

FY 10 Energy Funding Request

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Dan White with contributions from UAF and UAA institute directors

The FY 10 request for energy research would be administered through the Alaska Center for Energy and Power (ACEP), except where noted (**). While ACEP can serve in a central coordinating and management role, energy is interdisciplinary and has and will continue to be distributed around campus. Energy research that is conducted in different institutes will have the funding and personnel managed in the respective institute. The budget presented here, therefore, reflects opportunities that could be distributed across UA campuses as appropriate. This budget does not request funding for projects, but rather seeks to build the capacity needed to conduct externally funded projects.

1. Building energy capacity

\$1.25 M/year

\$1M is the equivalent to five faculty positions. We will not seek to fill these with five “standard” full time faculty, however. We seek to hire new research faculty (partial salary) or to attract top faculty from around the country into visiting positions. In this way we will remain expert, dynamic, responsive, and timely. The areas of expertise that need filling are geothermal technologies, geothermal exploration, power transmission, renewables (e.g., wind, solar, and hydrokinetic), and alternative fuels.

We expect \$1M to be administered by ACEP but the faculty to be housed in institutes across the University. The director of ACEP will have the discretion to negotiate with institute directors to determine where the expertise is needed, for how long, and in what type of faculty position.

**In addition, \$100k for the GF portion (approx. 60%) of a tenure-track energy economist faculty position to be based primarily at ISER with a possible joint appointment to ACEP. This position will lead the proposed Program on Energy and the Alaska Economy.

**In addition, \$150K for a tenure-track junior faculty position in UAA’s SOE in renewable energy engineering. This position could be a joint appointment to ACEP.

2. Energy leadership

\$250k/yr

Gwen Holdmann is the *organizational director* of ACEP. However, her first year salary was an INE investment made with one-time funding. She has accomplished a great deal in acquiring new projects for ACEP. Funding for a full-time director is a critical element of the sustainability of the energy program, gathering new projects, and setting the course for future energy research both at ACEP and across the university system.

3. Project support

\$400k/yr

Technical support is critical to the monitoring, maintenance, and operations of projects. This is especially important with energy research and testing that requires maintenance of major equipment and data systems. Financial support is also needed to manage the large amount of contracting associated with the energy research. This is the equivalent of 3 positions (\$300k).

**In addition, \$100k are needed for project support at UAA.

4. Student engagement

\$200k/yr

In order to engage students we seek \$200k for student fellowships. For graduate students this will cover approximately 4 per year. Most of the students we expect (approximately 25) will be covered on projects. However, the GF student positions is an essential element to recruiting and supporting student base. The areas of expertise needed are renewables, alternative fuels, fossil fuels, and power.

5. Energy outreach

\$600k/yr

ACEP will work directly with Cooperative Extension to conduct a program for energy outreach (\$450k)

**150k will be dedicated to UAA unit outreach.

