



**Financial Assistance
Award**

DENALI COMMISSION
510 L Street, Suite 410
Anchorage, Alaska 99501
 (907) 271-1414 (phone)
 (907) 271-1415 (fax)
 www.denali.gov

Award Number 01201-00

Award Title High Voltage Direct Current (HVDC)

Performance Period September 30, 2009 through March 30, 2012

Recipient Organization & Address

University of Alaska Fairbanks
 PO BOX 757880
 3295 COLLEGE ROAD 109 ASC
 Fairbanks, AK 99775-7880

Authority
 112 Stat 1854

CFDA Number
 90.100

**Denali Commission Finance
 Officer Certification**

Jennifer Price
 09/17/2009

Phone: (907) 474-6264
Recipient DUNS # 615245164 **TIN #** 926000147

Cost Share Distribution Table

Accounting Code	New Funding		Prior Period Funding		Total
	Denali Commission	Other Contributors	Denali Commission	Other Contributors	
95670000AL	\$2,371,942.00		\$0.00		\$2,371,942.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
		\$0.00		\$0.00	\$0.00
		\$0.00		\$0.00	\$0.00
		\$0.00		\$0.00	\$0.00
		\$0.00		\$0.00	\$0.00
Total	\$2,371,942.00	\$0.00	\$0.00	\$0.00	\$2,371,942.00

This Financial Assistance Award approved by the Federal Co-Chair of the Denali Commission constitutes an obligation of federal funding.

This award provides \$2,371,942 to the Alaska Center for Energy and Power (ACEP) to complete the next phase of the High Voltage Direct Current (HVDC) project previously funded through Alaska Village Electric Cooperative (AVEC). The Commission previously funded AVEC to oversee Phase I of this project which included feasibility analysis and preliminary engineering for a direct current transmission connection between Mountain Village and St. Mary's, Alaska. The initial design and engineering studies include building and testing a prototype of the converter. The final report has been completed.

By involving ACEP as a partner on this project, the Commission anticipates improved documentation of lessons learned and an understanding of potential replication of this technology throughout Alaska.

Signature of Authorized Official - Denali Commission

 Electronically Signed

Typed Name and Title
 George Cannelos
 Federal Co-Chair

Date
 09/16/2009

AWARD ATTACHMENTS

University of Alaska Fairbanks

01201-00

1. Award Conditions

***Award Conditions to the Financial Assistance Award
Between the Denali Commission and University of Alaska Fairbanks (UAF),
Alaska Center for Energy and Power (ACEP)
For High Voltage Direct Current (HVDC)
Award No. 01201
September 2009***

1. Scope of Work

This award provides \$2,371,942 to the Alaska Center for Energy and Power (ACEP) to complete the next phase of the High Voltage Direct Current (HVDC) project previously funded through Alaska Village Electric Cooperative (AVEC). The Commission previously funded AVEC to oversee Phase I of this project which included feasibility analysis and preliminary engineering for a direct current transmission connection between Mountain Village and St. Mary's, Alaska. The initial design and engineering studies include building and testing a prototype of the converter. The final report has been completed.

By involving ACEP as a partner on this project, the Commission anticipates improved documentation of lessons learned and an understanding of potential replication of this technology throughout Alaska.

Phase II is subdivided into three discreet sub-tasks as follows:

Phase IIA: Project Scoping and Component Design and Modeling

Phase IIB: Testing of Transmission System Components

Phase IIC: Construction and Testing of HVDC Converters

ACEP is authorized to enter into a sub-award agreement with Polarconsult for project completion for up to \$2,175,500. Milestone completion shall be monitored closely by ACEP and controls over grant payments shall be established and implemented throughout the grant performance period. It is understood that if this project does not proceed on schedule and within budget, the Commission reserves the right to redirect funding to other projects.

ACEP shall provide grant administration at a rate of 5%; or \$108,775. In addition to grant administration, ACEP shall provide data collection, processing and independent reporting for this project. The budget for this service totals \$87,667 and spans over two (2) years to include the following activities:

- 1) Work with Polarconsult to develop a data collection plan.
- 2) Compile and analyze the data on behalf of the Denali Commission.
- 3) Establish and convene a peer review committee to review results, including representatives of AVEC, Alaska Power Company (APC), National Renewable Energy Lab (NREL), NANA Pacific, and other appropriate stakeholders as identified by AVEC, ACEP, and the Denali Commission. This committee would be called as needed to review results and recommendations from the project.

- 4) Provide independent report on efficiency, performance, and economics in comparison to traditional HVAC transmission systems widespread use today, and identify potential areas of concern at the end of the project period.
- 5) Provide a final report packaging all data from the project and providing a recommendation on future use of the technology in Alaska at the end of the project period (mid-2011).

Data Collection Plan

ACEP will work with Polarconsult to develop a data collection plan. The economic data is most critical for this project in order to determine whether this approach should be adopted on a more widespread basis; however, efficiency of conversion and performance are also key factors.

All Commission funding is intended for use for the scope of work identified in the Award document only. Any balance of funds remaining after the full scope of work has been completed will be returned to the Denali Commission.

2. Milestones

The following milestones are identified as the major steps to be completed as part of the project. "Planned" dates for the first milestone are included here. As part of each progress report, recipients shall update the progress toward meeting these milestones (see section 7, Reporting).

Milestone	Planned		Actual		Units	Total Cost At Completion
	Start Date	End Date	Start Date	End Date		
In Progress	09/30/2009	12/30/2011			0	\$0.00
Project Close-out	12/31/2011	03/30/2012			0	\$0.00

3. Award Performance Period

The Award performance period is September 30, 2009 through March 30, 2012. This is the period during which Award recipients can incur obligations or costs against this Award.

4. Direct and Indirect Costs

The cost principles of OMB A-21 are applicable to this Award. Indirect costs up to 5% are allowable under this Award. Please refer to the cost principles regulations for specific details on other allowable charges under this Award.

5. Budget and Program Revisions

The Administrative Circular, 2 CFR Part 215, applies to this Award. Please refer to the Administrative Circular for specific details on revisions to this Award. The

Administrative Circular requires that ACEP will inform the Commission in writing (e-mail, letter, or report) at the earliest possible date of any unanticipated project cost overrun, project schedule delays, or changes in the project scope or changed site conditions.

6. Payments

Payments under this Award will be made by electronic transfer in response to a "Request for Advance or Reimbursement", Standard Form 270 (SF-270) submitted by the ACEP. Requests for reimbursements may be made as needed. The SF-270 must be submitted to the Denali Commission via fax, e-mail (finance@denali.gov) or mail in order for payment to be processed. The form is available on the OMB website: http://www.whitehouse.gov/OMB/grants/grants_forms.html. Payments shall be made in accordance with 2 CFR Part 215. Please contact the Denali Commission's Finance Specialist at (907) 271-1414 for further information about submitting this form. **No interest will be accrued on these funds.**

7. Reporting

Two forms of project reporting are required under this Award, listed below. ACEP shall submit reports using the Denali Commission's on-line Project Database System, available at www.denali.gov. If there are technical limitations which may prevent the recipient from meeting this requirement, please contact the Program Manager listed in this agreement.

- a. **Progress Reports** shall be submitted on a quarterly basis. The first reporting period is September 30, 2009 to December 30, 2009, and quarterly thereafter. Reports are due within 30 days of the end of the reporting period. Progress reports shall include the following:
 - i. Total project funding, including both Denali Commission funding and other project funding sources.
 - ii. The total project expenditures for the project as of the end of the reporting period, including both Denali Commission and Other funding sources.
 - iii. Updated schedule and milestone information as identified in the Scope of Work
 - iv. Narrative summary of the project status and accomplishments to date, and address the following questions: is the project on schedule, is the project on budget, and what actions are planned to address any project problems.
 - v. Photographic documentation of project progress shall be provided with the progress reports for active construction projects. The photo documentation shall include a minimum of three, dated photos per reporting period such that a complete record of the construction is maintained over time, from "before," showing the situation before the start of construction, to "during" showing work proceeding on the project, and "after" to show the finished project.

Photos shall be provided in a digital format as part of the on-line report. A short description of the activity and names of those in the photos shall also be provided.

- vi. For minor repair and renovation projects or other non-construction projects, pictures should be provided of before and after, or photos that are representative of the funded activity, to the extent possible. Photos shall be provided in a digital format as part of the on-line report. A short description of the activity and names of those in the photos shall also be provided.
- b. **Federal Single Audits** shall be submitted annually, when required. In accordance with OMB Circular A-133, which requires [subpart 200] “Non-Federal entities that expend \$500,000 or more in a year in Federal awards shall have a single or program-specific audit conducted for that year in accordance with the provisions of this part [subpart 205]. The determination of when an award is expended should be based on when the activity related to the award occurs.”

Recipients shall also submit single audits to the Federal Clearinghouse as designated by OMB. Information can be found on the following web-site:

<http://harvester.census.gov/sac/>

8. *Project/Award Close-Out*

The project close-out report shall be completed within 90 days of the end of the Award performance period or within 90 days of the completion of the project, whichever is earlier. Recipients must also draw down any remaining funds for expenditures incurred under this award during this 90-day period.

The project close-out report shall be submitted on-line through the Denali Commission’s on-line Project Database System, available at www.denali.gov. The project close out will require the recipient to submit the following information:

- a. Final data for each item listed in paragraph 7(a) “Progress Reports”
- b. Final project expenditures itemized by the following categories: planning & design; materials & equipment; freight; labor; project administration/overhead and other expenses.
- c. Acknowledgement of support: For all construction projects, the Award recipient shall display a sign that acknowledges the Government’s support for the project(s) developed under this Award. The Commission will provide an appropriate sign. The Award recipient must request an indoor and/or an outdoor sign from the Commission office. Pickup or delivery of the sign can be arranged at that time.
- d. Acknowledgement of support: For all non-construction projects, the Award recipient shall include an acknowledgement of the Government’s support for the project(s) developed under this Award. The format for acknowledgement of the Government’s support for non-construction awards will vary with each award and must be agreed

upon between the Award recipient and the Denali Commission Project Manager. Costs associated with this requirement shall be paid out of the project funding received by the Award recipient from the Denali Commission.

9. Public Policy Laws and Assurances

Award Recipients are required to comply with the public policy laws and assurances on Standard Forms SF 424b (non-construction projects) or SF 424d (construction projects). Some of the laws are highlighted below for your reference.

To the maximum extent practicable, considering applicable laws, Funding Recipients shall accomplish the project contemplated by the Award using local Alaska firms and labor.

No portion of this award may be used for lobbying or propaganda purposes as prohibited by 18 U.S.C. Section 1913 or Section 607(a) of Public Law 96-74.

Project level environmental reviews in accordance with the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA) are required for each project undertaken with Denali Commission funds.

10. Non-Compliance with Award Conditions

Recipients not in compliance with the terms and conditions of this Financial Assistance Award will be notified by the Denali Commission. The Denali Commission will work with the recipient to identify the steps necessary to bring them back into compliance, and will establish an appropriate time frame for the corrections to be made. If the corrections have not been made by the deadline, the Denali Commission reserves the right to either suspend or unilaterally terminate the Financial Assistance Award for non-performance.

11. Program Manager, Financial Manager & Other Contact Information

Denali Commission	Alaska Center for Energy and Power
Denali Daniels Program Manager 510 L Street, Suite 410 Anchorage, AK 99501 Phone: 907-271-1189 Fax: 907-271-1415 E-mail: ddaniels@denali.gov	Gwen Holdmann Project Manager 451 Duckering Building Fairbanks, Alaska 99775-5880 Phone: 907-590-4577 Fax: 907-474-6686 Email: gwen.holdmann@uaf.edu
Mariah McNair Grants Administrator 510 L Street, Suite 410 Anchorage, AK 99501 Phone: 907-271-2367	Maggie Griscavage Financial Contact 3295 College Road, 109 ASC Fairbanks, AK 99775-7880 Phone: 907-474-6446

Fax: 907-271-1415 E-mail: mmcnair@denali.gov	Fax: 907-474-5506 Email: ggriscavage@alaska.edu
---	--

12. Other Project Specific Paragraphs

In addition to reporting quarterly, ACEP shall meet twice annually with the Commission to report lessons learned and project status.