

ALASKA STATE LEGISLATURE
SENATE RESOURCES COMMITTEE

February 14, 2001
3:35 p.m.

MEMBERS PRESENT

Senator John Torgerson, Chair
Senator Drue Pearce, Vice Chair
Senator Pete Kelly
Senator Robin Taylor
Senator Kim Elton
Senator Georgianna Lincoln

MEMBERS ABSENT

Senator Rick Halford

OTHER MEMBERS PRESENT

Senator Bettye Davis

COMMITTEE CALENDAR

Gas Briefing: Alyeska Pipeline Co.
Mr. David Wight, President and CEO
Mr. Dan Hisey, Chief Operating Officer

ACTION NARRATIVE

TAPE 01-12, SIDE A
Number 001

CHAIRMAN JOHN TORGERSON called the Senate Resources Committee meeting to order at 3:35 p.m.

MR. DAVID WIGHT, President Alyeska Pipeline Co, said he wanted to put "renewal" in a different context than what they usually think about. "Right now we are in a right-of-way renewal process." There are four areas that have to do with people, business systems, the physical assets, and renewal of the right-of-way granting of lease terms.

MR. WIGHT said they have looked closely at their staff and a lot of them had been around for a significant period of time. It's important that they consider future retirements and how they are

going to replace the individuals. They also have some serious commitments around Sections 28 and 29. Their organization has committed to study each and every job and have a full understanding of the skills and competencies necessary for each job and have those kinds of definitions for the jobs they want to add to the organization. As they go forward, they want to have training programs, hiring programs, and development programs that will match up the skills they will need in the future with what it will take to run the pipeline.

MR. WIGHT said they had made substantial progress under Section 29 in the last year going from less than 4 percent to 14.5 percent on Alaska Native hires with a goal this year of reaching 16 percent. They have substantial commitments around other programs to develop individuals as well as recruit individuals into the company in those areas.

Number 460

He said that the right-of-way renewal is a very lengthy and complex process. There is renewal in three areas: private lands (80 miles or 10 percent) and the remaining 90 percent is almost equally divided by state and federal. They are trying to move all three categories in a parallel process starting about a year and a half ago. They are in the process of filing for right-of-way renewal approval in the late first or early second quarter and think it is a two and a half to three year process. An EIS is required and they take a minimum of 24 - 27 months.

They believe they can demonstrate economic viability of the project, which Mr. Dan Hisey would explain soon. They also have to demonstrate compliance with the grant and lease terms, both state and federal.

MR. WIGHT said the pipeline is 800 miles long and its primary purpose is to transport oil from Prudhoe Bay to Valdez. There is essentially no storage on the North Slope or in the pipeline, except for operational purposes. Therefore, the pipeline must be operated at a very high efficiency rate to allow the production on the North Slope to continue. During 2000, it operated at 99.7 percent reliability. "The pipeline has successfully carried more than 13 million barrels of crude oil since it started and currently is running around one million barrels per day... Projections from producers indicate that new fields should keep it at this level with a slight increase over the next three to five years. It represents nearly 20 percent of the domestic production and there are six owners."

MR. WIGHT said that there really are six pipelines where people own a share in the pipeline and they actually commercially offer that service for transportation of oil.

North Slope oil is a significant contributor to the economic well being of Alaska. They have oversight by 21 local, state, and federal regulatory agencies. They have Prince William Sound Regional Advisory Council and over 2,000 employees and contractors. Currently, Alyeska has 900 employees and day-to-day they have 1,700 - 1,800 contractors working for them except in the summer construction time when it would be more.

Management has a real commitment to have an open work environment so that any issues around the integrity of the pipeline and employment can be discussed and resolved. Part of this is an employee concerns program, which allows an employee to discuss pipeline integrity, harassment, intimidation, retaliation, or discrimination (HIRD).

MR. WIGHT said there had been substantial improvement in the atmosphere within Alyeska over the last four to five years and their last survey indicated that 100 percent of the employees would report any integrity issue. "Unfortunately, less than that indicate a willingness to talk about personal employment issues, so they continue to need an employee concerns program." He hopes that it is a bridge to the future when they have an open environment where people can talk about issues that need to be resolved.

Number 900

Within Section 29 they have a Building Foundations of Excellence Program (BFEP), which has 50 people in it. Seventy-seven percent of those individuals are Alaska Native hires. Recently, they converted about a dozen of those individuals into full time employment. "The desire would be to give people opportunities to look at Alyeska, experience Alyeska and find competent employees to fill our future needs."

MR. WIGHT said they have a constant 25 percent hire of women and have increased the minority population, which includes Alaskan Natives to almost 25 percent. Within that 25 percent, Alaska Natives have gone from five to almost 15 percent. They have a commitment to be at 20 percent by 2004, but hope to be there before that.

Number 1100

MR. DAN HISEY, Chief Operating Officer, said that they start all

meetings with a conversation about safety to keep people focused on their most important value and priority of no one getting hurt. He said there was a significant improvement in the incident rate between 1992 and 1995, but it plateaued in the years after that. They need to significantly advance their safety performance their goal is to halve the rates.

MR. HISEY said that the TAPS is one of the largest systems and the largest privately funded project ever built in the world. It's 800 miles long and 4 feet in diameter and is about 400 miles above ground and about 400 miles below ground, crosses three major mountain ranges, 34 rivers and streams and over 800 minor rivers. During the construction years, they had a total construction work force of over 70,000 people. The cost to build it was over \$8 billion.

The TAPS has 11 pump stations that were built during construction. Currently, they are operating seven of them; four were shut down in 1996 and 1997 when they dropped below throughputs of 1.4 million barrels a day. A pump station is designed to boost the pressure of the oil to move it down the line and over the mountain ranges from Prudhoe to Valdez and is manned by 10 - 25 full-time people around the clock, 365 days per year. Each pump station similarly configured has three 18,000-horsepower jet engines that operate the pumps. Those can be run in a multitude of configurations to accommodate the throughput (now, 1.0 million barrels per day).

MR. HISEY explained that Alyeska's major responsibility is to simply operate and maintain the asset. Of their \$500 million budget, they spend approximately \$200 - \$250 per year on maintenance. Their 2001 maintenance budget baseline is \$100 million and they have another \$100-plus million in investment projects of a one-time nature.

Properly maintained, the pipeline can be operated indefinitely. They have programs and routines in place to inspect, monitor and test, do preventative maintenance, and do repairs and maintenance as necessary to keep it operational.

MR. HISEY said the pipeline has 177 48-inch mainline valves. In 1997 they began a project to physically test the capacity of all the valves in case they needed to block the flow. They replaced three of those valves for \$5 million - \$6 million a piece. That routine maintenance is part of their ongoing program.

Alyeska's pigging program is the most aggressive and sophisticated pipeline inspection pigging program of any pipeline in the world. They actually developed the technology that is now used around the

world for "smart pigs" which are computerized. They use two kinds of pigs to inspect for corrosion. One is an ultrasonic device developed by NKK in Japan for Alyeska and the other one is a magnetic flux leakage pig. Both are capable of detecting even minor corrosion long before it would pose any threat to the integrity of the line. Alyeska has never experience a main line corrosion leak in its entire operation.

MR. HISEY explained that Alyeska uses other types of inspection pigs to monitor for curvature of a line should they get settlement or displacement in the buried sections. They also have a pig that can electronically measure for any deformation, dents or bends the line might experience. All the pigs are run on a routine program, which is the most rigorous and most frequent pigging program of any pipeline in the world. They run cleaning pigs on an almost weekly basis and those remove wax and sediments and any deposition in order to maintain flow efficiency.

Their inspection program costs \$2 million per year. A large amount of the money goes to inspect for corrosion. "Alyeska has an extensive overall corrosion inspection program. Their main defenses are sophisticated coatings and an electro-chemical process that's used to protect steel in corrosive environments. They currently spend approximately \$20 - \$40 million per year on their corrosion programs.

The purpose of the Valdez Terminal is to measure, store, and load oil onto tankers. The marine terminal covers almost 1,000 acres of property with 18 crude oil storage tanks of .5 million barrels capacity each for a total of 9 million barrels. There are four tanker-loading berths, two of which are equipped with tanker vapor controls. The marine terminal contains the automated operation control center so they can operate the entire pipeline from Valdez. Another primary function of the marine terminal is to remove the ballast water from the tankers as they arrive and treat it for hydrocarbons and impurities. They use the most stringent ballast water treatment permit in the world for the performance criteria.

The marine terminal operates its own electrical power generation and is capable of producing 37.5 megawatts, enough power for a city of 25,000 people. It employs about 500 people with over 1,000 going through the gate during the peak construction summer season.

The Tanker Vapor Control System was installed in 1997 and this captures the hydrocarbon vapors that are emitted as tankers are loaded. Last year they loaded 438 tankers and 403 of those were loaded utilizing vapor controls. They have four berths and two of those are equipped with vapor controls. Since 1997 they estimate

they have recovered and captured over 90,000 tons of hydrocarbon emissions. They use the vapors to generate power in a power plant and also use them to provide blanket gas to the crude oil storage tanks to keep an inert atmosphere.

He said their goal with the vapor control berths is to maintain the liabilities in the 100 percent range and they have a 10-year turn-around cycle for major rebuilds to the berths. Berth work is running \$20 - \$30 million per year - basically rebuilding all the piping systems, rebuilding the vapor recovery arms, replacing controls valves, and replacing ballast water piping, as well as some significant electrical and hydraulic work.

MR. HISEY explained how the tanker arms worked and why they have to maintain electrical isolation to avoid getting a current between the tanker and the berth. That is done two ways - either by a ground having a continuous electrical current or by isolation.

He said that an error was made recently during a maintenance operation whereby they bypass the isolation flange with a grounding strap and created a spark. They are not satisfied with any kind of ignition source around the crude oil. After extensive investigation, they uncovered the cause and made corrective actions. Another incident happened in October when the wrong size valve (too small) was installed and when the system started up, there was severe cavitation, which caused significant vibration. They shut the berth down and replaced the valves and figured out how they made the mistake.

The Fire Suppression System is in the crude oil storage tanks, which are 500,000 barrels each. Because of the snow loads in Valdez, they have a fixed roof so there is a vapor space in the tank. Not only do they have vapor controls to eliminate the potential for a hazardous atmosphere, they have a redundant system should a fire break out in one of the tanks. They have a subsurface fire foam injection system called spider piping which, in the event of a fire, would inject 5,000 gallons per minute of fire foam that would float to the surface and extinguish the fire. Fortunately, they never had to use those.

They discovered late in 1999 that the drop out of sediments from the crude oil streams had accumulated above the level of the spider pipings and they were able to inspect and identify the accumulations in all the tanks through some operational modifications and installation of equipment that will agitate the crude oil and move the sediments bringing the system back into operating condition. Another system tested the functionality annually.

In Valdez, they are proud of their Ship Escort Response Vessel System (SERVS). Alyeska operates the largest oil spill response organization in the world and has the largest conglomeration of spill prevention and response equipment anywhere. The process they use is to escort all laden tankers from the terminal 70 miles into the Gulf of Alaska with 2 SERVS vessels. The vessels can assist the tanker in case of an emergency; they are able to redirect the tanker and bring it under control and steer it. They also operate initial response equipment. However, prevention is the key and most of their focus is on eliminating the potential for a spill to ever occur. The SERVS operation in Valdez employs about 150 people. Last year they did 34 major oil spill drills and training exercises along with another 60 exercises on the pipeline, itself.

He said that SERVS has five new tugs: two enhanced tractor tugs and three prevention response tugs. All of them are 10,000 horsepower, world-class ships. They believe this fleet provides them the safest transit and response capability of any oil transportation system in the world. They have invested \$75 million to bring the equipment up to that level of technology.

Their long-term strategy involves using one contractor to provide this service, which is Crowley Maritime, and they have been able to reduce costs by using state-of-the art equipment and multipurpose vessels which are capable of docking, escorting, and responding as the need might be.

In 1997, their annual operating costs were \$498 million and the capital expenditures were \$61 million. They have spent significantly more last year and more this year.

MR. HISEY said their priority is to operate in a safe and environmentally sound manner and they are very successful at maintaining a high operations reliability. They are involved with strategic reconfiguration, which is an effort to look at the ultimate configuration of the pipeline, recognizing it's 25 years old. They are looking at replacing the entire control system with new state-of-the-art equipment and what configuration of pump stations and pumps is most efficient to operate at 1 million barrels per day (mbpd) as opposed to the peak of 2 mbpd. They are looking at integrating all their control and business systems and positioning themselves for another 30 years of operating in an efficient manner. They are also planning on removing one of the shutdown pump stations (number 2), which was shutdown in 1996. That will be a model on how to remove the assets on TAPS.

They also have an initiative to substantially improve and change

the way they do business through streamlining and improving the management systems.

Number 2100

MR. WIGHT said they feel they can continue to improve their business systems, which will change the role of the regulator and enhance their ability to see how Alyeska goes about their business. This is a very critical step.

In summary, he said he has never seen this level of care and involvement around the safety and integrity of the pipeline and concern about protection of the environment that goes on on a day-to-day basis.

MR. WIGHT related that he looked at some statistics once and was horrified to see that hundreds of spills had occurred on the Alyeska Pipeline. The operation he is familiar with has very few spills, if any. "Most people in the world don't measure spills like Alyeska does. The fact is that Alyeska had essentially no spills by most peoples' standards. They measure spills in terms of teaspoons, cups, and things of this nature and they report all of those."

SENATOR TAYLOR asked if they send the mixed up sludge from the fire system to a California refinery.

MR. WIGHT answered that they discovered in 1996 when the temperature of the Inlet stream dropped below 77 degrees, they had an exponential increase in wax precipitation fall out. So 99 percent of the solids that were moved were actually paraffins, which are a saleable product.

SENATOR TAYLOR said he didn't realize we already had 146 miles of 10-inch pipeline built. He asked what the ownership relationships were of the Gupco joint venture with the government of Egypt. He asked what Egypt was getting from their oil.

MR. WIGHT explained that Gupco was a joint venture operation - 50 percent AMOCO and 50 percent Egyptian government. "We had 4,130 employees, 70 of whom were expatriates who worked for AMOCO. The remainder was employees of the Egyptian General Petroleum Company. It's what you and I would call a production sharing agreement. Actually, AMOCO ran the operation, made the capital investment, and we recovered the capital investment through cost of oil margin associated with that. At the time I was there, we were producing about 400..."

TAPE 11, SIDE B

MR. WIGHT continued, "The initial stand for Gulf was Suez Petroleum Company. It was all located in the Gulf of Suez close to where it meets the Red Sea and it was all off-shore production on 18 different fields."

SENATOR PEARCE asked what was his estimated cost for the reauthorization.

MR. WIGHT answered:

We think that the process alone, in terms of the environmental impact statement (EIS), work, the people and the period of time that transcends about four and a half years is in the range of \$30 - \$35 million. That would not include any type of compliance issues that might come out of that. Although we feel, and have gotten some pretty strong advice, both from the regulators and independent valuers that we are in compliance, we do think there will be some work requested of us that we'll have to do to assure that compliance will remain in the future. That's the work effort around satisfying the environmental side and the compliance review, but it wouldn't include any work that might be necessitated by the outcomes of those reviews.

SENATOR PEARCE asked why they have to have an EIS and is the question continued impacts since the pipeline is already there.

MR. WIGHT answered that to his knowledge, "This is the first time an existing facility that is asking to continue to operate is required to do an EIS. That was a determination at the federal administrative level."

Alyeska and the owners talked about it a lot and felt that, while they would prefer not to do it, if they don't do it and get three years down the road having completed the requirements of grant and lease and are ready to get renewed and have a lawsuit around environmental issues, they might be three years behind in terms of having the answers to those. He said they had already done an environmental report, themselves, to prepare for an EIS and can satisfy the environmental requirements. He added that it is about an \$8 million process and a minimum of 24 - 27 months.

SENATOR PEARCE asked if the study was looking at cumulative impacts or what would happen if there weren't a reauthorization.

MR. WIGHT replied that it would be a full-blown EIS looking at all the aspects of the impact on the environment throughout the length

of the pipeline and the Valdez Terminal. They are currently in the process of negotiating the full details as if they were building a new facility.

Number 2190

SENATOR LINCOLN said on page 5, under work force diversity, that women had gone up one percent in the work force in the last four years and the other groups had gone up 10 percent. "There is a steady incline, but for women it took a dip."

She asked him to comment on that and to give the percentages of employees in numbers. She asked if he had similar numbers for contracting they do with Alaskan businesses versus non-Alaska businesses or contractors. She also wanted to know the number of employees that are Alaska hire versus non-Alaska hire.

MR. WIGHT answered that they have worked very hard to maintain their female population while at the same time strongly increasing the Alaska Native hires. They have not given the same level of emphasis to the other minorities and women. As part of the process of going into the future, they are going to redouble their focus in that area.

He couldn't answer the question of overall state demographics and how to compare them. "Obviously, the female population number would not be close demographically, so there's a substantial opportunity for improvement there."

Their goal, MR. WIGHT said, is to go from 26.5 percent to 31 percent of women in 2001. He would get the specific employee numbers for Senator Lincoln, but he did not have them with him. He noted that they also track statistics by positions, because it's important for them to know that they are making promotional and managerial opportunities available to them.

MR. WIGHT said, "Alaska hires versus non-Alaska hires - All of Alyeska's employees, save one, myself, are direct hires and therefore, they are Alaskans."

In 1997, they decided Alyeska should be more of an Alaskan based business and have substantially reduced secondis out of the owners. They have direct hires and try and recruit first from Alaska. Occasionally, they have to go outside to get technology and skills they want. The people move here and become Alaskans. He did not have statistics with him on Alaskan businesses and would get those for them. Alyeska focuses substantially around Alaskan businesses and Alaskan Native Corporations and their subsidiaries.

SENATOR LINCOLN asked for clarification of their goals on slide five.

MR. WIGHT responded that 2001 goals are 31 percent women, 20 percent minorities. "We are way above our commitment on minorities... Our goal is to actually move up another two percent on minorities to about 26.5 percent."

Number 1900

CHAIRMAN TORGERSON asked how many years would the new permit get an extension for.

MR. WIGHT answered they would like to have a 30-year extension on the right-of-way, which would be consistent with the original grants and leases that were obtained. Currently, federal law provides for administrative approval if requirements are satisfied. State law provides for a 10-year extension at this point.

CHAIRMAN TORGERSON asked if any of that took legislative or congressional approval or was it all regulatory.

MR. WIGHT answered the extension is administrative both state and federal; if you go beyond 10-years at the state level, it would take legislative action.

CHAIRMAN TORGERSON asked if they were working with villages that are close to their existing gas line.

MR. WIGHT said he is not familiar with any requests for gas supply along it.

MR. HISEY added that he is not aware of any requests from them to connect to the gas line.

CHAIRMAN TORGERSON said, "There's one coming."

MR. WIGHT mentioned that he is having discussions with the University Arctic Research Facility on that subject. They are one to two miles away from the gas pipeline.

SENATOR ELTON asked what kind of complications might there be with the right-of-way renewals for separate entities in a shared corridor.

MR. WIGHT replied that issue is not generally in his purview. A gas pipeline that is properly designed could be a good neighbor. As decisions are made both commercially and legislatively, he thought Alyeska would be in discussions involving business opportunities.

SENATOR ELTON said he was interested in business opportunities and it seemed to him, if Alyeska has to go through a full-blown EIS, one of the considerations they would have to give some thought to

is what happens if they do have a shared corridor.

MR. WIGHT replied that the scope would not include that. The EIS would be just for the pipeline. A series of studies will have to be done. One would have to be about the interactions of the two. Since their's is the existing pipeline and its around renewal, they have to look at the impacts from their pipeline and not the other. He reiterated that having an EIS will give some assurance that things are being done properly.

SENATOR ELTON asked what Alyeska is doing with ballast water treatment and exotic species and things like that.

MR. HISEY answered that some work was being done by Prince William Sound RCAC on non-indigenous species and some studies are being done by the shipping companies. Alyeska is not involved in that aspect of it right now. It is a marine shipping issue. With the advent of the tankers coming on line in the next 1 - 10 years, a lot of the tankers will be using segregated ballast (ballast that has not been commingled with crude oil).

SENATOR PEARCE asked if the new tankers were being built to fit their berths or would they have to reconfigure.

MR. HISEY answered that they do not have any plans for any major reworking of the berths.

SENATOR LINCOLN said that another company had been approached by Stevens Village about a feeder line going off the gas line to them. She asked how feasible that would be if the village is 30 miles away from the pipeline.

MR. WIGHT answered that each one would require an individual review of things like cost, access, terrain, volume and volume capacity of their pipeline and viability of taking gas off that in excess of any they need. They would need to consider whether there would be the ability to increase the capacity of that line. He realized in talks with the University that they would have to find out the legal and regulatory requirements. "The answer is that it's unknown for each one. The smaller the volume, the greater the distance, and what is in between are very significant factors in the cost to get there." The University is close and there are roads, so it shouldn't be a major issue, but 30 miles depending on what you have to go through and the volume could be very significant.

SENATOR LINCOLN asked if they had thought of supplying villages that are off that corridor, like Yukon Delta and Kuskokwim.

MR. WIGHT replied that he had only that one conversation and didn't know of any other significant conversations that had taken place within Alyeska.

SENATOR TAYLOR asked how long it takes for a person to be hired from "outside" to become an Alaskan resident.

MR. WIGHT answered that he didn't know and that he is a cheechako. Their goal is to be Alaskan based; they advertise and try to hire here. Sometimes they have to go outside to get the expertise they are looking for. The jobs are here in Alaska and they get paid on an Alaskan base. It's not a temporary assignment for them.

SENATOR TAYLOR asked if they would use the recent national census statistics when they come out to look further at the ethnic quotas.

MR. WIGHT said he feels that people are one of his prime responsibilities and he should know the demographics of the place he lives and works in. He felt uncomfortable that he doesn't have that information right now, but he would get it.

SENATOR PEARCE noted that the original Pipeline Act required a certain percentage of Native hire.

SENATOR TAYLOR said he knew that, but he wanted to know if the percentage would be adjusted according to reality or politics.

CHAIRMAN TORGERSON noted that he wanted to see the demographics, too, since it had changed a lot over 10-years. He thanked everyone for joining them and adjourned the meeting at 4:50 p.m.