get all the permitting together and applications filed (which they were), but more importantly to form the commercial working group and start those discussions (which also occurred).

4:52:02 PM
MR. NOAH said the intent of the second year (basically starting now) was to try to see if those commercial agreements between buyers and sellers could be achieved. It would be to use engineering and cost data to facilitate those discussions. The other part of the work plan for this year was to do enough work to maintain the schedule.

He explained that the engineering work looks at a whole group of different options; it's a little bit like an erector set where you can mix and match the different pieces as the commercial discussions were going on. It was just a basis of knowledge at that point. That work effort was set in motion last October, and the schedule has been maintained quite well. It was not the intent of the state to choose a specific project, but it was to work with the commercial entities to see if there was a project that worked for everyone, not just the state or not just the producers.

The permitting was undertaken for two reasons; first, to maintain the schedule - and then the idea was to get the work done to try to answer some of the open questions that prevented real cost estimates from being completed. Because when you complete right-of-way documents there is a whole group of stipulations. They can have a tremendous impact on cost and timing if there are "too woolly." As an example, when you build a major pipeline off the highway system, you're going to tear that highway system up. Who will pay for that? The producers say well, the state is. The legislature will probably say the producers. Dozens of these open questions need to be resolved.

4:55:17 PM
Beyond just maintaining the schedule, the reason to undertake the permitting was to get a clear path forward as to how the construction permits would be issued and how issues like who would pave the road would be resolved. Towards that end, they had asked John Reeves, Department of Transportation and Public Facilities (DOTPF), to work with them, but those questions still need to be answered. Getting just the permit is not enough.

4:55:57 PM
MR. NOAH said the third leg of the stool was the working group - the letters of intent. The purpose of the letters of intent was a. could you really get one - if no one will sign up for anything, you won't have any demand to ship gas - and, second, if you have those commercial discussions and there is a big gap between people selling gas and those buying it, the state would understand that. Then the legislature and the governor would be in a position to decide whether they wanted to help or not. It has to be clarified. It doesn’t do any good to bat around capital cost numbers if you don't have business entities ready to make a deal with the future pipeline company. But, if you have all of three things, however, the state will have facilitated a package that will be really interesting to a pipeline company.

4:57:47 PM
MR. NOAH said the key to a successful project is that someone has to be willing to sell on one end and buy on the other. Right now, Alaska does not have gas to dump into a pipeline tomorrow. The commercial agreements are necessary.

Over the past year he watched the debate between the big ling and the in state line, and it was his intent as part of this work program to see if commercial agreements could be reached that would them to deal with both the short-term needs of Alaska

and any long-term major sales of gas from the North Slope. He took the position that BP and ExxonMobil and ConocoPhillips could take care of themselves. At the same time, the utilities that would be buying the gas are only going to buy the gas if they can do it at a rate that is acceptable to their customers. So, this commercial activity is a self righting type of an equation. The question is how could the state facilitate both wanting to not hurt the long-term interests of a pipeline on the North Slope, but deal with Alaska's energy sooner rather than later. In his mind, it was always the mixture of the commercial aspects of this along with the engineering that was the key.

MR. NOAH closed saying that getting to point of being able to put the RFP "out on the street" to a private entity is the key thing. If they can't get those letters of intent, they can't do that work and that will tell them a lot. But if they can, the concerns about whether it affects the big pipeline or not are things the producers can take care of themselves. If they are willing to sign agreements and a business deal can be put together that is acceptable to everyone, then in a way the process will take care of itself. The state doesn't have to put itself in the position where it feels it has to make all these decisions. "We'd let the market do it."

5:01:03 PM
CO-CHAIR MCGUIRE thanked him for his work for the state and announced a brief at ease.

HB 369-IN-STATE PIPELINE/ MANAGER/TEAM

5:02:04 PM
CO-CHAIR MCGUIRE announced HB 369 to be up for consideration [CSHB 369(FIN) AM was before the committee].

REPRESENTATIVE CHENAULT, sponsor of HB 369, offered that he is a "hands on kinda guy" and he wants to start "turning dirt." He explained that this bill forms a joint in-state gas development team (JIGDT). It would be found in the Office of the Governor and consist of the chief executive officer (CEO) of the AHFC as chair, the CEO of Alaska Railroad or his designee, the commissioner of the Department of Transportation and Public Facilities (DOTPF) or his designee, the CEO of the ANGDA, and the in-state gas line coordinator or project manager.

5:03:31 PM
The bill also describes the duties of the in-state gasline coordinator in statute and sets the deadline of July 1, 2011 to

assure that a project plan is presented back to the legislature. The project plan would specify how an in-state line can be designed and built made operational by December 31, 2015. These are aggressive dates, but they won't get to completion of a project without a timeline. The project plan must also include specific plans to coordinate and facilitate the construction, ownership, operation and management of a gasline. They tried to leave these as loose as they could, because he has found that when the politicians get involved in projects like this, they tend to be the problem.

He said the development team is to prepare plans and designs necessary for construction, to coordinate with the entities qualified to build, own or operate a pipeline, and select the route; the route is to be the most economical, provide gas to residents at a reasonable cost, and to use state lands and rights-of-way to the maximum extent possible. It also establishes an expedited process for information access and cooperation among the state entities. It outlines the duties of the development team, but gives them some flexibility to determine what actions are necessary to complete the project without politicians being involved.

5:05:51 PM
REPRESENTATIVE CHENAULT said he feels the need to combine the efforts to move an in-state gas line forward not only for the funding purposes but to gather information and studies and to share them in order to turn dirt.

REPRESENTATIVE CHENAULT said the in-state gas line would provide economic opportunity for Alaska and will supply the energy needs for Alaskans for many years.

5:06:54 PM
CO-CHAIR MCGUIRE said they are trying to figure out how many captains and who is going where with what intent, and she looked forward to his input.

5:07:55 PM
REPRESENTATIVE CHENAULT agreed that one of the big problems is too many chiefs and not enough Indians. This project needs a strong leader who can make those determinations. It has to have a supportive administration and the legislature behind it. He thought it imperative that they consider that the state has tried for over 30 years to try to secure Alaska's energy needs and it no longer has the luxury of discussing it. It is time to turn it over to experts.

5:09:51 PM
SENATOR HUGGINS agreed with Speaker Chenault's opinion that they need to get a strong leader and let him do the job.

5:10:42 PM
REPRESENTATIVE CHENAULT said we have some of the best minds in the state; there is no reason a project can't be brought back.

CO-CHAIR MCGUIRE agreed and said she looked forward to working with him. She conceded that the timelines are aggressive but she believed Alaskans want something to move forward now.

5:11:48 PM
SENATOR WIELECHOWSKI referred to Mr. Heinze presentation that estimated the tariff at 250 mmcf/d would be $9.24 plus $1.50-$2 for the gas treatment plant. Bumping it up to 500 mmcf/d, you still have a $6 tariff plus the cost of the gas. He asked how HB 369 deals with a possible $10 tariff a couple of years down the road.

5:12:44 PM
REPRESENTATIVE CHENAULT said he didn't have a good answer to that. The question can be asked what do they tell their constituents in 2018 when they have no gas. He had no reason to doubt Mr. Heinze's numbers, but he wanted to see what the project looks like. As the numbers change so do the opportunities. He would like to build a bigger line but he thought that should be left to the experts.

5:14:43 PM
SENATOR FRENCH said they will have the estimates by July 1 and asked why the current structure is not sufficient to get this going.

REPRESENTATIVE CHENAULT answered that they have heard for a number of years through different agencies; ANGDA for instance was ready to go forward but then the legislature chose not to fund him on certain issues. They didn't think they were getting anywhere and that is how they came up with the in-state pipeline coordinator, and that agency has been in turmoil even though he respects Mr. Noah. The legislature needs to continue to keep "our thumb on" the task that not only the administration but the departments are tasked with, then what they get in July may be the answers they are looking for, but maybe not. The 2011 date could get pushed out further. He wasn't interested in hurting

the AGIA project's chances to go through, and he didn't see it being derailed by an in-state gas project such as this.

5:18:12 PM
SENATOR HUGGINS agreed with Representative Chenault. Who deserves the gas first? Alaskans! Spending the money on AGIA is fine, but he was willing to spend the same amount to get gas to Alaskans.

CO-CHAIR MCGUIRE said she thought the speaker was right; the legislature needed to set milestones in order to keep this on track. They both put July 1, 2011 in the bill out of respect for the governor but she wanted to have further talks with the engineers because they are saying more field work needs to be done in the summer.

REPRESENTATIVE CHENAULT agreed, but said that if they leave a project totally up to the engineers nothing will ever get done. Engineers look for perfection and, while he respects that, there was not going to be perfection. He thought that others need to be working with them to make the decisions.

CO-CHAIR MCGUIRE agreed that a team is needed. With that, she set HB 369 aside and said they would hear from Larry Persily.

Presentation by Larry Persily, Federal Coordinator for Alaska Natural Gas Transportation Projects

5:22:57 PM
LARRY PERSILY, Federal Coordinator, Office of the Federal Coordinator for Alaska Natural Gas Transportation Projects, said he had two presentations, one about the rules dealing with an export license that you have to get from the federal government if you're going to send natural gas overseas, and the other that talks about is going on in the world LNG markets.

MR. PERSILY stated that since 1938 exporting natural gas from the United State required an export license issued by the US Department of Energy (DOE). It must show that sending your gas overseas is consistent with the public interest. You have to show basically that there is a surplus, that it is available and not needed domestically. The DOE license for export at the Kenai plant was last issued in 2009 with a two-year renewal and is valid until March 31, 2011. It took almost 1.5 years to get. Initially in 1996 when the plant owners filed for a renewal it took 2.5 years.

He said the state originally opposed the last renewal (2007) and later dropped its protest. Chugach Electric opposed the renewal

as did others. The state initially asked for trial-type procedures with discovery - as did Tesoro which also wanted evidentiary trial-type proceedings. Chugach Electric was in negotiation with the producers at that time for supply contracts and wanted the state to continue opposing the export permit so as to strengthen their hand as they negotiate supply contracts with Marathon and ConocoPhillips. All that is to say that, without protests you can get an export license a lot sooner than 1.5 years.

MR. PERSILY explained that it is an administrative action, not congressional. It is the second export license that exists in Alaska. Twenty-one years ago the DOE approved an export permit for Yukon Pacific which at that time envisioned an LNG project. That export permit specified the gas could go to Japan, South Korea or Taiwan. (Export licenses granted by the Department of Energy actually specify which countries it can be sent to.) That license in 1989 was for a specific project, with specific owners, at a specific time. A change in ownership of the license would require Department of Energy approval - his opinion, not the Office of Federal Coordinator - but considering the changes in market conditions, supplies, economics and such in the 21 years, it's doubtful the DOE would simply okay the transfer of that license to a new owner who would have to go back through the process.

SENATOR FRENCH asked the volume allowed under that permit.

MR. PERSILY said he didn't remember. Even though export licenses for natural gas are administrative, politics do come into play. He remembered when the TAPS legislation went through Congress it banned the export of Alaska oil for more than 20 years. And when a Chinese oil company tried to buy Unocal a few years ago, nation-wide political pressure killed the deal.

5:26:29 PM
MR. PERSILY continued that back in his office, the Alaska Natural Gas Pipeline Act of 2004 includes a "sense of Congress" language that says the Lower 48 states will need Alaska gas in the coming decades. He commented that it would certainly be ironic and somewhat politically problematic if just as the president is elevating the Alaska gasline to a national interest project and just as the state's congressional delegation is trying to win approval to increase the loan guarantee to $30 billion, if at that same time they change direction and try to send the gas overseas. He said the federal loan guarantee, the accelerated depreciation on the pipeline, the federal tax

credits for the North Slope gas treatment plant, even the very assistance of the Office of Federal Coordinator and Federal Job Training Funds - none of that is available under current law for an export project.

The 2004 Act defines the Alaska natural gas transportation project as a pipeline system that carries gas to the border between Alaska and Canada, and then eventually heads south.

5:27:44 PM
MR. PERSILY said in terms of what is going on in LNG market, there is a lot of competition in the Asian market. China and India have local gas; China and the US are working together to develop shale gas. China and India, in addition to some local gas, also have the option of pipeline gas from Russia, Turkmenistan.

In terms of existing LNG producers or countries with LNG plants being built, you have Australia, Papua New Guinea, Sakhalin, Indonesia, Malaysia, Brunei, Qatar, the Middle East (a swing supplier that can go to the Atlantic Basin or to the Pacific). In fact, Japan most recently was getting 10 percent of its spot sales from the Atlantic based suppliers rather than just Pacific Rim. Currently there is an oversupply of gas in the world.

He said Shell is also looking at floating LNG production and has contracted with Samsung to build essentially a huge ship bigger than an aircraft carrier that parks over an offshore field; it produces, it liquefies, and then ships it out. When they are done they move to a different spot.

MR. PERSILY said that people who think of the export market look at pricing, because in the past just about all gas in Asia was tied to oil prices, when oil was $80-$100. Those are attractive gas prices and the buyers figured it out. Lately, about 20 percent of Asian LNG trade is going to spot market. The price was tied to oil will still be in the majority, but it is not the vast majority as it used to be.

Something else to consider, he said, is that 2007 numbers show that 73 percent of the gas consumed in world was consumed in the country where it was produced; about 19 percent of the gas consumed in the world was delivered to the consuming country by pipeline; and only 8 percent of the gas that was consumed was delivered by LNG tanker. It is a small piece of the market, even though it is an attractive market. To keep it in perspective, Mr. Persily said, the North American natural gas market on a

daily basis consumes about three times the gas of India, China, Japan, Korea, and Taiwan combined. He summed up that there are opportunities in the LNG market, but it is very competitive; there is a lot of gas in the Pacific Rim and a lot of LNG projects. It is a much smaller market than North America.

5:31:12 PM
CO-CHAIR MCGUIRE asked if he had seen Representative Young's letter to Secretary Chiu regarding the extension of the LNG export license.

MR. PERSILY replied yes; but he hadn't any feedback on it.

5:31:45 PM
SENATOR WIELECHOWSKI asked if he had any thoughts on whether the DOE would extend the Nikiski plant license.

MR. PERSILY answered if ConocoPhillips and Marathon, owners and operators of the plant, determine that they have enough gas to meet local needs and that they have some surplus, it would help to have some place to send the gas in the summer, and if no one protested it, they would have a pretty good shot at getting an extension.

SENATOR WIELECHOWSKI explained that he asked that question because one of his newsletters said there was zero chance.

MR. PERSILY clarified that was for a new export license for a project that was totally dedicated to something.

5:33:14 PM
SENATOR WIELECHOWSKI said they keep hearing that the President is interested in elevating his position and making this a project of national interest and he asked what that means to the project and the likelihood of it getting completed through the AGIA process.

MR. PERSILY said he didn't know. He had had one meeting at the White House and it was discussed. They haven't quite figured out what they can contribute along with the state and the pipeline developers and producers to help, but the President said he has to think of something.

He mentioned that Tokyo Gas Company, one of the Kenai plant's customers and is the largest gas supplier in Japan, recently signed a contract with British Gas (BG) that is developing a

project in Australia; they signed a 20-year deal starting in 2015 and it would cover 11 percent of their needs for 20 years.

5:35:29 PM
CO-CHAIR MCGUIRE apologized that she couldn't get to the other presenters and adjourned the meeting at 5:35 p.m.