## INFRASTRUCTURE DEVELOPMENT

### JANUARY 2017 - PROJECT SUMMARY MATRIX - PROSPECTIVE PROJECTS

<table>
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<tr>
<th>PROJECT</th>
<th>PROJECT VALUE</th>
<th>LOCATION</th>
<th>ECONOMIC BENEFIT</th>
<th>PURPOSE</th>
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</table>
| IEP     | $500 million  | Interior, AK | - Support between 250 and 840 total jobs and $16.5 million to $55.2 million in total income in the FNSB  
- 440 jobs average estimated annual employment  
- 350 jobs directly employed in construction industry  
- Average annual income generated by construction activities over this timeframe expected to be $29.1 million  
- $25 million income for construction workers  
- 520 local long-term jobs annually and $9.2 million indirectly supported at other FNSB businesses | Reduce the cost of fuel to Interior Alaska by providing an alternative, lower cost fuel source | Trucking: Private Sector  
Distribution: Interior Gas Utilities, Golden Valley Electric Association  
Natural gas supply (DCCED): RH for private partners  
LNG capacity/alternatives: Purchase of Salix Pre-FEED Materials | Natural Gas Supply: Ongoing Commercial Discussions with Cook Inlet Producers  
LNG Capacity/Alternatives: Optimizing commercial structure to create for lowest cost for customers.  
Transportation: Working with private industry and AK Railroad to generate cost estimates for rail LNG. Purchase of 13,000 gallon LNG trailers.  
Distribution: Work continues to integrate FNG and IGU and restart LNG storage efforts. |
| Bokan   | Up to $145 million | Prince of Wales Island, AK | - Evaluation of the economic benefits to the State of Alaska in terms of jobs development, business growth, and revenue are ongoing by AIDEA  
- Ucore continues to provide local employment in cooperation with the Prince of Wales Tribal Enterprise Consortium and Ketchikan area businesses | Provide high-paying jobs to Alaskans and support Alaska resource development | Project Proponent: Ucore Rare Metals, Inc. | |
| REI     | $1 billion | Cook Inlet, AK | - An estimate of employment for the various components of the LNG plant is approximately 1,000 construction related jobs and about 50 permanent jobs for the operation of the plant  
- The construction of this Greenfield facility should assist in the continued exploration and development in the Cook Inlet basin and create both construction jobs and long-term jobs in the LNG plant itself and in associated companies | Partner with Japan in Alaska natural gas resource development | Owner/Operator: Resources Energy, Inc.  
Partners: AIDEA and private entities | REI is in the process of meeting with potential investors, looking for methods to fund needed FEED work for a large Southcentral LNG plant, and organizing with private energy companies. AIDEA continues to work with REL |
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<tr>
<td>Snettisham Hydroelectric Facility</td>
<td>$100 million (AIDEA purchase cost) investment ($20M AIDEA)</td>
<td>Juneau</td>
<td>Jobs: 10 full-time direct jobs associated with facility operations; 10 indirect jobs associated with facility operations; 10 seasonal jobs at fish hatchery facilitated by facility operations. <strong>Economic Benefits:</strong> Facility provides approximately 80% of Juneau's electricity. Renewable, low, and stable electrical rates foster economic growth. Utility sells excess power to Greens Creek mine which helps support &gt;300 mine employees. Utility also sells excess power to local cruise ships during temporary docking in city, mitigating air quality concerns from cruise ships.</td>
<td>Provide a renewable, long-term and low-cost power source for Juneau, supporting local jobs and reducing costly diesel requirements and minimizing air emissions.</td>
<td>Owner: AIDEA Operator: Alaska Electric Light and Power Company (a subsidiary of Avista Corp.)</td>
<td>The two hydroelectric generating stations that comprise the Snettisham project are currently providing reliable and low cost power to Juneau residents and businesses. Excess power (when available) is also provided to the Greens Creek mine and cruise ships docked in Juneau. In 2015, AIDEA refinanced the outstanding bonds for the Snettisham project, providing cost savings to AEL&amp;P, which has helped maintain lower rates for the utility. The power station infrastructure also provided key support to the associated Snettisham Fish Hatchery, which released more than 12 million salmon smolt and fry in 2016.</td>
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<tr>
<td>Delong Mountain Transportation System</td>
<td>$267 million, total</td>
<td>North Slope Alaska</td>
<td>Jobs: 500+ regular direct FTE positions related to mine and port operations (mostly related to port operations).</td>
<td>Development of the Red Dog Mine and the DMTS provides a significant long-term source of non-governmental jobs and income sources for Northwestern Alaska.</td>
<td>Owner: AIDEA Operator: Teck Alaska, Inc.</td>
<td>Teck successfully completed the 2016 shipping season on the DMTS port, loading out more than 1.3 million tons of ore concentrates in 26 ships. Overall finances are aided by the recovery of zinc and lead prices from their January 2016 lows to current prices of over $1/lb each. The NVAB and Teck continue their negotiations to resolve the ongoing severance tax/payment in-lieu of taxes (PILT) dispute. The court case on this issue will likely be delayed due to the recent recessal of the judge due to conflict of interest concerns. In June, Teck paid the borough over $11 million, roughly the full amount that would have been paid under the 2011-2015 PILT agreement.</td>
</tr>
<tr>
<td>Mustang Road and Production Pad</td>
<td>$20 million (AIDEA) $7 million total</td>
<td>North Slope</td>
<td>Jobs: Supported more than 100 jobs associated with winter drilling (Jan-Mar 2016) in ASRC Placer Unit.</td>
<td>Foster the development of North Slope oil prospects that will potentially replace decreasing TAPS flows from the legacy fields.</td>
<td>Owner: Mustang Road, LLC Partners: AIDEA, Mep Alaska, LLC, Caracol Petroleum, LLC, TP North Slope Development, LLC Operator: Brooks Range Petroleum Corp. (BRPC)</td>
<td>The Mustang Road (MR) and gravel production pad were completed in the Spring of 2013. The road and pad continue to be valuable assets for ongoing exploration and development efforts on the western side of the North Slope. Based on published exploration plans, this winter the pad may support on-going exploration efforts for Armstrong Oil. Construction of the Mustang (MOC1) production facility, on the MR LLC pad, which started in Spring 2015, will be continued pending the refinancing of the project.</td>
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<tr>
<td>Mustang Operations Center #1 MOC1</td>
<td>$50M AIDEA investment ($201M+ total project value)</td>
<td>North Slope</td>
<td>Jobs: Up to 25 full-time permanent jobs associated with facility operations for the production facility (when completed) Up to 250+ construction jobs in Anchorage area and on the North Slope for the construction of the facility. <strong>Economic Benefits:</strong> Over $45 million in property tax payments to the North Slope Borough over the lifetime of the facility. Significant new royalties and other State tax payments. New oil production will sustain North Slope infrastructure and TAPS, contributing additional oil to the pipeline.</td>
<td>Support a new Alaskan-based independent oil producer that will also foster the development of new North Slope oil production and continued exploration/development of western North Slope oil prospects to augment decreasing TAPS flows.</td>
<td>Owner: Mustang Operations Center 1, LLC Partners: AIDEA, Brooks Range Petroleum Corp. (BRPC), Mep Alaska, LLC, Caracol Petroleum, LLC, TP North Slope Development, LLC, CES Oil Services, Pte. Operator: BRPC</td>
<td>BRPC received approval from the DNR for the 4th Plan of Development (POD) for the Southern Miluveach Unit (SMU) on November 22nd. BRPC is currently working with its owners to develop new financing and potentially seeking new partners for the project, with the intent to meet the requirements given in the POD. Nearly all of the warm standby commitments, including the completion of the majority of the major processing and rotting equipment for the oil production facility are now complete. All of this equipment is now in safe storage in Canada and the U.S.</td>
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<tr>
<td>Seward Marine Industrial Center (SMIC) Business Plan</td>
<td>$249,000</td>
<td>Seward</td>
<td>Jobs: Provide new jobs in the maritime industry. <strong>Economic Benefits:</strong> Provide potential homeporting for the UAF research vessel (R/V Sikuliaq). Enhance support for oil/gas exploration and development. Increases support for Arctic marine traffic and Alaska railroad trans-shipments. Increase workforce development, employment opportunities, and training opportunities at AVTEC.</td>
<td>Develop a sustainable business plan and funding strategy for the SMIC project and identify near, mid and long-term development options for the prioritization of public investment in infrastructure and facilities.</td>
<td>Facility Owners: City of Seward Land Owner: City of Seward User: Various, Vigor Alaska Operator: City of Seward</td>
<td>AIDEA awarded a contract to Arcadis for the development of a business plan for the Seward Marine Industrial Center. The stakeholder’s meeting, held at the Sheraton in Anchorage in January 2016 was successful in bringing people together for a common goal of focusing on the bigger opportunities at the industrial center. The final report was issued in October 2016.</td>
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## PROJECT DEVELOPMENT AND ASSET MANAGEMENT

### JANUARY 2017 - PAGE 1 - PDAM SUMMARY - ACTIVE PROJECTS MATRIX

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<tr>
<td><strong>Skagway Ore Terminal</strong></td>
<td>Skagway</td>
<td>• $14 million</td>
<td>• Jobs: Supports 5 permanent jobs at the terminal, plus 18 during ship repair and jobs associated with trucking of the concentrates.</td>
<td>Facility Owner: AIDEA Land Owner: City of Skagway User: Minto Explorations Ltd. Operator: Mineral Services Inc.</td>
<td>Capstone will continue operating the Minto mine through November 2017. AIDEA continues to follow Municipality of Skagway discussions and developments related to the Skagway Ore Terminal and AIDEA’s lease. AIDEA participated in the Department of Environmental Conservation’s meeting held in Anchorage in November 2016 to discuss the plans for potential sediment cleanup in the Skagway harbor. This meeting included the City of Skagway, White Pass and Yukon Route Railway officials, Mineral Services and Capstone Mining officials. Golder Associates, an environmental consulting firm, presented their findings and recommendations from reviews of the available harbor environmental data. Golder said the regulatory process moving forward should include an examination of all marine life resulting in a risk-based management/cleanup plan (if necessary) of the impacted sediments. Work is only addressing the lead-zinc contamination as all copper samples are below clean up requirements. All participants agreed with this process and will meet to discuss Golder’s work plan for future sampling and risk analysis methods.</td>
</tr>
<tr>
<td><strong>Camp Denali Readiness Center</strong></td>
<td>Anchorage</td>
<td>• $14.1 million</td>
<td>• Jobs: Retained 116 US Coast Guard (USCG) Anchorage jobs</td>
<td>Facility Owner: AIDEA Land Owner: JBER, Air Force User: USCG Operator: DMVA</td>
<td>The project was completed ahead of schedule for $14.1 million and provides an additional payment to AIDEA of $11.1 million. The consolidation of services provides great synergy between the U.S. Coast Guard, the State of Alaska Division of Homeland Security and Emergency Management and the Rescue Coordination Center.</td>
</tr>
<tr>
<td><strong>BlueCrest Energy Drilling Rig Loan</strong></td>
<td>Cook Inlet</td>
<td>• $30 million AIDEA direct project financing</td>
<td>• Jobs: Up to 150 full-time jobs associated with drilling operations</td>
<td>Borrower: BlueCrest Energy Lender: AIDEA</td>
<td>BlueCrest has successfully started the new rig and the drilling of the first well, Hansen #16. Surface casing is now set and drilling of the intermediate section is planned to start by the December 19th. Drilling of this first well should be complete with associated oil production by the end of April. On December 1st, the AIDEA Board approved Resolution G16-14 with modifications to the drill rig loan as requested by BlueCrest to mitigate the impacts from the lack of receipt of State of Alaska tax credits and construction delays for the rig that setback drilling and significant oil production (and ensuing revenues). To date, BlueCrest’s new Hansen Production Facility has produced more than 40,000 barrels of oil that has been sold to the Tesoro Kenai Refinery. More than 150 individuals, with more than 90% Alaskan residents, are now employed through the project, supporting both drilling and oil production.</td>
</tr>
<tr>
<td><strong>Federal Express/Aircraft Maintenance Facility</strong></td>
<td>Anchorage</td>
<td>• $22.2 million</td>
<td>• Jobs: 50 permanent, high skilled jobs</td>
<td>Facility Owner: AIDEA Land Owner: AK DOT/FF User: FedEx Operator: FedEx</td>
<td>Under the approved 2015 lease for the FedEx maintenance hangar facility, AIDEA undertook several maintenance and refurbishment projects. Refurbishment activities are complete at the FedEx Hangar and fire suppression building. The substantial completion inspection for the mechanical and electrical contracts was mid-December 2016. The contractor is working through punch list items. The replacement of the fabric hangar door is complete.</td>
</tr>
<tr>
<td><strong>Ketchikan Shipyard</strong></td>
<td>Ketchikan</td>
<td>• $80.1M Fed/State funds expended $11.2M Market Value</td>
<td>• Jobs: 157 direct jobs in Ketchikan</td>
<td>Facility Owner: AIDEA Land Owner: Ketchikan Gateway Borough, City of Ketchikan User: Various Operator: Vigor Alaska LLC</td>
<td>Vigor rolled out the forward half of the MV Tazlina into its berth 1 position in November 2016. The MV Tazlina is the first of the new Alaska-class ferries being built at the shipyard. The engine room modules will now be brought into the Assembly Hall and work will begin on the second (aft) half of the ship. Installation of the new fire alarm/detection system in the Assembly Hall continues. The new system will be commissioned during the week of September 10, 2017. The Federal Transit Administration (FTA) continues to work with the Federal Highway Administration to transfer unobligated federal funds for Ketchikan Shipyard to FTA for use on new shipyard projects. AIDEA met with the FTA to discuss the next steps for receiving the available funds. Once obtained, AIDEA will manage the project funds for the FTA and oversee the procurement and construction of the project. AIDEA and Vigor have begun a conversation with Senator Markowski's and Sullivan's offices in support of the effort to keep the maintenance of Alaska's United States Coast Guard (USCG) cutters in Alaska, with work to be done at Ketchikan Shipyard.</td>
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**ECONOMIC BENEFITS:**

- Future opportunities for other NW Canada or Alaska mining projects.

**VALUE LOCATION ECONOMIC BENEFIT PURPOSE PARTNERS CURRENT STATUS**

- Skagway: $22.2 million
  - Jobs: Support 5 permanent jobs at the terminal, plus 18 during ship repair and jobs associated with trucking the concentrates.
  - Provide a source of year-round stable employment, fund essential renovations to the terminal.

- Anchorage: $14.1 million
  - Jobs: Retained 116 US Coast Guard (USCG) Anchorage jobs.
  - Consolidate the USCG in Anchorage and provide operational efficiency between State agencies and Department of Defense.
  - Jobs: Up to 150 full-time jobs associated with drilling operations.
  - Provide flexible financing support for an independent oil producer for facilities to facilitate the development of a new oil field in Cook Inlet.
  - Oil from the Cosmopolitan Unit will increase current total Cook Inlet oil production, supporting local communities, businesses, and residents.
  - Oil produced from the facility is sold to the Tesoro Kenai Refinery, supporting local jobs and reducing oil imports.

- Cook Inlet: $30 million
  - Jobs: Support 50 permanent, high skilled jobs.

- Anchorage: $22.2 million
  - Jobs: Support 50 permanent, high skilled jobs.

- Ketchikan: $80.1M
  - Jobs: Support 157 direct jobs in Ketchikan.

**PROJECT VALUE**

- Skagway: $14 million
- Anchorage: $14.1 million
- Cook Inlet: $30 million
- Anchorage: $22.2 million
- Ketchikan: $80.1M

**LOCATION**

- Skagway
- Anchorage
- Cook Inlet
- Anchorage
- Ketchikan
CURRENT STATUS  

January 2017

Consolidated SF299 ANILCA applications have been filed with federal agencies, including the National Park Service (NPS), the U.S. Army Corp of Engineers (USACE), Bureau of Land Management (BLM), U.S. Coast Guard (USCG), and the U.S. Federal Highway Administration (FHWA). NPS, USACE, BLM, and FHWA have accepted the application to move forward and have determined that BLM will be the lead agency for the Environmental Impact Statement (EIS), along with NPS taking lead on the Environmental and Economic Analysis (EEA) per ANILCA Section 201.4(d). A Project Kickoff meeting with State and Federal agencies was held in early December 2016 to discuss next steps.

• AIDEA is in the process of revising the scope of work for the third party contractor on the EIS.
• BLM is in the process of publishing the Notice of Intent (NOI) expected between March 2017 and May 2017.
• NPS and FHWA are working on the EEA.

PROJECT DESCRIPTION

The Ambler Mining District Industrial Access Project (AMDIAP) concerns the preparation of the scoping portion of an SF-299 ANILCA right-of-way application for an approximately 200-mile industrial access road from the Dalton Highway to the Ambler Mining District in northwest Alaska. The Ambler Mining District has extensive mineral resources, including copper, silver, gold, lead and zinc. It has been characterized as one of the largest undeveloped copper-zinc mineral belts in the world. The area has been explored for decades, but development of the mineral resources has been limited due to a lack of transportation infrastructure for mine construction and operation.
The AMDIAP project could provide surface access to the Ambler Mining District and enable further exploration and development of the area’s resources, providing for economic development. AIDEA undertook the project with the goal of forming a Public-Private Partnership to finance, construct, operate and maintain the facility. The project design is modeled on AIDEA’s successful DeLong Mountain Transportation System (DMTS), which includes an industrial access road from the Red Dog Mine to the DMTS port. AIDEA worked with private industry to develop the DMTS industrial access road and the costs of road construction were paid back through tolls on road use.

AMDIAP could provide access to the Ambler Mining District through Gates of the Arctic National Preserve making use of special provisions in the Alaska National Interest Lands Conservation Act (ANILCA), that allow this type of access to reach the Ambler Mining District.

**APPROVAL PROCESS**

ANILCA Section 201 directs the Secretaries of the Interior (represented by the National Park Service) and Transportation (represented by Federal Highways Administration) to conduct an Environmental and Economic Analysis to determine the best route through Gates of the Arctic National Preserve. Title XI of ANILCA also requires an Environmental Impact Analysis under the National Environmental Policy Act. According to the National Park Service, this “Environmental and Economic Analysis” would not be a NEPA document. The Bureau of Land Management, the Army Corps of Engineers, and the Coast Guard are participating in the Title XI process as they have regulatory authority over land, wetlands and water crossings on the proposed project.

In addition to the federal approvals, the project would require a land use permit from the Northwest Arctic Borough. Finally, AIDEA’s regulations require there to be resolutions of support for the project from the Northwest Arctic Borough and a Regional Resource Advisory Committee appointed by the Governor to represent communities in the unincorporated areas in which the project is located.

**BUDGET/FINANCE**

AIDEA, as a development finance authority, would develop the access route as a Public-Private Partnership in which AIDEA funds and bonds would be used in conjunction with private capital for the construction and operation of the access modality. As with the DeLong Mountain Transportation System, mines using the road to haul ore to market would pay a user fee that would pay back the financing used for the road’s development and construction.

**PROJECT/ECONOMIC BENEFITS**

Development of AMDIAP could allow private industry to develop a 75-mile long area of high mineral resources. Over the life of the project, multiple mines would likely be developed in the area. Benefits from the project include:

- Job and business opportunities for rural residents in north-central and northwest Alaska

**Road Construction and Operations**

- Annual average of 486 jobs over road construction period
- Up to 68 full-time jobs for road operations and maintenance over the life of the road

**Mines Construction**

- 5,933 direct jobs over two years for mine construction with $457.4 million in wages
- 9,278 direct, indirect and induced jobs with $642.6 million in wages

**Mining Operations**

- 1,534 direct jobs with $164.2 million in wages annually
- 3,186 direct, indirect, and induced jobs with $324.7 million in wages annually

**Government Revenues Life of All 4 Mines**

- $261 million in mining license tax revenues to the State
- $357 million in corporate income taxes to the State
- $78 million in production royalties to the State

**PARTNERS**

Owner/Operator: Public-Private Partnership

Partners: AIDEA, Trilogy Metals, other mining companies, and other private entities

For more information visit the project website: [http://www.ambleraccess.org/](http://www.ambleraccess.org/)
PROJECT DESCRIPTION

BlueCrest Energy Inc. utilized an AIDEA direct-financing loan for the procurement, transportation, initial outfitting, and commissioning of a new on-shore oil drilling rig, rig mancamp, and associated materials, tools, and equipment to support its on-going development of the Cosmopolitan oil and gas lease blocks in the southern portion of the Cook Inlet.

The drilling rig, a 3,000 hp unit with more than 30,000 ft of reach capability, enables the safe and efficient drilling of the necessary oil production wells into the significant offshore oil reserves. This new rig provides capabilities not available with any existing rig in Alaska. The ultimate development of the Cosmopolitan oil field involves the drilling of up to 33 oil production and/or gas/water reinjection wells that will be installed over a 5 to 7 year period using the rig. The rig mancamp provides 50 rooms and support space for rig operations personnel.

Oil will be treated and produced through the production facility that is located on the 35 acre Hansen Pad, located just north of Anchor Point. Drilling of all the wells will also be performed from this pad.

The production facility is designed for up to 10,000 barrels per day of Cook Inlet sweet crude oil production. Produced oil will be transported via tanker truck and sold to the Tesoro Kenai Refinery. Anticipated oil production rates will greatly increase the current output of the overall Cook Inlet region.

CURRENT STATUS
January 2017

BlueCrest has successfully started the new rig and the drilling of the first well, Hansen #16. Drilling of this first well should be complete with associated oil production by the end of April. On December 1st, the AIDEA Board approved Resolution G16-14 to modify the AIDEA drill rig loan as requested by BlueCrest to mitigate the impacts from the lack of receipt of State of Alaska tax credits and construction delays for the rig that setback drilling and significant oil production (and ensuing revenues). To date, BlueCrest’s new Hansen Production Facility has produced more than 40,000 barrels of oil that has been sold to the Tesoro Kenai Refinery. More than 150 individuals, with more than 90% Alaskan residents, are now employed through the project, supporting both drilling and oil production.
The $30 million loan for the drilling rig and rig mancamp includes the following provisions:

- Covers the costs for the drill rig, rig mancamp, and associated transportation costs, commissioning costs, and other related equipment, tools, and materials.

- 6.4% interest rate on the first 15 months of a 16-month line-of-credit loan. Interest is compounded monthly during this period and a payment holiday exists for the life of this loan. The last month of this loan has a 10% interest rate. This line of credit automatically converts to a term loan on December 2016.

- 10% rate on the 68-month term loan. Accrued interest from the line of credit will be capitalized to the principal of the term loan. Interest only payments will be permitted from January 1, 2017 to November 1, 2017, with full payments thereafter.

- Reserve Account to cover any potential difference between a pot distressed asset sale and the loan balance. The account balance will be adjusted annually according to a valuation appraisal on the collateral.

- Draws required first meeting a condition precedent to document the availability of funds and plans for the drilling and production facility to support at least 8,000 barrels per day of crude oil production.

- Financing includes a 1% commitment fee and payment of all direct transaction costs.

AIDEA’s loan and the construction and operation of the drill rig is a crucial element to the overall Cosmopolitan oil field development. This development is anticipated to produce the following economic benefits:

- Over $20 million of new property tax revenue to the Kenai Peninsula Borough over the first ten years.

- Over $150 million of new State of Alaska oil taxes and royalties.

- At least 150 jobs associated with the drilling and well development activities; most of those will be filled by an Alaskan-based drilling contractor and rig operator.

- At least 100 jobs for the engineering and construction of the production facility.

- Up to 30 jobs for the long-term operations of the production facility.

- 15-20 administration and oversight/management jobs for the project.

- More than 25 jobs for local truckers to transport the produced crude oil to the Tesoro refinery.

The total rate of return for AIDEA on the loan, including all fees and interest, is anticipated to exceed 8.5%.

**PARTNERS**

**Lender:** AIDEA  
**Borrower:** BlueCrest Alaska Operating, LLC
CURRENT STATUS
January 2017

Ucore has confirmed the success of the SuperLig®-One (SL) technology pilot plant this past fall from an independent analysis that confirms and authenticated the separation of the Rare Earth Elements (REE). All REE have been recovered at >99% proving out the technology and providing a blueprint for future production facilities. The success of this pilot plant has initiated the planning and development of a SuperLig®-One Strategic Metals Complex (SMC) with Ucore and IBC Advanced Technologies, Inc. (IBC) of American Fork, Utah. Ucore has set out $690k budget for detailed engineering and preliminary planning of the Production Plant. The initial feedstock is expected to be sourced from recycling, swarf and tailings-generation partners in the automotive and rare earth permanent magnet industries, with the final location of the SMC expected to be heavily dependent upon transportation logistics. “This Strategic Metals Complex represents not just a transition by Ucore towards near-term production and revenue,” said Jim McKenzie, President and CEO of Ucore. “It represents a reaction to a very real domestic need for high-purity energy metals. In turn, the SMC represents a significant progression for Ucore, capitalizing on the innovative design of SuperLig®-One, and leveraging this platform in to full scale production.”

PROJECT DESCRIPTION

The Bokan-Dotson Ridge Rare Earth Element (Bokan REE) project is located at Bokan Mountain on the southern most part of the Alaskan panhandle. The Bokan REE property is enriched with heavy rare earth elements, including Dysprosium, Terbium and Yttrium. The project area is in Kendrick Bay on the southern end of Prince of Wales Island, approximately 37 miles southwest of Ketchikan. The project area includes approximately 9,500 acres of federal mining claims in the Tongass National Forest and 640 acres of state mining claims.
REEs are needed to make a wide-variety of items including high-tech military equipment, wind turbines, solar panels, advanced batteries, geothermal steam turbines, plus almost all high-tech consumer goods including flat screen TVs, computers, tablets and cell phones.

**PROJECT HISTORY**

In 2006, Ucore acquired and leased the Bokan property and found heavy rare earth elements (HREE) via large scale drilling. Since Ucore acquired rights to the Bokan property, it has continued its exploration program to further define and measure the resource. In 2012, Ucore completed a preliminary mine design and entered into a strategic contract with the US Defense Logistics Agency. During 2013, Ucore filed a Preliminary Economic Assessment to map out a prospective path to production and updated its resource estimate. In 2014, the Alaska State Legislature authorized AIDEA to issue bonds to finance certain infrastructure costs for the Bokan REE project.

**BUDGET/FINANCE**

The Alaska Legislature authorized AIDEA to issue bonds for up to $145,000,000 to finance the infrastructure and construction costs of the Bokan REE project. The Bokan REE project’s surface complex shall be owned and operated by or financed by AIDEA.

**PROJECT/ECONOMIC BENEFITS**

Evaluation of the economic benefits to the State of Alaska in terms of jobs development, business growth, and revenue are ongoing by AIDEA. Ucore continues to provide local employment in cooperation with the Prince of Wales Tribal Enterprise Consortium and Ketchikan area businesses.

**PARTNERS**

*Project Proponent:* Ucore Rare Metals, Inc.
PROJECT DESCRIPTION

In August 2012, the Board approved AIDEA to construct, own and operate a facility, an expansion of the existing National Guard Armory, for use by the US Coast Guard (USCG) on Joint Base Elmendorf and Richardson (JBER). Specifications for the Camp Denali Readiness Center Addition Project (CDRCAP) were presented to AIDEA in a USCG document entitled, “USCG Sector Anchorage Facility Requirements”, dated June 3, 2011. Using funds provided via a Reimbursement Services Agreement to AIDEA from the Department of Military and Veteran’s Affairs (DMVA), AIDEA retained a consultant to advance these specifications to a design level.

The CDRCAP matches the existing building of steel construction, 2 stories in height and encompasses an area of approximately 29,000 square feet. Associated with the building is a minimum of 120 parking spaces and an alternative access road. Earthwork included removal and relocation of an existing antenna system.

Through the Project Development and Operations Agreement, the DMVA is responsible for payments to AIDEA, subject to future legislative appropriations. In a separate agreement between the DMVA and the USCG, DMVA will be responsible for the operations and maintenance of the facility and the USCG will pay the DMVA directly for this effort.

CURRENT STATUS

January 2017

The project was completed ahead of schedule for $14.1 million and provides an annual payment to AIDEA of $1.1 million. The consolidation of services provides great synergy between the U.S. Coast Guard, the State of Alaska Division of Homeland Security and Emergency Management and the Rescue Coordination Center.
**PROJECT HISTORY**

Construction of the CDRCAP began in August 2012. Substantial completion was realized on December 3, 2013, more than a month ahead of schedule. This project proceeded without any significant issues. The CDRCAP was delivered to the DMVA substantially complete in a ready to occupy state December 18, 2013. Final delivery of all site work was the end of January 2014.

**BUDGET/FINANCE**

The cost estimate for this project did not exceed $15 million, which included a contingency and AIDEA oversight though a third party. This project was paid for with funds from AIDEA’s Economic Development Fund, A1105. The Memorandum of Agreement (MOA) between the USCG and the DMVA provides a payment of $1.1 million annually to AIDEA. This building is leased for 30 years from AIDEA to the DMVA who subleases the building to the USCG.

**PROJECT/ECONOMIC BENEFITS**

This project fulfills AIDEA’s mission of economic development and job growth by creating up to 80 new jobs during the facility construction, retaining over 115 USCG and civilian jobs in the Anchorage area and adding other jobs through consolidation of USCG billets from around the state to the new facility. Housing the USCG at the Camp Denali Readiness Center facility will enhance the cooperative efforts serving Alaska by strengthening interagency relations between the Department of Defense, the State of Alaska and the USCG. Due to the location of the Readiness Center addition, it will also facilitate synergy between the USCG and the Army/Air Guard through shared training classrooms and the medical clinic.

**PARTNERS**

*Facility Owner: AIDEA*

*Land Owner: JBER, Department of the Air Force*

*User: USCG*

*Operator: DMVA*
As one of AIDEA’s original projects, the Delong Mountain Transportation System (DMTS) was opened in 1989 to support the development of the Red Dog mine in northwest Alaska. The Red Dog mine, operated by Teck Alaska, Inc. in conjunction with the local native corporation (NANA Regional Corporation, Inc.), is one of the world’s largest producing zinc mines. The DMTS provides the necessary infrastructure for the transport of the ore from the mine site to the ore export barges. Expansion of the DMTS port facilities in 1999 enabled Teck to increase mine and port throughput, improving the overall project economics.

The full system includes the following infrastructure:

- A 52-mile, 30-foot all-weather gravel industrial haul road from the mine site to the port facility
- A shallow water dock to receive supplies, fuel, equipment, and personnel
- An offshore conveyor system to load ore concentrate to lightering vessels that can convey the concentrate to larger ships further offshore
- A fuel distribution facility including 6 bulk tanks capable of storing approximately 15 million gallons of fuel for port and mine use
- Storage facilities, including 2 buildings with approximately 1.2 million tons of ore storage capacity
- On-site power, other utilities and residential quarters for up to 96 workers

CURRENT STATUS
January 2017

Teck successfully completed the 2016 shipping season on the DMTS port, loading out more than 1.3 million tons of ore concentrates in 26 ships. Overall finances are aided by the recovery of zinc and lead prices from their January 2016 lows to current prices of over $1/lb each. The NWAB and Teck continue their negotiations to resolve the on-going severance tax/payment in-lieu of taxes (PILT) dispute. The court case on this issue will likely be delayed due to the recent recusal of the judge due to conflict of interest concerns. In June, Teck paid the borough over $11 million, roughly the full amount that would have been paid under the 2011-2015 PILT agreement.
BUDGET/FINANCE

Construction of the DMTS facilities was executed via an initial $180 million in AIDEA cash and bonding; the 1999 expansion involved approximately $87 million of additional bonding. Repayment of these bonds is achieved through a “toll” structure for use of the system by mine company customers. Presently, the Red Dog mine operated by Teck and owned by NANA, is the only user. The toll mechanism provides for a minimum annual assessment (aka payment) and additional payments based on escalated zinc prices and higher throughputs. The additional throughput payments are deposited to a reserve account that is used for any potential unpaid system operation costs or capital improvements. Excess reserve account balances are then periodically distributed to AIDEA and Teck according to the provisions of the AIDEA-Teck agreement.

PROJECT/ECONOMIC BENEFITS

The DMTS provides the only means for large-scale shipments of mined ores from the Northwest Arctic Borough (NWAB) and is integral to the operations of the Red Dog mine, the only significant private industry in the borough. Some of the direct and indirect benefits provided through the continued operation of the mine and DMTS include the following:

- More than 500 regular and 100 seasonal jobs are provided through the mine and DMTS operations, with the majority staffed by NWAB residents or NANA shareholders.
- Direct and indirect jobs from the mine provide more than $15 million of annual income to local residents.
- Royalty payments to NANA, the mine landowner, average greater than $130 million annually. These payments are then shared with other regional and village Alaska Native corporations according to sections 7 (i) and (j) of the Alaska Native Claims Settlement Act (ANSCA).
- Payments in lieu of taxes from the mine (Teck) to NWAB totaled more than $11 million in 2014.

In addition to these economic benefits, Teck has helped facilitate the purchase of lower cost heating oil for local villages and residents over several of the past years. Teck is also a large supporter of local non-profit organizations.

PARTNERS

Owner: AIDEA
Operator: Teck Alaska, Inc.
Landowner: NANA Regional Corporation, Inc.
PROJECT DESCRIPTION

The Federal Express Maintenance, Repair and Operations (MRO) facility consists of a hangar capable of accommodating one wide-body aircraft, such as a Boeing 747. The project also includes a ramp, taxiway, road, utilities and landscaping. The hangar is supported by a fire suppression pump house and water storage facility, which was constructed as part of this project.

PROJECT HISTORY

Federal Express had a ground lease agreement at the Ted Stevens Anchorage International Airport (TSAIA), which was conveyed to AIDEA. Federal Express management realized the potential to enhance their Anchorage operation by being able to perform line maintenance on their fleet of 747 aircraft operating through Anchorage and approached AIDEA to finance the facility. The facility was completed in 1995 and Federal Express signed a 20-year lease with AIDEA for use of the Aircraft Maintenance Facility and adjacent Fire Suppression Facility. The lease expired in March 2015, and the AIDEA Board approved the new lease through July 2023.

BUDGET/FINANCE

Tax-exempt bonds ($28 million) sold by AIDEA in September 1992, along with AIDEA funds, financed the project. The construction budget was $30.75 million. The investment has been repaid through user fees. On 20 June 2002 the remaining outstanding bonds at the time - $20,540,000 - were refunded through the issuance of $20,475,000 of refunding bonds at lower rates. All remaining outstanding bonds were called in April 2012.
PROJECT/ ECONOMIC BENEFITS

This projects strengthens Alaska’s role as an international air crossroads by improving basic services for air carriers serving Alaska. The facility created approximately 41 maintenance and 15-18 facilities management jobs that cycle to the hangar, when needed, to perform their duties. FedEx brought to Alaska a pilot base providing a direct infusion of income into the Alaska economy. The project demonstrates the significance of the Federal Express operations at Ted Stevens Anchorage International Airport to their overall business.

PARTNERS

* Facility Owner: AIDEA
* Land Owner: Alaska DOT & Public Facilities
* User: FedEx
* Operator: FedEx
The Interior Energy Project (IEP) provides the financial tools needed to bring natural gas to Interior Alaskans. Senate Bill 23 and House Bill 105 passed the Alaska Legislature in 2013 and 2015 respectively, and authorize the Alaska Industrial Development and Export Authority (AIDEA) to provide the financing package to partner with the private sector to build the infrastructure required to supply a natural gas heating distribution system in Fairbanks and North Pole.

Clean-burning natural gas will help substantially improve Fairbanks and North Pole air quality by providing an affordable substitute to wood and oil burning heating systems. This will help the region once again meet federal Environmental Protection Agency (EPA) standards.

The project consists of three major components:

- Financing new LNG capacity or alternative (propane or small diameter pipeline infrastructure)
- Transporting energy to Interior Alaska markets
- Expanding Interior natural gas distribution and storage system

**New LNG Capacity**

The IEP team and Salix together developed an agreement for the sale of Salix's pre-FEED (front-end engineering and design) project development work product to AIDEA. The IEP team will continue to advance development of the LNG plant as a utility owned asset by utilizing the purchased Salix work product. Utility ownership of the LNG plant is expected to drive down project costs.

**PROJECT DESCRIPTION**

Current Status

January 2017

Natural Gas Supply:
Ongoing Commercial Discussions with Cook Inlet Producers

LNG Capacity/Alternatives:
Optimizing commercial structure to create for lowest cost for customers.

Transportation:
Working with private industry and AK Railroad to generate cost estimates for railing LNG. Purchase of 13,000 gallon LNG trailers.

Distribution:
Work continues to integrate FNG and IGU and restart LNG storage efforts.
**Transportation**

LNG may be trucked or railed to Fairbanks. At full production, the initial LNG plant is anticipated to require up to 13 truck deliveries per day. This part of the project is anticipated to be met by the private sector or the Alaska Railroad Corporation.

**Natural Gas Distribution System**

A critical element for the project is the build-out of a natural gas distribution system, and connecting customers to this new energy source. AIDEA has financed the expansion of FNG’s distribution system and construction of IGU’s new distribution system. AIDEA expects these two utility systems to integrate with joint operations. LNG storage capacity will be developed to serve the expanded distribution system.

**BUDGET/FINANCE**

The IEP includes a financial package to act as a catalyst for AIDEA and private-sector partners to finance and develop the supply and delivery of natural gas to Interior Alaska. The financing package includes a $57.5 million appropriation to serve as the State’s equity stake in the project, up to $125 million in low-interest SETS loans, coupled with $150 million in State-backed AIDEA bonds. The project also leverages previous legislation that provides up to $15 million in natural gas storage credits for each qualifying LNG storage tank.

**PROJECT/ECONOMIC BENEFITS**

On the Natural Gas Distribution system depending on the construction year, the Project is estimated to support between 250 and 840 total jobs and $16.5 million to $55.2 million in total income in the FNSB. Average total annual employment over the 2014 to 2021 construction period is estimated at 440 jobs, of which 350 are expected to be directly employed in construction industry. Further, the average total annual income generated by construction activities over this timeframe is expected to be $29.1 million, of which $25.0 million is income for construction workers. Regarding long-term impacts, each year over the 2014 to 2028 period the Project would support on average 520 local jobs and $14.2 million in income. Of these, approximately 480 jobs and $9.2 million in income are indirectly supported at other FNSB businesses. (Interior Energy Project Economic Impact Analysis Cardno Entrix April 4, 2014).

**PARTNERS**

Natural gas supply (DCCED): RFI for private partners LNG capacity/alternatives: RFP for private partners Trucking: Private Sector Distribution: Interior Gas Utilities, Fairbanks Natural Gas
**PROJECT DESCRIPTION**

The Ketchikan Shipyard is located in Ketchikan, Alaska, adjacent to the Alaska Marine Highway System (AMHS) ferry facility. The shipyard consists of approximately 25.27 acres of real property, various building, fixtures and improvements located on such real property, a 10,000 long ton floating drydock, various equipment and tools and other personal property. AIDEA acquired title to and ownership of the Ketchikan Shipyard and entered into an agreement with Alaska Ship and Drydock (ASD) for the operation of the shipyard effective on 15 July 1997. Vigor Industrial purchased the shipyard operator, Alaska Ship and Drydock, in March 2012. In 2013 ASD’s name changed to Vigor Alaska.

**PROJECT HISTORY**

The Department of Transportation & Public Facilities (DOT&PF) spent approximately $30 million to construct the shipyard during the 1980’s. The shipyard is capable of providing maintenance for the AMHS. Under an agreement with the state, the City subleased operation and management of the shipyard to private contractors. Each operator experienced operational and financial difficulties. In 1991, the State canceled its lease with the City and closed the shipyard for two years. In November 1993, DOT&PF awarded an operating contract to reopen the shipyard and manage AMHS overhaul projects. On 15 July 1997, the shipyard was transferred from DOT&PF to AIDEA. In conjunction with the transfer, an MOU between AIDEA, the City of Ketchikan, Ketchikan Public Utilities and the Ketchikan Gateway Borough was created. In 1997, the Operations of the Shipyard was established through an agreement between AIDEA and ASD. The agreement was renegotiated in December 2005.

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**CURRENT STATUS**

January 2017

Vigor rolled out the forward half of the MV Tazlina into its berth 1 position in November 2016. The MV Tazlina is the first of the new Alaska-class ferries being built at the shipyard. The engine room modules will now be brought into the Assembly Hall and work will begin on the second (aft) half of the ship. Installation of the new fire alarm/detection system in the Assembly Hall continues. The new system will be commissioned during the week of 9 January 2017. The Federal Transit Administration (FTA) continues to work with the Federal Highway Administration to transfer unobligated federal funds for Ketchikan Shipyard to FTA for use on new shipyard projects. AIDEA met with the FTA to discuss the next steps for receiving the available funds. Once obtained, AIDEA will manage the project funds for the FTA and oversee the procurement and construction of the project. AIDEA and Vigor have begun a conversation with Senator Murkowski’s and Sullivan’s offices in support of the effort to keep the maintenance of Alaska’s United States Coast Guard (USCG) cutters in Alaska, with work to be done at Ketchikan Shipyard.
with a ten-year term and two ten-year extensions. The South Berth was transferred from DOT&PF to AIDEA in October 2010 and the Platt was officially signed in February 2014.

Shipyard development plans have been modified over the years to reflect the changing requirements of the operator. A revised Ketchikan Shipyard Development Plan and a Marketing Plan was prepared for the Borough by Northern Economics in March 1999, updated in 2002 and 2007.

The shipyard has received funding for several projects:

- TEA-21 funding (1999) was used to construct employee facilities and to expand fabrication and storage facilities. This $2.65 million grant required a 20 percent match which was provided by AIDEA and the Borough (approximately $328,000 each).

- Two federal Economic Development Administration (EDA) grants were received. The first grant (2002) funded the construction of a second dry dock and the second EDA grant (2006) funded the dry dock berth.

- Federal SAFETEA-LU funds were appropriated for the shipyard in 2006. The SAFETEA-LU funds totaled about $50 million over five years. Three TEA-LU funded projects were completed - the fabrication building extension, parking/lay down area and Berth 1. The funds for these projects was managed by DOT & PF and AIDEA. The Federal Transit Authority (FTA) approved AIDEA’s grant application August 25, 2008 for an environmental assessment, preliminary engineering for future upgrades and dry dock grounding grids ($7 million).

- AIDEA received an FY2009 state appropriation ($3 million) for standby power generators, a process water treatment system and deferred maintenance. The deferred maintenance funds were used on the two dry docks. AIDEA received a $2 million FY2011 state appropriation for deferred maintenance and a FY2012 state appropriation for $2 million for shipyard upgrades.

- The Ketchikan Shipyard received $1.18 million in FY15 State Appropriations to be used for the electrical substation relocation.

**BUDGET/FINANCE**

AIDEA has made capital investments in the shipyard, including the 1997 cost of acquiring the shipyard ($80.3 million) and a partial match to the 1999 federal TEA-21 grant. AIDEA has also matched Borough contributions to the repair and replacement (R&R) fund. AIDEA does not provide financial support for shipyard operations. Local government entities have made contributions for capital improvements, the R&R fund and shipyard operations.

AIDEA’s financial return from the Shipyard is based on several terms in the Agreement for the Operation and Use of the Ketchikan Shipyard. An amended and restated agreement became effective 1 December 2005. Under the amended and restated Operator Agreement the financial returns are through revenue and net profit sharing via payments to AIDEA first to reimburse AIDEA’s administrative expenses (up to $18,000), next into the R&R fund until its funded to 125 percent and then distributed as profit sharing to the AIDEA, Borough and City of Ketchikan.

**PROJECT/ECONOMIC BENEFITS**

*The McDowell Group, Economic Impact of the Ketchikan Shipyard, June 2016

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**PARTNERS**

*Facility Owner: AIDEA
Land Owner: Ketchikan Gateway Borough, City of Ketchikan
User: Various*
PROJECT DESCRIPTION

The Mustang Operations Center #1 (MOC 1) is an oil and gas processing facility to produce pipeline quality crude oil for sale through the Trans-Alaska Pipeline System (TAPS). The facility is being financed via a limited liability corporation (LLC) – MOC 1, LLC. AIDEA has entered into this LLC with its partner, CES Oil Services Pte, Ltd., a subsidiary of Charisma Energy Services (CES), Ltd., a Singapore based company. The facility is being built on the Mustang Pad, owned by Mustang Road, LLC. According to the Southern Mileuweach Unit (SMU) field development agreement, the facility will be constructed and operated by Brooks Range Petroleum Corporation (BRPC). The facility will include the following:

- Oil/gas treatment processes for up to 15,000 barrels per day (bpd) of oil production
- Power production equipment for roughly 10 megawatts (MW) of primary electrical power to support the processing equipment and overall Facility
- Gas treatment equipment for up to 7.5 million standard cubic feet per day (mmscf/d) of solution gas for reinjection and facility fuel purposes
- Well headers and connections for up to 11 production and 20 reinjection wells (gas and water)
- Operations camp to include a central monitoring and control facility, maintenance/workshop/warehousing spaces, storage tanks/dispensing capabilities, and appropriate water/sewer utilities

CURRENT STATUS

January 2017

BRPC received approval from the DNR for the 4th Plan of Development (POD) for the Southern Mileuweach Unit (SMU) on November 22nd. BRPC is currently working with its owners to develop new financing and potentially seeking new partners for the project, with the intent to meet the requirements as given in the POD. Nearly all of the warm standby commitments, including the completion of the majority of the major processing and rotating equipment for the oil production facility are now complete. All of this equipment is now in safe storage in Canada and the U.S.
Completed vapor recovery unit (gas processing) module

MOC1 completed oil processing train/equipment

Up to 22 million barrels of oil, based on proven reserve (1P) estimates for the Mustang Field, will be produced through the facility initially; oil from other nearby fields may also be received and treated through the facility as these fields are developed.

**BUDGET/FINANCE**

MOC1, LLC is owned by AIDEA and CES Oil Services Pte, Ltd (CES). For “contribution” of the facility to the Southern Mileuveach Unit (SMU, aka Mustang Field) for the production of oil from the field, MOC1 receives the greater of:

- A 20% share (working interest ownership) of the oil produced from the field, or
- A monthly Charter Fee payment that pays for MOC 1’s expenses and repayment of the financing for the construction of the facility.

MOC1’s financing is comprised of a $1 million equity contribution by CES, AIDEA’s $50 million equity contribution, and loans for the remainder of the facility construction costs. AIDEA’s financing is intended to be repaid over a seven year period with a quarterly dividend and annual share repurchases following first oil.

**PROJECT/ECONOMIC BENEFITS**

The development of MOC1 provides numerous benefits, including the following:

- Production of oil that will sustain the flow and life of North Slope oil infrastructure and the TAPS.
- New state royalty and production tax payments
- More than $45 million in property tax payments to the North Slope Borough over the project lifetime
- Up to 250 jobs for the design and construction of the facility
- Up to 20-25 full-time jobs for facility operations
- Over 200 indirect long-term jobs due to local facility related spending and expenses

The facility also enables the continued exploration and development of oil from other nearby fields and leases.

**PARTNERS**

*Owner:* Mustang Operations Center 1, LLC

*Operator:* Brooks Range Petroleum Corp. (BRPC)

*MOC1 partners:* AIDEA and CES Oil Services Pte, Ltd.

*SMU Working Interest Owners:* MOC 1; Thyssen Petroleum (TP) North Slope, LLC; Caracol Petroleum, LLC; and MEP Alaska, LLC.
PROJECT DESCRIPTION

In support of the efforts to foster the development of North Slope oil prospects that will help replace the decreasing flows in the TransAlaska Pipeline (TAPS) from the legacy fields, AIDEA formed a limited liability corporation (LLC) – Mustang Road, LLC to build and own a 4.4 mile road and 17.4 acre gravel production pad on the west side of the North Slope. Construction of the road also included the development of a new 18 acre gravel mine site with connecting 0.6 mile gravel road. The road and pad will be operated/used by the Brooks Range Petroleum Corporation (BRPC). This infrastructure enables further exploration and development of the Mustang prospect in the Southern Miluveach Unit, which is located off the southwest corner of the Kuparuk River Unit. As the second largest field in North America, Kuparuk has produced more than a billion barrels of oil since its development began in 1981.

Exploration drilling in the SMU by BRPC has discovered resources of more 25 million barrels of potentially recoverable oil. The new road and pad also supports the continued development of other nearby fields.

BUDGET/FINANCE

Total construction costs for the road and pad, as incurred by the LLC, were approximately $27 million, of which AIDEA contributed $20 million, with the other partners providing the remaining funding. AIDEA is the preferred member of the LLC. The agreement was updated/novated in July 2014 to enable the sale of BRPC by its former owners. The new terms of the agreement are as follows:

CURRENT STATUS

January 2017

The Mustang Road (MR) and gravel production pad were completed in the Spring of 2013. The road and pad continue to be valuable assets for ongoing exploration and development efforts on the western side of the North Slope. Based on published exploration plans, this winter the pad may support on-going exploration efforts for Armstrong Oil. Construction of the Mustang (MOC1) production facility, on the MR LLC pad, which started in Spring 2015, will be continued pending the refinancing of the project.
AIDEA maintains its status as the preferred member of the LLC.

- Repayment of the $20 million loan (to the LLC) within 7 years starting at an annual interest rate of 10% in 2018.
- Capitalization of 1 year’s worth of interest due to the deferral of the start of payments.
- State tax credits from the road and pad construction as payments on the loan, estimated to be at least $11.5 million. These were received in 2014 and 2015.

Mustang Road LLC received a 1% carried working interest (payments after taxes/royalties) in any production from Mustang Field.

PROJECT/ECONOMIC BENEFITS

- More than 250 jobs may be realized through the construction of the planned production facility.
- Up to 20-25 full-time jobs could be created through the operations of the production facility.

PARTNERS

Owner: Mustang Road, LLC
Operator: Brooks Range Petroleum Co.
Partners: AIDEA; TP North Slope Development, LLC; MEP Alaska, LLC; Caracol Petroleum, LLC

The benefits from the execution of this project include the following:

- Facilitation and access to/for the production of oil that will sustain the flow and life of North Slope oil infrastructure and the TAPS.
- New royalty and other tax revenues to the State of Alaska and the North Slope Borough.
- The construction of the road and pad resulted in more than 30 direct jobs.
REI is interested in developing a greenfield LNG plant and associated marine terminal (“the project”) in the Cook Inlet basin area for 1) the export of Cook Inlet natural gas as LNG, 2) LNG containerization for domestic consumption along coastal Alaska as well as via its road system, and 3) to encourage and enable consistent annual natural gas production of Southcentral Alaska’s oil and gas industry.

The Resources Energy project concept is to develop and construct a Greenfield LNG facility with a capacity of 1–1.5 Million Tonnes per Annum, associated pipeline facilities, marine terminal, loading facility and jetty, as well as storage tanks in the at a site to be selected in the Cook Inlet region.

REI is a Delaware Corporation with offices in Alaska. As a result of the 2011 earthquake in Japan and its impact on the nuclear power facilities at Fukushima and the implications for nuclear power generation throughout Japan, Mr. Toshitami Kaihara, former Governor of Hyogo Prefecture in Japan, requested a study to explore the viability of the replacement of nuclear power by LNG imports, including review of upstream sources, pipeline transportation, liquefaction facilities, ocean transportation and financing. REI was formed by Energy Resources Inc. (“ERI”), a Japanese company, to explore the feasibility of purchasing natural gas from Alaska and building liquefaction facilities in Alaska for the purpose of exporting LNG to Japan after Alaskan needs have been met.
BUDGET/FINANCE

The costs of the entire project are substantial—nearly US $1 billion. As the project progresses, REI has indicated that Japan based institutional finance will be available for the project. REI expects to attract Japanese investors for a significant portion of the balance. However, given the international nature of the project and its location in Alaska, REI is requesting AIDEA to consider funding a portion of the project’s cost, as well as advising REI on other potential US (particularly Alaskan) investors for the project.

PROJECT/ECONOMIC BENEFITS

The economic development, job creation and sustainable operation of this proposed facility could be substantial— an estimate of employment for the various components of the LNG plant is approximately 1,000 construction related jobs and about 50 permanent jobs for the operation of the plant. The construction of this Greenfield facility should assist in the continued exploration and development in the Cook Inlet basin and create both construction jobs and long-term jobs in the LNG plant itself and in associated companies.

Further, because of the counter-cyclical demand between Alaska (winter peak) and Japan (summer peak), an opportunity exists to provide a mutually beneficial relationship through the establishment of this proposed Greenfield LNG plant and storage facilities.

PARTNERS

Owner/Operator: Resources Energy, Inc.
Partners: AIDEA and private entities
PROJECT DESCRIPTION

Ever since Juneau’s gold-mining heyday over a century ago, the majority of the electric power required for the City and Borough of Juneau (CBJ) has come from hydroelectric facilities. Burgeoning power needs in the 1950s and 1960s necessitated the search for a long-term and low-cost power source. Long and Crater Lakes, located about 30 miles southeast of Juneau were subsequently determined to contain developable hydroelectric resources. In 1967, construction began on the Long Lake hydroelectric project by the U.S. Army Corps of Engineers. In 1973, 47.2 megawatts (MW) of power were delivered to the City of Juneau by the recently completed facility that included, at 8,400 foot power tunnel (to deliver water from the lake to the turbines), a remote camp, a boat slip, an airstrip, and a 44 mile long high voltage transmission line. In 1990, the nearby Crater Lake facility was brought on-line, contributing an additional 31 MW. The combined 78.2 MW from the project now provides approximately 65% of the power for the local electric utility, Alaska Electric Light and Power Company (AEL&P).

BUDGET/FINANCE

In 1998, seeking to divest itself from local power utilities nationwide, the federal government completed the sale of the facility and transmission line to AIDEA, which financed the purchase and some necessary rehabilitation of the facilities and transmission line through the sale of $100 million in revenue bonds. Payback of the bonds, by 2034, is accomplished through both long-

CURRENT STATUS

January 2017

The two hydroelectric generating stations that comprise the Snettisham project are currently providing reliable and low cost power to Juneau residents and businesses. Excess power (when available) is also provided to the Greens Creek mine and cruise ships docked in Juneau. In 2015, AIDEA refinanced the outstanding bonds for the Snettisham project, providing cost savings to AEL&P, which has helped maintain lower rates for the utility. The power station infrastructure also provided key support to the associated Snettisham Fish Hatchery, which released more than 12 million salmon smolt and fry in 2016.
term project and power sale agreements between AIDEA and AEL&P. Under the agreements, AEL&P is responsible for the operations and maintenance of the facility.

**PROJECT ECONOMIC BENEFITS**

The continued operation and local ownership of the Snettisham hydroelectric facility has enabled the CBJ to enjoy some of the lowest electrical rates in Alaska. These low electrical rates have helped foster continued growth and development of the city. Other distinct benefits from the project include the following:

- Maintenance of a stable power price, adjusted only for increased maintenance or operations costs.
- Sale of excess power to the local Greens Creek mine to lower production costs for the mine, which supports >300 mine employees. The mine is the largest private employer in Juneau. Hydropower also reduces emissions from the mine that otherwise relies upon diesel generators for power production.
- Sale of excess power to local cruise ships during temporary docking. This reduces onboard power requirements from diesel generators and removes air pollution during docking. Power sales to these cruise ships also produces rebates to local Juneau power customers.
- The Snettisham infrastructure provides access and support to the Snettisham Fish Hatchery, which provides 10-12 seasonal hatchery jobs. The hatchery provides critical support to the local fishing industry.

**PARTNERS**

Owner: AIDEA  
**PROJECT DESCRIPTION**

In July 1990, AIDEA purchased the Skagway Ore Terminal (SOT) to bring stability to Skagway’s then major year-round industry; fund essential environmentally efficient renovations to the terminal; and open the door to additional economic growth by marketing the terminal to other potential users. The terminal was purchased from White Pass Railway, with a sublease of City property approved by the City of Skagway. The current user is Minto Explorations Ltd., a subsidiary of Capstone Mining Corp. (previously Sherwood Copper Corp.). The user contracted with Mineral Services Inc. (MSI) to operate and maintain the terminal in April 2008.

The SOT consists of a 6.7 acre industrial waterfront lot whose primary features include: a 98,000 square foot 16-inch thick concrete floor, a 42,000 square foot concentrate storage building (the original concentrate storage building was demolished in 2003) surrounded by concrete containment walls, office, shop, laboratory, electrical and wash buildings; enclosed materials handling loadout conveyors and shiploader; and a .37 acre adjacent lot which contains a fueling facility (two 10,000 gallon day tanks) and tank farm (four 30,000 gallon storage tanks).

**CURRENT STATUS**

January 2017

Capstone will continue operating the Minto mine through November 2017. AIDEA continues to follow Municipality of Skagway discussions and developments related to the Skagway Ore Terminal and AIDEA’s lease. AIDEA participated in the Department of Environmental Conservation’s meeting held in Anchorage in November 2016 to discuss the plans for potential sediment cleanup in the Skagway harbor. This meeting included the City of Skagway, White Pass and Yukon Route Railway officials, Mineral Services and Capstone Mining officials. Golder Associates, an environmental consulting firm, presented their findings and recommendations from reviews of the available harbor environmental data. Golder said the regulatory process moving forward should include an examination of all marine life resulting in a risk-based management/cleanup plan (if necessary) of the impacted sediments. Work is only addressing the lead-zinc contamination as all copper samples are below clean up requirements. All participants agreed with this process and will meet to discuss Golder’s work plan for future sampling and risk analysis methods.
AIDEA’s investment facilitates continued employment in the Skagway area through a stable mining operation.

PROJECT HISTORY

Construction of the SOT Reactivation Improvements began in February 2007. The building “In Service” date was October 1, 2007. The first ship was loaded with ore concentrates October 24, 2007. Substantial completion was achieved January 18, 2008. AIDEA’s Board approved negotiation of an amendment to the User Agreement with Minto/Capstone to provide additional storage capacity on October 7, 2008. The building extension (14,000 SF) was substantially complete mid-December 2008. Minto/Capstone ships approximately 60,000 dry metric tons of copper concentrate through the terminal per year.

BUDGET/FINANCE

Original acquisition budget was $25 million: Tax-exempt bonds sold by AIDEA, to be repaid with terminal user fees. AIDEA financed the Minto/Capstone upgrades for a total of $14 million (AIDEA funds on hand) reimbursed by tenant fees over a seven year period. Minto/Capstone pre-paid the outstanding balance of $8.5 million (plus a pre-payment fee) in December 2010.

PROJECT ECONOMIC BENEFITS

Under current operations, the SOT creates up to 23 jobs at the terminal (3 full time, 2 part time plus 18 during ship loading six times a year for a 24 hour period), plus jobs associated with the trucking of the concentrates from the Northern Canadian mines to Skagway. Mineral concentrate shipping operations normally occur on a year-round basis, enhancing employment in a community otherwise heavily dependent on the summer tourist season. AIDEA continues to engage with potential users of the terminal. Ultimately, a new lease at the terminal will demonstrate the potential for future opportunities for other mining projects in northwestern Canada and the eastern interior of Alaska for the shipment of mine products to market. Additionally, all Skagway residents benefit from the enhanced winter road maintenance to Whitehorse, as well as additional revenue through real property taxes.

PARTNERS

Facility Owner: AIDEA
Land Owner: City of Skagway