

**ALASKA STATE LEGISLATURE
HOUSE RESOURCES STANDING COMMITTEE**

April 23, 2021

10:34 a.m.

MEMBERS PRESENT

Representative Josiah Patkotak, Chair
Representative Grier Hopkins, Vice Chair
Representative Zack Fields
Representative Calvin Schrage
Representative Sara Hannan
Representative George Rauscher
Representative Mike Cronk
Representative Ronald Gillham
Representative Tom McKay

MEMBERS ABSENT

All members present

COMMITTEE CALENDAR

HOUSE BILL NO. 98

"An Act relating to forest land use plans; relating to forest land use plan appeals; relating to negotiated timber sales; and providing for an effective date."

- HEARD & HELD

HOUSE BILL NO. 135

"An Act relating to geothermal resources; relating to the definition of 'geothermal resources'; and providing for an effective date."

- HEARD & HELD

PREVIOUS COMMITTEE ACTION

BILL: HB 98

SHORT TITLE: FOREST LAND USE PLANS; TIMBER SALES

SPONSOR(S): RULES BY REQUEST OF THE GOVERNOR

02/18/21	(H)	READ THE FIRST TIME - REFERRALS
02/18/21	(H)	RES, FIN
03/12/21	(H)	RES AT 1:00 PM BARNES 124
03/12/21	(H)	Heard & Held

03/12/21 (H) MINUTE (RES)
03/19/21 (H) RES AT 1:00 PM BARNES 124
03/19/21 (H) <Bill Hearing Canceled>
04/14/21 (H) RES AT 1:00 PM BARNES 124
04/14/21 (H) Heard & Held
04/14/21 (H) MINUTE (RES)
04/19/21 (H) RES AT 1:00 PM BARNES 124
04/19/21 (H) Heard & Held
04/19/21 (H) MINUTE (RES)
04/22/21 (H) RES WAIVED PUBLIC HEARING NOTICE, RULE
23 (A) UC
04/23/21 (H) RES AT 10:30 AM BARNES 124

BILL: HB 135

SHORT TITLE: GEOTHERMAL RESOURCES

SPONSOR(S): RULES BY REQUEST OF THE GOVERNOR

03/10/21 (H) READ THE FIRST TIME - REFERRALS
03/10/21 (H) RES, FIN
04/22/21 (H) RES WAIVED PUBLIC HEARING NOTICE, RULE
23 (A) UC
04/23/21 (H) RES AT 10:30 AM BARNES 124

WITNESS REGISTER

TIM DABNEY, Acting State Forester, Acting Director
Division of Forestry (DOF)
Department of Natural Resources (DNR)
Anchorage, Alaska

POSITION STATEMENT: Provided information and answered questions during the hearing on HB 98.

CHRISTOPHER ORMAN, Assistant Attorney General
Natural Resources Section
Civil Division (Juneau)
Department of Law (DOL)
Juneau, Alaska

POSITION STATEMENT: Provided information and answered questions during the hearing on HB 98.

CLAIR RADFORD, Legislative Counsel
Legislative Legal Services
Legislative Affairs Agency
Juneau, Alaska

POSITION STATEMENT: Provided information and answered questions during the hearing on HB 98.

STEVE MASTERMAN, Director
Division of Geological and Geophysical Surveys (DGGS)
Department of Natural Resources (DNR)
Fairbanks, Alaska

POSITION STATEMENT: Presented a PowerPoint during the hearing on HB 135.

CHARLES MCKEE
Anchorage, Alaska

POSITION STATEMENT: Provided comments not on topic with the published agenda during the hearing on HB 135.

HALEY PAINE, Deputy Director
Division of Oil and Gas (DOG)
Department of Natural Resources
Anchorage, Alaska

POSITION STATEMENT: Co-presented a PowerPoint during the hearing on HB 135.

ACTION NARRATIVE

[10:34:51 AM](#)

CHAIR JOSIAH PATKOTAK called the House Resources Standing Committee meeting to order at 10:34 a.m. Representatives McKay, Fields, Cronk, Hopkins, Schrage, Gillham, Hannan, Rauscher, and Patkotak were present at the call to order.

HB 98-FOREST LAND USE PLANS; TIMBER SALES

[10:35:46 AM](#)

CHAIR PATKOTAK announced that the first order of business would be HOUSE BILL NO. 98, "An Act relating to forest land use plans; relating to forest land use plan appeals; relating to negotiated timber sales; and providing for an effective date."

[10:36:35 AM](#)

REPRESENTATIVE HOPKINS, who had previously withdrawn Amendment 4 during the House Resources Standing Committee meeting on 4/19/21, said that he wasn't able to find a way to work the amendment through and restated that he withdrew Amendment 4.

[10:37:01 AM](#)

REPRESENTATIVE FIELDS, who had moved to adopt Amendment 6 during the House Resources Standing Committee meeting on 4/19/21, when it was subsequently set aside, moved again to adopt Amendment 6, labeled 32-GH1607\A.17, Radford, 4/27/21, which read as follows:

Page 7, lines 17 - 18:

Delete "[TO A LOCAL MANUFACTURER OF WOOD PRODUCTS OR A USER OF WOOD FIBER]"

Insert "to a local manufacturer of wood products or a user of wood fiber"

10:37:03 AM

CHAIR PATKOTAK restated his objection from 4/19/21 for purposes of discussion.

REPRESENTATIVE FIELDS explained that his amendments emerged from a desire to maximize local benefit; should natural resources related to fisheries or tourism, for example, be damaged through timber harvesting activities, support for local jobs and local manufacturers should be prioritized. He said Amendment 6 would limit the sale of timber to a local manufacturer, maximizing local economic benefits.

10:38:37 AM

TIM DABNEY, Acting State Forester, Acting Director, Division of Forestry (DOF), Department of Natural Resources (DNR), directed attention to a letter from the Alaska Forest Association (AFA) [included in the committee packet], which read as follows [original punctuation provided]:

In light of recent amendments that are under consideration to the Bill regarding limitations on exports and local hire requirements, AFA is concerned that the Bill will have negative unintended consequences on the timber industry and our member operators.

MR. DABNEY said that HB 98 designed to allow local industry to sell the timber harvested and to find a market for types of wood that can't be manufactured locally. While AS 38.05.118 currently gives DOF the authority to negotiate a timber sale, it doesn't clearly state that the local business may export the timber after the work has been done to build roads and transport the logs. He explained that local mills aren't equipped to process young growth, there is a lack of local demand for wood

products from small logs, and the only market for hemlock is in the Pacific Northwest.

[10:41:59 AM](#)

CHRISTOPHER ORMAN, Assistant Attorney General, Natural Resources Section, Civil Division (Juneau), Department of Law (DOL), explained that Amendment 6 would be returning to that which is in current statute in AS 38.05.118. The problem, he explained, is that the timber sale provisions regarding 500,000 board feet specified in current AS 38.05.115 would be moved to AS 38.05.118 under HB 98.

[10:44:53 AM](#)

CLAIR RADFORD, Legislative Counsel, Legislative Legal Services, Legislative Affairs Agency, said that Mr. Orman summarized the possible effects of Amendment 6 very well.

[10:45:16 AM](#)

REPRESENTATIVE HANNAN asked Mr. Dabney whether the sales of less than 500,000 board feet are the same as those of hemlock and other timber that can't be processed locally.

MR. DABNEY replied that both AS 38.05.115 and AS 38.05.118 can have an export component.

REPRESENTATIVE HANNAN spoke of the protectionist views concerning the benefits of local manufacturing and noted that simply selling timber to local manufacturers may not be in the best interest of the state. Of there not being a domestic market for a certain type of timber, she asked, "Is that reason enough to negotiate a sale?"

REPRESENTATIVE FIELDS responded that the lack of a domestic market is the reason for including an amendment to push local industry towards stability and job creation.

[10:49:05 AM](#)

REPRESENTATIVE MCKAY expressed that while he sees the benefits of driving local industries, he would prefer to "let the free market prevail" because the state needs the revenue. He then asked Mr. Dabney whether selling timber overseas would generate more revenue than using it for firewood.

MR. DABNEY said that in a competitive bid sale, the contract goes to the highest bidder; for material desirable as an export product, the out-of-state companies can outbid the local companies. This is one of the reasons, he said, that a negotiated timber sale with domestic business would be preferable.

REPRESENTATIVE MCKAY said that trees are a renewable resource, and more value could be obtained by selling to out-of-state buyers.

MR. DABNEY replied that balance is important, which is why it's important to have multiple mechanisms for entering into a sale. As far as trees growing back, he said, harvested areas previously populated with old-growth trees now contain young growth, which is a desirable commodity overseas. He said that taking advantage of overseas markets and allowing export for negotiated sales is the point of HB 98.

[10:54:26 AM](#)

REPRESENTATIVE HANNAN asked Mr. Dabney to clarify whether, if Amendment 6 were to be adopted, the statute would then say that the sale cannot be negotiated. She then asked whether that means a competitive bid process involving either foreign or domestic companies would be possible.

MR. DABNEY reiterated that if a negotiated timber sale is disallowed, a competitive bid process could take place, and foreign companies have a competitive advantage in being able to outbid domestic companies. He noted that a foreign or out-of-state purchaser would use local equipment and labor rather than sending their own employees and equipment to Alaska.

[10:56:55 AM](#)

CHAIR PATKOTAK withdrew his objection to Amendment 6.

[10:57:01 AM](#)

REPRESENTATIVE CRONK objected.

[10:57:03 AM](#)

A roll call vote was taken. Representatives Hannan, Hopkins, and Fields voted in favor of Amendment 6. Representatives Schrage, Gillham, Rauscher, Cronk, McKay, and Patkotak voted

against it. Therefore, Amendment 6 failed to be adopted by a vote of 3-6.

[10:58:03 AM](#)

REPRESENTATIVE FIELDS said that Amendment 7 would not be offered.

CHAIR PATKOTAK clarified that Representative Fields would not be [re]offering Amendment 7, which was labeled 32-GH1607\A.16, Radford, 4/17/21. [Amendment 7 - moved for adoption by Representative Fields on 4/19/21, with an objection for discussion purposes stated by Chair Patkotak, and subsequently tabled - remained tabled.]

[10:58:33 AM](#)

The committee took a brief at-ease.

[10:59:22 AM](#)

REPRESENTATIVE FIELDS moved to adopt Amendment 8, labeled 32-GH1607\A.15, Radford, 4/17/21, which read as follows:

Page 7, following line 13:

Insert a new bill section to read:

"* **Sec. 6.** AS 38.05.115 is amended by adding a new subsection to read:

(d) The commissioner may negotiate a sale of timber under AS 38.05.110 - 38.05.123 only to a prospective purchaser whose main office or headquarters is located in the state."

Renumber the following bill sections accordingly.

CHAIR PATKOTAK objected for purposes of discussion.

REPRESENTATIVE FIELDS said that, like Amendment 6, the intention of Amendment 8 is to support local businesses. He asked Ms. Radford to explain the differences between the two.

[11:00:25 AM](#)

MS. RADFORD explained that Amendment 8 would allow the DNR commissioner to negotiate a timber sale only to a purchaser with a head office or headquarters within the state.

[11:00:58 AM](#)

The committee took a brief at-ease.

[11:01:41 AM](#)

REPRESENTATIVE FIELDS said that milling jobs have declined over the past 30 years due to management of federal lands and international dynamics in the marketplace, but that there is expansive authority to create local jobs on state lands. He said that Alaska has historically had policies regarding in-state hiring.

[11:03:05 AM](#)

CHAIR PATKOTAK asked to have someone address the potential constitutional concerns with Amendment 8.

[11:04:05 AM](#)

MS. RADFORD said that Amendment 8 raises some constitutional issues under the Privileges and Immunities Clause, Commerce Clause, and Equal Protection Clause; she said that she has not done an in-depth analysis, but the Privileges and Immunities Clause restrains efforts to discriminate against out-of-state citizens.

REPRESENTATIVE FIELDS said that the issue of restricting hiring to Alaska residents in terms of state lands and resources, versus private or federal lands, goes back decades to when the State originally tried to mandate in-state hiring for development on the North Slope; the legislature gradually passed a series of laws, he said, "eventually arriving at an Alaska hire requirement statute called the Zone of Underemployment statute." He characterized the policy as permissible when certain economic decisions related to high unemployment. He said that the current administration was the first one in 30 years to stop pursuing in-state hiring, "departing from longstanding bipartisan support for Alaska hire."

[11:07:24 AM](#)

MR. ORMAN expressed his agreement with Ms. Radford's assessment of which constitutional clauses could affect Amendment 8 and listed several specific statutes that would apply to cases involving the Equal Protection Clause and the Privileges and Immunities Clause. He said that they key issue when looking at

Amendment 8 is identifying the rational basis for restricting timber sales to only include businesses with a main office located inside the state; when considering Amendment 8 in terms of the Equal Protection Clause, he explained that there has historically been legislative intent language explaining the rational basis. When considering the Privileges and Immunities Clause, he said, the question is, "Does the law place a burden on the privileges or immunities protected by the U.S. Constitution, and if a burden does exist, can the state provide a substantial reason for the discrimination?" He then explained that the Dormant Commerce Clause should also be considered, citing South-Central Timber Development v. Wunnicke, 467 U.S. 82, 104 S. Ct. 2237 (1984). In response to a follow-up question by Chair Patkotak, Mr. Orman clarified that Amendment 8 would cause redundancy in AS 38.05.

[11:17:22 AM](#)

REPRESENTATIVE FIELDS noted the need for rational basis and discussed the tendencies of local companies to hire local, support local charities, pay into the local tax base, and are attuned to the products that local people need.

[11:18:18 AM](#)

REPRESENTATIVE MCKAY said that sometimes business can't find qualified employees and that others can't pass a drug test. He characterized Amendment 8 as trying to solve a problem that doesn't exist and said that DOF is tasked with getting the most revenue for the timber.

[11:20:14 AM](#)

MR. DABNEY noted that negotiated sales under AS 38.05.123 are already allowed only for local manufacturers. He also said that the six factors of determination under AS 38.05.110(c) contain provisions for local benefits. Regarding Representative McKay's assertions, he explained that timber harvests tend to have predominately local hires in all aspects, and he said that maximizing revenue isn't the goal of DOF. While price is important, he said, he could foresee a situation in which a proposal with the highest price would fail to a proposal with a lower price but more local benefits.

[11:25:29 AM](#)

REPRESENTATIVE RAUSCHER opined that needed labor can't always be supplied locally, but that a company with a bottom line won't want to pay for plane tickets. He expressed that he does want HB 98 to pass and that he does not support Amendment 8.

[11:27:36 AM](#)

REPRESENTATIVE HANNAN noted that Amendment 8 does not specify hiring Alaska residents, it says that the business needs to be headquartered in Alaska in order to take part in negotiated sales; there is nothing in Amendment 8 restricting a company from bringing staff from elsewhere. She said that most of the old-growth has been harvested in the last 40 years, and that in southeast Alaska the few remaining areas of old-growth adjoin university or tribal land. She said that one of her prime concerns with HB 98 overall is the difference between negotiated sales and competitive bid sales. It's clear, she said, that the goal of bid sales is to give the contract to the highest bidder; however, negotiated sales are intended to address local need and, she said, "Asking for the business to be located here seems like a fairly low bar." She said that it would be ideal for the business to either be, or intent to remain, a longstanding member of the community, but that it's not difficult to start a business in Alaska.

[11:30:09 AM](#)

CHAIR PATKOTAK removed his objection to Amendment 8.

[11:30:10 AM](#)

REPRESENTATIVE CRONK objected.

[11:30:16 AM](#)

A roll call vote was taken. Representatives Fields, Hopkins, and Hannan voted in favor of Amendment 8. Representatives McKay, Cronk, Rauscher, Gillham, Schrage, and Patkotak voted against it. Therefore, Amendment 8 failed by a vote of 3-6.

[11:30:55 AM](#)

REPRESENTATIVE FIELDS moved to adopt Amendment 9, labeled 32-GH1607\A.14, Radford, 4/17/21, which read as follows:

Page 7, following line 13:
Insert a new bill section to read:

"* **Sec. 6.** AS 38.05.115 is amended by adding a new subsection to read:

(d) A timber sale contract entered into under AS 38.05.117, 38.05.118, or 38.05.123 must require the purchaser to hire only resident workers."

Renumber the following bill sections accordingly.

[11:30:58 AM](#)

CHAIR PATKOTAK objected for purposes of discussion.

REPRESENTATIVE FIELDS pointed out that workers have often been brought in from out of state, and that as timber sales become increasingly international, there becomes less incentive for multinational corporations to hire local workers. As the timber will be harvested on state lands, he said, the legislature has the authority to mandate local hiring. He recounted a story of a federal logging job in which the purchaser brought in undocumented immigrants from Mexico and classified them as independent contractors in order to defraud them of workers' compensation, minimum wage, and insurance benefits. He said that the situation was noticed only because one of the workers was killed by a bear, largely due to insufficient equipment and safety measures which would have otherwise been obligatory.

[11:33:54 AM](#)

MR. DABNEY said that the industry will not survive much longer if it is not provided with adequate timber and with the flexibility to export and that the collapse of the industry would affect local workers. He opined that the problem is the lack of available timber, not competition from outside the state. He said that HB 98 is intended to create more flexibility for the next few years, since the supply of timber from the U.S. Forest Service lands is severely limited, young-growth timber has not yet reached an amount sufficient to feed the industry, and DOF is already providing the maximum amount of timber available on state lands. He said that if a company is required to hire only local workers, the contract may be at risk. He stated that DOF opposes Amendment 9.

[11:36:11 AM](#)

MR. ORMAN said that the same legal issues as described earlier, concerning the Equal Protection Clause and the Privileges and Immunities Clause, are also issues with Amendment 9.

[11:36:45 AM](#)

REPRESENTATIVE SCHRAGE asked what kind of training is required for the jobs in question.

MR. DABNEY said there are multiple types of workers involved in the industry and listed chainsaw, heavy equipment, dump truck, and logging truck operators. He said that high-skill labor is required for the mechanized equipment, and noted the administrative staff required for the clerical work. He said that they're living-wage jobs that are important to the economy.

REPRESENTATIVE SCHRAGE asked whether Amendment 9 would apply to all staff, or only those actively involved in the harvesting of the timber.

[11:39:06 AM](#)

REPRESENTATIVE FIELDS responded that the intent is to specify local hires for the harvest of the lumber, not the entire company.

REPRESENTATIVE SCHRAGE noted his discomfort with the prior amendments addressing related issues but said that he could support Amendment 9 after hearing descriptions of the hands-on jobs. He referenced Representative Cronk's notes about the many firefighters who possess the specialized skills that would be transferable to the timber industry.

[11:39:55 AM](#)

REPRESENTATIVE CRONK recalled that Southeast Alaska used to have a thriving timber industry and opined that development of resources is being hampered by the federal government. He then characterized Alaska as having the best-managed resources and best environmental protections in the world.

[11:43:06 AM](#)

REPRESENTATIVE GILLHAM said that he agrees with hiring local, but there are times when qualified local employees can't be found.

[11:43:56 AM](#)

REPRESENTATIVE HOPKINS expressed that revenue being funneled into the general fund is not the only way to increase the wealth of the state. He characterized local hire amendments as having a "snowball effect" on local and regional well-being.

[11:45:20 AM](#)

REPRESENTATIVE RAUSCHER opined that over 90 percent of the committee members agree with the benefits of hiring local residents, but that it should not be mandated. He said that he would not support Amendment 9.

[11:46:33 AM](#)

REPRESENTATIVE HANNAN said that the goal should be to create the biggest economic impact possible when it comes to resource extraction. She discussed the possibility of having taxation on income earned in Alaska. Noting that Amendment 9 would likely not be adopted, she said that she would support it because hiring local workers keeps money in the local economy.

[11:47:49 AM](#)

REPRESENTATIVE FIELDS reminded committee members of the constitutional mandate to provide Alaska residents the maximum benefit from resource development on state lands and said that one of the most basic benefits is job production. He opined that, without mandates, the state would not achieve the local hire rates it needs.

[11:48:11 AM](#)

CHAIR PATKOTAK removed his objection to Amendment 9.

[11:48:14 AM](#)

REPRESENTATIVE CRONK objected.

[11:48:19 AM](#)

A roll call vote was taken. Representatives Schrage, Hannan, Hopkins, and Fields voted in favor of Amendment 9. Representatives Gillham, Rauscher, Cronk, McKay, and Patkotak voted against it. Therefore, Amendment 9 failed to be adopted by a vote of 4-5.

[11:49:25 AM](#)

CHAIR PATKOTAK stated that a committee substitute would be drafted to incorporate the amendments adopted thus far. He announced that HB 98, as amended, was held over.

HB 135-GEOTHERMAL RESOURCES

[11:49:49 AM](#)

CHAIR PATKOTAK announced that the final order of business would be HOUSE BILL NO. 135, "An Act relating to geothermal resources; relating to the definition of 'geothermal resources'; and providing for an effective date."

[11:50:31 AM](#)

STEVE MASTERMAN, Director, Division of Geological and Geophysical Surveys (DGGs), Department of Natural Resources (DNR), presented a PowerPoint on HB 135, beginning on slide 2, "Agenda," which read as follows [original punctuation provided]:

- DGGs: Introduction to geothermal energy
 - Fundamentals of geothermal systems
 - Geothermal systems of Alaska
- DOG: Overview of HB 135
 - Purpose of HB 135
 - DNR geothermal leasing history
 - Sectional analysis summary
 - Sectional analysis details
- DGGs: Examples of geothermal system
- Supplemental Information
 - AGILE Act
 - Drilling regulations

MR. MASTERMAN proceeded to slide 5, "Fundamental Ingredients of Useable Geothermal Energy, which displayed a cross-section of the well depths of a power plant and read as follows [original punctuation provided]:

- Elevated geothermal gradient
- Porosity and permeability for the migration of fluids
- Surface access
- Sufficiently large thermal System
- Customers for energy

MR. MASTERMAN explained that geothermal energy comes from heat generated within the earth, either by volcanic activity or radioactive decay, and that where there exists an elevated geothermal gradient there is hotter rock closer to the surface. Harvesting geothermal power requires hot rocks that are highly water-permeable, as well as surface access to the geothermal system, which must be large enough to generate meaningful amounts of energy. He continued to slide 6, "Heat Flow in Alaska," which showed the parts of Alaska and the surrounding oceans where it's easier to find geothermal energy. He noted that the area around Anchorage and Kenai Peninsula has less heat flow. Slide 7, "North Slope Geothermal Gradient," showed a contour map of the North Slope generated from the bottom temperatures of oil and gas wells. He explained that on the North Slope, in order to reach a rock temperature of 100 degrees centigrade, a hole would have to be drilled to 3,000 meters. A higher geothermal gradient would necessitate a shallower well. Slide 8, "Geothermal Gradients," provided a graphical representation with depth in feet on the y-axis and temperature in degrees centigrade on the x-axis. He noted the plot points of Chena production wells and the Makushin test well, producing noticeably higher temperatures at shallower depths, and stressed that more energy is obtained from a higher-temperature system.

[11:58:05 AM](#)

MR. MASTERMAN continued on to slide 9, "Geothermal Resource Quality, which read as follows [original punctuation provided]:

Generation capacity per unit cost depends on several geologic and economic factors:

- Temperature (hotter is better)
- Flow rate (higher flow rates are better)
- Reservoir Framework (uniform porosity better than fractures)
- Recharge (partially natural better than all artificial)
- Depth (shallower is less expensive, thus better)
- Location, location,... (relative to population, transmission system, development costs, etc.)

MR. MASTERMAN presented slide 10, "Introduction to Geothermal Resources," which read as follows [original punctuation provided]:

- Geothermal heat, where technically and economically accessible, is an excellent form of sustainable energy
- Hydrothermal systems are the most common form of energy extraction from geothermal heat
- Complex geologic parameters necessary for a viable geothermal resource, all present at one location, is rare
- Alaska contains several potential geothermal resources
- New technologies that will help expand geothermal development into less favorable geology are on the horizon

MR. MASTERMAN noted the importance of location and said that research is being done to develop new technologies to expand the capacity to produce geothermal energy from lower-temperature, drier systems, which would expand the use of geothermal energy as well as allow the development of smaller systems in areas of lower temperatures, potentially allowing smaller communities with lower energy needs to develop geothermal resources. He moved on to slide 11, "Geothermal Systems: Fairbanks Region," which showed a map of several geothermal systems that have reached the surface. A similar map was displayed on slides 13, 14, and 15, titled "Geothermal Systems: Seward Peninsula Region," "Geothermal Systems: Alaska Peninsula Region," and "Geothermal Systems: Southeast Region."

[12:08:30 PM](#)

CHAIR PATKOTAK opened public testimony on HB 135.

[12:09:14 PM](#)

CHARLES MCKEE provided comments not on topic with the published agenda.

[12:12:48 PM](#)

CHAIR PATKOTAK, after ascertaining that no one else wished to testify, closed public testimony on HB 135.

[12:13:27 PM](#)

HALEY PAINE, Deputy Director, Division of Oil and Gas (DOG), Department of Natural Resources (DNR), began her PowerPoint presentation [hard copy included in the committee packet] with

slide 17, "Purpose of HB 135," which read as follows [original punctuation provided]:

- **Modernize Alaska's geothermal exploration program**
 - Greater potential for providing affordable, renewable energy to rural communities and remote natural resource extraction projects
 - Promote clean energy industry job creation
- **Align geothermal licensing with the oil and gas exploration license program, thereby increasing feasibility for companies to develop resources**
 - More time for a company to identify and prove resource to convert to leases
 - Conversion to leases based on completion of work commitment and submission of exploration plan instead of proving discovery of commercial resource
 - Doubles maximum acreage allowed for exploration
- **Reforms definitions for geothermal resources to focus on Commercial Use**
 - Explicitly excludes domestic, noncommercial, or small-scale industrial use from the need for a geothermal license or lease

MS. PAINE stressed that there are "vast, untapped resources" in the state. She then paraphrased slide 18, "DNR Geothermal Leasing/Permitting History," which read as follows [original punctuation provided but formatting changed]:

Present

Mount Spurr Currently there are two pending applications for geothermal exploration prospecting permits in the Mount Spurr area. The final Best Interest Findings for the first was issued March 12, 2021 and the preliminary Best Interest Finding for the second was issued March 26, 2021.

2013

Augustine Island 26 tracts were offered. Only one tract was leased to a private individual and no exploration work was conducted as a result of that lease sale.

2008

Mount Spurr 16 tracts leased to Ormat and one private individual. Ormat purchased 15 leases in the 2008 sale and drilled on southern flank of volcano. They didn't find adequate temperatures in wells to pursue the

project. The state has the data available on DO&G's website.

1986

Mount Spurr On June 24, 1986, DNR offered 2,640 acres in two tracts. Both tracts received bids. The lease for Tract 1 expired in 1996, and the lease for Tract 2 was terminated in 1990.

1983

Mount Spurr DNR held its first geothermal lease sale in the Mount Spurr area on May 17, 1983. 10,240 acres in 16 tracts were offered in Competitive Geothermal Lease Sale 1. One tract received a bid. The lease for that tract was terminated in 1992

MS. PAINE explained that the sales described in slide 18 were held because the DNR commissioner had designated those regions as having significant potential for geothermal resources, so they were put out for competitive bid. She stressed that HB 135 would not change the competitive bid program, so DNR would retain the right to offer geothermal leases; however, it would change the process by which the prospecting permit would be administered. She explained that the prospecting permit has only two years in which to discover and prove a commercially viable resource, whereas the competitive leasing program gives a permit holder 10 years.

MS. PAINE continued to slide 19, "Sectional Summary, which read as follows [original punctuation provided but formatting changed]:

1 (AOGCC) Removes unnecessary reference to AS 41.06 from AS 31.05.030(m) because of changes made by Section 9.

2 (DNR) Changes permits to licenses. Explicit exemption for geothermal resources intended for domestic, noncommercial, or small-scale industrial use (See also Section 9). Removes preferential rights clause. This provision is not appropriate for commercial development of State resources.

3 (DNR) Changes permit to license. Extends term of licenses (formerly permits) from two to five years. Replaces lease conversion requirement of commercial discovery and development plan with work commitment and exploration plan.

4 (DNR) Changes permit to license.

5 (DNR) Changes permits to licenses. Increases maximum acreage from 51,200 to 100,000. Adds provision for rental fees to be defined in regulation, rather than statute (easier to update).

6 (DNR) Adds new subsections to AS 38.05.181 to modernize unitization statute for geothermal leases to match the model we use for oil & gas under AS 38.05.180.

7 (DNR) Replaces AS 38.05.965(6) definition of geothermal resources (Same as Section 11).

8 (AOGCC) Amends AS 41.06.020(e), clarifies that AS 41.06 does not limit DNR's authority over geothermal resource management on state land.

9 (AOGCC) Amends AS 41.06.020(f) to add explicit exemption for geothermal resources intended for domestic, noncommercial, or small-scale industrial use (See also Section 2).

10 (AOGCC) Amends AS 41.06.060(4) definition of geothermal fluid to remove temperature references and better conform with other changes in this bill.

11 (AOGCC) Replaces AS 41.06.060(5) definition of geothermal resources (Same as Section 7).

12 (AOGCC) Repeals AS 41.06.005(b) and AS 41.06.030, since geothermal units are managed by DNR.

13-16 General provisions for applicability and effective dates. Includes applicability provision for prospecting permits currently being processed.

MS. PAINE noted HB 135 would address several areas for a change in the terminology from "permit" to "license" in order to be consistent with the language used in oil and gas exploration. She also explained that applicants operating under a geothermal license would have five years, instead of two, to conduct reconnaissance, secure permits, and identify the resource. She said that the permit requirement would change from "the proving of a commercial resource" to "the completion of a work commitment" to be consistent with the oil and gas exploration license program. She noted that there are specific exemptions for non-commercial, industrial, small-scale home use for which an operator would not need to pursue a permit.

[12:18:50 PM](#)

REPRESENTATIVE HOPKINS asked Ms. Paine for more details on the private use exemption.

MS. PAINE said that an exclusion could be for domestic use such as a heat pump for a home, or for small-scale industrial use. She said that anything that isn't intended for a broader commercial application or large-scale development intended to sell power to multiple parties would fall under the exemption. She said that there is no specific threshold in terms of megawatt-hour or kilowatt-hour in order to keep the focus on use.

REPRESENTATIVE HOPKINS asked whether geothermal energy would be the only subsurface resource that wouldn't require a license or permit.

MS. PAINE indicated that she would research that question.

[12:20:44 PM](#)

REPRESENTATIVE HANNAN asked whether the geothermal development processes would be changed for administrative purposes only, or if similar companies would be pursuing those resources.

MS. PAINE replied that it would be the process that would be modified to align with the state's oil and gas exploration license program. She explained that the geothermal standard is currently higher than that of oil and gas exploration licensing, and that by modifying the terms of geothermal exploration, the goal is to make production of undiscovered geothermal resources possible.

[12:22:50 PM](#)

MS. PAINE resumed her presentation with slide 21, "Section 2: Private Use Exemption," which read as follows [original punctuation provided]:

- **New language added:**

A prospecting license or lease is not required under this section to explore for, develop, or use geothermal resources if the geothermal resource is intended for domestic, noncommercial, or small-scale industrial use.

- **This explicitly excludes private geothermal users from a requirement to apply for a license or lease.**

MS. PAINE paraphrased slide 22, "Section 2: Preferential Rights," which read as follows [original punctuation provided]:

- The preferential rights provision is being deleted because it is inappropriate to the situation (it's more relevant to water rights or other surface use cases not associated with the mineral estate).
- Surface owner rights are protected under AS 38.05.130.
 - If conflict arises, DNR ensures private landowners would not be left without heat or power, or otherwise damaged by commercial development.
 - Scenario is unlikely because private landowners usually don't have financial resources to develop a commercially-viable geothermal resource.
- Rights to access the mineral estate are reserved under AS 38.05.125.
 - Surface owners must provide reasonable access to resource developers.
 - The same condition exists for oil & gas or mining.
- If a surface use agreement can't be reached, resolution process is in 11 AAC 86.145.
 - DNR holds a hearing wherein the developer must prove there is no other alternative location for the well or data acquisition.
 - If the Commissioner concurs, developer posts a bond to compensate landowner for any impacts and work progresses.
- Public notice is a part of the license issuance process, and surface owners would be included.

[12:24:40 PM](#)

REPRESENTATIVE HANNAN asked Ms. Paine to further explain the rights to access under AS 38.05.123.

MS. PAINE said that even if a company has the rights to develop geothermal resources under a property with different surface owners, the company would be required to work with the owner on development and payment. She said that there is a "robust" public notice process as a part of license issuance and the best interest finding process, so there would be no infringement on personal property rights. She deferred to Mr. Masterman for technical information.

[12:27:34 PM](#)

MR. MASTERMAN explained that geothermal systems are developed at a much shallower depth than oil and gas resources, so there won't be the need for horizontal wells.

[12:28:43 PM](#)

MS. PAINE resumed her presentation by paraphrasing slide 23, "Section 3: Work Commitment," which read as follows [original punctuation provided]:

- **Changes prospecting permit to license and increases term from 2 to 5 years**
 - Creates greater opportunity for success of noncompetitive geothermal program
- **Conversion to noncompetitive lease through completion of agreed upon work commitment**
 - Current process for oil and gas exploration license
 - Commitment expressed in dollar figure
 - Annual reporting and performance objectives

MS. PAINE paraphrased slide 24, "Section 10: Geothermal Fluids," which read as follows [original punctuation provided]:

AS 41.06.060(4) is amended to read:

(4) "geothermal fluid" means liquids, brines, water, gases, or and steam at ~~temperatures greater than 120 degrees celsius or any commercial use of liquids and steam naturally~~ or artificially present in a geothermal system; **"geothermal fluid" does not include oil, hydrocarbon gases, or other hydrocarbon substances** at ~~temperatures less than 120 degrees celsius;~~"

- Aligns with modernized definition for geothermal resources.
- Not limited by temperature because current technology enables development of cooler geothermal systems.
- Distinguishes geothermal fluids from hydrocarbon resources.

MS. PAINE explained that slides 24 and 25, "Sections 7 & 11: New Definition," change language that specify specific temperatures which are no longer relevant due to advances in geothermal

technology. Slide 25 read as follows [original punctuation provided]:

"Geothermal resources" means the natural heat of the earth; the energy, in whatever form, below the surface of the earth present in, resulting from, or created by, or which may be extracted from, such natural heat; and all minerals in solution or other products obtained from naturally heated fluids, brines, associated gases, and steam, in whatever form, found below the surface of the earth; but excluding oil, hydrocarbon gases, or other hydrocarbon substances.

- Modern definition for geothermal resources.
- Not limited by temperature because current technology enables development of cooler geothermal systems.
- Ensures all the State's mineral estate resources are captured in definition.
- Same definition being applied to both DNR & AOGCC statutes.

[12:29:48 PM](#)

CHAIR PATKOTAK announced that HB 135 was held over.

[12:30:41 PM](#)

ADJOURNMENT

There being no further business before the committee, the House Resources Standing Committee meeting was adjourned at 12:31 p.m.