

HOUSE FINANCE COMMITTEE
March 18, 2011
8:05 a.m.

8:05:07 AM

CALL TO ORDER

Co-Chair Stoltze called the House Finance Committee meeting to order at 8:05 a.m.

MEMBERS PRESENT

Representative Bill Stoltze, Co-Chair
Representative Bill Thomas Jr., Co-Chair
Representative Anna Fairclough, Vice-Chair
Representative Mia Costello
Representative Mike Doogan
Representative Bryce Edgmon
Representative Les Gara
Representative David Guttenberg
Representative Reggie Joule
Representative Mark Neuman
Representative Tammie Wilson

MEMBERS ABSENT

None

ALSO PRESENT

Representative Alan Austerman; Representative Mike Hawker; Senator Cathy Giessel; Tom Barrett, President, Alyeska Pipeline Service Company; Pat McDevitt, Senior Project Manager, Alyeska Pipeline Service Company.

SUMMARY

HB 110 PRODUCTION TAX ON OIL AND GAS

HB 110 was HEARD and HELD in committee for further consideration.

#hb110

HOUSE BILL NO. 110

"An Act relating to the interest rate applicable to certain amounts due for fees, taxes, and payments made and property delivered to the Department of Revenue; relating to the oil and gas production tax rate; relating to monthly installment payments of estimated oil and gas production tax; relating to oil and gas production tax credits for certain expenditures, including qualified capital credits for exploration, development, and production; relating to the limitation on assessment of oil and gas production taxes; relating to the determination of oil and gas production tax values; making conforming amendments; and providing for an effective date."

8:06:21 AM

Co-Chair Stoltze informed the committee that there would be a presentation on the Trans Alaska Pipeline System (TAPS) and issues related to HB 110.

TOM BARRETT, PRESIDENT, ALYESKA PIPELINE SERVICE COMPANY, provided a brief overview of his experience, including directing Coast Guard operations and Deputy Federal Coordinator for the Alaska Natural Gas Transportation Project. He was a former regulator, headed the U.S. Pipeline and Hazardous Material Safety Administration, and was Deputy Secretary of the U.S. Department of Transportation.

Mr. Barrett provided a PowerPoint presentation, "Declining Throughput on the Trans Alaska Pipeline System, Alaska House Finance Committee, March 18, 2011" (copy on file). He added that he had been working for Alyeska since January 1, 2011, and was the first president that did not come from an owner company.

Mr. Barrett pointed out that the employees and contractors that operated and maintained TAPS moved hundreds of thousands of barrels each day from the North Slope to Valdez, and were committed to safety and protecting the environment.

Mr. Barrett asserted that the challenges related to TAPS were very real and present; he believed that without increased throughput in the line, the challenges of operating the line safely would increase over time. He pointed out that the challenges had been made very clear

during the recent, unscheduled shut-down in January. He believed the event should be a "wake-up call" for Alaskans. He described the experience of the shut-down as arising out of a "perfect storm" with serious risks. He felt the situation had been contained because of the dedication, talent, and commitment of Alyeska employees, contractors, owners, and the administration.

Mr. Barrett highlighted that one reason the situation was urgent was that it would take at least five years to get more oil in the line, even if production increased dramatically right away. He added that it would take ten years to get oil into TAPS for a big field. He spoke as a pipeline operator and asserted that the system was behind and that challenges were increasing daily. Since 1989, there had been a steady incline in crude oil coming from the North Slope at the rate of 5 to 6 percent each year. He did not see anything that would reverse the situation any time soon.

Mr. Barrett informed the committee that current throughput was about 640,000 barrels per day. He believed that the company was in new territory every day. When TAPS opened, throughput was about 700,000 barrels per day; it then increased to 2.1 million barrels and declined steadily to the current rate. He was concerned about the steady and consistent decline.

Mr. Barrett directed attention to a graph on Slide 4, "Throughput history...January Average Throughput." He emphasized that when throughput fell below 500,000 barrels per day, there were consequences like settlement of water (leading to ice), increased wax fallout, and the risk of frost heaves. He underlined that the risk would increase even if the oil was flowing.

[8:13:29 AM](#)

Mr. Barrett noted that at one time the Energy Information Administration (EIA) had said that Alyeska delivered about 25 percent of the country's domestic crude supply. The number was down to about 12.4 percent for 2010. Production of oil in the United States went up, while production in Alaska went down.

Mr. Barrett pointed out that a \$10 million study had been launched in 2007 to consider how declining flow affected

TAPS and what measures could be taken to mitigate the situation. He pointed out that the temperatures being experienced were well below what was considered likely when the pipeline was designed. In the original design, the ideal flow rate was about 1.5 million barrels per day. He reported that he had been up at Pump Station 4 talking to employees; they were ready, willing, and able to move production flow up to about one million barrels per day.

Mr. Barrett noted that the study included examining water accumulation under low-velocity conditions, looking at the potential for increased corrosion due to declining flow, assessing the potential for ice formation in the winter, examining increased wax deposits in the pipeline and crude tanks in front of pigs (pipeline inspection gauges, which were regularly moved through the line to keep the line clean and corrosion-free), and evaluating potential geotechnical impacts such as frost heaves. He detailed the effects of frost heaves on underground segments of the line; frost heaves were aggravated by declining flow in the line. Other items studied were impacts of operating pigs due to the wax and ice, particularly at low points in the line.

Mr. Barrett reiterated that the decline in throughput was steady; in 2007, the Department of Revenue (DOR) estimated that the flow in 2011 would be about 676,000 barrels per day, but the actual flow had been consistently behind the projections.

[8:16:08 AM](#)

Mr. Barrett emphasized that the most serious low-flow issue facing the state was the temperature of oil in the pipeline. Temperature decay in the line was a function of flow-rate, velocity, and time. The temperature of the oil continued to drop as the throughput continued to decline.

Mr. Barrett indicated Slide 3 ("January Crude Temperatures"), a line graph depicting the decline rate with the temperature profile and decay at 800,000, 630,000, and 400,000 barrels per day. He noted that the spike in graph represented the North Pole refinery, since some heat was recovered through recirculation there. He explained that oil came into the line at about 108 degrees (there were standards relative to the temperature of the oil entering the line) and declined steadily.

Mr. Barrett discussed the recent shut-down, which he called the "January event." He detailed that during a winter shutdown, the temperature would start at a lower point (such as 60 degrees) and the decay from that point would drop the temperature and result in ice formation and wax problems. There would be less time to get the line back up before there were serious consequences. He pointed to a potential scenario with blocked valves and damaged sensitive equipment resulting in a shut-down that could last for months. The consequence would be less time to manage any kind of shut-down.

Co-Chair Stoltze queried the dynamic of re-starting a natural gas system.

Mr. Barrett replied that the situation could potentially be the same, and could be worse. He pointed out that with the January shut-down, there had been about a two-week supply of fuel in the Interior; if Alyeska had not been able to get the line up and running within those two weeks, the region would have been out of jet fuel and heating fuel, and production would have been affected. When TAPS shut down, producers were asked to scale back operations and to shut in wells; at some point some of the wells would not be recoverable. He emphasized that the consequences would be enormous.

Mr. Barrett continued that the longer the line was down, the tougher it was to bring it back up safely. In the January event, they knew it would take around eight or nine days for repairs and to put in a by-pass line at Pump Station 1; any interruption at all (such as weather or delay getting equipment or parts) would have meant a pig in the line would have been pushing ice and wax towards the pump. Once a mainline pump went down, it would be very difficult to fabricate and install a new one.

[8:20:29 AM](#)

Vice-chair Fairclough referred to earlier questions related to temperatures. She asked why a decision was not being made to add the ability to heat the oil at different stages, and what that would cost.

Mr. Barrett replied that Alyeska was ready to add heat to the line; a lot had been done to add heat in January,

including recirculation from the North Pole refinery. In the January event, Pump Station 7 was added and BTUs were added everywhere possible. He added that the study mentioned had identified other potential ways to apply heat to the line and manage temperature decay, including adding crude-oil heaters, heat tape, or insulation on certain segments of the pipe. The company was considering what measures would be prudent and economically viable to implement over the years.

Mr. Barrett reminded the committee that the falloff in flow because of declining production was steady and had come faster than previously predicted.

PAT MCDEVITT, SENIOR PROJECT MANAGER, ALYESKA PIPELINE SERVICE COMPANY, added that ways of heating the line were being considered, such as crude-oil heaters, recovering heat from turbine waste gas, and recycling capability because of new equipment.

[8:23:07 AM](#)

Representative Doogan asked why Alyeska had not addressed the problems sooner, when it knew there were issues such as the temperature problem because of low flow as early as 1989.

Mr. Barrett answered that the study was started in 2007 and had been driven by a recognition that the problem would increase. He reported that Alyeska had always taken into account that there would be a need to address the issue of re-starting the line in cold weather. He believed that the issue was in reality much more complex; temperature was not the only driver, and it was not only an issue during shut-downs. There had been increasing awareness that the consequences of low-flow would also create serious risk for the line.

Representative Doogan agreed that hindsight was always clearer; he still believed the company was late to recognize the issue.

Mr. Barrett noted that he had watched Alyeska for a number of years as a federal regulator. He opined that it made sense to begin where they were. His beginning point had been what he had learned from the January event. He was proud of Alyeska employees, who had restored service in

seven days without hurting a single worker or the environment; those were not simple accomplishments. He stated that the company's commitment was to work through the issues as rapidly and as intelligently as possible.

Mr. Barrett added that one of his concerns as the operator was the huge implications related to temperature. During the January event, they tried to add BTUs, but even that had consequences; taking temperatures up and down on the line had implications for the quality of the crude oil in the line. He emphasized that the situation was complex; there were other risks in addition to temperature. For example, the cleaning program to prevent corrosion in the main line was very aggressive, and exceeded regulatory standards. Instrumented pigs were run through the line every three years (the standard was five). However, the current technology on instrumented pigs was not designed to be successful at one mile per hour. The company was beginning to understand that the risk of corrosion would increase.

[8:28:16 AM](#)

Mr. Barrett noted that the company had a very sophisticated, state-of-the-art leak-detection system on the main line that operated very well. He pointed out that no regulator in the world would allow the operation of a 48-inch line with the amount of oil going through without a very solid leak-detection system in place. However, the system would not work in low-flow areas, which meant the system had to be replaced, upgraded, or improved, and at enormous expense.

Mr. Barrett emphasized that there were complex technical and economic factors at play. The 48-inch line was big, and was designed to run at 1.5 million barrels per day, but it was running at 640,000 barrels per day. He provided the example of a car designed to run at maximum efficiency at 50 to 60 miles per hour; there would be carbon build-up and other problems if it was driven constantly at 20 mph.

Representative Wilson queried the financial impact of having to reheat the oil on the North Slope refineries.

Mr. Barrett responded that he did not know the financial impact. He noted that Alyeska had great support during the shut-down from the refinery, administration, employees, and

contractors. He thought the same kind of cooperation was needed day-to-day.

[8:31:42 AM](#)

Mr. Barrett underlined the complexity of the situation. He pointed out that once North Slope wells were shut in, a substance similar to anti-freeze was added to prevent freezing. However, the result was anti-freeze in the crude stream, which was good for a well, but bad for a refinery. Testing had to be increased to determine what exactly was in the line at re-start, because what was coming in had different component standards than usual, and the oil still had to meet standards. He referred to Betsy Haines, Alyeska's Oil Movements Director, who had been aggressive in making sure that nothing was done that would have an inadvertent collateral consequence, such as damaging the refinery.

Representative Wilson asked what would happen to the pipeline if the refinery could not operate to heat up the oil.

Mr. Barrett replied that the pipeline would have to find a way to add heat in another manner, such as crude oil heaters or insulators. He noted that the worst temperature decay started well before North Pole. He thought the bigger consequence was losing the refinery and what it produced.

Representative Hawker noted that he had worked on the development of one of the North Pole complexes and was familiar with the process. He had not understood the potential for risk to the community the refinery served in the event of a prolonged shutdown. He thought that the community had developed a dependency that had not existed before the refinery was there. He asked whether Alyeska was involved in contingency planning to protect the community if there was a disastrous disruption of flow in the pipeline. He wondered whether the communities were actively involved in contingency planning, or if that was outside the purview of the company.

[8:35:10 AM](#)

Mr. Barrett responded that Alyeska did not directly control or influence contingency planning. He was concerned about managing the risk of having a major piece of necessary

equipment (such as the pigs) create a problem. He reported that Alyeska was in active communication with the administration and the governor's office, from which there was strong support; Commissioners Sullivan [Department of Natural Resources] and Hartig [Department of Environmental Conservation] had been closely involved. Alyeska had resources that would be available in a community emergency, but the actual response would be done through the State Emergency Management Office.

Mr. Barrett assured the committee that he had been very concerned about life-safety consequences resulting from the refinery going down, because of his experience with the Coast Guard. He believed there would be life-safety concerns on the North Slope, as there were thousands of people there that would have to be gotten out. He stated that the company took pride in outreach to local communities around the state; employees supported elementary school programs and other community projects.

Representative Hawker wanted to further discuss community risk. He referred to a previous presentation with an Alaska North Slope (ANS) production forecast by DOR [3/16/11, HFIN]. He believed that the situation with TAPS had become increasingly problematic. He feared that the 500,000 barrels per day level could be reached in 2013. He believed the horizon was short and the issue very urgent. He asked whether the community was adequately prepared. He wondered whether the legislature should emphasize the risk.

[8:39:48 AM](#)

Mr. Barrett stated that he was uncomfortable with a throughput level of 640,000 barrels per day and thought the recent shut-down was a "wake-up call." He referred to the recent earthquake in Japan; similar experiences closer to Alaska could create problems. He agreed the situation was urgent. He urged the legislature to consider the possible consequences of inaction. He emphasized his pride of the employees at Pump Station 1. He was not going to allow a rushed restart that hurt someone, but the employees sensed the importance of getting the line back up. He encouraged the legislature to have the same sense of urgency.

Mr. Barrett asserted that the company had to do better. He maintained that the standard was flawless and reliable operations.

8:43:13 AM

Co-Chair Stoltze referred to a worker that he knew.

Representative Guttenberg appreciated the work done by Alyeska, especially during the crisis. He noted that when the pipeline was at its peak, drag-reduction additives were put in to make it flow better; now on other end, there was a whole other set of issues. He asked whether corrosive inhibitors were currently being put into the line.

Mr. Barrett replied that Alyeska had an extensive corrosion-management program, including injecting inhibitors in the line, though not the main line. He stated that Alyeska was very aggressive, and had learned the lesson and increased the strength of biocide in the inhibitor profile. On the mainline, scraper pigs were used rather than the corrosion injections, and the inspection tool was used to identify areas with corrosion that needed to be repaired.

Mr. McDevitt added that currently, corrosion on the mainline pipe had been external; internally, the pipe was in very good condition. Inhibitors would most likely be used in the mainline when water drop-out started to occur around throughput levels of 500,000 barrels per day.

Representative Guttenberg noted that Alyeska had started reconfiguration a few years prior, including moving employees to Anchorage. He believed the move had been controversial. He asked whether people were being moved back to where they needed to be rather than being kept at a central office.

8:46:33 AM

Mr. Barrett replied that a lot of the employees in Anchorage had been helpful during last incident; the engineering, planning, and design work needed to bring the system back up was done primarily in Anchorage, while the physical work (such as fabrication and welding) was done in the field. He felt that having the personnel in Anchorage was an advantage. He pointed out that the integrity management (IM) program was back up to full staffing. He reported that he had witnessed the ability to of the team to leverage talent.

Representative Guttenberg asked whether the situation would have been the same if the problem had been at Pump Station 7 or like the incident at Pump Station 9.

Mr. Barrett responded that the incidents were different. In any of the scenarios, there was an enormous overhead of front-end design, planning, and engineering. There was also the physical work of getting people where they were needed to do the work. He related that there were many people involved in the incident and close coordination was needed with other state authorities, such as the police and security. In January, people had been mobilized up and down the line. There were personnel at Pump Station 1, a pig was recovered at Pump Station 8, and there was cold-restart equipment staged everywhere. He opined that they were organized correctly to handle a large-scale crisis with the IM team located in Anchorage.

Representative Gara referred to frequent discussion about how the oil production projections had been off, but he did not recall an expectation of project shutdowns. He asked how much oil was lost in the shutdown and in the 2006 shutdown.

Mr. Barrett replied that he did not know about the event in 2006. In the more recent event, the actual oil loss was about 317 barrels (the amount recovered from the leak site at Pump Station 1). The flow rate was at zero and was brought up gradually to 640. He did not know much of the loss would be recovered over time.

[8:51:32 AM](#)

Mr. Barrett stated that he was very concerned that there could have been a three-to-five-month shutdown, with no oil going through and no revenue, if the situation had not been managed almost perfectly; however, he had been more concerned with the operational piece. He did not know about the recoverability after a shutdown.

Representative Gara asked how many annual barrels were lost in the current year because of the shutdown, regardless of whether they were recovered in the future.

Mr. Barrett did not know, but offered to get information to the committee based on the average throughput. He cautioned

that the situation was complex. Day-to-day, the average throughput was 640,000 barrels per day; it would be hard to guess the flow that had been missed over the specific 11 days of the event. However, the average could be found in order to get an approximation of the loss.

Representative Gara referred to reports in the media that Alyeska was asking for a tariff increase. He noted that as tariffs increased, the state's and the company's shares decreased. He wondered whether the state had challenged the tariff increase.

Mr. Barrett stated that he could not comment on the particular case as it was potentially a litigation issue. He did say that as Alyeska's costs increased, the tariffs increased, and the amount of the cost to the owners increased; the amount of money to the state would decrease. Managing all the issues cost Alyeska more per barrel. He asserted that the company had to manage the line safely and that costs had to increase to meet whatever needed to be done; if the amount of oil going through the line decreased, the relative cost per barrel would rise, with all the attendant consequences.

[8:54:44 AM](#)

Representative Gara recalled a chart showing that most of the largest spills related to the pipeline had occurred in the past six years. He queried plans to mitigate future spills and shut-downs.

Mr. Barrett wanted Alyeska to have the highest standard, which he defined as "flawless operations." He pointed to time working at the Department of Transportation and Public Facilities with aviation and the relatively low accident rate. He thought everything possible needed to be done.

Mr. Barrett discussed initiatives to prevent a repeat of the recent incident. He noted that the engineering division was conducting a walk-down survey of every similar piece of pipe on the line to assess the risk. He emphasized that the main line had a very aggressive pigging program. He felt there was no perfect situation. He made an analogy with football and quoted a coach: "We're going to chase perfection, knowing full well we will not catch it; in chasing it, we will catch excellence."

Mr. Barrett reported Alyeska had been having discussions with its employees about how to get to flawless operations, with "zero-zero-zero" and nobody hurt, no oil spilled, and no unscheduled shut-downs. He noted that there were 43 regulators; he believed the employees knew a lot about the system. He had asked a group of employees whether everything possible was being done to prevent a repeat of the incident. He pointed out that there were people who had worked on the line for 20 or 30 years; they knew the systems as well as the risks.

[8:58:47 AM](#)

Mr. Barrett believed people in the company would be able to raise any issues about safety. He stated that Alyeska would do anything it could and that the company would prepare for the future as well as it could to mitigate risk, given the declining throughput. He hoped to have an active, engaged culture of achievement, excellence, and reliability within the company.

Representative Gara queried the minimum throughput for operations.

Mr. Barrett responded that there was no specific answer because of the complexity of managing throughput at lower volumes. He emphasized that there were technical limits in the current configuration of the current, aging system. In addition, there were economic limit factors. He did not know what the outer limits were. He did not want to be naïve about the consequences regarding lower flow rates.

[9:02:21 AM](#)

Co-Chair Stoltze referred to statistics presented at an earlier hearing.

Mr. Barrett replied that the pipeline was designed and optimized to run at 1.5 million barrels per day; he wanted to have from 800,000 to 1 million barrels per day with the current line. He emphasized that the large (48 inch) line was not designed to handle 500,000 barrels per day.

Co-Chair Stoltze queried the cost of delivering each barrel of oil at a rate of 1 million barrels per day compared to 500,000 barrels per day.

Mr. Barrett stated that the cost of delivering was higher as there was a minimum level of infrastructure needed.

Representative Costello asked about Alyeska's relationship working with the state and federal governments in a crisis situation. She noted the state's dependence on air cargo for fuel and other commodities. She asked whether Alyeska would work with the state to address a crisis in which no aviation fuel was available.

Mr. Barrett responded that the company was in very close contact with the state and federal governments and that they regularly exercised response scenarios that involved the pipeline. He added that Alyeska was not directly involved in how the state would manage the described scenario. He explained that a couple of weeks prior, there had been unusually bad weather conditions on the North Slope; the company had helped by providing power and clearing an airport. The company had extensive emergency response plans for oil spills; the plans were tested on a regular basis.

Vice-chair Fairclough asked about the North Pole refinery and the temperature changes. She wondered whether there was a contractual relationship between Alyeska and the refinery.

Mr. Barrett replied in the affirmative; there were connection requirements and standards regarding the type of crude that could be delivered. He added that the standards were in effect everywhere there was a connection.

Vice-chair Fairclough discussed a temperature increase that was expected to take place at a certain point in the line. She wondered whether there was an agreement in contract.

Mr. Barrett responded that there would be discussions; the temperature of the oil both in and out of the line was important and was reflected in the agreement. He added that Alyeska worked closely with the refinery during the recent incident.

Vice-chair Fairclough asked whether there would be response time required in contract if the refinery were in trouble and was forced to close.

Mr. Barrett repeated that relationships were close and communications were good. He noted that in the recent event, he had spoken with the governor; one of the issues raised was the two-week window for fuel.

9:10:48 AM

Mr. Barrett emphasized how difficult the situation was to manage because of extensive distances and high costs. He explained that the cost was enormous, and those costs may not be sustainable in some communities.

Vice-chair Fairclough discussed lost production. She asked about the number of barrels that were left the line.

Mr. Barrett responded 317 barrels.

Vice-chair Fairclough wondered whether any wells were shut in or shut down because of the incident.

Mr. Barrett replied that a lot of the wells were shut in and he did not know whether they were all brought back on line.

Vice-chair Fairclough referred to how the federal government through the Environmental Protection Agency (EPA) had wanted to shut down the pipeline. She queried EPA's role in the crisis and who had been there to champion Alaska's efforts.

Mr. Barrett noted that there had been a lot of help through the congressional delegation and the administration in Washington, D.C. He pointed out that Commissioners Sullivan and Hartig had worked with the EPA to keep it from getting "too crazy." He believed there had been a question about jurisdiction in the case. His goal was to get the pipeline running, so he decided not to argue about it in order to reach his objective.

Mr. Barrett illustrated the situation by sharing a story about a meeting with the incident management team in Fairbanks. He and Commissioner Sullivan had received a very solid brief in Fairbanks regarding all aspects of the incident before the restart. At the end of the meeting, an EPA representative noted that they were really gambling. Mr. Barrett had responded that he did not gamble; he emphasized the risk of the consequences to Alaska if the

line was not rapidly and safely up and running. The EPA representative had "backpedaled" on the issue.

Mr. Barrett stated that he was acutely sensitive about protecting Alaska's environment. He felt there was a lack of understanding of the importance of getting the line up safely, using the interim restart. He questioned the sensitivity of the EPA.

[9:16:50 AM](#)

Mr. Barrett added that to be fair, he had expected a worse response from the EPA. He questioned the need of the representative to be in the state. He thought they were overreaching.

Mr. Barrett reported that he had had reports from Alyeska employees working at Pump Station 1 that the regulators were getting in their way. There were safety concerns with someone looking over the shoulders of workers who were trying to manage a well at 20 degrees below zero. He felt the regulators were making the employees anxious.

Vice-chair Fairclough believed Alaska had done a tremendous job protecting the environment. She referred to meetings in Washington, D.C., with the U.S. Department of Interior. She maintained that Alaska was unique and felt the process of trying to education EPA and the Department of the Interior was a long one. She noted frustrations at people coming in from outside the state when professionals were trying to balance a national security need for energy and Alaska's security needs. She appreciated the strong response by Commissioner Sullivan.

[9:20:39 AM](#)

Mr. Barrett addressed the cumulative effect of all the federal rules, including the permitting process, which could take five to ten years to get oil on line. He asserted that Alaska was different, and had its own rules about managing a restart in the Interior. He referenced a contingency plan called "Cold Restart" that was never exercised during the incident; it involved moving equipment in place up and down the line, including moving 300-ton cranes in the dark on icy roads. He pointed out that Alyeska was being told under EPA rules to bring the equipment back, even though it was not going to be used

except in an extreme response scenario; the equipment could not be left on site without permits, as it would become a "permanent installation." The company was told they would have to get a permit to leave the equipment in place. The cost of making equipment changes to get a permit for a contingency they hoped to never use would be very high. He had asked the EPA whether they could get a waiver; the answer was that no waivers were allowed. He asserted that the person had never been to the places in Alaska and experienced the extreme conditions.

Mr. Barrett did not think the rules made operational sense. The rules were designed for other places, perhaps in response to someone cheating on the rules; he questioned why everyone should be punished.

[9:25:11 AM](#)

Mr. Barrett asserted that Alaska was an Arctic state with particular consequences.

Vice-chair Fairclough noted that only 20 percent of Americans surveyed knew the U.S. had an Arctic coastline, but 80 percent of Alaskans knew.

Vice-chair Fairclough turned to the issue of maintenance on the line. She asked the reason for not replacing the pipe with a smaller pipe from Valdez backwards if that was where there were more corrosion issues.

Mr. Barrett replied that the decision would rest with the owners. He offered that once any segment of the line was downsized to 24 inches, the line would no longer be capable of handling a lot of oil if a big oil field were opened or another way were found to transport heavy oil out of Prudhoe Bay. He opined that he would not design the system the same way again; perhaps the line would not go to Valdez. He thought the consequences for the future of making decisions such as those related to downsizing the line would be enormous. He believed limiting the size of the pipe would limit options. He believed moving oil through a large line was the safest way to move oil.

[9:28:48 AM](#)

Representative Neuman wanted to focus on the risk of consequences to the state and the cost of delivery per

barrel. He referred to the presentation chart. Oil came into the pipe at 180 degrees but dropped significantly because of the low volume in the pipe. There was a need for the temperature to be increased at the North Pole refinery in order to keep the 800-mile long pipe above 38 degrees (48 degrees south of Fairbanks). He understood that when oil was above \$70 per barrel, the cost of operating Flint Hills Refinery went up. He believed the consequences to the state of losing North Pole refinery could be huge, and could mean losing fuel services to Ted Stevens International Airport (\$1 billion per year). On the other hand, the cost in tariffs of keeping the oil warm enough was also enormous. He requested comment on the importance of the heating facility.

Mr. Barrett agreed that without the refinery, there would have to be another solution to maintain the appropriate temperature. He believed there would be enormous challenges to heat the line, whether through crude oil heaters, insulation, or additional recirculation at other pump stations.

Mr. McDevitt agreed that North Pole refinery added about 15 million BTUs per hour; if the refinery were not functioning, temperatures would drop in the southern section.

[9:32:45 AM](#)

Representative Neuman pointed out that the direct costs of tariffs for keeping oil at the required temperature were high.

Mr. Barrett agreed that the per-barrel cost of doing business was increasing as production decreased.

Representative Neuman highly recommended the Alyeska TAPS low-flow oil plan summary, which he thought was informative regarding the process, cost, and risk-management potentials of adding the heat at the pump stations.

Representative Neuman questioned the ability of continued operation, given the information. He pointed out that when the line was full, it moved a lot slower and cooled down.

Representative Guttenberg commended efforts to meet a high standard through listening to employees and coming up with

operation and safety excellence. He pointed out that in the final analysis, however, Alyeska was not the one with the money and that the owners (Exxon, BP, ConocoPhillips, and others) had different agendas. Part of the discussion was whether the owners considered Alyeska a transport mode for their product, or a profit center. He questioned the level of funding needed to maintain and operate the pipeline.

Mr. Barrett replied that Alyeska was considering reshuffling priorities to address issues raised during the January event. He had not seen leveling on funding to run the pipeline safely; the thought the challenge from the owners was related to the cost of running such large infrastructure with a steadily declining flow. At some point, major investments would be required. He expected reluctance by the oil companies to making investments to keep the line viable for another 30 to 40 years.

[9:37:49 AM](#)

Mr. Barrett added that one of the issues being considered related to physical limits. For example, additional work would be needed in the upcoming work season at Pump Station 1, based on the January event. He pointed to limits to what could be done because of the footprint size of the station and the fact that the line would be operating for most of the time. He emphasized the difficulty of doing work when oil was still moving through the line. He reminded the committee that the seasonal work window was very short in the Arctic.

Mr. Barrett stated confidence about getting the money needed to keep the line maintained and operated safely. He reported that he was getting positive signals. He opined that there was a limit to how much and how fast something could be done, given the footprint size and seasonal work windows. He did not think that spending another \$20 million to \$50 million would necessarily solve the problem. He mentioned that the 300 people working on site in January was close to the limit of how many people could be there safely.

Representative Guttenberg recalled experience in the field related to keeping the "men in the white hardhats as far away as possible" so that the people working could do their jobs.

Mr. Barrett agreed.

Representative Doogan reminded the committee that the task before the committee was to evaluate whether the governor's proposal to put money into oil companies would result in more oil in the pipeline. He did not think the amount of oil in the pipeline could be brought up to 1.5 million barrels per day, or nearly doubled. He queried the effect of incremental increases in the pipeline's operation.

Mr. Barrett responded that anything that stemmed the decline of oil in the pipe was positive, but he questioned whether an amount that was not enough would be sufficient to reverse a 6 percent decline. He pointed out that Alyeska was a common-carrier pipeline, regulated by the Federal Energy Regulatory Commission (FERC), and required by law to take oil from any source, whether the pipeline owners or independent producers, as long as connection requirements were met. He was concerned about reversing the slope of the decline enough.

[9:43:00 AM](#)

Representative Gara commented that communications from the Finance Committees to federal agencies sometimes helped. He asked that Alyeska give pertinent information to the committee so that letters could be written to the agencies. In addition, he noted that there were connections with the congressional delegation that could be used.

Representative Gara believed that when Alyeska retrofitted the pipeline to carry smaller volumes of oil, there had been a goal of being able to operate the pipeline down to 250,000 barrels per day. He asked whether that was true.

Mr. Barrett responded that he was not aware of all the planning assumptions from the past period. He warned that repetition of an event like the one in January would become increasingly more difficult manage. He did not believe there was a magic number (of minimum barrels per day), only that the risk became higher and response more costly as the throughput decreased.

[9:46:22 AM](#)

Mr. Barrett concluded that more oil was needed in the pipeline. He urged the committee to recognize the

consequences and importance of getting the throughput back up. He stated that TAPS needed political help from sources in Washington, D.C., as well as Alaska.

Mr. Barrett relayed a story illustrating the consequences of inaction. He offered a mental model that he had used and applied in the Coast Guard: a ship in distress going down in the Bering Sea. The desired response was to move all possible assets aggressively and as quickly as possible, because the consequences might be worse in the future if not addressed while there was a window of opportunity. He argued that if it turned out that too much was done too soon, the assets could be easily called back.

Mr. Barrett reiterated the details of how assets were moved in the January event; he had been called Saturday morning initially, and by early Sunday it had become clear that the risks of waiting until the bypass was installed was very high, with enormous potential consequences. Options were narrowed and a specific set of actions were taken, but initially, all potentially useful assets had been moved immediately.

Mr. Barrett emphasized that the consequences of inaction were not good. He suggested policy that would push a lot of resource at the current problem and see if the result was positive. He repeated concerns and underlined the commitment of Alyeska to operate according to high standards.

[9:51:57 AM](#)

Co-Chair Stoltze reviewed expectations regarding upcoming meetings.

Representative Gara noted that he wanted Commissioner Bryan Butcher to come before the committee to answer questions that had been asked. He queried the bill and amendment process in committee.

Co-Chair Stoltze stated that the bill would be passed when it was ready.

Representative Doogan pointed out there was always a possibility that the committee would not report a bill out.

Co-Chair Stoltze agreed that it would take six votes to move the legislation out of committee.

9:55:56 AM

#

ADJOURNMENT

The meeting was adjourned at 9:56 AM.