



### MINUTES Alaska Industrial Development and Export Authority Board of Directors Thursday, February 14, 2008 10:30am Anchorage, Alaska

# 1. CALL TO ORDER

Chairman Kelsey called the meeting of the Alaska Industrial Development and Authority to order on February 14, 2008 at 10:32 a.m. A quorum was established.

# 2. BOARD OF DIRECTORS ROLL CALL

Members present in Anchorage: John Kelsey (Chair, Public Member); Deputy Commissioner Brian Andrews (Designee for Department of Revenue); and Commissioner Emil Notti (Department of Commerce, Community and Economic Development).

Members participating by teleconference: John Winther (Vice-Chair, Public Member) and Commissioner Leo von Scheben (Department of Transportation and Public Facilities).

# 3. PUBLIC ROLL CALL

Staff present in Anchorage: Sara Fisher-Goad (Acting Executive Director); Chris Anderson (Deputy Director-Credit); Mike Harper (Deputy Director-Rural Energy); James Hemsath (Deputy Director-Development); Valorie Walker (Deputy Director-Finance); Karl Reiche (Projects Development Manager); Karsten Rodvik (Project Manager-External Affairs); Chris Rutz (Procurement Manager); Jim Strandberg (Project Manager); Teri Harper (Program Manager-PCE); Brenda Fuglestad (Administrative Manager); and Sherrie M. Siverson (Administrative Assistant).

Others present: Brian Bjorkquist and Mike Mitchell (Department of Law); Mike Barry (Public); Bill Noll (Public); John McClellan and Tom Harris (Tyonek Native Corp.); Al Adams, Mayor Siikauraq Martha Whiting, Walter Sampson, Clement Richards, and Dave Case (Northwest Arctic Borough); Dennis Gann (Cook Inlet Alliance); Marc Greenough (Foster Pepper for NWAB); Andy Baker (Teck-Cominco); Richard Peterson (Alaska Natural Resources-to-Liquids Co.); Ashley Schmiedeskamp (Cook Inlet Region, Inc.); Angie Richards (The Growth Company); Vanessa Salinas (Alaskans for Responsible Mining); Jan Sieberts (Washington Capital Management); and Christine Vecchio (MEA Ratepayers Alliance).

# 4. PUBLIC COMMENTS

# VERBATIM

**Mike Barry:** Thank you Mr. Chairman. First let me say how wonderful it is to be on this side of the microphone. Please let me thank each one of you for your service to the state. I have been where you are and I know there can be a feeling that the public does not appreciate you. I want you to know that I sincerely appreciate what each of you is doing.

I am here today to talk about the Coal-to-Liquids Project. It is, in my mind, one of the very finest economic development projects that I have ever encountered. I have 45 years of experience in this state, either directly or peripherally involved in economic development and one thing I have learned is that economic development is very challenging.

While on the Board here, I recognized the efficacy of the Coal-to-Liquids Project in Western Cook Inlet, and in the missed potential such a project would be for Alaska. I came to recognize the depth of knowledge and the passion that Richard Peterson has for the creation of transport fuels utilizing Fischer-Tropschs and how this great knowledge and passion can be utilized to create jobs, tax-based, ultra-clean transport fuels and economic well-being, not just in Alaska, but across our nation. Our time today is very limited, but I extend to each of you a wish to meet to discuss this project in detail. I have reviewed the status report that Richard will make to you today and I am very pleased with the progress he has made in the past few years. As I said earlier, real economic development is very challenging. The goal posts are always being moved beyond your control. In this instance, coal-to-liquids has become more economically viable around the world at the same time that costs have increased significantly. Clearly, the increased price of energy continues to offset the cost increases and this makes more and more countries and regions attracted to this clean, alternative fuel source. At the same time that plant costs increase, the cost of coal increases and the value of the production of the plant increases.

When we started a few years ago we knew that we were in a race with other states that have coal to attract the technology provider necessary to commence the project. The only things that have changed is that today, thanks to Richard Peterson, we can demonstrate the superiority of our Alaska project, and there are even more potential competitors around the world for the technology provider's time and investment. The reason that AIDEA undertook this prefeasibility study was to attract the appropriate technology provider with clear information indicating the viability of the project. That factual document and foundation has been laid. Sometime soon, one or more of the technology providers will come to Alaska to do their due diligence on the potential of this project. I have heard that lower-level staff has ranked Alaska number one in potential economic viability. For Alaska's sake, I hope that AIDEA's leadership and the Administration are prepared to put our best foot forward. I know there are states that have already passed incentives to attract this industry. I know that there are Governors that have made several trips to Johannesburg to augment their strong vocal support for CTL in their state. I urge you to glean the information you need from Mr. Peterson so that you can do your part to bring the first U.S. CTL plant here to Alaska.

**Bill Noll:** Thank you Mr. Chairman. I have also been in Alaska for quite a few years. I arrived here in 1968 and have done a wide variety of things including some work in the coal area. In the late 1970s, my interest was drawn to Alaskan coal and what I perceived as potential markets in the Far East. To my knowledge there are some people in this room that might remember that and I think the folks up at Kotzebue are well aware of those efforts. I remember full well reading and then learning more about the high-quality coal that exists there.

We have used coal here in Alaska as a source of fuel since the beginning of people's presence in Alaska. The trick was, in the late 1970s, that we were undergoing the second of a convulsive contraction in the energy markets and coal was being looked at by every business magazine and business entity in the world. Everyone knew that coal was going to take the place of oil, which even in the late 70s was predicted to go to \$100 a barrel. It did not. There was a great deal of pressure on what was going to be used for energy in the future. It is obviously a terrific deal that is right on tidewater: approximately 10-20 miles from the coal field, which could be measured in terms of hundreds of millions of tons to maybe 10 billion tons of projected coal just a few miles to tidewater where you could get it to somebody's market. We would never, in Alaska, use that much coal. Somebody could use it; it was a great interest.

At the time I started in this coal business, a number of entities were already involved, some big names in American industry. The Hunt Brothers were involved, Starkey Wilson was involved and Bass people were involved. They had drawn in Bechtel, a big name in American industry. They had drawn in Maribeni, a big name in Japanese trading companies. All of the equipment, many hours of time, and many millions of dollars into studying what they thought, at the time, might be a 13M ton per year production. Then the world happened. Oil plummeted and we had no market for Beluga coal. We had a problem with Beluga coal and we had a problem with Usibelli coal and my company, which was called Suneel, struggled with developing a coal port in Seward and exporting that coal to Korea. The issue at the time and the issue today is with subbituminous coal.

To look at it on a practical basis, every time you see a coal train go by you start counting cars; 1, 2, 3, 4. The first three are coal, the fourth one is water. There is so much water in the subbituminous coal that every fourth ship that leaves Seward, every fourth railroad car that leaves Usibelli coal mine is nothing but water, useless in terms of energy. So we thought and we worked real hard on finding a way to get the water out of that sub-bituminous coal so we would be exporting more energy and less water.

A couple of years ago Richard Peterson approached me, when I was in office at the time, with an idea, which in my book is one of the best ideas that has come over the horizon in terms of coal since I have been here, which is again about 40 years. He found a way to solve the use of Beluga coal. Do not worry about the water, simply use the coal as a raw resource, go through a chemical-physical process and turn it into something far more valuable. This is called valueadded in spades. He is taking a very simple, well-known, established chemical process and turning the coal into a gaseous state and then precipitating that gas into a liquid. The liquid is going to be something that will make a truck or a car run diesel. Not many people wanted a coal ship full of water. Everybody wants diesel though; a very marketable commodity.

As a member of the Administration, I welcomed Richard into my office and fully supported the idea of exploring this business concept in depth. As Mike Barry already testified, it could mean as much as \$5B dollars or more in terms of capital assets to put into the Beluga coal field. A lot of that is going to be taxable into the Kenai-Peninsula Borough's base and the state's tax base. There could be a thousand jobs.

LNG or a gas line to America, it does not matter, gas is a big deal. This is a big deal and in terms of its do-ability, it might be just about as doable as any project around, including that gas pipeline. It is coal 10-20 miles from the coastline, a project that produces a product that is in great demand throughout the world, diesel fuel, and brings us a huge tax-base. I hope you will view it positively and receive his report with favor and do what you can to support the project. Thank you for the opportunity.

**John McClellan:** Good morning Mr. Chairman. My name is John McClellan and I am an engineer. I have been in Alaska for over 35 years developing large projects and heading an engineering company that is rated in the top 100 in the nation. Over the past few weeks I have been working with Tyonek Native Corporation and looking at the CTL project with a fresh set of eyes. I would like to share with you my perspective, not so much on the coal, but on the project itself from a project developer's point of view. What I have seen I am excited about. The project itself looks like it has all of the ingredients to be a successful project, one that AIDEA

and the State of Alaska can be proud of. More importantly, the project has the attention of the people who hold the technology and the people who build this kind of project. I urge AIDEA to keep supporting this project. I think we are at a crucial time for this project. Both the developers are looking for placement of new projects around the world. This project would be a competitor for a successful project placement, and we are at a crucial time when energy needs, both in Alaska and in the Lower 48, dictate that this type of technology be installed. Thank you for the time and the ability to make these comments.

In response to a question from Commissioner von Scheben, Mr. McClellan stated that he was affiliated with ASCG Incorporated.

**Tom Harris:** Good morning, thank you for this opportunity to visit with you. Mr. Chairman, AIDEA Board Members, I am Tom Harris, the Chief Executive Officer of the Tyonek Native Corporation. I am also the past president of Alaska Village Initiatives, which is a community-development corporation for the State of Alaska. Its members include all of the Regional Corporations, Villages Corporations, and Tribes. The focus there had been on economic development. As the current CEO of Tyonek Native Corporation, we have been watching this particular project for quite some time and began the analysis of coal opportunities back in 1994. We are very pleased with the work that we have seen from Mr. Peterson and the previous work Mr. Barry had brought to our attention.

From our perspective, on a local village level, we support this project because it offers sequestration and offers a net gain in power production for the communities of Southcentral Alaska. While it means a lot of opportunity to enter into the world market, it also means a lot for Alaska. The opportunity for safe fuel going into these communities is an enormous cost benefit and we look forward to your continued support of this. We mention that Tyonek has been making use of this coal for at least 4000 years, so from our perspective it is safe. We believe that it also has the opportunity to benefit not only the Southcentral region, but also the Bristol Bay and Calista regions, as well as any community that covets use of regular diesel.

We all know there are changes coming and we have to prepare for them. The exciting thing about this diesel is that it is EPA approved and we do not have to make changes to the fuel systems out there that other technologies require so we would really encourage your long view of this issue. Tyonek supports this project.

# 5. PRIOR MINUTES – January 25, 2008

The January 25, 2008 minutes were approved as presented.

# 6. OLD BUSINESS

There was no old business.

# 7. NEW BUSINESS

# 7A. Northwest Arctic Borough

**Mayor Siikauraq Martha Whiting:** Welcome Mr. Chairman. My name is Siikauraq Martha Whiting and I am the mayor for the Northwest Arctic Borough (NWAB). We are happy to come and talk with you today. One of the reasons we are here, as you know, is to purchase DMTS, the port site at the Red Dog Mine. When I first got elected Mayor, one of the things I

approached everyone in our community about is how can we help you to succeed? How can we help your communities be more financially self-sufficient? How can we build capacity in all of our villages? So that is my question for you today. How can we, at the NWAB, help you AIDEA, to succeed in your efforts to promote economic development in Alaska?

We are going to partner and will do everything that we can on behalf of the NWAB to help you succeed as AIDEA to help provide economic opportunities for the state. Right now we are specific to the NWAB. Our people are really resilient, we are really adaptable to change and we are still living a very active subsistence lifestyle.

Since 2000, the NWAB approached AIDEA in the purchase of the Delong Mountain Transportation System. We are still here. We are still a young company, a young organization, but we feel that we are financially able and our management is ready and capable to oversee the DMTS at the Red Dog Mine. We are excited to work with AIDEA. We know that it is critical to have this partnership. We are not saying that once it is done, a done deal, that our ties are severed. We want to make sure that the partnership continues because there are still a lot of potential resource opportunities in Northwest Alaska. It is an untapped resource for the state, so we look forward to a lot more involvement, not just resource development, but all opportunities in Northwest Alaska. So we want to make sure that we have a partnership to allow us to help ourselves in Northwest Alaska.

Our cost of living is really high in Northwest Alaska. For example a gallon of milk is \$10 a gallon. In one of our communities it is even \$18 a gallon. When we watch CNN News and people in California cry about \$3 a gallon for gas, well in a lot of our communities it is between \$8-9 for a gallon of gas and fuel oil. People will buy a five-gallon jug at a time as they can afford it. We really need to work on bringing down the costs of living. We have the richest mine, not only in the State of Alaska, but in the world. We want to make sure that the people in Northwest Alaska have the best benefit economically. We have a world-class mine in our neighborhood, we must benefit from it. The two closest villages are Noatak and Kivilina. Fuel costs in Noatak are \$8.50 a gallon. Kivilina is a little cheaper at \$5.05/gallon for gas and \$4.95/gallon for stove oil because they are on the coast and it is easier to access transportation to the community.

The mission for the NWAB is to work aggressively to improve the quality of life for all of our residents. To be able to achieve this, our assembly just last week selected three top priorities for our administration to work on. For our administration time is short, so we have to see results. We have to work to make sure that we can accomplish what we need in a short amount of time.

The top three priorities that the assembly talked about are:

- 1. Acquire DMTS. That is why we are here today, why we have been here since 2000, and that is why we will still make this our whole-hearted effort on behalf of our Borough to acquire the port site from AIDEA. This is the number one priority for us and we look forward to the day that it is going to be happening.
- 2. Law enforcement. In the NANA region we have one VPSO in our ten villages. We have had to recruit out-of-state and out-of-region to have law enforcement in the villages. We need to make sure there is adequate housing, salaries and training to make sure our people are able to provide law enforcement in the region.
- 3. Energy. How can we bring the cost of fuel down in all of our villages? It is opening transportation corridors? Is it opening a deep-water port? Is it opening with global warming? Are we going to see more transportation up rivers in Northwest Alaska? We have to look at ways to bring down the cost of energy. We are looking at alternative

sources of energy such as wind, hydropower and geothermal energy. This is the number three priority for our Borough and we have a really small staff to deliver the goods for what we need at the NWAB. We are resilient, we are adaptable, and we have our mission set before us. We are ready to roll up our sleeves and get the job done for what we need to do in Northwest Alaska. And, partnership with you, AIDEA, is critical for us to be able to do that.

In Northwest Alaska we also have what is called the Northwest Arctic Leadership Team where we continue partnering with NANA, the school district, many village associations, and the NWAB. These are the four major organizations that look at economic development, health care, jobs, education, and they work together consciously to see which organization will best fit. We do not have a lot of funding and we do not have a lot of people, so we partner. The only way we can succeed is to partner with each other and it has been a tried and true effort with the Northwest Alaska Region to have the Northwest Arctic Leadership Team work together. The other partnership that we have, that is really close, is with the North Slope Borough. We work jointly with economic development, culture, education, and resource development. We are tied really close with the North Slope Borough. We have had support from all the agencies I mentioned in our efforts to acquire DMTS because we do not have the resources that we wish we had. It is critical for all of us to partner to succeed and to be financially self-sustaining.

After acquisition, because we know it is going to happen. After acquisition, I just wanted to make that clear, that we are going to continue to work towards this effort and we do not want to sever ties with AIDEA. There is too much at stake in our effort to work towards future projects in Northwest Alaska. We have a lot of work still ahead of us, but we would love to hear your expertise, your guidance, your administration and help as we transition to be able to acquire and to reap the benefits of the Red Dog Mine in Northwest Alaska. One of our Inupiaq values is cooperation and sharing and we want to make sure that in all the business practices we do, we infuse everything that we are about. We would love to hear your expertise and welcome your staff to join us in that transition. We are hoping that by April 15, 2008 we have a negotiating team with your staff and Administration so we can work on what we need to do to make this become a reality. Of course we have a negotiating team at the NWAB as well, but by April 15, 2008 we hope your negotiating team could start working closely with us to make this become a reality.

I was reading your timelines on your website for AIDEA milestones and it mentions a few times DMTS and the Red Dog Mine. We want to include a new timeline milestone in there in the future that says something like, "in 2008, AIDEA sells DMTS to the NWAB in perpetuation of economic sustainability in the Arctic" and I can see that. When I was reading this, I thought we need to have a milestone on there for AIDEA to partner with the NWAB to make this become a reality. We absolutely look forward to your guidance and partnership.

At this time, I want to acknowledge one of your Commissioners, Emil Notti. We are a new generation at the Borough, still young and learning a lot of things about what we need to do to provide more economic opportunities in the Borough. I want to acknowledge Emil because as I read the history and talked to people in the North Slope Borough, there was a time that the Red Dog Mine was within the jurisdiction of the North Slope Borough. There were a lot of public meetings and North Slope people were saying "nope, nope, there is no way, we need this resource and we need to make sure that we have a continued profit for the North Slope residents." Even though our Inupiaq people and our cultural traditions are still the same, the boundary for the Red Dog Mine was in the North Slope. I want to acknowledge Emil, as DCRA Commissioner at that time; I think it was in the 1980s, with whose involvement was able to

change the jurisdiction so that it would include the NWAB and the Red Dog Mine for the Borough. As we sit here today, for me, it is kind of like coming full circle. We have this person here, that was involved years ago, to make sure and we want the Borough. This was the way that it happened; we got the Red Dog Mine which created the Borough for financial stability, and now here we are and I am just really glad that Emil is here because it is another milestone that we can perhaps, make this become a reality, to really get more revenues within our Borough. I want to acknowledge you for your persistence and assistance with the NWAB and for the native people of the state. Thank you.

Mr. David Case: Thank you Mayor Whiting, members of the Board, Mr. Chairman. I am David Case. I am the attorney for the NWAB and have been for many years at the request of several administrations, so I appreciate that very much. I have had some time during my tenure to come to grips with the effect of the Red Dog Mine within the Borough. They are generally positive effects and the relationship of the Red Dog Mine with the Alaska Industrial Development and Export Authority, I think this is something; a growing understanding of this relationship is what I experienced over the past 10-15 years. I do not think we understood it fully as we were going forward. This is the third time that the Borough has actually approached AIDEA about acquiring the DMTS and probably many of you are new to this Board. Commissioner Notti I think has maybe heard this before. The first time was in 2000 when the Assembly President Andy Baker met with members of the AIDEA staff, Brandy Simpson and This was when the Borough was looking at the ways in which it could fund the others. improvement in the education infrastructure in the Borough. President Baker spearheaded the effort to float the first bonds, the first education bonds in the Borough's history authorized in the amount of \$100M dollars. We were looking for revenue that would enhance the ability of the Borough to finance these education improvements. The bonds have been issued, but they have been capped out. Although the authorization was for \$100M, we do not have the revenue to go more than \$75M in bonded education improvements.

The next time you heard from the Borough was in 2006 when then Mayor Ross Schaffer wrote a letter to Ron Miller, your former Director, to request that the Borough be able to buy DMTS. That led to a discussion with the AIDEA Board in which we made the initial proposal and were requested by the Board to determine the valuation of the DMTS so that we could pursue it further. That is what you have before you now, the result of Northern Economics' valuation of DMTS. At the time, we understood that AIDEA might be doing its own valuation, I do not know if that is something that you have done or not. That leads us to this proposal including the valuation.

Mayor Whiting has now advanced the Borough's current proposal to purchase DMTS based on this valuation, taking into account the dividends that are paid to the state, for \$106M. I will get back to the dividend issue in a minute.

Putting forward this proposal, the Borough, of course, looked first to AIDEA's purposes and powers, to see if this was something that was even possible under your Statutory authority and we concluded that it is. AIDEA's purpose, as you are all aware, is to promote the general prosperity and economic welfare of the people of Alaska. As you heard from Mayor Whiting, the people of the Northwest Arctic are in need of some promotion of their prosperity and general welfare. It is historically one of the poorest areas of the state, and, notwithstanding the Red Dog Mine, it still is. It is within the power of this Board and of this organization to help the Northwest Arctic Borough promote that prosperity and you have the ability to do that by, of course, selling the property that you own in the form of the Delong Mountain Transportation System, including the road and the port site under your Statutory authority under 44.88.080 Section A. Of course

AIDEA has sold projects before and some recently. So we are asking you to sell this project to this local government so that it will be able to achieve its goals of enhancing prosperity of this region of Alaska, but it benefits all the people of Alaska.

The history of DMTS financing goes back to 1986 when AIDEA floated the first bonds to finance this project. Of course, this was in the time the Borough was just being formed. It did not have the capacity or the ability to finance the project. It made great sense for AIDEA to do that. And AIDEA has since refinanced the expansion of DMTS to facilitate the expansion of production at the Red Dog Mine. And in all of that, the Borough, well they just approved these proposals, these financing proposals, albeit without much knowledge or explanation of what was being financed and what the consequences of it were. As you all are probably aware, this financing returns a significant, positive cash flow to AIDEA and to the state. In addition to paying the annual debt it returns, we estimate and have actually been briefed by AIDEA staff in the past, approximately \$7M a year to the State of Alaska. Under your new agreement with the 1996 expansion I estimate that will go to about \$11M a year over the course of a few years. That is revenue that, as much sense as it made when AIDEA financed this in the early first 20 years or so, it seems to us to make less sense now, that this revenue should be flowing out of the very region that needs it the most, as the result of the development of this mine that is returning substantial tax revenues to the state already, in other forms.

The Borough is a home-rule government and under this form of government, and as wide spread as it is and the powers it has, is unique among the States of the Union. The Alaska Constitution is unique in the sense that it affords home-rule governments the maximum amount of governmental authority and the most efficient use of that authority. It is intended that these home-rule boroughs will be self supporting and self sufficient in most ways. I will get away from the way in which the state interacts with the municipalities on various levels, but that is the goal here. They are formed to provide services to their citizens. The Borough has mandatory powers, required under the Laws of Alaska, to provide education, land planning and taxation. The focus of the Borough, initially in its first years, was education, to improve the guality of education for its people, so that its young people would be able to participate in the Borough economy and even the wider economy of the state and the world. That is the purpose of the education bonding projects, to provide the students of the Borough with schools where the roofs do not leak and the windows are not frozen up and you have facilities in which you can actually learn. We have made a lot of progress with that with these bond issues. However, as I said before, the bonds were authorized for \$100M, that is the projected cost of these projects, but we are not able to finance them anymore because of a lack of revenue. The Borough also is unable to develop this revenue because it is one of the poorest regions of Alaska and its tax base simply does not exist outside of the Red Dog Mine. In lieu of taxes for the mine, as you probably are aware, we have a pilot agreement, a payment in lieu of taxes agreement. This was negotiated in 1986 to afford the mine tax predictability in their advancement of the mine. The mine had 20 years, before the last two, of very difficult operations. It was marginally profitable, but a very efficient mine. It was not very profitable and it was not until two years ago, or last year, at the end of last year, that it actually finally recovered its capital investments and that was only because of the extraordinary price of zinc over the last two years. Now that price is down from those extraordinary highs, although still higher than its prior lows. So the pilot agreement provides the Borough with \$6M a year in lieu of taxes. That funds the NWAB on an annual basis with some grant money. Our budget is \$10M not counting education funding that comes from other sources. The basic funding of the Borough, for any services that we are talking about, is \$6M a year, in what would otherwise be tax revenue. And AIDEA, the project takes \$7M a year out of the Borough. It would double the revenue of the Borough. As Mayor

Whiting said, this is a small staff of people at the Borough, but they do an extraordinarily efficient job and they are very creative in the way they get the job done.

We understand that minerals, base metals are not as lucrative as oil, that they do not produce the same kind of infrastructure and the same kind of tax base and that is the challenge we are dealing with. The Borough needs to make every dollar count that is coming out of this resource and that, I think, is the role we are asking AIDEA to play here. The Borough's goal, as the Mayor said, is self sufficiency, the way in which every home-rule government in this state looks to achieve self sufficiency. Education has been the focus of the Borough. These funds would help us be able to help the Borough to be able to complete its educational funding projects. Beyond that there is a clear need (I would say it is growing except it has already existed for a decade and never been met) for police protection within the villages. Can you imagine if there were communities of 200-300 or a 1000 people in Anchorage who had to wait days to have a policeman respond to their call or who did not have a policeman available at all in their community? Would we tolerate that? Why do we tolerate it in places like the Northwest Arctic? It is unconscionable and the Borough is seeking to rectify this problem. We do not think it can be done through the state. It has not been possible to fund these VPSO's and to fund local police protection through the state after many years. But it would relieve the state of an expense, a cost it now has to station troopers in the Borough, and would reduce or eliminate that need.

The other need, of course, is to provide some relief for the high cost of fuel and the cost of living. The Borough has in mind, and has in the past, had minimal local revenue sharing funded to its local communities through its own revenues in addition to those provided by the state. That is the purpose of this proposal. It is to empower and rightly support and vitalize a constituent government of the State of Alaska that is actually struggling on relatively little to support itself now and this frankly is the only means of additional revenue that would significantly address these issues. Thank you.

**Mr. Walter Sampson:** Mr. Chairman, members of the Board, members of the staff, members of the public. (Gives a statement in the Inupiaq language). Since he is our legal counsel, would you interpret please? (looked to legal counsel in jest)

First of all Mr. Chairman, I want to thank you for giving us the opportunity to come before you, members of the Board, members of the staff, members of the public. We are certainly intrigued and we are certainly looking at the future for the NANA Region. If you look at your map, most of what you will see is the Northwest NANA region and what we call the Northwest area. That encompasses roughly 38,000 square miles. NANA is represented by 11 communities. Kotzebue is the hub with 3000+ people. Kobuk is the smallest, 120 miles East of Kotzebue, with about 100 people. When you look at the map, about 90% of the lands within that region are Federal lands. Even though they are Federal lands, we have been able to work with federal agencies in regard to doing things. The region is also represented by 11,000 shareholders. Originally, the ANGSTA shareholder numbers were about 4700, but early in 1990s the shareholders of the region elected and voted to enroll what we call afterborns, children that were born after 1971. That is why our enrollment base is much higher today. Those children get the same benefits that the rest of us have as original enrollees.

When statehood came about back in the 1950s it also created governments. Prior to those city governments that were recognized by the state, the majority of our communities were traditionally run as a tribal entity. Today we have some city governments and tribes that merged together as one government in order to make sure that services are provided for the community.

That is a basic reason why we have villages that are merging and partnering together. So they can get the most of what little they can get from both the federal and the state government.

When the Alaska Native Claims Act was passed (imagine a traditional community learning that they have been signed into something that is foreign to them) that certainly was a challenge to all of us. Coming from a traditional lifestyle, now venturing into a Western-type of a business structure, in itself, was a challenge. I think NANA has been fortunate that we have been able to find and partner with people that have the ability and capability to manage and to work with us on getting NANA to where it is today and we are one of the successful regional corporations in this state.

In fact, when ANGSTA was passed, it created village corporations as well. In the early 1980s, a question came about from some of our villages; they said "what do we do as a village corporation"? Because they were created by the government, that guestion came to them, "what do we do"? So we looked and made sure that we provided information to the community, telling them that since they are now a village corporation that they would have to become a business structure. The second question, how do we do that? We do not have a knowledge base. And the question to NANA was "what can NANA do to help us to make sure that we do not lose our land base"? Based on those questions, NANA went out looking to see what we can do to make sure that the villages stay in existence as a village corporation or as a regional corporation. The discussion around that became 'merger.' They said "what if we give up the village corporation and become one corporation"? That was tossed around and talked about for two years. Finally, in one of our annual meetings it was voted. Out of the 11 villages, 10 villages merged as a regional corporation today. Kotzebue, being the largest in the region said, "well we think we can run on our own so we will stay a village corporation." And that is the reason why we have one corporation today, because of that. Back then people were very protective, not only in the NANA region, but I am sure in some of the areas where other natives live as well. By protective, I mean the lands that they lived off, they wanted to make sure those lands were protected. Certainly that was, the land was their backyard, their Safeway to their table. Certainly that was something that they wanted to protect, and in fact, they went one step further and said there would be no development, because our lands are too important to us. And just like any other communities through the state, services started coming into the region, telephones, electricity, water and sewer. All that stuff started to come in. Back in the 1980s, handouts were pretty great from the state and from the federal government. People were used to receiving checks to pay for these services. Over time we know that the state government and the Federal government said well we are going to have to cut down, so they took the rug off the bottom, and said well, we're sorry. At that point in time people started to realize that there has got to be a way to provide those services, to pay for these services. That is when the change started to come. They said what if we can look at some sort of a development. At that point in time, we were not aware of Red Dog. We were still in the land selection stages. However, we learned from different agencies and some individuals that there was some staining up north above Noatak and, at that point in time, we looked. We were able to apply some of our selections within in the Red Dog area. USGS indicated there was some staining. Bob Baker, who was Andy's dad, also was a prospector that reported the staining. Why Red Dog today? Bob had a lab that was red that went with him all over the countryside and he had the dog with him, the red lab and that is why we call it Red Dog and that is the name of the mine today.

The purpose of Red Dog is to create an opportunity for employment for the shareholders in the region and certainly we did create that. Out of the 400 plus jobs today, Red Dog employs a little more than half from that, about 60% of the employees are shareholders. The rest of the others are from Anchorage, Fairbanks and elsewhere from the state. So, it is not only our

shareholders that have the opportunity to be employed by the mine site and the port facility, it is pretty much shared throughout the state. Of course you talked, you heard about the NWAB. because we now have a tax base, the discussions around the region was what can we do to support education? What can we do to create an opportunity for the residents of the region? That is how the discussion started in regards to developing or the creation of the NWAB and that is the basis of that government today; to support education and to create an opportunity for the residents of the region. As you heard from the presentations today, Red Dog is the only tax base that can provide for that opportunity. If you look at and discuss education and an opportunity for employment, they come together. They work together. In order to ensure that we provide the best opportunity, the jobs for the residents you have to educate people to get and to fit into those positions. That is why we all support the NWAB today. A small portion of the \$6M dollars that we get from the Red Dog mine goes to the Borough itself. The majority of it goes into the educational system. When we were authorized to bond up to a \$100M to create infrastructure for schools, we did with what we had. To date, we have seven new schools using the revenues that we get from the Red Dog Mine. Today we cannot continue to build new schools because we are maxed out on bonding capacity. We have four other schools that we would love to get built, but we are maxed out.

We need to look for additional revenue sources where we can. There are some discussions in regards to some new potential development in the region as well, to create more additional opportunity for the residents of the region as well as the state. Ambler mining district you all know is a good district for some good potential development. In fact, a company is working with the upper villages in regards to doing their work for the last three years. They have employed some folks from Ambler, Shungnak and Kobuk and certainly those three villages are supporting a development. They see the opportunity for employment, but in order to fill some of these opportunities, we need to educate some of our people to make sure they get the maximum education to fill those that are in need. That is where we are today with the NWAB and the relationship that we have with NANA. I think with all the rhetoric that has been happening today statewide, in regard to the initiatives, certainly Red Dog will be impacted. We know that in the future resource development whether it is coal, placer, gold, copper, or another deposit, certainly it is going to be much harder to try to develop in the future. But, if NANA is successful in what it did because of the work in partnership that we create, not only amongst our region but with other regions and with the government, we have been able to succeed. With a positive attitude we certainly take things on an approach. We look at things from the perspective of an opportunity to create so people will have those jobs. Sometimes you get a little depressed. I am sure you have that moment at work when someone says "hey what are you doing to the water"? What are you doing to the, you know, those kinds of people you can also listen and talk to. For the last 35 years that I have been with NANA, one thing that I certainly learned to do is to listen to people. You listen to both people that are constructive, people that would love to destroy things. But you learn to respond in a positive way that people will take as a good message and we certainly want to work with AIDEA in regards to trying to create additional opportunity for the folks in the state. I told you it is not only NANA region that will benefit. Just from Red Dog alone, the regional folks brought in last year \$23M plus as work. Some of our employees live in Anchorage, so Anchorage benefits from that as well. With that, Mr. Chairman, I hope that I paint a little bit of a picture of what NANA region is all about and how we work with entities and what we would love to do for the future of our region. Thank you very much.

**Tom Harris, President of the Corporation:** I just wanted to go on the record and introduce myself as the President of the Assembly. I echo loud and clear what Martha, Dave and Walter have shared with you today and look forward to many future communications and hope our ties get stronger and stronger as we go forward.

### END VERBATIM

In response to Commissioner von Scheben, Mr. Case responded that the Borough has shared some revenue it has of its own with its communities, but the dividends he spoke of going back to the state are the dividends that are paid by AIDEA from the positive cash flow that comes from DMTS financing.

In response to the Board, Mr. Bjorkquist stated that questions would be appropriate for a public session. If there is anything the Borough would want to have discussed in Executive Session, it can be dealt with that at that point in time.

Mr. Sampson asked if there was anything that would hinder the process as a board if things should go into a public setting, as far as the proposal is concerned. He stated he did not want to get into a position where there are discussions and details that do not necessarily need to be discussed in detail in a public setting.

Commissioner Notti thanked the delegation for their presentation. He stated it was a very good picture of the conditions and history and a good foundation to begin from.

Commissioner von Scheben asked about the transmittal letter signed by the Mayor which says the NWAB is offering \$106M. They also say the assessed value is \$169.6M, which is the present value analysis of the net revenue that the state gets and there was a couple other valuations of \$177.9M and \$197.4M. A synopsis in the last sentence of the middle paragraph goes from \$127.2M and \$84.4M and takes the average to come up with \$106M. How did the valuation drop from \$169.6M to an offer that is somewhere in the area of \$106M.

Mr. Case responded that this represents NWAB's view that the dividend AIDEA pays to the state is not a part of the value of the DMTS to AIDEA. It is revenue that flows from AIDEA to the state. The dividend AIDEA pays to the state is between 25-50% of the revenue. NWAB had to estimate because they did not know which percent or part of the revenue was from Red Dog Mine.

In response to questions from Commissioner von Scheben, Mr. Case stated the \$106M figure was an average between 25% off of \$169.5M (\$127.2M) and 50% off of \$169.5M (\$84.8M).

Commissioner von Scheben asked why AIDEA would consider taking anything less than the valuation of \$169.9M.

Mr. Case responded that they believe this asset and the way in which this revenue flows is unique. It is not a normal business because you do not have access to that revenue. It is really is a state question; what is the state government's position on this. The state government has been responsible for a lot of the capital that has been put into this project through state funding and grants to AIDEA, not strictly AIDEA revenue and our valuation experts believe that the money that is being required to be paid by AIDEA as a dividend is not really part of the value to AIDEA, of the DMTS. So unlike any other business, you do not have the access to that revenue. It is required to be paid to somebody else.

Commissioner von Scheben asked staff if the Red Dog asset helps with the bonding situation and if it was a positive for reasons other than cash flow. Ms. Fisher-Goad replied yes. She suggested that staff take the information and valuation from the NWAB and come back to the Board with an analysis of the offer and recommendations with respect to how to proceed. Chairman Kelsey and Commissioner von Scheben both agreed.

Mayor Whiting thanked the Board for their time and stated that everyone here is trying to make a positive difference not just for today, but for seven generations down the road. She stated that we all want to make sure the work that we are doing is not just work, but it is making a positive difference in the lives that we serve.

### 7B. Beluga Coal-to-Liquids Project Overview

Ms. Anderson reviewed Resolution G06-01 regarding the financial assistance for the Beluga Coal-to-Liquids Project that was approved by AIDEA's Board on January 27, 2006. This resolution authorized staff to expend in a single-source contract up to \$500,000 as part of a \$1.5M predevelopment for the Beluga Coal-to-Liquids Project also known as the CTL Project. This resolution was not asking AIDEA to finance the project, but to help finance the predevelopment stage in order to see if the project was viable, if it was feasible. The monies were to be used to complete a coal resource study, baseline environmental work for environmental permits and get with the technology providers, primarily Sasol and Shell, for the Fischer-Tropsch technology that was needed. In exchange for this expenditure, AIDEA would be entitled to a 12.5% interest in ANRTL (Alaska Natural Resources-to-Liquids Company), a business owned by Dick Peterson. A contract was signed in September 2006 between AIDEA and ANRTL. We thought it would be beneficial to have Mr. Peterson provide an overview and project status update for the Board members who were not there at that time.

Mr. Hemsath provided additional background as an introduction to Mr. Peterson's report. During 2004-2007, he was a member of the Department of Energy's Arctic Energy Office, managing research projects for the development of energy in Alaska. At that time two studies had been conducted related to coal gasification and coal liquefaction, one in conjunction with Agrium's Blue Skies project and the other a coal-to-liquids project at Healy. One point for the board to consider is that in reviewing any CTL or CTG project it is important to look at, what we were calling, poly-generational opportunities. This means that the output of this kind of facility has more than one product generated. For example, a CTL or GTL plant in addition to generating syn-diesel, generates electricity from the waste heat. Hydrogen and Nitrogen are created, which from Agrium's perspective were feedstock for making Urea; Sulfur and mercury are captured, and CO2 is recovered not only for sequestration but also for the use in enhanced oil recovery or enhanced gas recovery in coal. The value of CO2 for enhanced oil recovery in the 2006 study was \$30 per ton, when the price of crude was at \$65. This provides another revenue stream. Our studies in 2007 at Usibelli Coal, for a much smaller facility, indicated that a 15% rate of return on the investment was available when the product was valued at \$67 per barrel, which at that time was slightly below the value of crude oil. North Pole Refinery indicated they would buy all products that would be generated to be used as feedstock to their refinery. There has been some wide analysis on CTL and the approach has value in Alaska. Mr. Peterson has just delivered the prefeasibility study this week. It's an extensive document and there is need for a significant review of that document before we proceed.

**Mr. Richard Peterson** thanked the Chairman, members of the Board, AIDEA staff, members of the public, and those who spoke so kindly in support of the CTL project. He gave an overview of the results of the Alaska Beluga Coal-to-Liquids Prefeasibility Study. Due to the short period of time allocated this afternoon, he discussed one particular issue, which he believes clarification is needed to understand. That is the debate on coal usage, whether it is in Alaska or across the United States or in the world, is in progress. The prefeasibility study indicates that

a commercial scale coal-to-liquids plant in the Tyonek-Beluga area is feasible. We still have not gotten a technology provider (Sasol or Shell) to commit their technology to this project. We are still in discussions with Sasol and Shell on this technology. As was pointed out earlier, we are in competition with the potential CTL projects that can be built across the world, most notably in China and in India. There is one issue that will have an impact on CTLs ability to be utilized in the US though,  $CO_2$  sequestering and its impact on greenhouse gas emissions. There is also one issue that there is so much misinformation about in the public domain that it has become a political issue. Coal is not the cleanest fuel in the world. We all know that. Historically, coal is burned in a furnace to boil water, produce steam to turn a generator and produce electricity. Little effort is made to capture the waste gases that go up the stack. Recently, people began building coal gasifiers to produce a syngas for power gas generation. This process is called IGCC (integrated gas combined cycle), the new buzz word for producing cleaner electricity. Again, little effort is being made to capture wasted gas, in particular  $CO_2$  produced in this particular process.

The CTL process is actually a three-step program where in the first stage you produce syngas, primarily through the process of gasification. The second step is the Fischer-Tropschs reaction where you react the synthetic gas and build a catalyst to make this long-chain molecule which you eventually crack into products. This is totally different than the IGCC process in that you must remove or capture all of the waste elements such as CO<sub>2</sub>, sulfides, mercury, and other harmful emissions that are produced in the first stage of gasification before that syngas can go to the second step, otherwise you poison the catalyst. This is one reason that CTL is so expensive, because you are installing syngas treatment facilities to remove and capture all of these emission elements. You end up with virtually all of the harmful emissions that are normally found in the combustion of coal captured easily although not inexpensively and properly disposed of. The process requires you to capture and remove all of these elements prior to the second stage. We have the ability to capture, deal with, sequester, and dispose of these particular elements. The Alaska Beluga CTL project will have the ability to sequester  $CO_2$ . It is built into our process. The issue is usually where to put the  $CO_2$  that you capture. Many pundits say it may be impossible to find adequate locations. This is one of the big advantages of the Cook Inlet location. In Cook Inlet we have a combination of depleted oil and gas fields ready and available where you can put CO<sub>2</sub> into the ground. You have been told about DOE studies in the last several years that have looked at enhanced oil recovery, EOR, where CO<sub>2</sub> would be available to increase oil production in Cook Inlet. You could potentially recover as much as 300 or 400 million barrels of additional oil from these fields. Coal combustion cannot be treated in the same way as CTL. CTL addresses the issues of waste gases and harmful emissions. CTL is the way to go in dealing with coal in this country.

Fischer-Tropschs fuels are cleaner than petroleum-based fuels. When you put Fischer-Tropschs fuels in your automobile you will produce no more and usually less  $CO_2$  than you would from petroleum products. This fuel contains no sulfur or aromatics and so emissions from your existing vehicle are considerably less with Fischer-Tropschs fuel from the CTL process than from petroleum-based fuel. Putting  $CO_2$  back in the ground is not cheap, it is a very expensive part of the process and you must have a way to physically put the  $CO_2$  back in the ground. Cook Inlet has that single advantage and Southcentral Alaska is a good location because we can deal with those issues. He passed out a summary of the prefeasibility study for the Boards review.

Chairman Kelsey asked Mr. Peterson to address the economics of such a project.

Mr. Peterson stated the cost of building anything on the energy side of the business has gone up considerably with the demand for energy projects across the world. When we initially started this program, Sasol gave us numbers of about \$4.2 billion dollars for this particular scale, an 80,000-barrel-a-day plant, which is identical in size to the plants they are currently designing for China. When you factor in construction financing and other issues for developing the mine, we ended up with a project with a cost of approximately \$5.2 billion dollars. In 2004, crude oil still was in the \$40-dollar range and product prices in the markets we planned to bring the fuels to were in the wholesale range of approximately \$1.30-\$1.50 a gallon. Today, with the increased demand for CTL and energy projects around the world, there is a potential cost of \$12 billion dollars for this particular facility. This includes the cost of developing the mine, which at approximately \$600M dollars has almost doubled since the 2004-2005 estimates. The good news is that the value of products in the market has gone up considerably. On the West Coast, primarily in the California markets, this particular low-aromatic fuel is highly valued. The wholesale price is now about \$2.50 a gallon which is approximately \$110 a barrel. While the projected capital costs of building a plant has gone up dramatically, almost three-fold, the value of products in the market has also gone up considerably, making this project still economically doable. The whole key to bringing Fischer-Tropschs, whether GTL, CTL, or BTL (biomass), to the United States was to get congress to enact legislation that supported these alternative, synthetic fuels in a same or similar manner that they have for ethanol, LNG, CNG, propane used for transportation fuels. In 2005, with the efforts of Senator Stevens, Congress enacted and passed and President Bush signed into law, legislation that supports Fischer-Tropschs fuels produced from coal or biomass to the level of 50-cents-a-gallon or \$21 a barrel. That fact makes this project economically feasible and workable in the United States because we are competing at a different level than free coal in China and lower labor costs in other parts of the world. This is a key element that makes a CTL project economically viable. Without that level of support in Congress, these projects would not be viable in the United States. With all that in place, CTL is economically viable in Alaska for a multitude of reasons that are covered in-depth in the report. To answer your question, yes, CTL is economically justifiable and feasible, even at the \$12 billion dollar capital costs today.

Deputy Commissioner Andrews thanked Mr. Peterson for his presentation and asked that he expand on exactly what the FT Technology Provider does: why they are so instrumental in taking this project forward, and where they are in this process.

Mr. Peterson said even at \$4.5-\$5 billion dollars, it was apparent from discussions with the financial market that they would only lend money to a project using FT technology. There were commercial operating plants throughout the world that they could see and understand. Sasol had existing plants operating in South Africa producing over 200,000 barrels a day, and a plant coming online in Qatar running on natural gas. Shell was operating a natural gas facility in Bintulu. Malaysia. With that in mind, we looked at these two FT Technology Providers. Initially they responded to us saying that if we wanted to use their technology: 1) we must choose a plant similar in size to one they were currently designing for China to save on engineering costs; 2) they would not license their technology to us, but would participate as an equity owner in our project. The rate of return earned as an equity participant would determine where they would invest in CTL projects to bring their technology around the world; and 3) they will not allow third party access to their proprietary technology so they must be in control of that when operating a plant. With those three requirements in mind, we designed a project that outlined the need to be competitive with CTL projects and investment opportunities around the world for the FT technology provider; that the provider must play a lead role in bringing their technology to us; and they must guarantee the integration of their FT technology, the center of the overall process, with the first step producing the syngas and the third step making the final diesel or

whatever product you want to make. If you can make jet fuel, you can make gasoline and a whole host of products.

If the state jet had not been sold, we could fly to Johannesburg and fill it up with a combination of FT jet fuel and conventional aviation jet fuel. The military would like to use 50% FT fuel and you can get that using the technology today. The bottom line is only two technologies out there are commercially financeable unless you can put up 60-70-80-90% equity. Only two technology providers out there have the ability to look at CTL projects around the world and they say our project must compete for their corporate equity on a level playing field with every other project they are looking at. They must control their technology in the project. This is how the FT Technology Providers place their goals in this particular project. Whether it be Sasol or Shell, or a combination, they will be an equity owner of 30-50% of the project; their criteria for participation in a CTL project.

Commissioner Notti asked Mr. Peterson what the BTU comparison was for FT fuel compared to petroleum-based diesel or gasoline.

Mr. Peterson stated that typical petroleum-based diesel runs from 132,000 BTUs per gallon to approximately 138,000 BTUs per gallon depending on what part of the country you are in and whether it is #1 or #2 diesel, arctic-grade diesel and so on. Fischer-Tropschs diesel typically runs about 132 to 135,000 BTUs per gallon depending on what part of the country you are in, it would be slightly above or below, but on average, about the same. The biggest issue with Fischer-Tropschs diesel is that it has a 70 Ctane rating, the equivalent of octane for gasoline, whereas conventional diesel has a 45-48 Ctane rating. It works far better in the Arctic than the conventional Arctic grade diesel fuel we get here in the winter time.

Commissioner von Scheben asked Mr. Peterson if he had ever talked to Dr. Paul Metz from the University of Alaska Fairbanks, to which Mr. Peterson replied no.

Commissioner von Scheben stated that Dr. Metz has an extensive background in sequestration of  $CO_2$  and burn off of coal. He asked if Mr. Peterson knew about the process of putting  $CO_2$  gas into the ground causing a type of chemical reaction with igneous rock to form limestone.

Mr. Peterson stated he had heard of that and that there are all sorts of potential possibilities for injecting  $CO_2$  into the ground, into nontraditional gas and oil depleted reservoirs. The viability of those particular types of processes has not been commercially proven at this point and if the US adopts a  $CO_2$  sequestering credit, \$5, \$10 a ton, or \$15 a ton, then it is our belief that some of these other processes may be attractive. At this point, it is still unknown whether or not you can make it. There is so much unknown about physically injecting  $CO_2$  into a nontraditional reservoir and what impact it will have as far as mitigating or moving throughout the reservoirs over the next million years.

Commissioner von Scheben recommended Mr. Peterson talk to Dr. Metz about coal infusion. He also asked Mr. Peterson to confirm that he said the project cost was approximately \$12 Billion and that he was thinking about putting the gas into vacated reservoirs in Cook Inlet.

Mr. Peterson confirmed it was \$12 Billion and that there are a number of depleted oil reservoirs that are no longer producing. A number of reservoirs, as pointed out in the DOE study, are in the second phase of enhanced oil recovery. The third phase is injection of  $CO_2$ . He pointed out that the use of  $CO_2$  for enhanced oil recovery has been going on in the US for at least 30 years. There are some very large projects in the Lower 48 utilizing this technology. It is the most

common type of technology that is known and therefore probably the most desirable to pursue. At the end of the day, the oil fields would not use as much  $CO_2$  as this particular project would produce. We have to look at secondary areas which would be depleted oil fields and depleted gas fields; there you have the benefit of knowing that that particular reservoir is more than capable of holding the  $CO_2$  for the next million years because it held the oil and gas in that reservoir for the previous million years.

Commissioner von Scheben added it is a very interesting idea and exciting technology. Again, he recommended Mr. Peterson speak with Dr. Metz at UAF.

Mr. Winther said when this project was first suggested there was 100-200 million barrels of increased oil production, now it is 300-400 million. That is a pretty significant increase. It was mentioned that from this project there would be feedstock for some of the plants in Nikiski and in Kenai that were running out of natural gas. It was believed that the process would be a spinoff of a substantial amount of electricity or power for electrical generation. He asked if this was still correct.

Mr. Peterson stated all those things are correct. The CTL plant produces a tremendous amount of waste heat. The Fischer-Tropsch process is what we call exothermic, it throws off a tremendous amount of heat. The plant itself will use about 800MW of power. 800MW is almost the daily average load of the railbelt, so we are talking about a very significant amount of power usage at that one specific location. In addition to being able to be self-providing with your own electric power, the plant will produce enough waste heat to produce another additional 3-4-500MW of what we would call waste-heat power. The discussion has been that this plant, which is located approximately 12 miles from the Chugach Beluga plant, is 380 plus MW of power and destined to be replaced in the next 5-10 years. This certainly would replace that as a source of low-cost, energy-efficient, reduced-emissions electricity for the railbelt system. Some of the waste of the CTL process, in addition to being CO<sub>2</sub>, is nitrogen. It has an oxygen plant and the oxygen is used in the gasification and it produces a tremendous amount of nitrogen. It is very possible that the waste streams from the CTL process can be utilized in the fertilizer process to make fertilizer. Most CTL plants throughout the world make fertilizer. The CTL plants in South Africa produce approximately 150 different byproducts from the waste streams, fertilizer being one of them and methane gas being another one. There is the possibility of utilizing these different waste streams as pointed out in earlier discussions for various activities throughout Southcentral.

With respect to the amount of recoverable oil, he stated he is relatively conservative in what he likes to report as far as income-generating streams and higher-cost operating streams. The DOE study, which ANRTL had no input into, said early on it would produce somewhere between 200-300 million barrels. We chose 150 million barrels to be conservative. In its final phase it talked about as much as 400 million barrels and that is where those numbers come from. It is not something that we have generated.

Mr. Winther said residents of Kenai, the Anchorage Borough area, and the Mat-Su Valley area should be supporting this project. It is an amazing project and every time we hear about it, it just gets better with spinoff benefits. What will it take for Sasol and Shell to commit and what can AIDEA do to help that cause?

Mr. Peterson said the head of Sasol International, which CTL is underneath, has told us he is going to come to Alaska some time in this first or second quarter. Cold weather is one of the biggest detractions that Lower-48 competing coal projects raise about an Alaskan site. He will

come to Alaska and lay out what they see as the cost of building CTL projects around the world; what they see as the cost of building CTL projects in the US; and what they see as the cost of building and operating a CTL project specifically in Alaska. He will say, if you can be competitive with our other opportunities around the world, then we are willing to commit our technology to a Fisher-Tropsch CTL program in Alaska. Our charge, when we find out when he and his staff are actually coming up, is to put together people from within the State of Alaska, government, manufacturers, companies like CH2M Hill and others who can physically build some of these modules and parts of the plant, and lay out to them the advantages of being in Alaska. Hopefully, by that time, the issues of taxation on the North Slope for the crude oil producers and gas producers will be resolved. At \$12 Billion dollars, this is going to be the second largest potential capital project expenditure in Alaska. Our vision when we came here in 1996 was to do GTLs on the North Slope and, as you ran out of gas, to supply the raw material to make synthetic gas you would go further West to the vast coal resources of the Northwest part of the state which may rival the total world's known coal resources. Gasify that coal, bring that syngas to Prudhoe Bay and continue on for the next 200 years producing products batched down the oil pipeline. Who knows, by then, they might have run out of oil, but that was our longterm vision for the state for the next 200 plus years in resource development. We firmly believe that the first CTL plant in the United States, certainly in Alaska, will be the blueprint for the potential of doing CTL for what appears to be the largest single coal resource in the world. As the North Slope has shown, they are the largest gas processing facility in the world and you can certainly build the largest CTL plant in the world. But, we have got to get to the first step and the first step is getting this plant built at Tyonek.

Commissioner Notti asked, if you burn coal directly and you compare it to the conversion and then burning of liquids, what is the net gain or loss of emissions?

Mr. Peterson said a typical coal-fired plant today is about 30 to 35% thermal efficient. With respect to carbon capture, they are somewhere from 20 to 25% carbon efficient as far as carbon capture. A CTL plant with the ability to use waste heat will be a minimum of about 80% thermally efficient and a minimum of about 60% carbon-capture efficient with the remaining carbon most likely in the form of  $CO_2$ , then being captured and injected into the ground. The CTL plants in South Africa have no requirement to capture carbon. Under Kyoto, South Africa has no requirement to sequester  $CO_2$  or capture it and China and India have no requirements to capture or sequester and therefore those plants will not be built with that in mind. On some of the requirements of the FT provider, Sasol or Shell, will not consider a CTL project in the United States unless there is the ability to capture and sequester  $CO_2$ . End of discussion. Without that ability there will be no involvement of them in a project, which tells you what their role in the United States is with respect to greenhouse gas and emissions control.

Chairman Kelsey asked if the resulting product was designated as diesel fuel.

Mr. Peterson said this goes back to where the most profitable market is. The closest would be Alaska, but by doing that you would displace diesel fuel that Tesoro, Kenai, Bates and Flint Hills makes in Fairbanks. Our goal was not to negatively impact any existing manufacturer or business within the State of Alaska with this process.

Chairman Kelsey said the point is diesel fuel has tax involvement, but the same product called heating fuel has no tax. So on the market place that has an effect.

Mr. Peterson stated this is correct. The way the law was written is if you can provide Fischer-Tropsch fuels, not necessarily diesel, to a qualified purchaser, the federal government will send you a check for 50 cents a gallon for each gallon you provide to a qualified end-user. The law defines it as Fischer-Tropsch fuels.

Deputy Commissioner Andrews asked if China and India, with their large appetite for fuels and energy, are aware of what is happening with the Beluga fields.

Mr. Peterson said if we make a synthetic fuel, a transportation fuel, we need an export permit to send that overseas. If we produce coal here, we can send it to China and do not need an export permit. Other countries can come here and buy coal resources and do not need a permit do that. If we make a Fischer-Tropsch CTL plant in the United States with their money, the U.S. Government can say no more exporting. Today we import 3M barrels a day of gasoline diesel for this country. We lack 3M barrels a day of refining capacity to meet current demands, so we need these plants here. China is talking about building 12 of these plants, so why not build in their own back yard where the labor and operating costs are much cheaper, and they have total control of that asset. They just announced no more exports of coal from China. They have the ability to stop exports, but we do not.

# 8. DIRECTOR COMMENTS

### 8A. Director's Status Report of AIDEA Programs and Projects

Ms. Fisher-Goad stated that loan activity, delinquency reports, and AIDEA project fact sheets are in the Board member packets. She added that prior to the start of the board meeting, she, Valorie Walker and Brian Bjorkquist testified about Senate Bill 255, which was introduced by Senator Elton at AIDEA's request. The bill will allow AIDEA to refund Snettisham Bonds pending AEL&P's request, possibly sometime this fall. The Bill made it out of its first committee of referral and should be on the Senate floor soon. Deputy Commissioner Andrews added that he has heard nothing to oppose this Legislation.

Mr. Bjorkquist reported that additional documentation on the Healy Clean Coal Project settlement agreement with Golden Valley Electric Association was sent earlier this week and mediation will continue on Saturday. Any detailed questions from the Board would need to be addressed in an Executive Session.

### 7C. Executive Director Search Update

MOTION: Mr. Winther moved to go into Executive Session to discuss personnel issues related to an AIDEA Executive Director search, and litigation, mediation and negotiation strategies on the Healy Clean Coal Project. Seconded by Commissioner von Scheben. There being no discussion, the question was called. A roll call vote was taken and the motion passed unanimously.

### EXECUTIVE SESSION: 12:47 p.m.

The Board reconvened its regular meeting at 2:32pm.

A quorum was established. It was noted for the record that Commissioner Galvin joined the meeting for the Executive Session.

Mr. Bjorkquist stated that the Board was back in session to add two more topics for discussion in Executive Session: 1) Legislation; and 2) Acting Executive Director compensation.

MOTION: Commissioner Notti moved to return to Executive Session to discuss Legislation and compensation for the Acting Executive Director. Seconded by Mr. Winther. There being no discussion, the question was called. A roll call vote was taken and the motion passed unanimously.

### EXECUTIVE SESSION: 2:33 p.m.

The Board reconvened its regular meeting at 2:58 p.m.

A quorum was established. Chairman Kelsey advised that the Board had not taken any formal action on the matters discussed.

#### 9. BOARD COMMENTS

Commissioner Galvin stated that this is the first Board meeting he had been able to attend due to a busy schedule. He stated for the record that Deputy Commissioner Brian Andrews has done a wonderful job sitting in his place, but he plans to participate more actively with AIDEA and AEA and the board meetings in the future. Brian will continue to participate and keep him informed.

#### 10. ADJOURNMENT

MOTION: Commissioner Galvin moved to recess the AIDEA Board Meeting at 3:03 p.m. on Thursday, February 14, 2008 and reconvene on at 10:15 a.m. on Monday, February 18, 2008. Seconded by Commissioner Notti. There being no discussion, the question was called. A roll call vote was taken and the motion passed unanimously.

Sara Fisher Goad, Acting Executive Director/Secretary Alaska Industrial Development and Export Authority