# 2/08/11 Office of Governor Energy Report to the Legislature

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Governor Sean Parnell
STATE OF ALASKA

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January 31, 2011

The Honorable Mike Chenault
Speaker of the House
Alaska State Legislature
State Capitol, Room 208
Juneau, AK 99801-1182

Dear Speaker Chenault,

In accordance with Ch. 83, SLA 10, Sec. 40, Page 25, Line 8, I am submitting the enclosed report to the Legislature regarding State energy programs and increasing coordination and efficiency of the State's energy programs and services.

To reach the State's energy policy goal of 50 percent electricity generated via renewable resources by 2025, our energy efforts and investments must be targeted and strategic. Conservation, weatherization, and energy efficiency are key components of our energy strategy as is our proposal to advance a large hydroelectric project in south central Alaska to supply much needed energy and jobs. Renewable energy fund grants will lower the cost of energy in rural Alaska and the integrated resources planning efforts will create the energy road map for south east Alaska.

I look forward to working with the Legislature to reach our energy policy goals.

Sincerely,

Sean Parnell
Governor

# *Energy Report to the Legislature*

*OFFICE OF THE GOVERNOR ENERGY REPORT. Not later than January 31, 2011, the Governor shall submit a report to the Legislature providing recommendations for how best to structure State energy programs and offices to increase the coordination and efficiency of the State's efforts and describing State energy services and programs in their entirety. The report must also include an examination of existing powers and duties and the structure of the Alaska Energy Authority and its board of directors, specifically analyzing the relationship between the Alaska Energy Authority and the Alaska Industrial Development and Export Authority.*

## Executive Summary

The State of Alaska has a variety of energy programs and initiatives. State and federal funding for both formula driven and competitive award programs has increased significantly in recent years. Several State departments and State corporations have roles to play in the coordination and delivery of energy related programs. Some State agencies' programs have a secondary focus on energy – primarily in the realm of resource management but also in infrastructure development and maintenance. It is in the State's interest for the Executive Branch to clarify and further define each agency's role and responsibility for certain Alaska energy programs and services.

Alaska's Constitution directs that natural resources be developed for the maximum benefit of the people. The 49th state is blessed with abundant resources – oil, gas, coal, timber, water, and wind. Necessarily, agencies with primary responsibility for the management of those resources must play a role in the provision of energy supplies where it is consistent with the larger constitutional and legislative direction. The roles and responsibilities of each agency need to be well understood and coordinated.

In recent years, the Alaska Energy Authority (AEA) has become a key agency for the planning of energy infrastructure and financing. While key improvements to AEA's authorizing statute are necessary at this time, there remains a need for continued coordination across multiple State agencies, corporations, and funding streams.

Policy development, legislative action, and implementation will need to be coordinated across departments if Alaska's energy future is to remain focused.

## Recommendations to Change Structure

### Changes to Services and Programs

Services and programs should be evaluated on their effectiveness in providing value to communities and residents of the state of Alaska. Reorganization of reporting structure should be implemented only if there is evidence supporting a reasonable expectation that program effectiveness will be improved.

AEA's powers should be changed to allow AEA to own new energy projects and to hire staff. The introduction of House Bill 103 and Senate Bill 42 allow the Legislature to consider these changes and accomplish the changes through passage of a bill.

House Bill 103 and Senate Bill 42 would authorize and allow AEA to move aggressively to pursue a large hydroelectric project (Susitna Dam) that would supply needed renewable energy to Interior and Southcentral Alaska. AEA could further the design, permitting, construction, and operation of the Susitna Dam project. This project is critical to Alaska reaching its energy policy target of generating 50 percent of its electricity through renewable energy by 2025.

The AEA managed Bulk Fuel Revolving Loan Fund and the Department of Commerce, Community and Economic Development (DCCED) managed Bridge Loan Fund should be merged into one program with two levels of service. Currently, the zero-percent Bridge Loan Program provides a disincentive for borrowers to increase their creditworthiness. AEA and DCCED are working to accomplish this merger.

A Commercial Energy Efficiency Loan program should be developed. Currently, the State has addressed needed energy efficiency programs for public buildings and residential homes. However, commercial buildings have energy efficiency upgrade needs as well, often in lighting. Providing loan funds specific to this need should be explored. DCCED, AEA, and the Alaska Industrial Development and Export Authority are developing options for an appropriate program.

### Changes to Current Coordination Efforts

Currently, coordination efforts occur through meetings between agency personnel and the Office of the Governor, including, but not limited to, guidance from the Office of Management and Budget (OMB). Energy policy encompasses more than the annual budget and needs to be coordinated among the commissioners of the various agencies involved, the Governor's office, and the Legislature. The Energy Policy Coordinator (EPC) will provide additional focus and coordination for energy programs and policies that cross lines of several State agencies. The EPC will be the spokesperson for energy issues on behalf of the Governor and will work with commissioners, agency personnel, etc., to communicate with the Legislature.

The mission of the EPC is to help commissioners, staff, OMB, and the Governor's office ensure the State's energy resources and energy programs are devoted in a way that produce results which advance the State's energy policy priorities.

The EPC should further evaluate energy services and programs, measure their results, and make recommendations for any necessary changes beyond the recommended changes provided in this report. The EPC is an effective way to provide coordination between the various State energy programs and to communicate with the Legislature. The EPC will also be the mediator between agencies that have conflicting points of view or the appearance of duplicating efforts.

## State Energy Programs and Offices

### Description of Agency Coordination Efforts

For new policy initiatives in energy programs, the Office of the Governor plays a key role in the development of the new programs and planning. Agency personnel are, of course, charged with implementing authorized programs and efficiently using funds appropriated by the Legislature for programs.

**Background and History of State Energy Office**

In 1996, at the request of the United States Department of Energy (USDOE), the Governor designated AHFC as the lead agency for the USDOE State Energy Program (SEP). The SEP was the result of the USDOE's consolidation of two formula grant programs: 1) the State Energy Conservation Program managed by AHFC, and 2) the Institutional Conservation Program, managed by the former Department of Community and Regional Affairs, Division of Energy. In 1996, AHFC and Division of Energy, entered into a Memorandum of Agreement that delineated how SEP funds were to be managed and shared by AHFC and Division of Energy. The agreement stated that 60 percent of SEP funds would be transferred to the Division of Energy.

In 1999, the Department of Community and Regional Affairs was statutorily eliminated and the Division of Energy programs became the responsibility of AEA. After AHFC informed AEA that it would transfer no funds to AEA for the former Division of Energy programs, a new Memorandum of Agreement was signed by AHFC and AEA. The 2001 agreement delineated how SEP funds were to be managed and shared by AHFC and AEA. The agreement stated that 50 percent of SEP funds would be transferred to AEA.

During the 2008 Legislative Session and each subsequent session, the State of Alaska has created new energy programs and provided significant funds for various energy programs and initiatives. The federal government has also provided substantial funds, both formula driven and competitive awards, for energy programs.

**Recent Coordination Efforts**

The annual SEP allocation to Alaska has been approximately $300,000 during the past few years, although the allocation in FY2008 was $250,000. Half of the money is directly transferred from AHFC to AEA through a Memorandum of Agreement. Energy audits on schools and community buildings are the primary use of that funding. The other half of the money is used for educational programs sponsored by AHFC. These programs include workshops on energy efficiency for real estate professionals, builders, and homeowners, as well as paying for printing of various publications on energy efficiency and renewable energy. Additionally, funds supplement the Weatherization Assistance Program to reduce electrical use in eligible homes.

ARRA funds for 2009 totaled $28.232 million for the State energy program. Performance contracting on schools, State owned public buildings, and municipal buildings will use about two-thirds of the funding, with improvements to BEES, ARIS and AkWarm also being upgraded.

AHFC and AEA should, and are, updating their Memorandum of Agreement to memorialize both AHFC's and AEA's role in managing certain Alaska energy programs and to confirm the distribution of SEP funds. Similar to the process followed with ARRA funds, when circumstances arise that necessitate additional input, AHFC and AEA will coordinate efforts with the Office of the Governor to ensure the administration's priorities are carried out by the agencies.

## Alaska Energy Authority

### Examination of AEA Structure and Board of Directors

AEA was created by the Alaska State Legislature in 1976. AEA is a public corporation and a component unit of the State of Alaska. AEA's mission is to reduce the cost of energy in Alaska. The Board of Directors of the Alaska Industrial Development and Export Authority (AIDEA) is also the AEA Board of Directors. The AEA board of directors has seven members: five public members and the Commissioner of Revenue and the Commissioner of Commerce, Community and Economic Development. The five public members are appointed by the Governor, each of whom has expertise in private sector business or industry, or both, and possesses demonstrated leadership skills. The public members serve at the pleasure of the Governor for two-year terms.

### AEA History

Throughout the 1980's, AEA worked to develop the State's energy resources as a key element in diversifying Alaska's economy. A number of large-scale projects were constructed; four of those projects were sold in 2002, and one was transferred to the City of Larsen Bay in the fall of 2010. The Bradley Lake Hydroelectric project together with the Alaska Intertie's 170 miles of transmission line help provide Interior Alaska with cheaper energy available in the Southcentral portion of the state. Pursuant to statute, on August 12, 1993, the board of directors of AIDEA, a public corporation and a political subdivision of the State, became the board of directors of AEA. AEA continues to exist as a separate legal entity. The corporate structure and operating assets of AEA were retained but the ability to have employees, and construct or acquire energy projects was eliminated. Among other things, AIDEA provides personnel services for AEA. On April 10, 2008, the board appointed a separate and independent AEA executive director who is an employee of AIDEA, but is not subject to supervision by AIDEA's executive director. Previously, the AEA and AIDEA executive directors were the same. There is no commingling of funds, assets, or liabilities between AIDEA and AEA and there is not responsibility of one of these entities for the debts or obligations of the other.

The 1993 legislation required AEA, to the maximum extent feasible, to enter into contracts with public utilities and other entities to carry out AEA duties respecting the ongoing operation and maintenance of the AEA owned operating assets; this has occurred with oversight responsibility retained by AEA.

Pursuant to legislation effective July 1, 1999, rural energy programs previously administered by the former Department of Community and Regional Affairs, Division of Energy, were transferred to AEA for administration, as part of a larger reorganization of State agencies. Several general energy programs primarily focused on rural energy issues moved to AEA. Rural energy programs were originally part of AEA prior to the reorganization that occurred in 1993.

During fiscal year 2008, legislation added energy development programs to AEA. AEA has developed the *Alaska Energy Pathway*, a guide for Alaskan communities to utilize local energy resources. AEA has also established the Renewable Energy Fund and Grant Recommendation Program.

## AEA Current Programs and Projects

### AEA - Rural Energy Infrastructure

Traditionally, State agencies will grant funds to a community or utility to build a project. However, many rural communities lack the necessary financial resources and technical expertise to manage and construct energy infrastructure upgrades. AEA's rural energy infrastructure program provides direct project management support to design and construct rural powerhouses and bulk fuel storage facilities. Under this project management model, AEA manages the federal grant or State appropriated project, hires a construction manager, provides project oversight, and bookkeeping services for locally hired labor.

### Rural Power System Upgrades

Electricity provides for lighting, communications, heat, and power necessary to operate infrastructure that supports all other elements needed in any community to permit safe and healthy living conditions. In rural communities throughout Alaska, electricity is generated by a small local "system" (generation and distribution) using diesel fuel at a cost that is three to five times higher than that in urban parts of the state. Of 200 rural communities, approximately half are served by cooperatives or another form of utility that performs under a well-established organization. Others are served by very small entities, many which experience technical and administrative problems due to lack of economies of scale and/or lack of specialized skills in the community.

AEA manages powerhouse and electrical distribution upgrades that may include efficiency improvements, powerhouse upgrades or replacements, line assessments, lines to new customers, demand-side improvements, and repairs to generation and distribution systems. System upgrades to be funded may be identified through a variety of ways, including via technical assistance, advanced by the local community or directed by the Legislature.

### Bulk Fuel Upgrades

Most rural Alaska communities receive fuel for heating, generation of electricity, vehicles, and other uses only during summer months when coastal areas and rivers are ice free. These communities typically store enough fuel to meet their needs for an entire winter. Many rural bulk fuel tank farms were constructed more than 20 years ago and are in poor condition. With substantial contributions from the Denali Commission, the bulk fuel upgrades program provides funding for the design/engineering, business planning, and construction management services to build code-compliant bulk fuel tank farms in rural communities.

In the early 1990's, many rural communities faced the very real threat that they would no longer be allowed to take delivery of fuel in bulk quantities because of the condition of their bulk fuel storage tank farms. The most common problems were the piping systems to, from, and within the tank farms. The AEA bulk fuel upgrade retrofit and revision program is funded with grants from the Denali Commission and State appropriations.

### AEA Alternative and Renewable Energy Program and Projects

AEA's alternative and renewable energy program promotes the use of renewable resources as alternatives to fossil fuel-based power and heat, and measures to improve energy production and end use efficiency. In rural areas, the program may support developing local sources of coal and natural gas as diesel alternatives. The Alaska State Legislature created the Renewable Energy Fund

(REFund) in 2008, with the intent to appropriate $50 million annually for five years. The Legislature authorized AEA to manage the REF project application process, project evaluations, recommendations, completion of grant agreements, and disbursement of funds to grantees. In addition to managing the Renewable Energy Grant Fund and Recommendation Program, AEA is a technical resource for entities wanting to develop alternative and renewable resources. AEA staff is frequently called upon to participate in conferences, make public presentations regarding program areas, and provide technical advice and assistance.

**Renewable Energy Program Areas**

The Alaska Energy Inventory (cooperative project of AEA and Alaska DNR) consists of renewable and fossil resource data, energy supply and usage data, and other information useful for energy planning and development.

The Biomass Energy Program develops projects using wood, sawmill residue, and municipal wastes for energy; tests air emissions and performance of fish oil and diesel blends as fuel; assesses the viability of recovering fish oil from fish processing wastes.

The Geothermal Program supports projects such as the Chena Hot Springs power plant; organizes workshops and training sessions; coordinates State assistance in developing other potential projects such as Mt. Spurr on the Railbelt and Makushin in Unalaska.

The Small-scale Hydroelectric Program provides technical assistance through staff and contractors for hydro feasibility assessment; manages public funding for project construction.

The Ocean and River Energy Program evaluates technology and feasibility of converting wave motion, tidal and river flow into power in partnership with Alaska utilities and the Electric Power Research Institute.

The Wind Program assists utilities and communities in resource evaluation, training, environmental assessment, regional development, conceptual design and economic feasibility of rural wind-diesel systems; assists with Railbelt wind integration studies.

The Emerging Energy Technology Fund under AS 42.45.375 was established in 2010. AEA may make grants to eligible applicants for demonstration projects of technologies that have a reasonable expectation to be commercially viable within five years and that are designed to: 1) Test emerging energy technologies or methods of conserving energy; 2) Improve an existing energy technology; or 3) Deploy an existing technology that has not previously been demonstrated in Alaska. The statute provides for an advisory committee to assist AEA in the development of the program and review of potential projects to be funded. AEA is in the process of soliciting the first round of grant applications for this new program.

**Examination of AEA and AIDEA Relationship**

Since 1993, AIDEA staff members are responsible for administering AEA programs. In 1999, when the Department of Community and Regional Affairs (DCRA) was dissolved, AEA became responsible for former DCRA Division of Energy programs and certain DCRA staff became AIDEA employees. In 2008, the AIDEA and AEA by-laws were changed to allow the board of directors to hire an AIDEA employee as an AEA executive director who is a different person than

the AIDEA executive director. The AEA executive director serves at the direction of the AEA board of directors.

As mentioned earlier, Governor Parnell has introduced legislation (SB 42 and HB 103) to allow AEA to hire staff. The legislation allows for the transfer of certain AIDEA employees to AEA. AIDEA's and AEA's relationship has existed for over 17 years, and many employees have shared responsibilities to both organizations. For efficiency purposes, AIDEA and AEA will continue to share certain services and be located in the same building. A complete split of the two corporations is estimated to cost at least $2 million and certain staff expertise would be difficult to duplicate. SB 42 and HB 103 provide the most cost effective way for both agencies to continue to pursue their distinct missions and to benefit from shared services and staff.

## Other State Programs

**Oil and Gas – DNR, Revenue, Multi-Agency Gasline Team, ANGDA**
The Department of Natural Resources (DNR) is the State agency charged with primary responsibility for the management of resources on State lands. Resources managed by the agency that have an impact on energy supplies and demands include oil and gas, forestry, minerals (especially coal), water (tides and rivers), geothermal, and the land below many areas with significant wind.

The management of these resources is guided by the Constitution and enabling statutes. Development of these resources provides contributions to the public, usually in the form of revenue to the treasury and funds being deposited in the Alaska Permanent Fund.

Many of these resources can provide energy when they are developed. However, most population centers in Alaska are not large enough to achieve the efficiencies of scale required to provide that energy at a low cost to the consumer. Often, an export market of some sort is required to achieve that efficiency, which energy is then also available to the local population in proximity to the development. A key focus of work for AEA has been, and will continue to be, to find ways for local populations to share in energy development.

Interests in development of State resources must be ordered and harmonized. This is done through the legislative process, which establishes the statutory and budgetary boundaries by which DNR may operate. The development of State policy as it relates to an Alaska North Slope (ANS) natural gas pipeline illustrates the principles involved.

The Alaska Gasline Inducement Act (AGIA) spells out statutorily what the Constitution requires. It seeks to maximize the chances that ANS natural gas resources are commercialized while minimizing the fiscal concessions achieved by lessees. It does so by advancing the development stage of the project with monetary incentives, but in return for commitments that the project be developed with particular State priorities in mind.

The original AGIA structure was developed and proposed by multiple State agencies with guidance and coordination provided by the Office of the Governor; it was adopted and approved by the

Legislature in 2007. The AGIA License provides for the delivery of gas within the state to be provided at reasonably low rates at destinations along the project's route.

The Alaska Natural Gas Development Authority (ANGDA) was created by the voters of Alaska through a 2002 General Election Ballot Initiative and is a public corporation. ANGDA is focused on getting North Slope natural gas to Alaskan communities as well as identifying feasible LNG opportunities for the State. With the support of the Legislature and the Administration, ANGDA started work in 2003 within the Alaska Department of Revenue (Revenue). Alaska Statute 41.41 contains the law for the establishment and functioning of the authority.

The Alaska Stand Alone Gas Pipeline (the "bullet line") is being planned as an in-state gas pipeline designed to provide long-term, stable supplies of natural gas from the North Slope to Fairbanks and the Cook Inlet areas, as well as other communities where practicable. In the spring of 2010, the Alaska Legislature and the Governor mandated that a group of industry professionals convene under the corporate banner of the Alaska Housing Finance Corporation for the specific purpose of developing, refining, and producing an in-state natural gas pipeline project plan by July 1, 2011. The focus of the pipeline project is to supply gas to Southcentral Alaska by 2016 to offset the projected supply decline.

The design of the Alaska Stand Alone Gas Pipeline addresses current market demand with the capacity to expand for future growth. The project design accommodates initial capacity of 500 million standard cubic feet per day (MMscfd) of clean-burning natural gas. The initial flow rate will be 250 to 500 MMScfd, and the line can be expandable to 1,000 MMscfd if needed. The project plan includes opportunity and options to export liquefied natural gas (LNG) and marked natural gas liquids (NGL) to the West Coast of the United States and/or Pacific Rim markets.

The Alaska Stand Alone Gas Pipeline Project is an independent project and is not contingent on any of the other projects under consideration and currently moving forward in Alaska. The Alaska Stand Alone Gas Pipeline Project was conceived as a smaller-diameter "bullet line" that could be built on a shorter timeline to specifically address the urgent needs in Alaska, particularly in the heavily populated areas in Fairbanks and the Cook Inlet region. In the event the large-diameter gas pipeline projects do not move forward, the project plan for the Alaska Stand Alone Gas Pipeline Project positions the State of Alaska for timely response to the energy issues presently facing the Interior and Southcentral areas of Alaska. Relative to larger projects, the "bullet line" is designed to advance quickly to construction on a shorter timeline.

## Energy Efficiency – AHFC and AEA

### AHFC

Meeting Alaska Building Energy Efficiency Standard (BEES) is required for all new residential homes built since 1992 in the state, and for community-owned buildings receiving AHFC financing. AHFC is responsible for BEES, provides technical assistance to the businesses in the housing industry, and maintains a list of individuals who are qualified to certify compliance with BEES.

AkWarm Energy Modeling Software – AkWarm software is trademarked and has been used by AHFC since 1996. This technology is an integral part of developing and improving AHFC's energy

programs. The software is continuously updated. Scheduled upgrades include electrical ratings, estimating electrical use from appliances, equipment, and lighting. An air conditioning component and improved user interface and reporting are planned improvements.

Alaska Retrofit Information System (ARIS) – ARIS collects data from AkWarm including: commercial benchmarking information; the Home Energy Rebate Program; census records; weatherization program; grants; zip codes; legislative districts; and borough and city tax records. ARIS is a required data input/collection and retention system for all AHFC programs. The program further allows program staff and researchers access to much of building/construction data, including location, size, type, fuel sources and costs, owner, and operators, and conveniently provides all of the data in one place, with table links between datasets established. ARIS will also now track information for public and commercial facilities receiving State lending or grant funding for all AHFC Programs.

Energy Ratings – AkWarm Certified Energy Raters are individuals who measure energy efficiency in a home using AkWarm and other diagnostic tools. For new construction, the home's energy rating may be used to help verify compliance with BEES and benefit the homebuilder or owner by qualifying Five Star and Five Star Plus homes, or existing homes requiring energy improvements, for a reduced interest rate reduction (see "Energy Efficiency Interest Rate Reduction Program" or "EEIRR," below). Energy ratings are also required for the Home Energy Rebate Program and Second Mortgage Program for Energy Conservation. With the AkWarm software improvements mentioned above, AHFC is working toward the addition of a sixth star for green building. AHFC maintains a list of energy raters by community. Over 60,000 home energy ratings have been completed in Alaska, one of the highest in actual number for any state in the country, regardless of population. Approximately 36,000 of those ratings were performed since April 2008. More than 100 raters are qualified in the state of Alaska.

Energy Efficiency Interest Rate Reduction Program (EEIRR) – AHFC offers interest rate reductions to homebuyers purchasing new homes with Five Star and Five Star Plus energy ratings. These ratings exceed BEES requirements. AHFC also offers rate reductions for energy improvements to older, existing home purchases. To date, AHFC has issued more than 10,000 loans under this program with a total value of nearly $1.8 billion.

Energy Efficiency Education and Workshops – There has been tremendous growth in the Weatherization Assistance Program, from 600 homes weatherized pre-2008 to now an average of 3,200 homes per year. Coupled with the addition of the Home Energy Rebate Program for up to 20,000 homes, energy-efficiency education has become a top priority for AHFC.

AHFC provides energy-related workshops, classes and seminars for homeowners, homebuyers, renters, builders, lenders, real estate professionals, and others. In FY2009, more than 5,000 Alaskans attended energy-efficiency classes offered through or funded by AHFC.

AHFC has embarked on training programs to bring up to 2,000 green jobs into energy-efficiency programs. Energy raters, weatherization assessors, crews, contractors, do-it-yourself homeowners, and the general public are being trained in weatherization installation techniques, building science, building auditing, energy modeling, combustion safety, moisture control and ventilation, and more. Training programs such as these are essential to achieving long-term energy efficiency goals.

With the implementation of the Alaska Energy Efficiency Revolving Loan Fund (AEERLF), new public facility energy audits and retrofits are being performed, requiring even more education for contractors, engineers, architects, and others. AHFC is developing education programs to fit these needs.

Home Energy Rebate Program – On April 5, 2008, legislation was signed authorizing the addition of $100 million to the Home Energy Rebate Program. This program is designed to rebate homeowners some of the costs of making energy-efficiency improvements to their home, regardless of income. An AkWarm energy rating performs both before and after improvement audits to determine eligible measures and maximum rebate amounts. Depending on the rating increase and actual receipts, a rebate of up to $10,000 is available for consumers. The program is further supplemented with other financial incentives, including the Second Mortgage Program (see below for description) for Energy Conservation. A $7,500 rebate is available for newly constructed Five Star Plus homes. Demand for the rebate program was sufficient for the Legislature to add an additional $60 million in September 2008. Since April 2008, AHFC has doubled the number of energy raters. Estimated average energy savings are about $1,500 per home per year, and more than 12,000 pounds of carbon dioxide per home has been prevented from entering the atmosphere.

Second Mortgage Program for Energy Conservation – The Second Mortgage Program for Energy Conservation was initiated in April 2008. Potential borrowers may apply to AHFC for financing to make cost-effective energy improvements on owner-occupied properties. Borrowers select from the list of energy upgrades included with the energy audit of their home, performed by an AkWarm-certified rater. All improvements must be completed within 365 days of loan closing.

Small Building Material Loan – AHFC provides direct financing for the renovation or completion of residential properties located in designated small communities; however, the project may include energy-efficient upgrades and renewable-energy systems and, therefore, would be eligible for these loans.

Energy Efficiency Conservation Block Grant (EECBG) – The EECBG is a new program to Alaska, launched in 2009. It will supplement the Energy Efficiency Education Program, ARIS, and AkWarm, aid in the development of a commercial audit program, establish a Village Waste Heat Recovery Project, and a municipal block grant for energy efficient retrofits.

Research Information Center – The Research Information Center (RIC) provides information, presentations, and technical assistance for AHFC energy programs. The RIC Library has thousands of online resources, books, fact sheets, videos, reports, catalogs, etc., available to all Alaskan residents on topics such as northern building, innovative housing construction, energy efficiency, renewable energy, sustainable technology, and much more. Information requests, library visits, educational presentations and web visits total approximately 20,000 annually.

Weatherization – The Low-Income Weatherization Assistance Program allows eligible low-income Alaskans to lower the cost of heating their homes. AHFC provides funds to nonprofit organizations and municipalities. To apply for the program, Alaskans contact the program provider for their area. The Weatherization Program has been in effect in Alaska for about 30 years using funding from a variety of sources. It has a highly developed, functioning infrastructure for effective delivery and is one of the most successful programs the State has ever offered to clients, providing immediate,

tangible benefits that are documented in energy savings and reductions in threats to health and safety commonly found in the home.

The Weatherization Program has a long history of performance in building a skilled workforce, processing applications, working with other agencies to provide needed services, identifying high priority clients and families, introducing new and effective products to the market, increasing the awareness of the HVAC industry, providing critical client education, assisting low- and moderate-income families to curb unnecessary expenditures in heating and utilities, and in providing healthy, safe living environments to the highest priority clients, including those with young children, the disabled, and senior citizens.

**AEA**
Diesel Generation Efficiency Program provides assistance in developing projects that use high efficiency generators and recover "waste heat" from diesel generators.

Energy Efficiency and Conservation Program focuses on reducing energy use in larger facilities such as schools, community buildings, water treatment plants, and commercial buildings. Current initiatives include the federally funded Energy Efficiency and Conservation Block Grants, the Village End Use Efficiency program, a building energy monitoring, pilot projects, and a statewide public education and outreach program.

AEA has recently launched a commercial energy audit program. Owners of eligible commercial buildings throughout Alaska may be reimbursed up to $6,500 for a qualifying energy audit. The program is funded by the American Recovery and Reinvestment Act, and is expected to provide up to 150 commercial energy audits. The Alaska Commercial Energy Audit Program will reimburse eligible applicants the cost of an energy audit up to a specified dollar limit on a per square foot basis. Eligible buildings are commercial buildings, including nonprofit owned, up to 125,000 square feet. Building tenants are not eligible, but may refer the building owner to the program.

## Public Assistance – AEA, DHHS

The State of Alaska has energy assistance programs to help qualified Alaskan residents and community facility owners help defray high energy costs.

**AEA Power Cost Equalization Program**
AEA Power Cost Equalization (PCE) program provides economic assistance to electrical customers in rural areas of Alaska where the kilowatt-hour (kWh) charge for electricity can be three to five times higher than the charge in more urban areas of the state. PCE only pays a portion of approximately 30 percent of all kWh's sold by the participating utilities. Community facilities and residential customers are eligible for PCE reimbursements. PCE fundamentally improves Alaska's standard of living by helping small rural areas maintain the availability of communications and the operation of basic infrastructure and systems, including water and sewer, incinerators, heat, and light. AEA determines ratepayer and community facility eligibility, manages the program, and reimburses utilities for eligible PCE costs.

The Regulatory Commission of Alaska (RCA) determines utility eligibility and establishes the PCE rates that are used to calculate eligible PCE payments. PCE rates have a fuel cost and non-fuel cost component. The fluctuation in the PCE levels are primarily due to the change in a utilities fuel cost to produce electricity. Participating utilities are required to reduce each eligible customer's bill by the amount that the State pays for PCE.

### Department of Health and Social Services (DHSS) – LIHEAP and AAHP

The Low-Income Home Energy Assistance Program (LIHEAP) is a federally-funded heating assistance program that helps households pay a portion of their winter heating costs. The program is limited to households with incomes at or below 150 percent of the federal poverty income guidelines. Several factors affect final eligibility and the household's benefit amount. These factors include the community the applicant resides in, how they heat their home, what type of dwelling they live in, the number of people living in the house, all residents' gross monthly income, and whether or not an elder, disabled individual, or child five years of age or younger lives in the home.

The Alaska Affordable Heating Program, a State-funded program for households with income between 151 percent and 225 percent of the federal poverty income guidelines, mirrors LIHEAP. Both programs use the same application form and eligibility criteria.

Qualified applicants receive one grant per year, payable to their fuel vendor. Applicants are notified about the status of their case through a notice of action. Applicants may designate a portion of their award be sent to their electric company. Applications are accepted from October 1 through April 30. Both programs are open to renters as well as homeowners.

## Office of Management and Budget / Standardized Methodology to Collect and Store Energy Consumption and Expense Data (SB 220, Section 39)

The State of Alaska's facilities energy cost and consumption data will be collected and stored in a new web-based module in Alaska Housing Finance Corporation's Alaska Retrofit Information System (ARIS). The new module, estimated to cost $42,000, will be paid for with ARRA energy funds and will allow State employees to access the system via the internet.

State facility users will be able to enter basic data about their buildings. It will include electrical and other space/water heating fuel costs and usage, and demand charges. Also included will be size, type of building, occupancy, schedule, facility owner, contact, and other data. The system's reporting function will summarize data by such features as building, building type, energy usage, history, department, and geographic locations, allowing for the capability to prioritize facility energy efficiency retrofit opportunities.