

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.