ALASKA STATE LEGISLATURE
HOUSE RESOURCES STANDING COMMITTEE
April 6, 2018
1:03 p.m.

MEMBERS PRESENT

Representative Andy Josephson, Co-Chair
Representative Geran Tarr, Co-Chair
Representative John Lincoln, Vice Chair
Representative Harriet Drummond
Representative Justin Parish
Representative Chris Birch
Representative DeLena Johnson
Representative David Talerico

MEMBERS ABSENT

Representative George Rauscher
Representative Mike Chenault (alternate)
Representative Chris Tuck (alternate)

COMMITTEE CALENDAR

HOUSE BILL NO. 331
"An Act establishing the Alaska Tax Credit Certificate Bond Corporation; relating to purchases of tax credit certificates; relating to overriding royalty interest agreements; and providing for an effective date."

- HEARD & HELD

PRESENTATION(S): ALASKA INDUSTRIAL DEVELOPMENT AND EXPORT AUTHORITY

- HEARD

PREVIOUS COMMITTEE ACTION

BILL: HB 331
SHORT TITLE: TAX CREDIT CERT. BOND CORP; ROYALTIES
SPONSOR(s): RULES BY REQUEST OF THE GOVERNOR

02/07/18	(H)	READ THE FIRST TIME - REFERRALS
02/07/18	(H)	RES, FIN

03/30/18	(H)	RES AT 1:00 PM BARNES 124
03/30/18	(H)	Heard & Held
03/30/18	(H)	MINUTE(RES)
04/04/18	(H)	RES AT 1:00 PM BARNES 124
04/04/18	(H)	Heard & Held
04/04/18	(H)	MINUTE(RES)
04/06/18	(H)	RES AT 1:00 PM BARNES 124

WITNESS REGISTER

KEN ALPER, Director
Tax Division
Department of Revenue
Juneau, Alaska
POSITION STATEMENT: Provided a sectional analysis of HB 331 and answered questions during the hearing of HB 331.

MIKE BARNHILL, Deputy Commissioner
Office of the Commissioner
Department of Revenue
Juneau, Alaska
POSITION STATEMENT: Answered a question during the hearing of HB 331.

DEVEN MITCHELL, Executive Director
Alaska Municipal Bond Bank Authority
Department of Revenue
Juneau, Alaska
POSITION STATEMENT: Answered questions during the hearing of HB 331.

WILLIAM MILKS, Senior Assistant Attorney General
Labor and State Affairs Section
Civil Division(Juneau)
Department of Law
Juneau, Alaska
POSITION STATEMENT: Answered questions during the hearing of HB 331.

JOHN SPRINGSTEEN, CEO/Executive Director
Alaska Industrial Development and Export Authority
Department of Commerce, Community & Economic Development
Anchorage, Alaska
POSITION STATEMENT: Provided a PowerPoint presentation entitled, "Ambler Access Update," dated 4/6/18, and answered questions.

MARYELLEN TUTTELL, PE; Chief Risk Officer
DOWL
Anchorage, Alaska
POSITION STATEMENT: Answered questions during the presentation of the "Ambler Access Update" by the Alaska Industrial Development and Export Authority.

GENE THERRIAULT, Team Leader
Interior Energy Project
Alaska Industrial Development and Export Authority
Department of Commerce, Community & Economic Development
Anchorage, Alaska
POSITION STATEMENT: Answered questions during the presentation of the "Ambler Access Update" by the Alaska Industrial Development and Export Authority.

RICK VAN NIEUWENHUYSE, President/CEO
Trilogy Metals Inc.; Director
NovaGold
Vancouver, British Columbia
Canada
POSITION STATEMENT: Provided a PowerPoint presentation entitled, "Advancing the Ambler Mining District in Alaska by Forming Strong Partnerships."

BRENDA APPLEGATE, Chief Financial Officer
Alaska Industrial Development and Export Authority
Department of Commerce, Community & Economic Development
Anchorage, Alaska
POSITION STATEMENT: Answered questions during the presentation of the "Ambler Access Update" by the Alaska Industrial Development and Export Authority.

DAVID G. CLARKE
Anchorage, Alaska
POSITION STATEMENT: Provided a PowerPoint presentation entitled, "Ambler Mining District Industrial Access Road Project."

ACTION NARRATIVE

1:03:00 PM

CO-CHAIR ANDY JOSEPHSON called the House Resources Standing Committee meeting to order at 1:03 p.m. Representatives Josephson, Tarr, Parish, Drummond, and Lincoln were present at the call to order. Representatives Talerico, Birch, and Johnson arrived as the meeting was in progress.

HB 331-TAX CREDIT CERT. BOND CORP; ROYALTIES

1:03:28 PM

CO-CHAIR JOSEPHSON announced that the first order of business would be HOUSE BILL NO. 331, "An Act establishing the Alaska Tax Credit Certificate Bond Corporation; relating to purchases of tax credit certificates; relating to overriding royalty interest agreements; and providing for an effective date."

1:04:25 PM

KEN ALPER, Director, Tax Division, Department of Revenue (DOR), continued his presentation from the previous House Resources Standing Committee hearing of HB 331 on 3/30/18, and explained the language of HB 331 incorporates the following:

- a structure creating the bond corporation and authorization to sell bonds
- a structure containing conforming changes to existing language to ensure the existing process to purchase tax credits is not overwritten, but is supplemented through the bonding method
- a structure containing a series of new sections describing the mechanisms by which DOR values the tax credits and other factors
- a Department of Natural Resources (DNR) statute related to how DNR would negotiate and authorize overriding royalty interests offered by companies

MR. ALPER directed attention to a sectional analysis of HB 331, provided in the committee packet, which read [original punctuation provided]:

> Section 1:
> Exempts the bond corporation created in Sec. 2, and any overriding royalty interests negotiated under Sec. 11, from the procurement code.
>
> Section 2:
> Establishes the Alaska Tax Credit Certificate Bond Corporation within DOR. [Largely patterned after Alaska Pension Obligation Bond Corporation, AS 37.16]

37.18.010 Creates the corporation.

37.18.020 Establishes the board of directors, all of whom are state department commissioners.

37.18.030 Authorizes the corporation to issue bonds up to $1 billion and contract for associated services.

37.18.040 Authorizes the corporation to have a reserve fund which will hold funds to be used for repurchase, as well as funds appropriated for the purpose of interest and principal payments to bond holders.

37.18.050 Authorizes the corporation to set the terms of bonds to be issued.

37.18.060 Corporation must adopt a resolution to approve the issuance of bonds.

37.18.070 Gives certain enforcement rights to certain bond holders.

37.18.080 Bonds may not be issued unless the discount rate by which tax credits are purchased is at least 1.5% greater than the total interest cost of the bonds.

37.18.090 Corporation may refund bonds prior to the maturity date.

37.18.100 Bonds are legal instruments.

37.18.800 This chapter shall be liberally construed to carry out its purposes.

37.18.810 Corporation may adopt regulations necessary to implement this chapter.

37.18.900 Definitions.

Section 3: Amends the Gas Storage Credit to enable repurchase of any credits via the bond program.

Section 4: Amends the LNG Storage Credit to enable repurchase of any credits via the bond program.

Section 5: Amends the Refinery Infrastructure Credit to enable repurchase of any credits via the bond program.

Section 6: Amends various provisions of AS 43.55.028, the tax credit repurchase fund. .028(e) The department may either use the tax credit fund money, or money disbursed from the bond program, to purchase tax credits. Written to maximize flexibility and retain the existing program and procedures.

Section 7: .028(g) Clarifies that the current $70 million per company per year cap, with the associated "haircut", does not apply to repurchases via the bond program.

Section 8: .028(i) Adds definitions for "money disbursed to the commissioner," and "total interest cost."

Section 9: .028(j) Clarifies that if a company has an outstanding liability to the state, this can be offset against a payment via the bond program as well as via traditional repurchase.

Section 10:

.028(k) New section authorizing the department to negotiate a repurchase of all credits held by a company, and describing how the holder of credits indicates their desire to participate in the program. This section contemplates that if a holder of credits existing at the time of a bond issuance declines to participate in the program, such holder is precluded from submitting such existing credits for purchase in connection with future bond issuances. This provision does not preclude such holder from submitting credits claimed after a bond issuance for purchase in connection with a future bond issuance.

.028(l) New section describes the mechanism by which the department estimates the expected cash flow to a company via the current repurchase process and expected schedule. From this estimate, a purchase offer can be calculated based on the discount rate determined in (m).

.028(m) New section establishing a base discount rate of 10%, with four methods to reduce this to a number equal to total interest cost + 1.5%.

1. For a seismic credit, the company has waived the 10-year confidentiality period for the data and allowed it to become public;
2. The company has agreed to an overriding royalty interest (ORRI) accepted by the Department of Natural Resources;

3. The company has committed reinvest the entire amount received within an Alaska oil and gas project within 24 months;

or 4. The credit is against the corporate income tax, primarily impacting refinery infrastructure credits.

.028(n) New section clarifying that the amount of a credit in excess of the discounted amount purchased retains no value and cannot be used against taxes or sold.

Section 11: Authorizes the Department of Natural Resources to negotiate Overriding Royalty Interests (ORRI). These are then valued, and a determination is made whether the incremental value received by the state warrants the approval of the lower discount rate for purposes of credit repurchase.

Section 12: Authorizes DNR and DOR to adopt regulations to implement this act

Section 13: Authorizes retroactive application of regulations.

Section 14: Immediate effective date.

1:06:02 PM

MR. ALPER further explained Section 1 contains conforming language exempting the bond corporation and royalty interest from the Alaska Procurement Code. Section 2 is similar to other Alaska state statutes creating special purpose bonding mechanisms such as the pension obligation bond authority, and other authorities that are delegated to the commissioner of DOR. Also included in Section 2 is the provision that the structure of the bond is left to the discretion of the commissioner of DOR.

REPRESENTATIVE PARISH expressed his understanding that the Alaska Pension Obligation Bond Corporation has never issued bonds.

MR. ALPER said correct.

REPRESENTATIVE PARISH asked whether any other state corporations - that would acquire debt in a similar manner to the proposed bond corporation - have been created "without revenue streams internal to them."

1:08:38 PM

MIKE BARNHILL, Deputy Commissioner, Office of the Commissioner, DOR, before responding to Representative Parish, made the point of correction: the commissioner of DOR does not set the structure of the bond debt service under the statute but the board of directors of the Alaska Tax Credit Bond Corporation would perform that function. The board of directors would include the commissioners of DOR, the Department of Commerce, Community & Economic Development (DCCED), and the Department of Administration (DOA).

REPRESENTATIVE PARISH restated his question.

MR. BARNHILL advised there are many state entities that issue bonds and deferred to Devin Mitchell.

1:10:19 PM

DEVEN MITCHELL, Executive Director, Alaska Municipal Bond Bank Authority, DOR, explained a similar entity would be the Alaska Housing Finance Corporation (AHFC) which entered into an agreement with the state to purchase what is now known as the [Robert B. Atwood Building]; there were no revenues in the agreement except for the state's pledge to pay on a "subject to appropriation" basis, as allowed by standalone law, and which is exactly as proposed in HB 331. Further, the proposal is a familiar structure to the state as well as to municipal market participants.

REPRESENTATIVE PARISH commented the aforementioned example was a lease purchase agreement; however, HB 331 proposes a debt of up to $1 billion for the state with no lease directly involved. He asked how HB 331 resembles a lease purchase agreement.

MR. MITCHELL answered a lease purchase agreement is based on a lease which is subject to appropriation; HB 331 [bond] debt would be based on a contract, also subject to appropriation. He remarked:

> In the case of the lease, [should the state choose not to appropriate], the negative ramification would be you would not only get downgraded, you would lose access to the building for a period of time. Not the

> entire life of the building, but just a period of time as established in the lease. And, that could be negotiated down to as short as a year, and then the state would again have right to occupy the facility even though there'd been a failure. So, again, it's a familiar structure to the state and it's a familiar structure to the capital markets.

REPRESENTATIVE PARISH referred to the Constitution of the State of Alaska, Article IX, Section 8. State Debt., which read [in part, original punctuation provided]:

> No state debt shall be contracted unless authorized by law for capital improvements or unless authorized by law for housing loans for veterans, and ratified by a majority of the qualified voters of the State who vote on the question.

REPRESENTATIVE PARISH continued to Section 11. Exceptions., which read [in part]:

> The restrictions on contracting debt do not apply to debt incurred through the issuance of revenue bonds ....

REPRESENTATIVE PARISH asked whether the proposed bonds are revenue bonds.

1:12:57 PM

MR. MITCHELL said they are not. He clarified the bonds would be revenue bonds of the corporation; the corporation would issue either revenue bonds or general obligation bonds of the corporation, however, the final structure has not been determined. Mr. Mitchell continued:

> I work with another public corporation, the Alaska Municipal Bond Bank [Authority (AMBBA)], [and] we, we borrow money based on underlying communities' need of borrowing money. So, when we borrow money in the capital markets, we issue general obligation bonds of the Alaska Municipal Bond Bank, which [are] secured by that cross-collateralized underlying borrowing pool as well as the State of Alaska's moral obligation pledge. And, in the instance of the ... bond bank, we sell general obligation bonds for both revenue bonds of underlying communities as well as general obligation

> bonds of underlying communities. And so, the corporation, ... the separately legally existing corporation we're talking about, would be able to potentially sell general obligation bonds, but the only thing that would be securing those would be the revenues that it would derive from this contract it would enter into with the state. And so, it could also be structured ... potentially as a revenue bond.

REPRESENTATIVE PARISH questioned whether the proposed bond corporation's issuance of a general obligation bond would be subject to a majority vote of the qualified voters.

MR. MITCHELL restated such a bond would be a general obligation bond of the corporation and not of the state. Public corporations, such as the Alaska Student Loan Corporation [Postsecondary Education Commission], Department of Education and Early Development, the Alaska Industrial Development and Export Authority (AIDEA), Department of Commerce, Community & Economic Development, AMBBA, and AHFC, can issue general obligation bonds of the corporation. He characterized general obligation bonds as "a more limited pledge, obviously, than the State of Alaska's general obligation pledge, but could be a full faith and credit pledge of that legal existence, of that entity."

1:15:11 PM

WILLIAM MILKS, Senior Assistant Attorney General, Labor and State Affairs Section, Civil Division(Juneau), Department of Law (DOL), directed attention to a letter addressed to Senator Giessel, dated 3/2/18, from Mr. Mitchell, representing DOR, and himself, representing DOL, that was included in the committee packet. Mr. Milks informed the committee the letter addresses the constitutionality issue, opining the proposed bonds are constitutional because they are "subject to appropriation" bonds. He returned attention to Article IX, Section 8, [text previously provided, in part], commonly known as the debt provision, and further advised Section 8 applies specifically to a general obligation bond, backed by the full faith and credit of the State of Alaska, and thereby not a subject to appropriate bond. General obligation bonds must be paid regardless of the state's financial circumstances, are issued for capital improvements, and are usually subject to voter approval. As noted in the letter, a key case was reviewed by the Alaska Supreme Court, Carr-Gottstein Properties v. State, 899 P.2d 136, 142-44 (Alaska 1995), and the court decided the issue is whether a bond is subject to appropriation, and the special meaning of debt under the constitution. Mr. Milks concluded if a bond does not hold the full faith and credit of the State of Alaska for repayment, it is subject to appropriation, which is a procedure the courts have permitted in Alaska and elsewhere.

REPRESENTATIVE PARISH recalled previous testimony that if [the legislature] failed to appropriate [funds for repayment], the state's bond rating could be downgraded two or three times, and surmised the state's faith and credit is "on the line," although creating a shell corporation would "dodge" the narrowest reading of the law. He asked, "How is this really substantively and significantly not state debt if our credit rating could take an enormous hit for failure to pay?"

1:17:52 PM

MR. MILKS pointed out the bill on page 2, [lines 19-22], specifically states the bonds do not constitute general obligations to the State of Alaska. He reiterated the Alaska Supreme Court has interpreted this provision to be a moral authority bonding, which is subject to appropriation. He deferred to Mr. Mitchell for a further response.

MR. MITCHELL acknowledged the state could choose not to pay, have its credit rating downgraded, and lose access to the capital markets with the subject to appropriation commitment; with a general obligation commitment, the state would be forced and compelled to pay. In fact, the Alaska Statute provides a standing appropriation that does not require annual legislative action to pay general obligation bond debt service; however, there is no similar provision for any subject to appropriation obligation.

CO-CHAIR JOSEPHSON, in response to Representative Parish, advised testimony by the department representatives would be ending; however, the representatives may be available to answer additional questions [following the hearing].

1:19:54 PM

REPRESENTATIVE PARISH stressed HB 331 provides for a debt of possibly $1 billion; therefore, he would like all his questions exhausted on the record at this hearing. The fundamental question is whether the state can create a corporation to take on debt which is neither revenue debt, revenue bonds, nor general obligation bonds, but is "a sort of nebulous additional

... category," and if so, whether there is any limit to the amount of debt. He questioned whether a state corporation could accrue $5 billion in loans so [the legislature] could follow the statutory dividend formula to pay the Permanent Fund Dividend, and observed the Alaska Supreme Court decision [Bill Wielechowski, Rick Halford, and Clem Tillion v. State of Alaska and Alaska Permanent Fund Corporation] found that the power of appropriation rests with the legislature and thus, the statute cited earlier becomes murky.

1:21:32 PM

MR. MITCHELL disagreed that the aforementioned legal opinion relates to general obligation bonds and the state's commitments, which are embedded in the state constitution. He deferred to Mr. Milks for further discussion in this regard. He said Representative Parish's questions have been asked "many times before"; however, [the proposal within HB 331] is legal under Alaska law and is accepted as a common form of financing utilized by Alaska and other states.

REPRESENTATIVE JOSEPHSON, in response to Representative Birch's suggestion to end testimony on HB 331, advised further review of constitutional questions may be necessary prior to hearing amendments to the bill, which is scheduled for 4/9/18.

REPRESENTATIVE PARISH remarked:

> On this specific question, the difference has been, been clearly established as to whether or not a, the state should be allowed to contract state debt without a general vote of the people, without a revenue bond, and without any of the other specific exceptions listed in the constitution. And on the counterpoint, there's, there's the assertion that because lease purchase agreements in the past have gone forward because the Pension Obligation Bond Corporation was established, and because, the bill says, " ... it is constitutional," I guess, I guess that's, that's just a disagreement which may have to get resolved in the courts.

1:25:03 PM

CO-CHAIR TARR stated under current Alaska statute there is already a formula - subject to appropriation - for paying the [tax] credits; HB 331 is an alternative proposal to pay the tax credits which would also be subject to appropriation. She cautioned the reason for the current debate is because "no one read the statute" before making business decisions to spend money and obtain bank financing based on the state's repayment of tax credit certificates. Co-Chair Tarr suggested if the statute had been read, beneficiaries would have acted more cautiously and would not be defaulting on loans while waiting for the state to repay tax certificates. Although the funding provision within HB 331 is subject to appropriation, there would be every expectation that the money would be appropriated. She concluded HB 331 does not resolve the current fundamental problem, which is having sufficient funds to pay the credits that are due.

MR. MITCHELL did not respond to the policy aspects of the question. From a debt perspective, he said HB 331 differs from the sort of subject to appropriation commitment that currently exists in financing markets. He expressed his concern about maintaining the state's credit rating, its access to capital markets, and its ability to accomplish needed capital projects through the use of financing tools. Within all capital markets, an entity's ability to borrow is only as good as how its word is perceived. In the event an entity fails to pay its bills, that entity will experience higher interest rates or diminished access. Also related to financing in capital markets, the current diminished payments that have been made on the credits currently due have a lesser impact on the state's credit rating than if the state defaults - a non-payment - on a subject to appropriation bond issue of a public corporation.

There followed a short discussion regarding the deadline for amendments to HB 331.

1:29:36 PM

The committee took an at-ease from 1:29 p.m. to 1:32 p.m.

1:31:25 PM

CO-CHAIR JOSEPHSON posed a scenario in which credit holders, who may or may not have transferred their credits, would be able to decline to have provisions of the bill applied and would instead proceed under the normal payment schedule. He asked whether, under the aforementioned circumstances, the state would need to pay [tax credit certificates] under two different payment streams.

MR. ALPER returned to the sectional analysis of HB 331 and said Sections 3, 4, and 5 are similar in structure and relate to the existing tax credits that are in the corporate income tax statute, AS 43.20. Existing corporate income tax provisions include a gas storage credit for the Kenai Gas Storage Facility, a liquefied natural gas (LNG) storage credit for the main storage tanks in Fairbanks, a credit for the Interior Gas Utility, and a refinery infrastructure credit. As currently written, the aforementioned credits can be purchased with money from the tax credit [repurchase] fund. However, the existing language would be amended by HB 331, so the credits could also be purchased with proceeds of the [tax credit] bonds.

MR. ALPER explained Sections 6-9 amend portions of AS 43.55.028, the tax credit [repurchase] fund, as follows: Section 6 relates to the use of tax credit fund money or money disbursed from the bond program to purchase tax credits; Section 7 clarifies that there is no $70 million [per company per year] cap on repurchases via the bond program; Section 8 adds definitions, notably, "money disbursed to the commissioner" means the proceeds of the bond; Section 9 clarifies that a right to offset a credit payment held by a company would be extended to a bond purchase. Section 10 is a new section adding four new subsections to AS 43.55.028. Subsection (k) requires companies to offer their credits to the program, and all credits must be offered. Further, companies that choose not to participate cannot offer credits in a subsequent bond offering. Mr. Alper characterized the provisions in subsection (k) as language that is intended to prevent parties from "gaming the system."

1:37:07 PM

MR. ALPER said subsection (l) provides the mechanism to determine a company's expected cash flow under the traditional credit repurchase structure using new definitions affected by a company's pro rata share of the annual appropriation per the formula within [AS 43.55.028(c)]. The existing language would be clarified by subsection (l), and he remarked:

> We're going to presume we are appropriating for the next five, six years at "x" dollars per year based on the fact that you have this much credit in 2016, they're going to get paid first pro rata for however many years it takes, and then all the 2017 credits will be paid pro rata for however many years it takes. So, every company will be given a unique expected cash flow under the traditional system, which is then

discounted at a discount rate. The discount rate is covered in subsection (m), and what subsection (m) says is that the base discount rate is 10 percent per year, and then there are four different ways by which a company could buy that down to the lower rate, which is written in as, as the true interest cost plus 1.5 percent, which we currently forecast to be about 5.1 percent interest. But that would be determined closer to the date of final issuing of the bonds. We've talked about what those four methods are, they're clearly written out in (m). Either you have the overriding royalty interest; the commitment to reinvest all of the proceeds. If you have seismic credits, ... you have to waive your 10 years of confidentiality on the seismic data. Or, if you have one of those corporate income tax credits - primarily the refinery credit - outstanding, you're automatically bought in at the lower interest rate.

MR. ALPER continued to subsection (n) which clarifies if a credit is sold at less than face value, the remaining value cannot be cashed, sold, or used to offset taxes. Section 11 authorizes the Overriding Royalty Interests (ORRI) and provides the mechanisms and rules for negotiations between DNR and credit holders related to the value of fields offered for credit and factors affecting said value. For example, calculations would include cash flow, royalty interest, and present value. In fact, the mandate is: the present value of the overriding royalty interest must be at least equal or greater than the incremental value the company would receive from the lower discount rate versus the higher discount rate. Sections 12-14 are: authority to write regulations; the ability for those regulations to take effect retroactively if they are not finalized before the effective date; the effective date. Mr. Alper concluded, noting HB 331 has an immediate effective date, thus after its expected passage in May, [2018], the process of underwriting and preparing bonds would be completed and bonds would be issued in August or September [2018].

1:41:10 PM

[HB 331 was held over.]

PRESENTATION: Alaska Industrial Development and Export Authority

1:41:38 PM

CO-CHAIR JOSEPHSON announced that the final order of business would be a presentation on the Ambler Mining District Industrial Access Road project provided by the Alaska Industrial Development and Export Authority (AIDEA), Department of Commerce, Community & Economic Development (DCCED).

1:42:15 PM

JOHN SPRINGSTEEN, CEO/Executive Director, AIDEA, DCCED, provided a PowerPoint presentation entitled, "Ambler Access Update," dated 4/6/18. Mr. Springsteen informed the committee the Ambler Mining District Industrial Access Project (AMDIAP) addresses the infrastructure necessary to enable another economic engine for Alaska and is one of two special projects assigned to AIDEA. From 2013 through 2015, AIDEA received appropriations totaling $17 million for the project, about $13 million has been expended or encumbered, and about $4 million remains. Although federal permitting is expensive and challenging, he acknowledged the need to utilize "proper science" and to hear testimony from the affected communities. Mr. Springsteen said access to the Ambler Mining District is necessary because it is a resource rich region with four known key deposits; further, decades of exploration findings were reported by the U.S. Geological Survey (USGS) in 1977 [document not provided] which identified a district rich in gold and copper, nickel, jade, molybdenum, and other minerals (slides 5 and 6). In fact, the importance of access to the Ambler Mining District was recognized by the federal government in a provision of the Alaska National Interest Lands Conservation Act (ANILCA) (slide 7). He directed attention to slides entitled, "Alaska - A Connected Economy," and "Alaska - Key Infrastructure," and said Alaska's primary economic engines are its resources such as oil and gas, seafood, timber, tourism, and mineral mining. However, industry infrastructure is the key to unlocking the state's economic engines, for example, roads, ports, and shipping lanes. Mr. Springsteen informed the committee AIDEA's model for access to the Ambler Mining District is the road portion of the Delong Mountain Transportation System (DMTS) which provides the Red Dog Mine access to world markets. A slide entitled, "DeLong Mountain Transportation System servicing the Red Dog Mine" was a picture of its infrastructure including a portion of the road, a warehouse, a conveyor system, a camp, a fuel terminal, a dock, and power generation, all of which are aspects of infrastructure to support the mine. [Representing its return on investment], the Red Dog Mine provides revenue to the state, to the Northwest Arctic Borough, to NANA Regional Corporation (NANA) and to other

Native corporations, and job opportunities for Alaskans. A slide entitled, "Stakeholders in the Red Dog Mine" illustrated various stakeholders who benefit from "more self-reliant communities." He reviewed [2015] employment statistics and economic impact figures listed on a slide entitled, "Red Dog Mine Benefits."

1:48:06 PM

MR. SPRINGSTEEN directed attention to slide 14, which listed purposes of the project: permanent access, construction of enabling infrastructure, supporting development and promoting economic development. Slide 10 listed potential community benefits such as broadband access, local jobs, better access to transportation and goods and services, and a tax base to fund community assets for communities that seek these benefits. Slide 16 illustrated the process of the Ambler access project and he pointed out the project is in the scoping process managed by the Bureau of Land Management (BLM), U.S. Department of the Interior; even after the project route is permitted, significant additional permits would be necessary. Turning to the history of the project, he recalled in 2010, the project was assigned to the Department of Transportation & Public Facilities (DOTPF) and was reassigned to AIDEA in 2013. Community outreach is ongoing and based on preliminary research and engineering, DOTPF evaluated eight routes considering factors of wetlands, endangered species, sites, wildlife, and migration patterns; the evaluation revealed a route across the Gates of the Arctic National Preserve would have the lowest impact (slide 19). Subsequently, a proposed Ambler access project corridor was submitted in AIDEA's permit application in 2015; he pointed out the route was adjusted in response to a request by the Native village corporation of Evansville, Incorporated that the route not cross its land (slide 21). Slide 23 illustrated the National Environmental Policy Act (NEPA) permitting process; additional federal permits required are: through NEPA and Title XI of ANILCA; environmental and economic analyses under ANILCA Section 201(4); wetlands permits from the U.S. Army Corps of Engineers (USACE); bridge permits from the U.S. Coast Guard (USCG) (slide 24). He further explained ANILCA Section 201(4) provides a unique process for an approved route and the analyses process is overseen by the National Park Service (NPS), U.S. Department of the Interior (slide 25).

MR. SPRINGSTEEN restated AIDEA is the applicant for the permits and reviewed the roles of NPS and BLM (slide 26); in addition, the BLM environmental impact statement (EIS) schedule was provided on slide 27. Returning attention to the project process illustrated on slides 16 and 29, he said AIDEA will address subsistence and lifestyle concerns raised at federal scoping meetings, and cautioned there remain significant required approvals for the project such as legislative authorization for bonds, regional approval, rights-of-way (ROWs) from private landowners, and AIDEA project and bond authorization (slide 30). Additional supporting information was provided in the committee packet.

1:53:16 PM

REPRESENTATIVE PARISH asked Mr. Springsteen to further explain AIDEA's "right-of-way options."

MR. SPRINGSTEEN said AIDEA does not have eminent domain capabilities, thus ROWs must be negotiated with private landowners.

REPRESENTATIVE PARISH gave an example of a private landowner who does not grant a needed ROW and asked whether AIDEA would have recourse.

MR. SPRINGSTEEN restated AIDEA's earlier response to a request from a landowner.

1:54:38 PM

MARYELLEN TUTTELL, PE, Chief Risk Officer, DOWL, in response to Representative Parish, explained substantial changes to the corridor could require a supplemental (EIS); however, state agencies seek to work with landowners to develop a route acceptable to parties. The majority of the corridor crosses state land, and there are portions on federal land and on land owned by regional Native corporations.

REPRESENTATIVE PARISH inquired as to how many individual and corporation landowners are affected.

MS. TUTTELL said the corridor crosses land owned by [Doyon Limited (DOYON), NANA, and Native village corporations consolidated within the NANA region. In further response to Representative Parish, she stated there are no other private landowners.

REPRESENTATIVE PARISH questioned whether the current favorable positions of Doyon and NANA are unlikely to change.

MR. SPRINGSTEEN acknowledged AIDEA would need a permit for access to begin binding negotiations.

CO-CHAIR JOSEPHSON recalled Doyon has expressed reticence about the project.

MR. SPRINGSTEEN said yes. [AIDEA] considers all aspects of a project such as risk, return, benefits, inducements, security, collateral, cultural values, and lifestyle.

REPRESENTATIVE BIRCH expressed his understanding the route through the Gates of the Arctic National Preserve was an access route previously set aside within ANILCA.

MR. SPRINGSTEEN said yes; ANILCA, Section 201(4)(b), directs federal agencies to select a route through the Gates of the Arctic National Preserve.

1:59:23 PM

REPRESENTATIVE BIRCH, speaking as a mining engineer, expressed his support for the project.

REPRESENTATIVE DRUMMOND referred to the financial agreement that was in place between the operator of the Red Dog Mine and the state prior to state funding and construction [of DMTS]. She asked whether an entity has committed to repayment of the cost of the Ambler access project.

2:00:28 PM

MR. SPRINGSTEEN explained AIDEA needs a permit to begin negotiations on this topic as well; however, at "the proper stage," he restated AIDEA will reexamine all aspects of the project. In further response to Representative Drummond, he opined he could not get approval from the AIDEA board of directors [for the proposed project] without a contract from mining companies for repayment.

CO-CHAIR JOSEPHSON returned attention to [slide 10] and questioned Mr. Springsteen's statement that communities are not interested in benefits such as a tax base to fund community sustainability (energy, water/wastewater, transportation).

MR. SPRINGSTEEN clarified communities must search for an economic engine that is compatible with the community, the region, and the state; the scoping process allows communities to do so.

REPRESENTATIVE LINCOLN asked Mr. Springsteen to discuss the EIS timeline.

MR. SPRINGSTEEN returned attention to slide 27, noting NEPA scoping was completed in January 2018, a scoping summary report is due in April 2018, a draft EIS is anticipated in March 2019, and a final EIS is anticipated in December 2019.

2:03:38 PM

REPRESENTATIVE LINCOLN questioned whether the EIS is funded.

MR. SPRINGSTEEN explained AIDEA has received $1.2 million for the scoping process; a decision on further funding is dependent upon a review of the scoping process by the administration. In further response to Representative Lincoln, he said the decision is anticipated in May or June [2018].

CO-CHAIR JOSEPHSON inquired as to whether AIDEA posts statements in opposition to a project on its web site.

MR. SPRINGSTEEN said AIDEA provides background information on its web site; information from communities is routinely garnered through federal government processes. He suggested information in this regard could be requested.

2:05:19 PM

GENE THERRIAULT, Team Lead, Interior Energy Project, AIDEA, DCCED, speaking from his experience, advised the NEPA process is robust regarding public comments and relating to the scope of the project; any concerns brought forward, or questions posed by the public, must have a response by the applicant.

MR. SPRINGSTEEN noted AIDEA's web site provides links to the related federal web site.

REPRESENTATIVE PARISH surmised all of the documents found in the committee packet are in opposition, and asked whether there are letters of support from local elected officials representing the affected region.

MR. SPRINGSTEEN opined the letters submitted to AIDEA expressed interest in reviewing the results of the EIS process with all the concerns addressed. He acknowledged there are different voices within Native villages and Tribes.

REPRESENTATIVE PARISH restated his question related to expressions of support from elected officials of local or Tribal governments.

MR. SPRINGSTEEN said, at this time, AIDEA has not requested formal letters of support, other than those of the EIS process, from communities in the region.

2:08:47 PM

RICK VAN NIEUWENHUYSE, President/CEO, Trilogy Metals Inc., and Director, NOVAGOLD, provided a PowerPoint presentation entitled, "House Resources Committee Hearing on AMDIAP Presentation April 6, 2018 Advancing the Ambler Mining District in Alaska by Forming Strong Partnerships." Mr. Van Nieuwenhuyse paraphrased from the following written statement [original punctuation provided]:

> My name is Rick Van Nieuwenhuyse, I am an American citizen and grew up in Alaska graduating from West Anchorage High School in 1972. I left Alaska in 1994 to pursue my passion - exploration geology, to work all around world. Returning to North America in 1997 and decided to start my own exploration company focussed here in Alaska - NovaGold. I first worked in the Ambler mining district in 1977 - it was my first job as an exploration geologist with Kennecott Minerals and then Anaconda. More recently, when I set up NovaGold we started working in the district in 2004 - we have been active every year since. We spun out Trilogy Metals to our shareholders so that NovaGold (where I remain on the Board and continue to be involved with the company) along with our business partners - Calista, The Kuskokwim Corporation and Barrick Gold could focus on advancing our 40 million ounce Donlin Gold project - which I am happy to report is in the final stages of permitting with a ROD expected later this year. That left Trilogy to focus on advancing our interests in the Ambler mining district. We formed a business partnership with NANA in 2011 with the objective of developing the Ambler mining district into a premiere mining camp. [Slide 2 - US at Night].

2:11:25 PM

Before discussing the specifics of our project, I would like to first talk about a topic of great importance to all of us - Earth and how to meaningfully address Climate Change and the effects of Global Warming. As the only Arctic Nation in the US, we feel these effects more acutely than anyone in the lower 48.

Governments around the world are collaborating to focus on addressing Climate Change and Global Warming. The Paris Climate Accord adopted numerous measures to "limit a global temperature rise this century below 2 degrees Celsius above pre-industrial levels". Although there are many things that can be done to address carbon emissions, the most meaningful and obvious is to use cleaner forms of energy and transportation.

Alaska has shown the world how energy resources can be responsibly developed, spearheading Alaska's transition from the rough and tumble new state I grew up in, to one providing comprehensive quality education, healthcare and transportation services for its residents. All while being good stewards of the environment. Currently, fossil fuels make up 90% of both Alaska's revenues, and energy production on a global scale. World leaders are trying to change that energy mix to meaningfully address Global Warming. While much of this transition is beyond our control, one thing we can do is decide to remain only part of the problem by continuing to produce oil, or become part of the solution. [Slide 3 BP].

Great graphics - thank them. Point out more consumption of energy and a transition to alternative non-carbon energy… [Slide 4].

2:13:48 PM

BP predicts and Shell just published a similar report with similar conclusions, that by 2040-2050 it will require a mix of energy sources to meet worldwide demand - driven by a growing population and a global improvement in lifestyle - particularly in the developing world and that is truly a great thing ….what BP didn't point out in their slides is that this transition requires a huge amount of copper. [Slide 5 - Alternative Energy Requires Copper]. Regardless of which forms of non-carbon-based energy the world transitions to (Solar, Wind, Geothermal, Hydro, or Nuclear), they all require more copper to generate power. Conventional coal and diesel take 1 ton of copper to produce 1 Megawatt of power, whereas Wind, Solar and the others require 3 to 5 tons per MW…..plus additional copper wire to connect the power generation source to the grid. Large off-shore Wind generators like CIRI's Fire Island Wind Farm take 10 tons of copper per MW. Green Energy production requires an average of 5 times more copper than conventional, carbon-based energy generation. [Slide 6 - Electric Cars].

2:14:17 PM

Now let's talk cars - specifically hybrid and electric cars. A typical Internal Combustion Engine (ICE) vehicle uses 20kg of copper per vehicle while an all-electric uses 80kg of copper. In addition to copper, significant amounts of nickel, cobalt, manganese, graphite and lithium are also needed. If you want to replace ICE with hybrid or electric vehicles, then you need 3 to 4 times as much copper per car……even more for trucks, buses and mass transit. [Slide 7 - Electric vehicles require more electricity…..more copper….5X].

More electric vehicles will require more power generation and charging stations. Add it up and we need 5 times more copper to build electric vehicles and the infrastructure to support them. So, if we want less CO_2 going into the atmosphere, we need to produce more copper under it! [Slide 8 - Copper Recycled].

The great thing about copper is that it's essentially 100% re-usable. Today, about 80% of the copper mined is eventually recycled. New supply chains for renewable energy, and hybrid and electric vehicles will improve this to well above 95% - resulting in a sustainable supply of copper and clean, green energy and transportation. There are solutions to reducing pollution and C02 in the atmosphere, but copper and a host of other base and specialty metals are required -

no way around it! In my opinion, if you are truly concerned about Global Warming and consider yourself an environmental steward of Planet Earth - you must Think Copper! [Slide 9 – Africa and Child Labor].

Now where does copper come from - here is where we have choices to make as a society. We can do nothing and the earth keeps warming up; we can do nothing "in our backyard", leaving it to others to fill our global need for copper and cobalt knowing that it may involve child labor, corruption and human rights atrocities (see Amnesty International Report on mining in Africa: https://www.amnesty.org/en/latest/news/2017/11/industry-giants-fail-to-tackle-child-labour-allegations-in-cobalt-battery-supply-chains/),
[Slide 10 – Water and Copper –].
or in the Andean countries of South America - Peru, Ecuador, Argentina and Chile where over 50% of the world's copper production is mined..…often displacing water used by farmers and causing serious social unrest – see http://www.bioone.org/doi/pdf/10.1659/mrd.1039. These two areas combined are where about 70% of the world's copper and cobalt comes from….or we can support mining in Alaska - a jurisdiction with a long history of responsible resource development and absolutely no history of any significant mining disasters.

2:17:45 PM

A prime opportunity for Alaska to contribute to both this global transition, and our own economic self-determination lies in the Ambler Mining District (AMD): a high quality, well known mining district containing over 10 Billion Pounds copper, significant cobalt and a host of other metals; where the State of Alaska and NANA, an Alaska Regional Native Corporation, specifically made land selection for mining as a result of the Alaska Native Claims Settlement Act (ANCSA) and Alaska National Interest Lands Conservation Act (ANILCA) legislation; and that the Federal Government specifically granted a Right-of-Way to connect this metal-rich district with the Dalton Hwy and the rest of Alaska's infrastructure. Specifically, Section 201(4) of ANILCA states:
"Congress finds that there is a need for access for surface transportation purposes across the Western

(Kobuk River) unit of the Gates of the Arctic National Preserve (*from the Ambler Mining District to the Alaska Pipeline Haul Road*) and the Secretary [of the Interior] *shall permit* such access." (Emphasis added.)
Congress made it very clear what was intended with this unique and specific language in ANILCA.
[Slide 11 – World at Night].

To put what is already known about the mineral resources in the AMDs into perspective, there are already 10 Billion Lbs of copper identified in the AMD - that could be used to build 56 million EV's and reduce CO2 entering the atmosphere by 250 million metric tonnes every year. Remember copper is 100% re-cyclable so these C02 reductions are sustainable!
How much CO2 will be emitted by the Ambler mining complex to mine 10 B lbs of Copper that could generate these annual global CO2 reductions? Our plan is to use Liquid Natural Gas (LNG) from the Titan plant near Wasilla for on site power generation to run the mill – that results in ~ 75,000 tonnes CO2/year on site + transportation and copper refining emissions to produce usable copper metal totals ~200,000 tonnes of C02/year. That's over 10 to 1 return on investment in terms of C02 reduction.

2:19:30 PM

Alaska is a State that produces a lot of oil and will for the foreseeable future. Although we need to diversify our economy as a part of this global energy transition and wean ourselves off being so dependent on oil, it will take time. It won't happen over night, but it is something we must work towards - a diversified economy is a stronger economy.
Alternative forms of energy and electric vehicles can help enormously to reduce C02 emissions and provide a sustainable solution to reducing greenhouse gas emissions….but it requires copper. [Slide 12 – UKMP].

Let me introduce you to the Ambler Mining District and our Upper Kobuk Mineral Projects where we are developing two high quality copper projects. BTW – the Caribou antler is our logo to remind us of how important the Caribou is to subsistence hunting in the region.

2:20:23 PM

[Slide 13 - Bornite Camp - 80 people typically working in the summer with upper 55% to 65% local shareholder hire]. [Slide 14 - NANA Region].

Business Partnership with NANA - OC - reviews and approves budgets….Communications Committee…..Subsistence Committee…….Work Force Development Committee
Last year Willie Hensley joined Trilogy Board of Directors - particularly proud that he agreed to join our Board because I did a paper on Willie my graduating year at West High in Anchorage on his role in Native Alaskan rights and his role in the ANCSA legislation. He will be a valuable member of our Board of Directors. [Slide 15 - Map of UKMP].
Explain [Slide 16 - Local Hire and Community Engagement].

Meet three times a year - review activities on the project, discuss concerns and accept job applications. Strict zero tolerance drug and alcohol policies enforced. [Slide 17].

3D model of the UKMP project area assists with project and community concerns discussions. [Slide 18 - Arctic].

10 times the average grade being mined today in open pit mines around the world
Drilled
163 holes have ben drilled plus a number of Geotech and hydrology holes

2:23:01 PM

This summer we will drill an additional dozen Geotech holes along with another dozen hydrology hole. These will be used to continue to advance our hydrological model for the area around the mining and related facilities area in preparation for our feasibility study and permit application documents.
BTW - I should probably tell you a little more about Trilogy Metals - we are a publicly listed company based in Vancouver, BC. We are listed on the NYSE -

what they call the American Exchange where about 90% of our shares trade. We are also listed in Toronto. Our shareholder base is about 85% America with some Canadian, European and Asia (Hong Kong) shareholders. Our major shareholders include Tom Kaplan's Electrum Group; John Paulson's Paulson and Co. ; Seth Karmen's Baupost and South 32, our strategic business partner and one of the largest mining companies in the world that bring a huge amount of technical and operating experience to the team - these are large, well know, sophisticated investors and together with management control about 65% of the company. We are NOT a fly-by-night junior explorer. As I mentioned, I was the founder of NovaGold and the huge discovery at Donlin where we formed a 50/50 partnership with Barrick Gold - and now after 5 years of permitting we look forward to getting a ROD so we can build a world class mine there in partnership with Calista and TKC. I grew up here in Alaska and have worked extensively throughout the State and have deep roots and experience here and I am passionate and proud of our accomplishments. But none more than Nicole Tickett. [Slide 19 - Nicole Tickett]. [Slide 20 - PFS].

Review Arctic PFS results
This is a very robust project -$1.4B NPV8%...33% post tax IRR and with a two year payback. We will of course drill additional holes to define measured resources/proven reserves when we complete our feasibility study and stage gate process next year. I should mention at all of these estimates are done by independent third party consultants - Ausenco did the mill design; AMEC Foster Wheeler did the open pit Mineral Reserves and SRK did the tailings and waste rock facilities design. [Slide 21 - Speaking of which…..Subarctic Creek valley]. [Slide 22 - Tailings/Dam/Wasterock facilities]. [Slide 23 - Why do we need a road……].

Concentrates of copper, zinc and lead containing precious metals gold/silver. Road to Fairbanks then Alaska Railroad to Port of Anchorage. Each box will contain 28 tonnes of concentrates. BTW - in case you are wondering it is long haul - over 800 miles to Anchorage….these concentrates are all valued in excess of $2000/tonne. Transportation costs along the road and rail route will be $175/tonne - Lynden did the estimate - they move much of what is transported in Alaska so it is a good number. It represents less than 10% of the contained value. Fairly typical for land transportation costs on a worldwide comparative basis. [Slide 24 - 27 - walk through the Qube Logisitics slides]. [Slide 28 - Ambler district…]. district exploration…].

Like Red Dog with additional exploration there will be additional Resources and Reserves - remember this is a well known mineral district that NANA and the State of Alaska specifically made land selection here for that reason…….Bornite deposit where we are working on our second project. [Slide 29 - Review Bornite].

2:26:06 PM

our Bornite project located just 20 miles to the southwest of Arctic. We have already outlined a resource in excess of 6 Billion pounds of copper averaging nearly 1% in a potential open pit resource and 3% in a potential underground resource. This year we will be back exploring with a $10 Million exploration program with the objective of expanding the already sizeable resource. In addition, based upon a significant amount of geometallurgical test work, we will be reporting a cobalt resource at Bornite in Q2 of 2018. With keen investor interest in a North American source for cobalt - an essential ingredient in new battery technology for electric vehicles, we feel that our cobalt at Bornite will add to value already established. Once again, it will be a busy year for the Trilogy Team.
In total Trilogy has expended about $100M - $60M at Arctic and $40M at Bornite - not including our $15M program planned for 2018. [Slide 30].
So, there you have it - alternative forms of energy and electric vehicles can help enormously to reduce C02 emissions and provide a sustainable solution to reducing greenhouse gas emissions, but this Green Energy solution requires copper - a 100% re-cyclable metal. [Slide 31 - Planet Earth].

It's a beautiful place….but global warming is a global issue.
The choice is ours - do we support mining copper and cobalt here in Alaska and be part of a sustainable

energy solution, or do nothing and remain only part of the problem by outsourcing production of these resources to jurisdictions out of sight and out of mind?

Thank you!

2:30:17 PM

REPRESENTATIVE PARISH returned attention to slide 19 and asked whether the shown 33 percent internal rate of return (IRR), during a mine life of 12 years, was based on proven deposits or on proven and inferred deposits.

MR. VAN NIEUWENHUYSE said the category is probable; when completed, the feasibility study of measured and indicated resources will reveal proven and probable reserves.

REPRESENTATIVE PARISH observed the Arctic prefeasibility study (PFS) projects a mine life of 12 years; however, the proposed road projects a payback period of 30 years. He asked whether Trilogy would still be working in the region in 30 years.

2:32:16 PM

MR. VAN NIEUWENHUYSE said yes. For economics, Trilogy seeks to spend its money on geology. The study outlined a mine life of 12 years, although the Arctic [Mine] prospect holds more resources and the mine would probably expand underground. Further, there are reports that identified an additional 40 million tons of historic resources in the district.

REPRESENTATIVE PARISH noted the Ambler access project may be a good investment but there seems to be unanimous local opposition. He questioned whether Trilogy could garner support for the project.

MR. VAN NIEUWENHUYSE restated the project is following the EIS process that includes hearing concerns and addressing concerns. Trilogy participates in a lot of community engagement in the region to discuss topics such as the number of trucks on the road and their payloads, and river crossings. Mine permitting will follow, "hopefully within the next year or two."

CO-CHAIR JOSEPHSON observed [Donlin Gold] will finance its infrastructure and questioned why Trilogy would not.

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MR. VAN NIEUWENHUYSE said Trilogy has entered into a partnership with AIDEA and has spent $100 million exploring and developing mineral deposits within the district. In most of the U.S. and the world, governments build infrastructure and the Red Dog Mine [and DMTS model have] demonstrated that a public-private partnership approach makes sense because AIDEA has a significantly lower cost of capital; for example, Trilogy plans an 8 percent rate for a mining project, whereas AIDEA would expect a 4 percent rate for an infrastructure project.

CO-CHAIR JOSEPHSON pointed out AIDEA anticipates receiving payment in full for its investment [in the Ambler access project] and asked, "Is that something Trilogy intends to do too?"

MR. VAN NIEUWENHUYSE responded, "That's certainly what our expectation is ...."

CO-CHAIR JOSEPHSON asked how Trilogy's economics would be affected if the state declines to invest in building the road.

MR. VAN NIEUWENHUYSE acknowledged Trilogy's cost of capital would increase, which would affect the project's rate of return; however, operating costs would not be changed significantly except for financing the cost of the road. He stressed the project is a robust project that can afford to pay for the road if the price of copper remains at [$3 USD/lb].

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REPRESENTATIVE BIRCH, speaking from his experience, said the Red Dog Mine has greatly improved lives in Northwest Alaska. Further, the extension of the road from Manly Hot Springs to Tanana has reduced costs for residents, as have ice roads for surface access into Utqiagvik and other communities.

REPRESENTATIVE JOHNSON expressed her understanding AIDEA would have other mining companies that would pay for the road and may garner a profit from tolls. She observed Donlin Gold is a good example of a mining company working with affected communities in a positive way, and asked about Trilogy's engagement with local communities.

MR. VAN NIEUWENHUYSE recalled in over 20 years, NovaGold displayed "frequent, open, and honest communication and hearing what the problems are." He said he is associated with Donlin

Gold and supports how it does business in the Yukon-Kuskokwim region. Trilogy has the same approach and has met two to three times each year with the Kobuk River villages to answer questions raised during the exploration period.

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REPRESENTATIVE DRUMMOND pointed out Trilogy is asking the state to build a road covering a distance equal to that of traveling from Wisconsin to Montana; she said she seeks to ensure the state would be repaid for building the road. She returned attention to slide 21 which illustrated a "huge rock dam and water high above your pit, I believe, and considering the carelessness of some other mining companies, this kind of thing is very concerning to me." Representative Drummond asked for clarification of Mr. Van Nieuwenhuyse's association with NovaGold and NovaCopper.

MR. VAN NIEUWENHUYSE informed the committee he founded NovaGold and the company was split into two different companies, NovaGold and NovaCopper; NovaCopper was changed to Trilogy to avoid confusion with NovaGold.

REPRESENTATIVE DRUMMOND asked whether Mr. Van Nieuwenhuyse is associated with the Rock Creek Mine in Nome.

2:46:29 PM

MR. VAN NIEUWENHUYSE said the [Alaska Gold Company] mine project was shut down; during the time period [of operation] there was a recession and it was difficult to raise money, so the project did not go forward. The site was reclaimed, and the company's assets and land were sold to the Bering Straits Native Corporation. He recalled some of the project's major shareholders went out of business during the recession; however, the mine was properly closed, and the land reclaimed.

REPRESENTATIVE DRUMMOND stated all Alaska residents are aware of the state's financial situation; in fact, the state is having its own depression. She remarked:

> And your company is asking us to build a road, so that your company may profit from that and I'm ... hoping that we're going to hear how you're going to help us do that.

MR. VAN NIEUWENHUYSE said Trilogy is not asking the state to build the road but is partnering with AIDEA and following what is known as a public-private partnership utilized around the world. He agreed the infrastructure needed to develop the Ambler Mining District is significant. Further, [the state's investment in] the Red Dog Mine and DMTS has made a huge improvement in Northwestern Alaska. He stressed the project would not be built without a feasibility study level document indicating Trilogy could pay the toll.

REPRESENTATIVE DRUMMOND added, "and ... that the communities along the way will, will appreciate it and support it."

REPRESENTATIVE LINCOLN asked how much DMTS cost to construct.

MR. SPRINGSTEEN advised DMTS is not a perfect "mirror" for the Ambler access project because DMTS provided other infrastructure such as a port, a conveyor system, a warehouse, and a camp, that are not contemplated in the proposal.

2:50:09 PM

REPRESENTATIVE LINCOLN restated his question.

MR. SPRINGSTEEN estimated total cost, in today's dollar equivalent, for a 52-mile road would be $50 million to $60 million.

REPRESENTATIVE LINCOLN asked how much the state receives annually from the Red Dog Mine for the use of DMTS.

2:51:03 PM

BRENDA APPLEGATE, Chief Financial Officer, AIDEA, DCCED, informed the committee AIDEA receives its annual assessment for DMTS plus a 6.5 rate of return. The rate of return becomes a portion of AIDEA's dividend base and, within the statutory limitation, part of that returns to the state. Therefore, the state will recoup the cost of construction plus the rate of return. In addition, there are price sensitive and tonnage sensitive payments which enable AIDEA to pay down the principal of its investment in the project, and to pay into a reserve account shared between AIDEA and the mine operator, Teck Alaska, Inc.

2:53:19 PM

DAVID G. CLARKE provided a PowerPoint presentation entitled, "Ambler Mining District Industrial Access Road Project," and paraphrased from the following written testimony [original punctuation provided]:

Mr. Chairman, members of the committee, for the record my name is David Clarke. I am a private citizen and I appreciate the opportunity to provide comments to the House Resources Committee on the Ambler Mining District Industrial Access Road Project.

• I am a Project Management Professional with 38 years of oil & gas industry experience, working on major capital projects around the world, including 11 years here in Alaska. • I am supportive of resource development in Alaska, including the Ambler Road project, but I am strongly against high risk, low reward projects that are likely to destroy value for the State. • I think that the State, like all successful private companies, should always adhere to Warren Buffett's 2 Rules of Investing: Rule 1: Never lose money; Rule 2: Never forget rule 1.
I have reviewed the Ambler Road project from a Project Management perspective and my findings are as follows: (Slide 2)

1. Reward must be commensurate with risk and the Ambler Road project is currently wildly skewed in favor of the mining companies to the detriment of the State of Alaska. 2. If the Ambler Mining District is economically viable, the mining companies should be willing to collectively enter into a joint venture with the State to fund the Ambler Road Project. 3. If the mining companies are unwilling to put some of their own money at risk in the Ambler Road Project, then this should be a huge red flag and the State should abandon the project. 4. If the project is restructured to fairly share the risk and reward between the State and the mining companies then it could be a win-win for everyone. 5. The Ambler road project as currently configured plays the age-old game of privatizing profits while socializing costs.

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Let me explain the basis for these findings:

Firstly, I'll talk about the many shortcomings that I see in the current Ambler road project and then share with you my suggestions on how it could be restructured to more fairly share the risk/reward balance between the State (AIDEA) and the mining companies.

In the private sector, where I have reviewed large-scale multi-billion-dollar projects for over 15 years, companies frequently have more potential projects that they would like to progress than they have funds (or resources) to complete. A situation not unlike the one that the State of Alaska now finds itself. Successful companies have adopted a rigorous "stage gate process" (slide 3) in which funding is released in stages as more detailed information becomes available. To get through each stage gate, the project team must provide a rigorous justification to peers and stakeholders showing that the project adds value and is a competitive use of the available funds.

It is very important that the review team for a project decision is made up of multiple relevant subject matter experts who are independent, i.e. they do not have a stake in the project outcome, otherwise bias can creep in.

Given what I know about the Ambler Road project it would not pass a rigorous and independent stage gate review for the following 4 reasons: (slide 4)

1. 100 percent of the project risk of cost overruns is borne by AIDEA and none by the mining companies who ultimately benefit from the road. 2. The reported NPV of $85-90M is calculated assuming a discount rate of just 3.9 percent and hence the project will be considerably underwater or negative at a more normal risk adjusted discount rate of 8-10 percent. AIDEA plans to finance the project with municipal bonds at an interest rate of around 2.75 percent. I assume the reason the rate is so low, for such a high-risk project, is that these are general obligation bonds and that the State (you and I) are guaranteeing any revenue shortfall. 3. Revenue from the project is solely from tolls which are dependent on 4 mines that may be developed in the Ambler District: Trilogy's Arctic and Bornite mines; Teck Resource's Smucker mine

and the Sun mine whose former owner went bankrupt. 4. The minerals on which the Ambler Road project will rely for tolls are largely classified as indicated or inferred resources, or in the best case probable reserves rather than proven reserves (economically mineable). No exploration work is currently ongoing at either Sun or Smucker. Consequently, there is a high risk that some or all of the mines may prove uneconomic and not developed.

In summary the potential reward for success on the Ambler road is not commensurate with the project's high risk.

I'd like to share with you the work that I did on a project in the eastern Gulf of Mexico (GOM) that may be analogous to Ambler and provide some insights. I appraised a relatively small gas resource that was in a very remote region with no infrastructure - not unlike Ambler. The prospect was hopelessly uneconomic, it just couldn't support the large costs to build out the infrastructure necessary to get the product to market.

2:59:38 PM

Given that there were similarly challenged resources in the region, we met with the other field owners and it was apparent that the only way to develop the resources in this region was to join forces and share the costs of building out the infrastructure. To do this we formed a Joint Venture company to build, own and then operate the infrastructure. In hindsight, it never occurred to us to ask the State of Louisiana to build the infrastructure for us. Key to success was developing all 3 fields and the infrastructure to access the resources concurrently. So, in this GOM project the resource developers took 100 percent of the infrastructure project risk and the State of Louisiana did not take any risk, but instead benefitted from royalties and corporate taxes.

Another analogue here in Alaska would be the TAPS which was financed, built and operated by a JV company, Alyeska, comprised largely, but not exclusively, of the resource developers. So, with Alyeska and Ambler you have 2 ends of a spectrum from

0 percent to 100 percent state ownership in the infrastructure necessary to get resources to market.

I would suggest that a similar Joint Venture company should be explored to build and operate the Ambler Road with the principle mining companies and AIDEA as partners.

This Joint Venture arrangement has a number of significant benefits over the current Ambler Road structure: (Slide 5)

1. The project risks of cost overruns and/or revenue shortfalls would be more equitably split between AIDEA and the mining companies. 2. There would be greater scrutiny of the road cost estimate by the mining companies, who would now be putting their own capital at risk. There is always a tendency to low-ball the cost estimate to get a project approved and worry about the consequences later. 3. The best people to determine the true viability of the various mines are the mining companies. If they are not prepared to put some of their own money at risk in the road, then this should be a huge red flag and the State should abandon the project. Remember Rule 1. 4. Greater chance that the road development and at least one anchor mine will take place concurrently as the mining companies will not want to tie up capital in a road that may not generate any revenue. It also reduces the risk that resource development does not take place at all, as was the case for the Umiat road project and the Point MacKenzie rail spur.

The track record of State sponsored infrastructure projects to support resource developments is not good. The State spent some $35M on studying a road to the Umiat Oil field, before the developer Linc. Energy went bankrupt. Also, the State spent $184 million on the partially completed Pt MacKenzie rail extension based on very optimistic projections of coal, ore, cement, and woodchip developments which are still to materialize.

3:02:40 PM

MR. CLARKE, in response to Co-Chair Josephson, restated the state spent $35 million on a road to the Umiat oil field and

$184 million on the Port MacKenzie rail extension; the project in the Gulf of Mexico was the Canyon Express Gas Field.

REPRESENTATIVE BIRCH asked for a summary of Mr. Clarke's experience related to this issue.

MR. CLARKE restated his interest as a private citizen in the undue risk posed to the state by the Ambler access project. He returned to his written testimony as follows [original punctuation provided]:

> When you compare the published projected economics of the Ambler Road and the Arctic mine there is a huge disparity between the risks and rewards experienced by AIDEA and Trilogy. I reviewed this very recent corporate presentation by Trilogy on Advancing the Ambler Mining District (Slide 6). This is Slide 27 from the presentation on the inputs and economic results of the Arctic Mine Preliminary Feasibility Study. I've put a star next to the 3 key economic results (NPV, IRR and payback) for the Arctic Mine. These are the corresponding numbers from AIDEA's website on the toll payments. (Slide 8)

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> I recognize that Trilogy may be guilty of an optimism bias while presenting the Arctic mine results. Nevertheless, if we take them at their word this is how the economics of the AIDEA's Ambler Road and Trilogy's Arctic Mine compare: (Slide 9)

> AIDEA Ambler Road Trilogy Arctic Mine Initial capital expenditure $380 million $780 million Ambler road cost overruns 100 percent AIDEA 0 percent Trilogy Risk of shortfall in toll revenue 100 percent AIDEA 0 percent Trilogy Internal Rate of Return Estimated at 4-5 percent 38 percent Payback 30 plus years (if ever) 1.9 years Net Present Value (after tax) $84 to $90 million at 3.9 percent Negative at 8 percent $1,413 million at 8 percent

> It is very clear from this table that the relative risks/rewards of the 2 projects are wildly skewed in favor of the mining companies to the detriment of the State of Alaska. In fact, AIDEA's Ambler road deal is by far the worst deal that I've ever seen!

Based on Trilogy's economic projections the Arctic Mine could easily finance 100 percent of the road construction; payback would increase from just under 2 to about 3 years which is still stellar; NPV would decrease a little as trading upfront capital for operating tolls, but I'd estimate it would still be well north of $1 billion.

To conclude: (Slide 10) • Reward must be commensurate with risk and on the Ambler Road project it is currently wildly skewed in favor of the mining companies to the detriment of the State of Alaska. • If the Ambler Mining District is economically viable, the mining companies should be willing to collectively enter into a joint venture with the State to fund the Road Project. • If the mining companies are unwilling to put some of their own money at risk in the Road Project, then this should be a huge red flag and the State should abandon the project. • If the project is restructured to fairly share the risk and reward between the State and the mining companies then it could be a win-win for everyone. • The Ambler Road project as currently configured plays the age-old game of privatizing profits while socializing costs.

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CO-CHAIR JOSEPHSON surmised from the projected rate of return of the project, "the tax rate needs changing...."

MR. CLARKE cautioned, because the presentation was shown to investors, the projected rate of return may reflect "a more optimistic economic result." In further response to Co-Chair Josephson, he said he is a chemical engineer by profession, who spent thirty-five years in the oil industry, and has been consulting for the last three years for smaller exploration companies. He said he was asked by a colleague who works with The Wilderness Society to analyze the project, and is a resident of Anchorage.

REPRESENTATIVE DRUMMOND returned attention to slide 9 and restated the cost of the road is $380 million, the cost to build the Arctic Mine is $780 million, and after the road is built it would be worth $84 to $90 million.

MR. CLARKE clarified $380 million is the cost for all phases of construction to a two-lane highway. Also, the AIDEA figures assume that all four mines are developed, but the Trilogy figures are for only the Arctic Mine.

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REPRESENTATIVE PARISH inquired as to the discount rate to the state of 8 percent.

MR. CLARKE advised an 8-10 percent discount rate is commonly used to analyze projects and represents the cost of capital.

REPRESENTATIVE BIRCH urged the committee to schedule additional opportunities for public testimony on this issue.

REPRESENTATIVE LINCOLN surmised AIDEA would need additional authorization from [the legislature] before advancing the project; he asked why Mr. Clarke cautioned that other private mining companies would not join in the partnership with AIDEA.

MR. CLARKE opined in order for companies to be committed to a project, they need to make a capital investment and not just sign papers.

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REPRESENTATIVE TALERICO questioned whether Mr. Clarke assumed the state will never complete the rail extension to Port MacKenzie.

MR. CLARKE said no. He explained he referred to Port MacKenzie because a study projected revenues to the state of over $4 billion, but the expected development has not occurred, and he urged for caution in regard to promises to develop resources without a firm financial investment; in fact, resource development and infrastructure development should occur simultaneously.

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REPRESENTATIVE TALERICO expressed his belief there will be a large railyard at Port MacKenzie one day. Furthermore, although AIDEA can operate as a business partner, its mission as a publicly-held corporation, and a subdivision of the state, is to help develop projects, and also to create short-term and long-term employment opportunities in regions of the state.

REPRESENTATIVE BIRCH asked whether DMTS was a good investment.

MR. CLARKE said yes.

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ADJOURNMENT

The meeting of the House Resources Standing Committee was recessed at 3:14 p.m., to 4/7/18 at 2:00 p.m.