**AHFC Energy Efficiency Monitoring Research** **FY2001 Request: $950,000**
**Reference No: 6351**

**AP/AL:** Appropriation **Project Type:** Health and Safety
**Category:** Housing/Social Services
**Location:** Statewide **Contact:** Les Campbell
**House District:** Statewide (HD 1-40) **Contact Phone:** (907)330-8356
**Estimated Project Dates:** 07/01/2000 - 06/30/2005

**Brief Summary and Statement of Need:**
Corporate (AHFC) funds to conduct research, analysis, and information dissemination and interchange among members of the industry, and between the industry and the public. Through competitive procedures, an entity would be selected to provide data gathering and analysis of energy efficient designs for homes, as well as, monitoring activity of homes.

| Funding: | FY2001 | FY2002 | FY2003 | FY2004 | FY2005 | FY2006 | Total |
|---|---|---|---|---|---|---|---|
| AHFC Div | $450,000 | $500,000 | $750,000 | $1,000,000 | $1,000,000 | $1,500,000 | $5,200,000 |
| Fed Rcpts | $500,000 | | | | | | $500,000 |
| Total: | $950,000 | $500,000 | $750,000 | $1,000,000 | $1,000,000 | $1,500,000 | $5,700,000 |

☑ State Match Required ☐ One-Time Project ☐ Phased - new ☐ Phased - underway ☑ On-Going
50% = Minimum State Match % Required ☐ Amendment ☐ Mental Health Bill

**Operating & Maintenance Costs:**

| | Amount | Staff |
|---|---|---|
| Project Development: | 0 | 0 |
| Ongoing Operating: | 0 | 0 |
| One-Time Startup: | 0 | |
| Totals: | 0 | 0 |

**Additional Information / Prior Funding History:**
FY2000 - Requested but unfunded.

**Project Description/Justification:**

The purpose of this project is to conduct research, analysis, information dissemination and interchange among members of the industry, as well as, between the industry and the public.

The projected outcomes are:
· Conduct research, analysis, information dissemination and interchange among members of the industry, and between the industry and the public.
· Gather data and perform analysis of geographically diverse area energy efficient designs for homes.
· Monitoring homes for energy usage, comfort levels, durability, occupant health, and economic benefit of efficiency features.

Homebuilding associations around the state have approached AHFC about providing grants towards research and information projects of interest to the industry. In particular, monitoring and testing of energy efficiency designs, products, and construction technology testing are areas where little is being done in Alaska. Considering the diverse building conditions and requirements across the state, the homebuilding industry has indicated they would like to see research and testing of energy efficiency designs in different regions in the state.

AHFC is required by state law to purchase homes that meet minimum energy efficiency standards, and the corporation has established and funded incentive programs for increased energy efficiency in homes. Currently, corporate arbitrage

dollars are used to offer reduced interest rates on homes that meet or exceed energy rating criteria. Yet, little information is currently available about the cost benefits to the homeowner over time from these programs or how effective certain energy efficiency designs have been across Alaska's climate regions.

Funds requested here would be to conduct research, analysis, and information dissemination and interchange among members of the industry, as well as, between the industry and the public. Through competitive procedures, an entity would be selected to provide the following:

Data gathering, as well as, analysis of energy efficient designs for homes. Alaska has a wide range of climates and temperatures, with everything from coastal rain forests to arctic tundra. Energy efficiency designs and technologies for homes need to address conditions in each of these regions across the state.

Monitoring homes. Homes with different energy efficiency designs would be monitored for energy usage, comfort levels, durability, occupant health, and economic benefit of efficiency features. Different regions of Alaska would be monitored along with different energy efficiency designs.

Activities should have a high level of effectiveness and success based on three reasons:

1. Programs and projects will be results oriented. Home building is a practical activity. Monitoring research and analysis should seek workable answers to real problems of home building and to real ways to improve homes across Alaska. Future trends and developing technologies need to be considered, with an emphasis on the impact that such trends and technologies will have on the way the homes are actually built.

2. Contact with the real world of home building needs to exist by having some ties to the state home building industry. In addition to a statewide association, local home building associations exist in Anchorage, the Kenai Peninsula, Ketchikan, Juneau, Interior Alaska, Mat-Su, and Kodiak. These associations could provide a grassroots network of cooperating builders. When research is launched, builders would be expected to provide direction on specific questions, technologies, designs, and to cooperate in studies and field tests.

3. Research & analysis flow directly into the building industry and the public. Monitoring results would be expected to help link the research and product development communities with the practitioners who put methods into practice and products into use. The involvement of the building industry is intended to increase builders confidence in the findings. All results and analysis would be publicized and disseminated throughout the housing industry, creating a favorable climate for the adoption of desirable changes.