

Assessment of In-state Gas Energy Potential - Phase 3 of 3 **FY2013 Request:** **\$200,000**
Reference No: **49185**

AP/AL: Appropriation **Project Type:** Gasline
Category: Natural Resources
Location: Statewide **House District:** Statewide (HD 1-40)
Impact House District: Statewide (HD 1-40) **Contact:** Jean Davis
Estimated Project Dates: 07/01/2012 - 06/30/2017 **Contact Phone:** (907)465-2422

Brief Summary and Statement of Need:

This three-year project (FY2013 is phase three) provides critical data for evaluating natural gas potential in prospective unexplored basins near transportation corridors and population centers. Many basins in Alaska have geology conducive for natural gas, but the lack of data hinders evaluation of their potential. Some basins will not only have sufficient resources for local use, but may have volumes that justify export. Data on the gas potential of these areas will promote informed decisions regarding energy options and spur exploration. Funds will be used to evaluate existing data and gather new data on gas potential in selected basins.

Funding:	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	Total
Gen Fund	\$200,000						\$200,000
Total:	\$200,000	\$0	\$0	\$0	\$0	\$0	\$200,000

<input type="checkbox"/> State Match Required	<input type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input checked="" type="checkbox"/> Phased - underway	<input type="checkbox"/> On-Going
0% = Minimum State Match % Required		<input type="checkbox"/> Amendment	<input type="checkbox"/> Mental Health Bill	

Operating & Maintenance Costs:

	<u>Amount</u>	<u>Staff</u>
Project Development:	0	0
Ongoing Operating:	0	0
One-Time Startup:	0	
Totals:	0	0

Additional Information / Prior Funding History:

SLA2011/CH05 - \$500,000 Nenana basin was targeted for more detailed evaluation; reviewing available data for basin. Developing plans for the Nenana basin for field work in May FY2012.
SLA2010/CH43 - \$500,000 Finished compiling existing information on gas potential in interior basins along transportation corridors. The Susitna basin was targeted for more detailed evaluation of gas potential; completed 10 days field work in FY2011.

Project Description/Justification:

Alaska faces significant energy challenges that threaten the economic well-being of the population and the state's economic future. Simply stated, the state does not know where its energy is going to come from over the next few decades. More immediately, the high cost of fuel in rural and rail belt communities is having a strong adverse impact on families and local governments. While fuel costs in some areas have moderated with the current worldwide economic downturn, drastic price increases will return once the global economy starts to improve and demand for energy increases. The only way to mitigate this cycle is to look for local sources of energy that have the potential to supply more affordable energy for local consumption.

A significant amount of recent work has been done to identify renewable sources of energy to help communities reduce the volume of imported fuel oil, yet many communities have a limited suite of

options for locally-derived energy. Unlike wind, solar, and hydroelectric, the potential for natural gas is more difficult to discern because it resides deep underground. There are many sedimentary basins in Alaska whose geological characteristics are conducive to natural gas, including unconventional gas. However, most of these basins are so poorly known that we do not have a realistic understanding of their gas potential.

This is a three-phase capital project. This request represents phase III, which will last one year and be used to complete the project. This project will complete the evaluation of prospective basins throughout the state whose geology suggests some potential for natural gas suitable for in-state use. The prospective basins included in this evaluation are the Susitna and Nenana. As an example to help illustrate the need for data, thick coal deposits are known from widely scattered locations in the Susitna Basin, yet we do not understand the distribution of these coal deposits well enough to begin evaluating their potential to supply natural gas. The same statement can be made regarding the Selawik, Yukon Flats, and Middle Tanana Basins – all three contain significant coal deposits, yet we know little of their geology and geographic distribution. This type of information is critical for realistic evaluations of the natural gas potential of these sedimentary basins. This project will identify those basins having geologic characteristics most conducive to natural gas deposits and will gather technical data to support more realistic evaluations of their gas potential. A review has been completed of basins throughout the state and based on geological considerations, it was decided, to focus on the Susitna and Nenana basins. Funds received in FY2011 (Phase 1) are being used for the Susitna work. Funds received in FY2012 (Phase II) are being used for the Nenana work. We plan to use these requested FY2013 funds, to complete work in both basins. We completed a 10-day field program this past summer in the Susitna basin and are in the process of working up our data. We are also in the process of compiling available data for the Nenana basin in preparation for field work next May (FY2012).

Resulting technical data will be appropriate for public release and will help spur private sector exploration investment. Project results will include one significant report per basin summarizing relevant aspects of the geology related to gas potential (component Strategy A1, Targets 1 and 2). These reports will provide state policy makers some of the essential information required to make informed decisions regarding viable alternate energy sources for Alaskan communities.

Project execution may require help from other organizations and private-sector geological consultants in the form of direct contracting. The goals of this project are clearly consistent with the statutory mandates of the Division of Geological & Geophysical Surveys, which is to determine the potential for energy resources on state lands.

Why is this Project Needed Now?:

This project is time-sensitive. High energy costs are adversely impacting the state right now and decisions to fund projects involving alternate energy sources are currently being made. It is in the state's long-term best interest to make sure that decision makers have access to the best information in order to make informed decisions that will allow pursuit of the most cost-effective and viable energy options.

Specific Spending Detail:

LINE ITEM	DOLLAR AMOUNT	DESCRIPTION
Personal Services	\$ 30,000	Partial support for existing DGGs personnel over 1.0 fiscal year; no new positions
Travel	\$ 5,000	Travel for project planning and collaboration with project partners
Services	\$ 164,500	
Commodities	\$ 500	Field supplies

State Match Required:

- ☒ **NO**
☐ **YES**

Project Support:

Other agencies and groups are known or considered likely to support this project proposal, including:

- Various regional native corporations, including Doyon Limited, Cook Inlet Region Incorporated, Arctic Slope Regional Corporation, Ahtna Regional Corporation, Bering Straits Regional Corporation, all hold surface and subsurface rights to large land positions in their respective regions of the state, and would benefit from improved understanding of the resource potential of their lands,
- Various native village corporations whose residents are bearing the burden of high energy costs,
- The U.S. Geological Survey Energy Resources Program is a regular collaborator with the Alaska Division of Geological & Geophysical Surveys and the Division of Oil and Gas, will embrace this project,
- Oil and gas corporations exploring on the North Slope and Cook Inlet, and those interested in exploration opportunities in other Alaskan basins, will welcome the data and interpretive results generated through this project
- The University of Alaska-Fairbanks faculty and students benefit from state-administered geosciences investigations of this type, which create opportunities for academic research programs and educational opportunities.

Project Opposition:

Formal opposition to this project is unlikely. The proposed studies do not have any direct impact on the environment, subsistence use, or other surface resources.