

**ALASKA STATE LEGISLATURE**  
**SENATE COMMUNITY AND REGIONAL AFFAIRS STANDING COMMITTEE**

February 4, 2004

1:34 p.m.

**TAPE (S) 04-2 SIDE A**

**MEMBERS PRESENT**

Senator Bert Stedman, Chair  
Senator Thomas Wagoner, Vice Chair  
Senator Gary Stevens  
Senator Kim Elton

**MEMBERS ABSENT**

Senator Georgianna Lincoln

**COMMITTEE CALENDAR**

SENATE BILL NO. 250

"An Act establishing a moratorium on the issuance of state shallow natural gas leases in the vicinity of Kachemak Bay, and directing the commissioner of natural resources to reacquire shallow natural gas leases on the Kenai Peninsula within the moratorium area; and providing for an effective date."

HEARD AND HELD

**PREVIOUS ACTION**

BILL: SB 250

SHORT TITLE: NATURAL GAS LEASES ON THE KENAI PENINSULA

SENATOR(S): STEVENS G

01/12/04	(S)	PREFILE RELEASED 1/2/04
01/12/04	(S)	READ THE FIRST TIME - REFERRALS
01/12/04	(S)	CRA, RES, FIN
02/04/04	(S)	CRA AT 1:30 PM FAHRENKAMP 203

**WITNESS REGISTER**

Mark Myers, Director  
Division of Oil and Gas  
Department of Natural Resources  
400 Willoughby Ave.  
Juneau, AK 99801-1724

**POSITION STATEMENT:** Testified on SB 250

Pirtle Bates  
Department of Natural Resources  
400 Willoughby Ave.  
Juneau, AK 99801-1724  
**POSITION STATEMENT:** Testified on SB 250

**ACTION NARRATIVE**

**TAPE 04-2, SIDE A**

**CHAIR BERT STEDMAN** called the Senate Community and Regional Affairs Standing Committee meeting to order at 1:34 p.m. Present were Senators Elton, Gary Stevens, Wagoner and Chair Stedman.

**SB 250-NATURAL GAS LEASES ON THE KENAI PENINSULA**

CHAIR BERT STEDMAN announced SB 250 to be up for consideration. The bill establishes a moratorium on shallow natural gas leasing in the vicinity of Kachemak Bay and asks the state to reacquire leases within the moratorium area. The bill has revenue implications and is of concern to residents in the affected communities.

He advised he did not intend to move the bill that day. The sponsor would familiarize members with the issues and Director Mark Myers would speak to the fiscal impacts. He would not take public comment that day, but comments submitted by email or FAX were welcome and the affected communities and others were invited to listen via teleconference.

SENATOR GARY STEVENS, sponsor of SB 250, thanked the Chair and said he looks forward to hearing from the public as well. He restated the purpose of the legislation and further explained:

SB 250 reaffirms previous findings of the state that Kachemak Bay and Homer area are not really appropriate areas for oil development and gas development and there are two instances I present you. The first, in 1976, the state found it in the best interest of the state to reacquire the oil and gas leasehold interests in Kachemak Bay and the surrounding upland areas. The Legislature approved SB 720 that year for several reasons, but mainly because it found that the natural environment and intrinsic beauty of Kachemak Bay area supported a community of economic development path based on renewable resources like tourism and fishing.

The state reacquired these leases later in 1976 so that the local communities would not be encumbered with the conflict associated with oil and gas development in this unique environment. In 1999, the state again found it in the best interest of the state to exclude Homer and [Kachemak Bay] area from area-wide oil and gas lease programs. Today, Homer enjoys the benefits realized by [excluding] Kachemak Bay, Fox River Flats critical habitat area, the Kachemak Bay State Park, the Alaska Maritime Wildlife Refuge and our only national estuarine research reserve and has built a thriving economy based on tourism and fishing and small business.

One of the unintended consequences of this 1999 decision was to make the area available for this streamlined, less regulated shallow natural gas leasing program under HB 394 that was passed in 1996. Following the letter of the law in HB 394 but not really the precedent set in the past three years, DNR leased the subsurface rights of 22,000 acres in the Homer area last June. These leases included predominantly residential areas, schoolyards, municipal reservoir, natural environment that was excluded from leases in the past sales. This is a very serious concern. The benefits of exploiting this really very small gas reserve - 22,000 acres to a depth of 3,000 feet - would be much smaller than the economic and environmental cost to the community would be.

I've heard from dozens, if not hundreds, of residents of the Kachemak Bay area who are very concerned about this and are concerned about the fairness of this streamlined process that led to these leases being let. Many of these citizens feel they are being denied an opportunity to speak to the lease sales because of the fact that no notices or limited notices, and no notices in the Homer area newspapers, which have a very wide circulation and should have been included. These residents have also raised concern about the unintended statutory preemption of the department's ability to consider public comments, the potential for administrative override of local ordinances and also the lack of clear environmental regulations. A lot of questions remain about whether the amount of money

paid for these leases might be less than what it cost the state to administer.

There are also concerns about the patchwork quality of these leases, which include several surface-rights owners as well as areas that are in residential areas, schoolyards, a municipal reservoir and then the natural environment that was excluded from past leases.

In its resolution supporting this buyback, the City of Homer is concerned about the potential affects of shallow gas drilling on their water supply. They have a water supply that serves 450 homes and businesses inside and also outside the city as well as groundwater that is vitally important for private water wells. The City of Homer is also concerned - in its resolution - about the general health and general ecology of the local area economics. [Residents] are so dependent on the activities of commercial fishing as well as sport fishing, charter guided, [and] subsistence fishing. The city is also concerned about tourism and land values and roads. The City of Kachemak and also the Kenai Peninsula Borough supported buybacks through resolutions and this bill is supported overwhelmingly by a majority of Homer residents. I've had a chance to attend a couple of public hearings in Homer and 250 people or so were at those hearings and virtually to a person, they are overwhelmingly in support of this buyback.

You may remember that Governor Murkowski indicated at one time that he would at least consider lease buybacks as an alternative. Mr. Chair, I urge your support for this extremely important legislation to the people I represent, to continue the state's 30 year consensus of supporting renewable resources and the economic development path on the southern Kenai Peninsula and hope the committee will hold a further hearing on this bill to allow for public comment. I will end by saying we have not received a clear - well actually the fiscal note we received is indeterminate and I'm anxious to hear of any further developments in that area.

CHAIR STEDMAN stated he would request additional information regarding the fiscal note. He then advised that when dealing

with this type of complex issue he would appreciate having maps provided to help relay information to the public.

SENATOR GARY STEVENS agreed to provide maps.

CHAIR STEDMAN asked Mr. Myers to come forward and speak to the issue.

MARK MYERS, Director of the Division of Oil and Gas, DNR, reported he had geology, natural resource law and leasing program experts available online to answer questions.

He assured members that DNR appreciates the concerns expressed regarding the environment and the uniqueness of Kachemak Bay. That being said, he advised that the 1979 moratorium from offshore leasing was justified under AS 38.05.184 where "Kachemak Bay was declared one of the state's most important commercial fisheries; and that even minute quantities of oil may be harmful to larval forms of crabs and other marine life..." but there was no moratorium established for onshore leasing.

At the time that DNR switched to area-wide leasing a best interest finding (BIF) was called for and the commissioner made the decision to draw the line for the finding at Anchor Point. Because the document did not speak to the area to the south of the point, no determination was made on the value or lack of value of the state's best interest for that area. He emphasized that DNR has no documentation regarding the commissioner's reason for drawing the line at Anchor Point; it was just a decision he made.

As a point of clarification he explained that under conventional oil and gas leasing, the state leases all mineral rights, not just gas, which is why the Legislature was concerned about oil spills into the marine environment and why they made the determination that Kachemak Bay should be protected.

MR. MYERS acknowledged the leases could be viewed as an unintended consequence of the 1999 decision because over-the-counter, shallow gas lease sales are specifically allowed in areas excluded from area-wide leasing. Based on the nature of the shallow gas leasing program law that asks whether the gas would benefit the residents of the local area, the commissioner made the appropriate decision.

With regard to adequate noticing, he insisted the sale was properly noticed in the newspaper. The fact that it wasn't in

the Homer newspaper was an oversight and he apologized, but pointed out that notice was placed in the Peninsula Clarion in an effort to reach the area involved. He noted DNR was noticing for leases in the Mat-Su Valley at the same time so they did a single blanket announcement and unintentionally omitted publication from the Homer paper. He explained the shallow gas program doesn't allow a BIF or the typical public process that people are accustomed to in the area-wide leasing program or exploration licensing. DNR's position is that the leases were appropriately let, but they realize that there is strong local opposition to the shallow gas program.

MR. MYERS explained the procedure for evaluating the leases if the state were to conduct a buy-back. First, the cost value at \$500 per lease multiplied by eight leases for a total of \$4,000 is established. Next, DNR negotiates compensation for work done to the point of buy-back. Finally, if an agreement cannot be reached with the lessee, the use of eminent domain is authorized. If that mechanism is used, the state constitution requires just compensation to be rendered, which would include the cost of the lease, the cost of work performed, and the potential value of the undiscovered resource.

Valuing the undiscovered resource base depends on the quality of data available and the interpretation of that data. In this case, DNR would look at analogs onshore in Cook Inlet. The Homer area is on structural trend for conventional gas with some known gas fields and reservoirs. Using that model and hypothesizing that one-fifth of the state's 22,000 acres is productive and there is a 50 foot pay sand, DNR estimates that there is a conservative 20 bcf of recoverable gas and an optimistic 100 bcf. Assuming a conservative \$1 net per thousand cubic feet, the ground value would amount to roughly \$20 million. The applicants could claim significant resource value, he said. It follows that the fiscal note is indeterminate because it is dependent upon what is negotiated.

MR. MYERS speculated that many of the leases won't be explored and will probably be turned back to the state. They're 3 year leases and about 2 years are remaining. When reviewing the conventional 7 year leases, most see no exploration activity for one reason or another and for 3 year leases the process is even more difficult.

SENATOR KIM ELTON mused he was puzzled as to why the leases were let for \$500. The price for the lease isn't predicated on the value of the resource yet the repurchase figure is predicated on

the projected value of the resource. This, he asserted, is particularly perplexing when the fiscal gap is considered.

MR. MYERS acknowledged his point was good then noted that the intent of the non-competitive shallow gas leasing program was to provide rural energy in remote areas. In a competitive program, multiple companies may bid and when that occurs, the state receives the most optimistic view of the value of the lease, which is typically better than market value. The shallow gas program is different so the cost of acquiring the lease is not in proportion to the value of the lease in a competitive market.

Keep in mind, he said, the state would also receive royalties and severance taxes from the production. Using the estimated \$1 per 1000 cubic feet net for an optimistic 100 bcf reserve, a 12.5 percent royalty would result in receipts of \$12.5 million. However, if the gas was used for local sources and wasn't competing against other gas, just half that amount could be expected.

SENATOR ELTON asked if there had been any effort to work with the community and buy back just those leases that were of special concern.

MR. MYERS replied the points were good and the issue and concerns were similar to those expressed in the Mat-Su Valley where drilling activity has begun. He advised that Pat Galvin has been named state coordinator for coal bed methane and he is leading a series of workshops to get public input and involvement in the process of looking at the public notice procedures as well as the stipulations and mitigation measures. The initial stages of exploration and drilling spurred involvement in the Mat-Su Valley and residents weren't sure DNR had covered the full spectrum of regulatory issues with coal bed methane.

He informed the committee that the commissioner of DNR scheduled four major workshops and several additional public meetings in the Homer area to go through the process to assess how the stipulations and mitigation measures work. He warned that it's difficult to foresee what measures might be required until there is a proposed activity, but the details are attached to the lease and give the state great power and latitude.

For example, if coal bed methane is developed and water produced, they would expect to be required to reinject water. Surface entry might be limited in certain areas as well. In the

Homer area, where conventional gas is the primary target, directional drilling is the appropriate use of technology. So they're able to offset sensitive habitats and drill directionally under as they do further north on the Kenai Peninsula.

He repeated that no one has proposed a well yet and since the leases are short term it is likely that no drilling will occur. If it does, there will be full community involvement and stipulations and mitigation measures will be used. Finally, the governor did state that he would consider buy back as a last resort if it's shown that you can't drill with minimal risk to the environment.

SENATOR GARY STEVENS agreed with Senator Elton that the process for buy back doesn't immediately jump to the highest value because there is room for negotiation between the state and the leaseholders along the way.

He told Mr. Myers that the community was advised that this development would be shallow gas yet the testimony indicated that the leaseholders were looking at conventional gas. He asked how a shallow gas permit that is limited to 3,000 feet could become a much deeper, conventional gas development.

MR. MYERS conceded there is considerable confusion due to the nomenclature used on shallow gas, coal bed methane and conventional gas programs. He explained:

The shallow gas leases contemplated all gas at shallow depths so when I use the term conventional gas I mean gas that's present in a reservoir that's typically a sandstone at more conventional play. The gas is not found in the coal seam itself as it is in coal bed methane or in a fractured shale as it is in some other non-conventional gas sources. So conventional gas simply refers to the more traditional reservoirs where it's more like a tank. You have sand grains and in between those sand grains are spaces and there is gas in those sand grains. The gas was created in a different source and it migrated out of that source into a trapping mechanism of some sort. Those type gas fields typically recover the gas with very little produced water and they are generally produced at much higher production rates than do non-conventional gas methods such as coal bed methane. In coal bed methane, the gas is trapped in the coal seam. It's physically

within the coal and not within the cracks in the coal. When you pull water out of the cracks, it lowers the pressure in the coal and gas actually comes out of the matrix of the coal into these cracks and then gets produced along with the water. So, it's sort of like a bottle of soda; with an unlimited supply of CO<sub>2</sub> you shake it up and produce the gas and out comes the gas with the water and you separate those two.

With conventional gas, the gas is typically by itself in the reservoir, sometimes with a little bit of water underneath it, but normally just a pocket of gas in the sand grain. So you produce that, you just produce the gas. The advantage of conventional gas is the rates are much higher; it takes much fewer wells to drill it and generally it's more economic if it's present.

The conventional gas in this program has to be at shallow depths in order to qualify - at least part of the reservoir. One of the problems with the shallow gas program is it made sense from a point of trying to mitigate oil spill risk by limiting depth so you have less chance of encountering oil, but it doesn't make any sense from a production, conservation of resource, maximization of producing the gas [standpoint]. It also creates huge quarrelative rights problems between owners at different depths. The difficulty is it uses 3,000 feet above the surface, true vertical depth. If your surface is like Homer and you have bluffs and sand, where difference in depth might be 400 to 500 feet. [Indicated a rolling wave variation] Underneath, geologically you could have a flat line reservoir and you could be in and out of the coal seam based on the undulation of the hills [with areas] legal to produce [and] not legal to produce. The well doesn't care; you don't produce just around the well bore but in a radius of investigation of significant distance from the well bore. Coal bed methane typically [has] five wells per square mile [and] it would be less than that for conventional wells. So you have a well that is draining an area of say one-quarter to one-half mile radius around that area. Some of the gas they would legally have in a 3,000-foot limit; some of which would be 100 percent unleased state gas rights. On some of that gas sale it's 12.5 percent or 6.25 percent and some yield it's 100 percent. Huge

quarrelative rights huge disincentive for maximizing production of the reservoir and all these other issues that we have to deal with as an agency to protect the maximum recovery of resource and maximum by the state. It creates a huge problem.

So, two years ago the statutes was amended to say that if part of the field was above 3,000 feet, you could produce the deeper gas and that was aimed from a practical standpoint. The only logical way to see further development, so when that was passed, it does allow - if part of that field is above 3,000 feet - for you to follow that same field down to deeper depths. I would advocate that is the only responsible way to develop the gas resources; otherwise you're going to leave a lot of value in the ground. You won't maximize recovery. I think that is one of the unintended consequences of the shallow gas leasing program. It really didn't contemplate beyond leasing - to the next stage of what do you do. In coal bed methane, when you get below about 4000 to 6000 feet, the pressures of the earth on top collapse the fractures in the coal that are necessary to get the gas out of the coal. Realistically there is a limit of depth between 4000 and 6000 feet depending on geology in which coal bed methane simply will not work no matter what you do. Conventional gas, that can go as deep as 20,000 feet - so a big difference in how you would produce it - but still all that gas above 3000 or 4000 feet depending on definitions of what part of the field is still definitely shallow gas and allowable to be produced from the lease.

SENATOR GARY STEVENS remarked that the understanding that the leases are shallow gas and are limited to 3000 feet is incorrect. In fact the depths could be considerably deeper and there could be conventional gas development.

MR MYERS replied there is no more environmental impact from a deeper well and a lot of advantages because production is maximized with fewer well bores. "From a technical and environmental standpoint, I think the 3000 foot depth didn't make a whole lot of sense and I think that is why it was amended two years ago."

SENATOR GARY STEVENS noted that the Homer area was unintentionally excluded from the public notice process for the

lease sales while Talkeetna was properly noticed. Talkeetna expressed concern and they were removed from the lease sale and he questioned whether that might have happened in Homer as well had they responded similarly.

MR. MYERS pointed out there is little geologic potential in the Talkeetna area and DNR made the determination that leases wouldn't benefit the area residents. In contrast, there is a geologic trend in the Homer area and the area has a population of 15,000 and no source of natural gas. Although community input is taken into consideration, the standard isn't a best interest finding standard. It is a standard that is much more focused to the benefit of gas and, he maintained, the commissioner had little discretion but to grant those leases.

PIRTLE BATES, leasing program expert, DNR, testified via teleconference and explained the notices for Talkeetna, Mat-Su, and Homer were identical. "For the Talkeetna area, it was done in the statewide paper, which was the Daily News as well as the Frontiersman for the Mat-Su Talkeetna area. Whereas on the peninsula we did notice in the Peninsula Clarion." In addition, local community councils, municipalities, local boroughs as well as regional and village Native corporations were notified. He reported they received no response from the core Mat-Su area or the Kenai Peninsula other than from the borough and several state agencies whereas Talkeetna residents registered a significant number of comments after the original public notice. As a result of the concerns expressed, DNR attended local public meetings and responded to a number of comments from Talkeetna.

It is a misconception that the bill prohibits DNR from considering public comment, but the legislation creating the program does require the use of decision criteria that weights geologic evaluations. As a result of the work done by DNR resource evaluators, the director decided not to issue leases in the immediate Talkeetna area.

SENATOR WAGONER asked for a specific list of which publications were notified of the proposed lease sales.

MR. BATES agreed to provide a complete list to the committee.

CHAIR STEDMAN asked Mr. Myers if he had additional comments.

MR. MEYER stated DNR is sensitive to the need for balance between the environmental and resource needs, but they are concerned about the gas reserve base in Cook Inlet and they do

see geologic potential in the Kachemak Bay area. He concluded, "As we're learning in the Mat Valley, the public process is very important and we don't intend to short it to the extent we're allowed under the law."

CHAIR STEDMAN noted supporting resolutions from the City of Homer, Kenai and Kachemak were in member's packets.

SENATOR GARY STEVENS asked whether there were other leases south of Anchor Point and outside the scope of SB 250.

MR. MYERS replied DNR isn't aware of any other applications in the Homer area. Since it's an over-the-counter program applicants are free to apply any time, but there is currently a moratorium on leases until the coal bed methane process in the Mat-Su Valley is complete. He continued to report there aren't any conventional leases offshore, but there is a federal OCS [outer continental shelf] sale scheduled in lower Cook Inlet in May 2004.

CHAIR STEDMAN recapped several points:

- There is considerable public concern regarding this issue
- DNR is looking for ways to mitigate potential impacts
- The leases have approximately two years left
- Drilling has not begun

He held SB 250 in committee.

CHAIR STEDMAN announced the next meeting would be held on February 9, 2004 at which time the committee would take up SB 260. With nothing further to come before the committee, he adjourned the meeting at 2:21 pm.