

**ALASKA STATE LEGISLATURE
HOUSE SPECIAL COMMITTEE ON ENERGY**

February 8, 2011
3:14 p.m.

MEMBERS PRESENT

Representative Neal Foster, Co-Chair
Representative Lance Pruitt, Co-Chair
Representative Bob Lynn
Representative Kurt Olson
Representative Dan Saddler
Representative Pete Petersen
Representative Chris Tuck

MEMBERS ABSENT

All members present

COMMITTEE CALENDAR

PRESENTATION(S) ON REPORTS REQUIRED BY THE ALASKA SUSTAINABLE ENERGY ACT OF 2010.

OFFICE OF THE GOVERNOR OR DESIGNEE~ "HOW BEST TO STRUCTURE STATE ENERGY PROGRAMS"

DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES~ "RETROFITTING STATE BUILDINGS TO IMPROVE ENERGY EFFICIENCY" & "USING COMPRESSED NATURAL GAS TO POWER VEHICLES"

DEPARTMENT OF REVENUE~ "CREATING A MUNICIPAL ENERGY IMPROVEMENTS FINANCING PROGRAM"

OFFICE OF MANAGEMENT & BUDGET~ "STANDARDIZED WAY TO COLLECT DATA ON ENERGY CONSUMPTION AND COSTS"

-HEARD

PREVIOUS COMMITTEE ACTION

No previous action to record

WITNESS REGISTER

SARA FISHER GOAD, Executive Director
Alaska Energy Authority (AEA)

Department of Commerce, Community & Economic Development (DCCED)
Anchorage, Alaska

POSITION STATEMENT: Testified on the Office of the Governor report titled, "How Best to Structure State Energy Programs."

JOEL ST. AUBIN, Chief-Statewide Public Facilities
Office of the Commissioner
Department of Transportation & Public Facilities (DOTPF)
Anchorage, Alaska

POSITION STATEMENT: Testified on the Department of Transportation & Public Facilities (DOTPF) report titled, "DOT&PF Retrofitting of State Facilities."

DIANA ROTKIS, Manager-Statewide Equipment Fleet
Office of the Commissioner
Department of Transportation & Public Facilities (DOTPF)
Anchorage, Alaska

POSITION STATEMENT: Testified on the State of Alaska Vehicle Fleet Compressed Natural Gas Pilot Program.

BOB BREAN, Director
Research & Rural Development
Alaska Housing Finance Corporation (AHFC)
Anchorage, Alaska

POSITION STATEMENT: Offered to provide written information on the Alaska Energy-Efficiency Revolving Loan Fund program.

JERRY BURNETT, Deputy Commissioner
Treasury Division
Department of Revenue (DOR)
Juneau, Alaska

POSITION STATEMENT: Testified on the report titled, "Alaska Department of Revenue Municipal Energy Improvements Financing Report January 31, 2011."

CRAIG KAHKLEN, Policy Analyst
Office of Management & Budget (OMB)
Office of the Governor
Juneau, Alaska

POSITION STATEMENT: Testified on the report titled, "SB220 Alaska Sustainable Energy Act," dated January 31, 2011.

ACTION NARRATIVE

[3:14:00 PM](#)

CO-CHAIR NEAL FOSTER called the House Special Committee on Energy meeting to order at 3:14 p.m. Representatives Foster, Saddler, Petersen, Tuck, Olson, and Pruitt were present at the call to order. Representative Lynn arrived as the meeting was in progress.

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PRESENTATION(S) ON REPORTS REQUIRED BY THE ALASKA SUSTAINABLE ENERGY ACT OF 2010.

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CO-CHAIR FOSTER announced that the first order of business would be presentations on reports required by the Alaska Sustainable Energy Act of 2010, beginning with the executive director of AEA reporting on how best to structure state energy programs.

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OFFICE OF THE GOVERNOR OR DESIGNEE, "HOW BEST TO STRUCTURE STATE ENERGY PROGRAMS"

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SARA FISHER GOAD, Executive Director, Alaska Energy Authority (AEA), Department of Commerce, Community & Economic Development (DCCED), informed the committee the report from the governor's office titled "How Best to Structure State Energy Programs," required an examination of the powers and duties of AEA and its relationship with the Alaska Industrial Development & Export Authority (AIDEA). She said AEA has become a key agency for the planning of energy infrastructure financing by issuing grants through the Renewable Energy Grant Fund and Recommendation Program and the Emerging Energy Technology Fund program. Also, AEA has managed the construction of many rural energy infrastructure projects, and provided technical assistance and training to local power plant and bulk fuel operators. In partnership with the Regulatory Commission of Alaska (RCA), AEA also manages the Power Cost Equalization (PCE) program. However, AEA does not have the ability to own and operate new energy projects or to hire staff; in fact, AIDEA staff manages most AEA programs. Ms. Fisher Goad stated that authorizing statutes in proposed HB 103 would restore AEA's power and allow it to hire staff. She provided a brief history of the governance of AIDEA and AEA by their boards of directors, and advised that AIDEA and AEA are now allowed "to move forward with

their separate and distinct missions as State of Alaska corporations." The aforementioned pending legislation, if enacted, will provide the next step and allow AEA to hire staff for the purpose of managing its programs. She pointed out that the report makes two recommendations: 1. The Bulk Fuel Loan fund - managed by AEA - and the Bulk Fuel Bridge Loan Fund (BFBLF) - managed by DCCED - should be merged into one program; 2. AEA, working with AIDEA and DCCED, should explore options to address the energy efficiency needs of commercial buildings through the Alaska Commercial Energy Audit Program. The report also directed that coordination between commissioners, staff, the Office of Management and Budget (OMB), and the governor's office for the management of energy programs is provided by the Energy Policy Coordinator (EPC), whose mission is to help ensure that the state's energy resources and energy programs are devoted to advance the state's energy policy priorities. Ms. Fisher Goad concluded that the governor's report also recommended that the EPC further evaluate services and programs to measure their results and make additional changes, if necessary. She opined the overall message is that services and programs should be reevaluated and reviewed for their effectiveness in providing value to the residents of the state.

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CO-CHAIR FOSTER asked for Ms. Fisher Goad's opinion on creating a department of energy.

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MS. FISHER GOAD said:

What we have found is that, you know, any coordination of the variety of projects and programs for energy across several, several state agencies, and creating a department of energy, may not provide any additional services and enhancements of those services to the, to the communities and the residents of the state of Alaska. And so I think the Energy Policy Coordinator in the governor's office - and the governor's office has also always played the role of the coordination - would be able to, to coordinate those programs without making a restructuring process that would move, for example, AEA programs or commerce programs, into some type of other entity.

**DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES, "RETROFITTING
STATE BUILDINGS TO IMPROVE ENERGY EFFICIENCY" & "USING COMPRESSED
NATURAL GAS TO POWER VEHICLES"**

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JOEL ST. AUBIN, Chief-Statewide Public Facilities, Office of the Commissioner, Department of Transportation & Public Facilities (DOTPF), informed the committee the Alaska Sustainable Energy Act requires DOTPF retrofit at least 25 percent of all state public facilities that are in excess of 10,000 square feet no later than January 1, 2020. As a first step, DOTPF is gathering utility bills for the past two years for all state buildings that meet the criterion. Most agencies have provided this information and his department is generating energy-use indices in order to prioritize need. The department and AEA have collaborated on this approach to prioritize the facilities and to group projects by location if feasible; however, grouping facilities may mean improvements are not made in the exact order of need based on the baseline energy-use index. Mr. St. Aubin advised that DOTPF has issued a request for proposal (RFP) for energy performance contracting and has begun negotiations with energy service companies. The retrofit process will take many years, although the initial costs of \$10 million will be paid by the American Recovery and Reinvestment Act (ARRA) through the U.S. Department of Energy, and must be spent by March 2012. After the initial funds are committed, additional funding will be through the Alaska Energy-Efficiency Revolving Loan Fund program administered by the Alaska Housing Finance Corporation (AHFC), but he anticipated that some projects may be funded by a combination of these, and other sources. Mr. St. Aubin recalled that retrofit projects prior to the passage of the Sustainable Energy Act were completed using energy performance contracting. The phase of these projects completed in 2006 resulted in energy cost avoidance of \$366,000 during the following year; the phase completed in 2009 resulted in \$793,000 of cost avoidance during the following year. Finally, he noted that 16 facilities, equal to 10 percent of the buildings affected by the Sustainable Energy Act, have already been retrofitted either by the Department of Administration (DOA), DOTPF, or the Department of Corrections (DOC).

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REPRESENTATIVE TUCK asked for the amounts of energy cost avoidance in 2007 and 2008.

MR. ST. AUBIN responded that the energy savings are continuing, but the report indicates the dollar savings just during the first year after.

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CO-CHAIR PRUITT asked whether additional money to fund the program after ARRA funds are expended, is set aside, or will be sought from federal or state government.

MR. ST. AUBIN advised the future funding source is the \$250 million Energy-Efficiency Revolving Loan Fund managed through AHFC.

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DIANA ROTKIS, Manager-Statewide Equipment Fleet, Office of the Commissioner, Department of Transportation & Public Facilities (DOTPF), discussed a report produced by Mercury Associates, Inc. titled "State of Alaska Vehicle Fleet CNG Pilot Program Recommendations/Cost," dated January 2011. She said the report concluded that compressed natural gas (CNG) is a feasible fuel for certain Alaska fleets and expansion of the program would be beneficial towards Alaska's sustainability efforts required by the Alaska Sustainable Energy Act of 2010. Phase 1 of the pilot program would enhance the existing fuel infrastructure and increase the number of vehicles and equipment using CNG by the Municipality of Anchorage (MOA), the Anchorage School District (ASD), and the state. Some of the provisions of Phase 1 are: upgrading the five existing CNG stations; acquiring a fuel management system for state bulk fuel tanks; conversion of twenty-five state light-duty vehicles, four school buses, four solid-waste trucks, and two transit buses; designating an inter-government program coordinator to find and administer federal grants for future phases, to acquire U.S. Department of Energy (DOE) Clean Cities status for Anchorage, and to garner public support for the program. Ms. Rotkis noted a complete copy of the report and her one-page summary on the economic advantages and disadvantages of the program are provided in the committee packet.

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REPRESENTATIVE TUCK asked whether the state light-duty vehicles selected for the pilot program were high-mileage vehicles.

MS. ROTKIS said the identified vehicles were high-mileage vehicles limited to travel within the municipal boundaries, so that they could refuel at CNG stations.

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REPRESENTATIVE PETERSEN agreed that CNG is a proven technology; however, the supply of natural gas in Southcentral is tenuous. He questioned whether it is wise to encourage the use of CNG.

MS. ROTKIS acknowledged that one of the economic disadvantages identified by the report is the need for additional natural gas storage in Cook Inlet to meet peak winter natural gas demand.

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REPRESENTATIVE SADDLER pointed out natural gas is a hydrocarbon and asked how it qualifies as a sustainable source of energy.

MS. ROTKIS expressed her belief that the study looked at the effect on greenhouse gases and the future availability of CNG as a "two-sided coin." She opined sustainability is going forward with a fleet that uses less regular fuel, costs less, has higher engine performance, and longer-lasting vehicles.

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REPRESENTATIVE SADDLER surmised CNG vehicles cost less and run better than those fueled by gasoline or diesel.

MS. ROTKIS clarified that natural gas vehicles do not cost less; in fact, there is a premium on hybrid-type vehicles of \$16,000-\$24,000 for a light-duty vehicle. However, they have a much cleaner engine, so there is less preventative maintenance needed, and a longer engine life.

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CO-CHAIR PRUITT asked where the natural gas fuel stations are located and whether they are open to the public.

MS. ROTKIS said there is one public station in Spenard and the others belong to MOA or Elmendorf Air Force Base.

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CO-CHAIR PRUITT asked whether the goal of the program is to only establish a CNG program for state vehicles, or also to show that this is a feasible option for personal-use vehicles in the long-term.

MS. ROTKIS advised the long-term goal of the pilot program is a public-private partnership that will create enough demand so that CNG fueling stations - which cost between \$500,000 and \$1 million to build - will turn a profit. To accomplish that, demand beyond state use is required. The Municipality of Anchorage is seeing success with CNG school buses; in fact, other states with solid-waste truck and transit bus programs that use large amounts of fuel, have proven to pay for themselves over the life of the equipment. This type of savings is harder to achieve with light-duty equipment in an area with limited CNG fueling stations.

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CO-CHAIR PRUITT observed that some school buses and solid-waste trucks are run by private companies. He asked whether there is an understanding that the state will provide subsidies to private companies.

MS. ROTKIS stated that the pilot program school buses belong to ASD and the solid-waste trucks and transit buses belong to MOA. She said the study suggests that the Phase 1 "up-fit" will be funded by government grants or legislative dollars.

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MS. ROTKIS, in response to Co-Chair Pruitt, advised that private-sector interest in the pilot program is only in providing fuel. In further response, she noted that Mercury Associates, Inc. talked with local bus companies, but they are "cautiously awaiting to see what will happen."

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BOB BREAN, Director, Research & Rural Development, Alaska Housing Finance Corporation (AHFC), offered to provide written information on the Alaska Energy-Efficiency Revolving Loan Fund program to which Mr. St. Aubin referred.

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REPRESENTATIVE TUCK recalled that ENSTAR Natural Gas Company used natural gas vehicles in its fleet. He pointed out that clean natural gas is two-thirds the price of a gallon of gasoline, and vehicles that were originally designed with high-octane engines enjoy higher power and fuel economy than retrofitted vehicles. He asked whether the vehicles in the pilot program were retrofitted.

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MS. ROTKIS affirmed the 25 light-duty vehicles in the first part of the study were converted with an OEM warranted retrofit, which is not equal to "something that comes off the floor at Ford Motor Company or Chevrolet, fully ready to go with compressed natural gas." The school buses and solid-waste trucks were a more advanced retrofit, by companies such as Roush Engineering, and the performance and longevity of these vehicles is superior to that of diesel counterparts. The transit buses were also retrofitted.

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CO-CHAIR FOSTER referred to Ms. Rotkis's written document provided in the committee packet that indicated \$5.3 million is required from the legislature to accomplish the work of the pilot program. He asked if there has been a response.

MS. ROTKIS reminded the committee the report was issued 1/31/11, thus there has been no response yet. In further response to Co-Chair Foster, she stated that the study did not address integration into rural areas, or even Fairbanks, because of the cost of moving liquid natural gas (LNG) to remote locations and converting it to CNG. However, the construction of a natural gas pipeline providing cost-effective CNG to Fairbanks would warrant expansion of the program.

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REPRESENTATIVE PETERSEN related his experience with CNG in other cities and opined the price of vehicles manufactured to use CNG will drop with increased demand.

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CO-CHAIR PRUITT asked for the energy equivalent of CNG compared to gasoline or diesel fuel.

MS. ROTKIS said she was unsure. The department makes a comparison on the energy savings for an individual vehicle and the cost per gallon equivalent of vehicle performance. For example, school buses fueled by CNG perform well except when going up hills. Additionally, in the past CNG trucks performed well, but could not support the installation of a snowplow. She stated that many of these problems have been overcome by newer retrofits, and there is no energy loss or performance difference in the new vehicles.

DEPARTMENT OF REVENUE, "CREATING A MUNICIPAL ENERGY IMPROVEMENTS FINANCING PROGRAM"

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JERRY BURNETT, Deputy Commissioner, Treasury Division, Department of Revenue (DOR), informed the committee his department was tasked with issuing a report that addresses financing programs for energy efficiency and renewable energy projects on residential, commercial, and industrial property through property tax assessments. Although this is a new program in Alaska, the first program of this type was started in California in 2008, and now 20 states have such programs that are known as Property Assessed Clean Energy (PACE) financing systems. He explained that this type of financing mechanism is similar to that of a local improvement district (LID) where the municipal government places a special property tax assessment on a residence for water, sewer, or for paving streets and sidewalks. However, under the PACE program the assessment is placed on a voluntary basis against individual properties to allow property owners to finance projects that would result in energy savings or clean energy projects. Unfortunately in July 2010, the Federal Housing Finance Agency (FHFA) called for a pause in PACE programs due to the assessment's position as a first lien. He opined that PACE is not an impractical program if the first lien risk can be worked out with mortgage lenders. Mr. Burnett advised that the suspension of the program at the federal level presents specific challenges to Alaska if the state chooses to continue the program at the state level. For example, since PACE programs are administered at the local level, and there are 162 local governments in Alaska and only 38 local governments implement property taxes, there must be statewide administration of the program. On the other hand, the state has experience with the weatherization and energy efficiency rebate programs through the Alaska Housing Finance Corporation (AHFC). Moreover, the existing rebate program has proven that energy savings are being realized, and a 10-year

pay-off of the assessment is practical. In conclusion, his department made the following recommendations: A PACE program would require local governments to create PACE districts to participate; Local governments would administer property tax collection and lien implementation; A statewide issuer of bonds would provide financing; There would be uniform statewide standards; The legislature should consider providing for a revolving loan fund to supply up-front capital; The state should work with FHFA to establish standards to allow a PACE type program that will conform to national mortgage underwriting standards.

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REPRESENTATIVE PETERSEN heard about property owners installing solar panels in California through PACE programs.

MR. BURNETT affirmed that in California and New York parties are in litigation with FHFA over the program. He added that some of the programs had standards that allowed a loan-to-value of up to 110 percent, thus after the mortgage crisis, a burden was created for lenders.

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CO-CHAIR FOSTER asked whether members of the Alaska Municipal League have expressed interest in the program.

MR. BURNETT said DOR has not heard from local governments.

OFFICE OF MANAGEMENT & BUDGET, "STANDARDIZED WAY TO COLLECT DATA ON ENERGY CONSUMPTION AND COSTS"

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CRAIG KAHKLEN, Policy Analyst, Office of Management & Budget (OMB), Office of the Governor, reported on section 39 of SB 220, the Alaska Sustainable Energy Act of 2010, that requires OMB to develop standardized methodology for the collection and storage of energy consumption cost data. He stated that OMB, the Alaska Housing Finance Corporation (AHFC), and the Department of Transportation & Public Facilities (DOTPF) worked to develop a module for the Alaska Retrofit Information System (ARIS) that will allow state employees to enter data for ARIS through the Internet. After the data is entered, the system will allow the information to be sorted by various factors such as facility type, facility size, occupancy, and geographic location, and the

sorted data will then be used to manage energy consumption and costs. It will also allow for the prioritization of retrofit opportunities. Mr. Kahklen advised the system is in its final phases of testing and data entry will begin soon.

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CO-CHAIR FOSTER asked for a more specific timeline.

MR. KAHKLEN expressed his understanding that the system will be launched "in the next month or two."

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ADJOURNMENT

There being no further business before the committee, the House Special Committee on Energy meeting was adjourned at 4:05 p.m.