Amount Requested:
Info from The Design Alaska report

$19,747.00 General contractors cost
$12,862.00 Structional construction estimate
$131,110.00 Electrical construction cost estimate

$163,719.00 – total estimated cost of project

Option 1: we find an investor

The fixed cost to students = $23,000 Design Specs (phase I)
$ 5,000 Bid advertisement and D&C costs (phase II)
$10,000 D&C Salary during construction period (Phase II)

$38,000 = total fixed cost

Variable costs to students = (Y * .045)(N) or (p)(N)

Y = Yearly payment to investor
p = 4.5% of Y
N = number of years

The Plan: UAF Design and Construction will partner with UAF Procurement & Contract Services and UAF Administration & Real Estate Management to develop a maintenance and operating agreement or a use permit which will allow the capture of the federal governments 30 percent (ITC) Business Energy Investment Tax Credit. The bid will go through the Procurement Office. D&C will manage the construction of the system; the direct salary cost will be paid by the RISE board (not to exceed $10,000). Once the system is installed Administration and Real Estate will manage the agreement throughout the contract term at 4.5% of yearly sums exchanged.

The Bid Proposal Idea: The investor will install the system and then own the system for this time. The investor will receive the 30% tax credit on the total cost of the system in the year of construction (aprox. 60,000). The electricity generated will be used in the SRC building and the exterior south facing wall space will be used by the investor, both at no charge. The investor can capture depreciation on the system however they see fit. The RISE Board will pay a monthly or annual fee to the investor for leasing of the solar PV system, as part of the bid agreement. At the end of the contract term, the system will be donated to the University and the ownership will transfer to UAF (RISE or the SRC Facilities). The third party can then take advantage of a second tax credit based on the donated value of the system. We assume the Solar PV System will take on a negotiated name, involving advertisement for the third-party as an incentive for investing.

Option2: we do not find an investor

If we do not find an investor, the second option is for the RISE Board to fund the project. This would be equal to approximately 8,300.00 students all paying $20.00. It would be the above cost of $163,719+ $10,000 for D&C oversight. = $173,719.00
Alaskans, and it will begin to diversify and thus secure UAF’s energy future.

The SRC Solar PV Project is a strategic step in fostering the cultural change necessary to institutionalize this energy awareness and sustainability-buy-in on the UAF campus and connected northern communities (Anderson, 1999). The many unobstructed south facing walls of campus are ideal for solar capture. Being able to assess and understand a site’s solar potential is critical for sustainability in northern climates, whether through solar PV, solar thermal, or passive solar design. Taking advantage of this solar resource is demonstrative of how sustainable development can attract investment, boost the economy, and create reliably priced energy.

The University of Alaska Fairbanks is witnessing a rapid increase in efforts to measure, monitor, and foster sustainability on campus. With the top down support of the chancellor Brian Rodger, sustainability is becoming part of UAF’s culture and curriculum.

Sustainability appears to be the global challenge of the 21st century, and universities around the world are creating curriculum and strategies to prepare students and lead society into a more desirable future (Greenberg, 2011 & Meyer, 2010, & Roca, 2007). UAF’s campus is no different, and after many years of talking about the changes which need to transpire, increased community and top-down support in combination with the students commitment to the SIREN fee and subsequent fund has given UAF the power to act in new and powerful ways.

The SRC Solar PV project will create a new precedent for solar PV public private partnerships, it will demonstrate that solar technology is not just installed for research (such as on the CCHRC) but that it is a viable option for Alaskans, and it will begin to diversify and thus secure UAF’s energy future.
Technical Advisors and Collaborators:
Mike Ruckhaus  Facilities Services, Design and Construction x5797
Charles Ward  UAF, Power Plant x5608
Richard Wies  UAF, Electrical & Computer Engineering Department x7071
Michele Hebert  UAF, Sustainable Coordinator, 388-6085/ x 2423
Richard Seifert  UAF, Coop- Ex, Community Sustainability Coordinator x7201
Craig Gerlach  UAF, Center for Cross-Cultural Studies x6752
Michael Davis  UAF BBC, Dept. of Alaska N. S. & R.  D.medavis@alaska.edu
Robert Holden  UAF, Associate Director of Auxiliary and Business Services x5145

Budget Detail:
Please see attached Design Alaska Document, plus the above writing under Amount Requested.

Budget Justification:
This justification is also within the attached Design Alaska Document, plus the above writing under Amount Requested. If you need any other information I will be happy to provide it in person or in written format.

Implementation Plan/Time Line:
Time Line: 2011
May – Completion of the Built-to Specifications
July 1st – Procurement bids the proposal (3 weeks)
August – Award Bid
Aug. , September, or October – Install Solar PV System

Design and Construction, more specifically Mike Ruckhaus will be overseeing this project. No matter how we fund the project, it will go to bid through the University System and an outside contractor will install it.

Qualifications & Experience:
As the board knows I have been working on this project from the beginning and am able to continue my role until its completion.