ALASKA STATE LEGISLATURE
HOUSE SPECIAL COMMITTEE ON OIL AND GAS
January 24, 2006
5:05 p.m.

MEMBERS PRESENT

Representative Vic Kohring, Chair
Representative Norman Rokeberg
Representative Ralph Samuels
Representative Nancy Dahlstrom
Representative Berta Gardner
Representative David Guttenberg

MEMBERS ABSENT

Representative Lesil McGuire

OTHER MEMBERS PRESENT

Representative Kurt Olson
Representative Jay Ramras

COMMITTEE CALENDAR

OVERVIEW/UPDATE FROM ALASKA OIL & GAS CONSERVATION COMMISSION

- HEARD

HOUSE BILL NO. 300
"An Act relating to the qualifications of the member of the Alaska Oil and Gas Conservation Commission who need not be certified, trained, or experienced in either the field of petroleum engineering or the field of petroleum geology."

- MOVED CSHB 300(O&G) OUT OF COMMITTEE

PREVIOUS COMMITTEE ACTION

BILL: HB 300
SHORT TITLE: OIL & GAS CONSERVATION COMMISSION MEMBER
SPONSOR(s): REPRESENTATIVE(s) KOHRING

05/04/05	(H)	READ THE FIRST TIME - REFERRALS
05/04/05	(H)	O&G, RES
01/24/06	(H)	O&G AT 5:00 PM CAPITOL 124

WITNESS REGISTER

CATHY P. FOERSTER, Commissioner
Alaska Oil & Gas Conservation Commission (AOGCC)
Department of Administration (DOA)
Anchorage, Alaska
POSITION STATEMENT: Presented an overview/update from the Alaska Oil & Gas Conservation Commission.

DANIEL T. SEAMOUNT, JR., Commissioner
Alaska Oil & Gas Conservation Commission (AOGCC)
Department of Administration (DOA)
Anchorage, Alaska
POSITION STATEMENT: Testified that it's good insurance for all members of the commission to have a fundamental understanding of the industry he/she regulates.

ACTION NARRATIVE

CHAIR VIC KOHRING called the House Special Committee on Oil and Gas meeting to order at 5:05:22 PM. Representatives Kohring, Samuels, Gardner, and Guttenberg were present at the call to order. Representatives Rokeberg and Dahlstrom arrived as the meeting was in progress. Also in attendance were Representatives Olson and Ramras.

OVERVIEW/UPDATE FROM ALASKA OIL & GAS CONSERVATION COMMISSION

CHAIR KOHRING announced that the first order of business would be an overview/update from the Alaska Oil & Gas Conservation Commission.

5:06:24 PM

CATHY P. FOERSTER, Commissioner, Alaska Oil & Gas Conservation Commission (AOGCC), Department of Administration (DOA), informed the committee that the AOGCC is a quasi-judicial [state] regulatory agency. She said that the AOGCC is responsible for "everything from the wellhead on down into the reservoir" in oil and gas operations on all of Alaska's private and public lands and waters, except Denali National Park and Preserve. The AOGCC regulates drilling and production for oil and gas. In addition, the AOGCC protects correlative rights, which means that if there are two landowners and one feels that the other landowner is infringing upon his/her rights to get his/her oil and gas out of the ground, the AOGCC steps in to ensure that the correlative rights of both landowners are being protected. The AOGCC also

prevents waste of hydrocarbons and promotes greater ultimate recovery of hydrocarbons. The AOGCC also protects Alaska's fresh groundwaters. She stated that the AOGCC has been given the opportunity to manage the Class II Underground Injection Control (UIC) program of the Environmental Protection Agency (EPA), which includes any injection of fluids in an oil and gas operation. Examples of injected fluids include: enhanced oil recovery fluids, saltwater, and waste disposal.

5:08:40 PM

MS. FOERSTER explained that within the AOGCC's mission, the AOGCC has "a few key" goals and strategies. The first key goal of the AOGCC is to prevent the physical waste of the hydrocarbon resource. The AOGCC evaluates every drilling proposal that is submitted. She stated that every time a company wants to drill a well in Alaska, it has to get permission from the AOGCC to do so. The AOGCC ensures that during drilling operations, a company is using sound engineering practices that don't harm the groundwaters and don't cause waste of oil and gas, either during drilling or production, or in the event of abandonment of a well that's not successful. Once there are ongoing operations, the AOGCC has five full-time inspectors that travel throughout the state inspecting operations. She informed the committee that the AOGCC also evaluates any new reservoir development to ensure that the operator's proposed plans to extract the oil and gas from the ground are consistent with good oil field practices to maximize ultimate recovery.

5:10:27 PM

MS. FOERSTER specified that another goal of the AOGCC is to promote greater ultimate recovery. The AOGCC watches what's happening in all of the existing fields by reviewing data that comes in from the wells in the fields in order to track how the operator is doing versus how the operator said he/she is doing. This helps ensure that the operator really is doing what will get the most gas out of the ground. The AOGCC is able to review information that quickly tells the AOGCC whether good or bad things are happening. For example, an oil reservoir needs to maintain fairly constant pressure in order to avoid anything that would decrease ultimate recovery. She explained that if the pressure starts to drop, the AOGCC has to either inform the operator to "shut in," add the water injection well, or offer a mitigating step that will achieve the correct. When the AOGCC reviews approved development plans and drilling proposals, it does so with an eye for greater ultimate recovery, she noted.

5:11:41 PM

MS. FOERSTER identified independently assessing oil and gas development as another key goal of the AOGCC. She stated that the AOGCC reviews every step of an operator's proposal and ties it back to the statutes in "Title 31" to ensure that everything is in accordance with those laws.

5:12:15 PM

REPRESENTATIVE GUTTENBERG referring to AOGCC's jurisdiction from the wellhead down asked, "Where do you define the end of the wellhead?"

5:12:48 PM

MS. FOERSTER answered that in a drilling operation, AOGCC has to ensure that the blowout preventer equipment is in good working order. If there are surface safety valve systems, AOGCC ensures that they are working properly and connecting with sub-surface safety valve systems. At or near the surface, the AOGCC works with: the blowout prevention equipment, diverters, and safety valve systems.

5:13:16 PM

REPRESENTATIVE GUTTENBERG clarified that the AOGCC works with everything at a "gathering facility," but probably not after it goes on a "gathering line" out to a "production center."

5:13:26 PM

MS. FOERSTER confirmed that Representative Guttenberg's clarification was correct and added, "We're pretty much on the drill site."

5:13:31 PM

REPRESENTATIVE GUTTENBERG referring to inspection of the wellheads, inquired about industry standards and whether there's an international industry standard, and how the standards have evolved to take into account Arctic drilling and conditions.

5:13:58 PM

MS. FOERSTER informed the committee that the AOGCC applies American Petroleum Institute (API) standards for their operations. Also, she said that where local industry has asked that AOGCC "up the ante" because of special considerations, AOGCC has done that. However, typically AOGCC "sticks to" API standards.

5:14:24 PM

REPRESENTATIVE GUTTENBERG inquired as to how often the vapor recovery and pressures numbers are checked.

5:14:43 PM

MS. FOERSTER explained that operators have different reporting requirements depending upon the pool rules that are in place. She said that typically the AOGCC receives the data every six months, year, or two years, depending on the field and the criticalness of getting the data. However, the operators receive the data on a "much more" frequent basis and AOGCC's experience has been that it's in the best interest of the operators to maximize the recovery.

5:15:34 PM

MS. FOERSTER identified another key goal of the AOGCC as protecting Alaska's underground sources of drinking water. The AOGCC reviews every application for any sort of injection to ensure that there's no way for the injected fluid to migrate to a locale that not supposed to. She explained that the review includes the geology/connectivity of the different reservoirs in which it's acceptable to inject things into, and the possibility that those reservoirs might be "in communication" with places that it shouldn't. In addition, the review includes the mechanical integrity of the wellbores to ensure that there aren't any leaks or cement breakdowns that would allow fluid to enter a path in and around the wellbore and move to a place where it's not supposed to go.

5:16:27 PM

MS. FOERSTER moved on to the AOGCC's goal of protecting correlative rights. She explained that the AOGCC provides every landowner with the opportunity to get his/her fair share of the resources. If a landowner feels like that's not happening for him/her because of something that the AOGCC is able to help control, the AOGCC will step in and adjudicate the dispute(s).

For example, she explained that a typical oil or gas well has a certain drainage area that it covers, and if a landowner's well is too close to another lease line, he/she would be draining oil or gas that belongs to another landowner.

5:17:38 PM

REPRESENTATIVE GUTTENBERG inquired as to how often the situation that Ms. Foerster mentioned occurs.

5:18:00 PM

MS. FOERSTER said that the situation has "not been an issue" since she's worked for the AOGCC, although she said that she has heard of a "few" cases in the past in which an individual or a company has asked the AOGCC to provide relief. She added that the AOGCC determines the field rules based on science.

5:18:34 PM

MS. FOERSTER highlighted that there's a lot of confusion regarding the roles of the AOGCC, the Department of Natural Resources (DNR), the Department of Environmental Conservation (DEC), and the AOGCC's relationship with the oil companies. She explained that the oil companies own a significant portion of the resource by virtue of having leased the right to develop and produce it from the landowner. The landowner is the primary owner and typically receives a smaller percentage [of the] royalty. The two regulatory bodies, who don't have any ownership in the resource, but have a regulatory responsibility in the production of the resource are the DEC and the AOGCC. She further explained that the DEC's role is primarily on the surface, with an environmental protection responsibility, while the AOGCC's role is more resource conservation with a groundwater protection responsibility.

5:20:39 PM

MS. FOERSTER informed the committee that the AOGCC's headquarters are in Anchorage. She said that it also has a field office in Deadhorse, with some living arrangements for the inspectors there. The AOGCC tries to keep two inspectors on the [North Slope] at all times, although sometimes there is only one. The remainder of the AOGCC inspector staff covers the Matanuska-Susitna Valley and Cook Inlet. She clarified that the AOGCC has five inspectors who rotate between Cook Inlet, the Matanuska-Susitna Valley, and the North Slope.

5:21:40 PM

MS. FOERSTER explained that the AOGCC divides its technical staff into an "east team" and a "west team," on both the North Slope and in Cook Inlet. The "east team" consists of the North Slope, Prudhoe Bay, and all of the satellites of Prudhoe Bay, while the "west team" includes Kuparuk and its satellites as well as the National Petroleum Reserve-Alaska (NPR-A).

5:22:04 PM

REPRESENTATIVE ROKEBERG inquired as to whether NPR-A is under the AOGCC's jurisdiction or whether the AOGCC has an agreement with the federal government to work in the NPR-A.

MS. FOERSTER reiterated that the AOGCC regulates [oil and gas development] on all land in Alaska whether it's private, public, or federal. She added, "When someone drills in N-PRA, they'll come to us for a permit as well." In further response to Representative Rokeberg, she noted that the AOGCC has "east" and "west" teams in Cook Inlet.

5:23:16 PM

MS. FOERSTER discussed the AOGCC's highlights in 2005, which include approval of 88 orders and other approvals, approval of 216 drilling wells, and approval of 388 sundry applications. She explained that a sundry application is necessary when an operator wants to "get onto a well" and do something other than drill, such as something that will change the mechanical condition of the well or the reservoir, or change the wells producing or injecting status. Another key accomplishment that she mentioned is that the AOGCC had five enforcement actions in 2005, which occur when an operator has violated AOGCC statues and/or regulations.

MS. FOERSTER, moving on to highlights of rulings and findings, stated that eight AOGCC orders either established or modified "pool rules." Seven orders either approved or extended pilot projects, which are shorter in duration than a full field development. Typically, pilot projects try out something new to determine whether it's going to be good or bad for the reservoir. She explained that the short duration is important so that the AOGCC is able to "pull the plug" if something harmful is occurring. On the other hand, if something good for the reservoir is occurring, the AOGCC is able to extend the

project. If the pilot project does something "really good" for the reservoir, the AOGCC will make it part of the "pool rules." She noted that the AOGCC had eight orders approving or modifying enhanced oil recovery and two orders approving underground storage of hydrocarbons, which is something new in Alaska. She informed the committee that two operators in the Cook Inlet requested the approval of the AOGCC to use existing gas reservoirs in Cook Inlet to store gas that's produced during the low-demand months so that during the peak-demand months in the winter they can continue to produce all of their wells and draw from the storage reservoirs to meet the peak demand. She opined that it's important that the AOGCC regulate underground storage of hydrocarbons because there are some risks associated with it.

5:27:24 PM

MS. FOERSTER, continuing her discussion of 2005 AOGCC highlights of rulings and findings, stated that nine orders were approved, modified, or denied for disposal injection operations. She explained that the AOGCC denies something when it believes that it will create waste and/or be harmful to the fresh waters. Also, there were four orders to streamline operations and reduce the paperwork required for routine wellwork/day-to-day operations in the field.

5:27:59 PM

MS. FOERSTER, referring to a graph of Alaska oil and gas activity over the last 50 years, explained that the numbers of permits, active wells, and active reservoirs have all been increasing. In regard to approved permits, she said that although the number has dropped "a little bit," it's not because people are doing less, rather the well operations are getting more complex and more time consuming. Therefore, she said that the activity level has remained "very, very high." She opined that it has gotten more challenging to keep up with as the complexity of the work has increased.

5:29:35 PM

REPRESENTATIVE GUTTENBERG inquired as to whether the decreased number of approved permits has anything to do with the amount of decreased time for construction in the winter.

5:30:00 PM

MS. FOERSTER opined that the impact of decreased time for construction in the winter is "fairly small," and that the biggest impact is that the work is taking longer on the routine/multi-lateral drilling. In regard to cumulative annual well activity, she stated that drilling permits have "dropped a little bit," but the "biggest drop" has be in the sundry permits.

5:30:47 PM

MS. FOERSTER, in regard to the more complex wellwork, stated that the AOGCC's permit workload has increased due to having to maintain a higher level of technical knowledge. Examples of advances in wellwork are enhanced oil recovery techniques and approval of pentilateral wells, in which branches are drilled off of the main bore as well as branches drilled off of the branches.

5:32:26 PM

MS. FOERSTER, in regard to exploratory well permits, explained that there are "a few" operators that have continued to explore. However, in 2002, BP stopped exploring. In the first five years, there were two to five companies that were drilling, and in 2005, there were 12 companies that were drilling. She stated that as more operators begin drilling, AOGCC's work "gets a little harder."

5:35:12 PM

CHAIR KOHRING inquired as to whether AOGCC staffing is adequate for the workload.

5:35:17 PM

MS. FOERSTER replied that the AOGCC currently has "a couple of" vacancies it is actively working to fill. In addition, she said that the AOGCC has asked for "a few" new positions in this year's budget. She added, "We'd rather operate lean and mean than overstaffed."

5:35:59 PM

CHAIR KOHRING said that it's his hope that in the future, Alaska will see a greatly expanded oil and gas industry, as it is Alaska's "ace in the hole" economically, and that he'd liked to see more activity. He asked, "If that were to occur, do you

foresee a substantial need for increased staff and perhaps, even an increase in the number of commissioners?"

5:36:10 PM

MS. FOERSTER answered, "We don't see it now," and reiterated that the AOGCC has asked for some small increases. In addition, she said that the AOGCC has asked for funding of contractors to do "very specialized things" that the AOGCC hopes will diminish.

5:36:36 PM

CHAIR KOHRING asked if there would ever be a scenario in which the AOGCC would need more than three commissioners to handle the work that is required.

MS. FOERSTER said that it's always a possibility.

5:37:20 PM

REPRESENTATIVE SAMUELS asked for clarification of the vertical well and extended reach well slide in the handout.

MS. FOERSTER explained that in the past, when only vertical wells were drilled, "clever" operators would tilt their drilling rigs. Therefore, agencies such as the AOGCC adopted rules that required distance from lease lines. She added that the distance is not the surface distance from the lease line, rather the reservoir penetration distance from the lease line, in order to protect the drainage radius of an operator.

5:38:57 PM

REPRESENTATIVE ROKEBERG inquired as to how the number of "bore holes" inside a multi-lateral wellbore are counted and whether each bore requires an individual permit.

MS. FOERSTER informed the committee that every bore requires its own permit and the AOGCC maintains records on every bore that's drilled from the time an operator applies for a permit, until an operator "abandons" a well.

5:39:50 PM

REPRESENTATIVE ROKEBERG asked if Ms. Foerster if she was able to recall the maximum number of [bores] in one multi-lateral well.

MS. FOERSTER answered that the AOGCC is starting to see pentilateral wells, in which there are five bores, all drawing from the same reservoir into the same main bore.

5:40:09 PM

REPRESENTATIVE ROKEBERG inquired as to whether the AOGCC expects more than five branches in the future.

MS. FOERSTER explained that the operators are getting "very, very" good at drilling the multi-lateral wells and are finding that it's cheaper than drilling a "brand new" well, and makes less of a "footprint" than drilling a "brand new" well. Therefore, to the degree that the operators can continue to expand their technology, she answered, "Why not, let them put as many extensions as they can."

5:40:51 PM

REPRESENTATIVE ROKEBERG asked if [adding branches] increases the numbers of permits.

MS. FOERSTER reiterated that every time an operator drills a new penetration, a new permit to drill is required. In further response to Representative Rokeberg, she explained that the time frame of the process to add additional bores varies from well to well. Although an operator doesn't have to start from the surface and drill a new well, there are certain operations that are added to the process that would not be necessary if the operator was drilling a new well. Therefore, she stated that adding a bore can be more complex. In addition, as a result of the other wellbores that are open, there's an increased risk of making a mistake. Ms. Foerster explained that an operator has to isolate the existing bores in a manner that isn't damaging or permanent, and such that they are accessible after the additional bore is completed. Then an operator has to cut a window in the pipe to create an opening for the additional bore. The next step is a deliberate process in which measuring and adjustments occur while drilling. Therefore, to ensure that mistakes aren't made, an operator ends up taking more time to add an additional bore than he/she would to drill a new well.

5:43:37 PM

CHAIR KOHRING, in regard to the "actual" production of oil, asked how the production levels are monitored, and whether monitoring is a function of the AOGCC. More specifically, Chair

Kohring asked if the state is able to verify what the industry is reporting, to ensure that the state is getting its "fair share" of the royalties from the production of oil.

5:44:07 PM

MS. FOERSTER explained that production volumes are reported to both the AOGCC and the DNR. The DNR receives the production volumes for revenue purposes and the AOGCC receives them for the reservoir management and injection purposes. The production of oil and gas, and the injection of every fluid, goes into the calculation of the AOGCC's regulatory cost charge. The industry pays the cost of the AOGCC and the cost is allocated to the different members of the industry based on the volumes of fluid that are produced and injected.

5:45:18 PM

MS. FOERSTER discussed key challenges and projects of the AOGCC. One key challenge is determining the impacts of major gas sales upon ultimate hydrocarbon recovery from Prudhoe Bay and Point Thomson reservoirs. Before one produces gas in an oil reservoir, one [should] get all of the oil out first because producing the gas before all of the oil has been produced will result in a loss of some of the oil. She explained that there are variables that impact the loss: the timing with which it's done, how much of the oil is left, the volumes with which the gas is withdrawn, and the mitigating steps that the operators take to offset the oil losses. The AOGCC is involved in a study that is reviewing the reservoir model and its use in planning and predicting for Prudhoe Bay, such that a matrix of the allowable gas offtake will depend on the timing and mitigating steps.

MS. FOERSTER stated that the AOGCC is currently conversing with the Point Thomson operator to reach a similar agreement and do a similar study for Point Thomson. However, the issues will be different because there are questions as to whether Point Thomson should be produced as an oil reservoir or as a gas reservoir. She explained that there's a significant amount of gas condensate associated with the Point Thomson reservoir and producing it as a gas reservoir has the potential of creating loss of some of the condensate resources. The AOGCC needs to do a similar study to ensure that whatever development plan is pursued for Point Thomson is one that maximizes total hydrocarbon recovery. Another key challenge is to facilitate

expanded statewide exploration and development. She stated that the AOGCC doesn't want to be a "permitting bottleneck."

5:48:38 PM

MS. FOERSTER stated that another key challenge of the AOGCC is to respond to the needs for revising AOGCC's regulations as the industry moves into new areas, such as nonconventional resource recovery, shallow gas, and gas storage. The AOGCC needs to be responsive to the changes and ensure that it is appropriately regulating new things as they arise. She said that the AOGCC is working to provide information via the Internet to make it possible for anyone interested in investing in Alaska to access the data to make good investment decisions.

5:49:45 PM

MS. FOERSTER stated that another key challenge is to continue to provide appropriate regulation over the underground injection activities in Class II and to take primacy for Class I injection, if allowed by the EPA.

5:50:06 PM

REPRESENTATIVE GARDNER, in regard to making Alaska oil and gas information available on the Internet, asked where the AOGCC draws the line between confidential information and information that the it is able to make available to everyone.

MS. FOERSTER answered, "Our line is very clear and solid." Information with confidential status either has confidentiality for a set time period or it has confidentiality forever. In further response to Representative Gardner, she informed the committee that the AOGCC's statutes determine how information is categorized. She stated that another key challenge is responding to the changing conditions in a mature oil field, where the infrastructure is aging and the operations are changing. The AOGCC ensures that operations are safe and that resources are being maximized.

5:52:32 PM

MS. FOERSTER explained that the AOGCC is responsible for monitoring gas disposition in Alaska, and therefore every thousand cubic feet (mcf) of gas that is produced must be accounted for in order to prevent waste. She mentioned that the AOGCC's [gas disposition monitoring] process needs revision.

AOGCC's final key challenge is to continue to evaluate ways to increase efficiency, reduce costs, encourage new operators to enter the state, and encourage operators in Alaska to remain.

HB 300-OIL & GAS CONSERVATION COMMISSION MEMBER

5:54:43 PM

CHAIR KOHRING announced that the next order of business would be HOUSE BILL NO. 300, "An Act relating to the qualifications of the member of the Alaska Oil and Gas Conservation Commission who need not be certified, trained, or experienced in either the field of petroleum engineering or the field of petroleum geology."

5:55:07 PM

CHAIR KOHRING, sponsor of HB 300, explained that HB 300 "adds some substance" to the requirements for the public seat on the three-member AOGCC. As a result of the oil and gas industry's technical nature and complexity, Chair Kohring opined that it makes sense to require that an appointed individual has a background in the oil and gas industry. The law [referring to the public seat of the AOGCC] currently reads "Need not be certified, trained, or experienced in either the field of petroleum engineering or petroleum technology." However, the proposed committee substitute (CS) says that the public member, "Shall have training or experience that gives the person a fundamental understanding of the oil and gas industry in the state."

5:57:12 PM

REPRESENTATIVE SAMUELS moved to adopt CSHB 300, Version 24-LS0997\F, Kane, 1/23/06, as the working document. There being no objection, Version F was before the committee.

5:57:42 PM

DANIEL T. SEAMOUNT, JR., Commissioner, Alaska Oil & Gas Conservation Commission (AOGCC), Department of Administration (DOA), stated that the AOGCC can support HB 300. He noted that although the AOGCC doesn't feel like there's been any demonstrative problems with lack of experience by the public member in the past, oil and gas operations are becoming much more complex and it's good insurance for all members of the

commission to have a fundamental understanding of the industry he/she regulates.

5:59:29 PM

CHAIR KOHRING noted that [HB 300] is "definitely not" an indictment of past members who have served on the AOGCC.

5:59:51 PM

REPRESENTATIVE SAMUELS asked if "fundamental understanding" is a term of art or if common sense should apply.

MR. SEAMOUNT explained that the term "fundamental understanding" allows for some flexibility. The AOGCC doesn't currently have a definition for it.

MS. FOERSTER further explained that while the AOGCC felt that it was appropriate to "tighten up" the requirement "a little bit," the AOGCC didn't want to restrict good applicants who might be a little unorthodox or might not meet a tight requirement. She said that it would be a loss to the state if such people were kept from applying.

6:02:10 PM

REPRESENTATIVE ROKEBERG opined that an appointment to the AOGCC public seat should not be a political reward but rather should be based on competence.

6:03:11 PM

CHAIR KOHRING, upon determining that no one else wished to testify on HB 300, announced the closure of public testimony.

6:03:17 PM

REPRESENTATIVE SAMUELS moved to report CSHB 300, Version 24-LS0997\F, Kane, 1/23/06, out of committee with individual recommendations and the accompanying zero fiscal note. There being no objection, CSHB 300(O&G) was reported out of the House Special Committee on Oil and Gas.

OVERVIEW/UPDATE FROM ALASKA OIL & GAS CONSERVATION COMMISSION

6:03:39 PM

CHAIR KOHRING announced that the final order of business would be the continuation and conclusion of the overview/update from the AOGCC.

6:04:01 PM

REPRESENTATIVE ROKEBERG, referring to prior testimony regarding the "Prudhoe Bay takeoff rating," asked if the study Ms. Foerster spoke of is the same study on which the committee previously heard testimony.

MS. FOERSTER explained that when the AOGCC went to the legislature during the previous session and requested a significant amount of money to embark on a study, the AOGCC feared that it would end up being a study that it would have to do alone and for which it would have to build its own model without the cooperation of the industry. She said that [such a study] would have cost a lot of money, taken a lot of time, and there wouldn't have been a guarantee that the AOGCC would achieve a result with as high quality as the existing operator's model would have given the AOGCC. Fortunately, the AOGCC has been able to work with the operator and the other owners to reach an agreement in which the AOGCC can utilize the [operator's] expertise, through both the AOGCC's existing reservoir engineering staff and a consultant that it has hired. The consultant has 25 years of reservoir modeling experience, much of which has been in Prudhoe Bay, she noted.

6:07:19 PM

REPRESENTATIVE ROKEBERG asked if the AOGCC has an estimate of how much time it will take to complete the study.

MS. FOERSTER related that the AOGCC is confident that it will be able to [complete the study] in six months because the AOGCC will have full access every working day to the model. If the AOGCC reaches the end and is in need of an extension, the agreement allows a reasonable extension. However, she added that the AOGCC doesn't think that it will need an extension.

6:07:58 PM

REPRESENTATIVE ROKEBERG, in regard to Point Thomson, inquired as to the status of AOGCC's agreement with ExxonMobil as well as the timeframe.

MS. FOERSTER explained that the AOGCC is still in the "early stages" of dealing with ExxonMobil. She opined that she's hopeful that the AOGCC will have an agreement by this summer [of 2006] to begin a similar six-month process [with ExxonMobil].

6:09:04 PM

REPRESENTATIVE ROKEBERG inquired as to whether ExxonMobil's modeling is as good, since it isn't in production.

MS. FOERSTER informed the committee that in the 1970s in Prudhoe Bay, the AOGCC determined an allowable gas offtake, which was 2.7 billion [standard cubic feet per day]. She said that it was based on a "very good" model, although it had no production data with which to do a history match. Now the AOGCC has a lot more data with which it is moving forward on the new "Prudhoe studies." Although ExxonMobil's ability to analyze the data has improved, its model isn't nearly as good as it will be after there's been production.

6:10:25 PM

REPRESENTATIVE ROKEBERG asked how the AOGCC will be able to complete the study in six months if it doesn't have good data.

MS. FOERSTER explained that the less data that the AOGCC has to evaluate, the quicker it can complete the evaluation. However, the AOGCC recognizes that the evaluation will be less reliable.

6:11:34 PM

MS. FOERSTER stated that an AOGCC permit is required for the drilling of a well, alteration in configuration of a well, or injection of anything into the ground. In regard to the AOGCC permitting process, she explained that the operator has to apply to the commission with what he/she feels would be the necessary supporting documentation. For example, for a permit to drill, the operator informs the AOGCC of the depth of drilling, provides a map of the well's projectory, informs the AOGCC of the type of cement and amount to be used, and the type of pipe to be used. The AOGCC uses the aforementioned information to determine whether the well will not violate the correlative rights of other operators, will be undamaging to the groundwaters, and will be a good oil field operation that will be a lasting safe well allowing maximum recovery. She stated that for each type of permit, the AOGCC looks at very specific information to ensure that it is able to "check off all of those

boxes." Based on the AOGCC's technical staff's analysis of the above information, a recommendation is made to the commissioners to either approve or deny the permit.

6:14:16 PM

MS. FOERSTER noted that AOGCC's drilling permit approval time has remained at about seven days for the "last couple of years."

CHAIR KOHRING added that [the permit approval time has remained at about seven days] despite the fact that the process has become more complex.

MS. FOERSTER further added that the requirements that the AOGCC has placed on the operators have gotten more stringent.

6:15:32 PM

MS. FOERSTER stated that the sundry application decisions take about four days, and are typically less complex because the operators are doing something to an existing well.

6:16:07 PM

MS. FOERSTER, in regard to wellwork in the sundries, explained that it could be either abandoning a completion, adding or plugging perforations, or stimulating producing pools. She added that the AOGCC is seeing a lot of repairing wells, and that wasn't something it saw in the past. As the wells are aging, to maintain the mechanical integrity and keep the operation safe, there's been a lot of repairing. The AOGCC has seen several suspensions, but hasn't seen a lot of abandonments. Rather than abandoning a well, the operator is going back into the well and drilling multi-laterals. The operators use the existing wellbore to go some place new so that they don't add to the footprint, and so that they can get to "things" cheaper.

6:17:02 PM

MS. FOERSTER explained that when the AOGCC regulates underground injection, it can be enhanced recovery, which can be through water, miscible injection (MI), dry gas, and CO2 injection. She clarified that CO2 is a greenhouse gas and as hydrocarbon gases are produced, CO2 is taken off of it and something has to be done with it. For many reservoirs, CO2 is a good enhanced oil recovery tool. Therefore, operators are going to use the CO2 to produce more oil. She stated that the AOGCC is also increasing

its vigilance over gas storage and it's the responsibility of the AOGCC to monitor waste disposal.

MS. FOERSTER explained that as part of the AOGCC's permit approval process, the AOGCC approves the conservation orders that determine whether a well will be produced as an oil or a gas well. She added that there are restrictions on the amount of gas that can be produced out of an oil well, typically in a gas:oil ratio. For every barrel of oil produced out of a well, an operator can only produce a certain amount of gas. If the operator produces more than the allowed amount, [the gas production] will be restricted or the operator won't be allowed to produce the well at all without re-injecting the gas into the reservoir.

MS. FOERSTER added that the AOGCC also looks at allowable offtake rates by well or pool, in both oil and gas, because there are maximum efficient rates for improving ultimate recovery. In addition, the AOGCC has performance monitoring requirements. She also mentioned well spacing to protect correlative rights. Sometimes the AOGCC grants special spacing rules that are closer together and closer to the lease lines to acknowledge that a reservoir might not have as big of a drainage radius as the statewide rules would allow.

6:20:26 PM

MS. FOERSTER explained that the AOGCC has different reporting requirements based on the parameters of the reservoir. For example, if the AOGCC is concerned about water production, it will require water reporting on a more frequent basis. She summarized that each conservation order makes the rules as the specific reservoir requires. In regard to special development considerations, if there are spacing exceptions for valid reasons and offset operators don't object to them, then the AOGCC is able to grant them. She mentioned that Contingency Plan (C-Plan) exemptions are spill-response plan requirements.

CHAIR KOHRING noted that the committee is "very" familiar with C-plan exemptions.

6:21:46 PM

MS. FOERSTER described annular disposal. She said that in a remote operation, where there aren't disposal wells nearby, the AOGCC wants to encourage an operator to "go out and explore," and part of the encouragement is to minimize the costs of the

operator. It costs a lot to take all of the drilling waste in a remote location and move it to a disposal location. Therefore, in some circumstances, the AOGCC allows annular disposal into the exploratory well. She then described an information dissemination special development consideration.

6:24:09 PM

REPRESENTATIVE ROKEBERG, in regard to Point Thomson and the potential loss of condensates from the gas versus liquid study, asked if it is going to be separate from the takeoff, or is it integral to the AOGCC's whole study of the unit. Also, he asked if the AOGCC is privy to ExxonMonbil's $100 million study.

6:24:39 PM

MS. FOERSTER informed the committee that it is integral to the entire development. She said that from the AOGCC's perspective, the main concern is preventing waste and maximizing ultimate recovery. The number one objective in these studies is ensuring that both oil and gas recoveries are optimized so that the total hydrocarbon recovery is maximized. Non-confidential data has been shared with the AOGCC by ExxonMobil, she noted. However, due to the depth of analysis necessary, the AOGCC needs to look at data that ExxonMobil is not yet willing to make public. Therefore, the AOGCC has to reach an agreement with ExxonMobil that will allow the AOGCC to review ExxonMobil's confidential data. The AOGCC is trying to work toward a study similar to the one done with BP in Prudhoe Bay.

6:25:37 PM

REPRESENTATIVE ROKEBERG inquired as to whether the AOGCC is involved with the Division of Oil & Gas (DOG) in its approval for the annual plan of development.

MS. FOERSTER explained that the Department of Natural Resources' (DNR) process and the AOGCC's processes are separate. However, if the DNR has a hearing or presentation that involves something that the AOGCC is working on, then the AOGCC will also attend the hearing or presentation, and vice versa. The AOGCC and the DNR have to be careful that neither violates confidentiality agreements in which the other isn't involved. In addition, she added that the AOGCC and the DNR also have to be careful that they maintain independence from each other because they regulate "totally different things".

6:27:28 PM

ADJOURNMENT

There being no further business before the committee, the House Special Committee on Oil and Gas meeting was adjourned at 6:27 p.m.