NORTHWEST ARCTIC BOROUGH ASSEMBLY
RESOLUTION 15-08

A RESOLUTION OF THE NORTHWEST ARCTIC BOROUGH ASSEMBLY ACCEPTING ADDITIONAL AEA GRANT FUNDS FOR THE BUCKLAND, DEERING, AND NOORVIK WIND-DIESEL PROJECTS AND FOR RELATED PURPOSES.

WHEREAS: the Borough accepted a legislative grant through the Alaska Energy Authority (AEA) to investigate, plan, design, and construct a wind generating project in Deering; and

WHEREAS: to continue moving the projects forward, the Borough wishes to accept additional AEA grant funds in the amount of $2,697,113 for a total budget of $10,758,928; and

WHEREAS: when completed, these projects will help offset the high costs of energy in Buckland, Deering, and Noorvik, and the Borough wishes to proceed with by accepting the additional AEA grant funds.

NOW THEREFORE BE IT RESOLVED: the Northwest Arctic Borough Assembly, on behalf of the Northwest Arctic Borough, approves an AEA grant amendment in the amount of $2,697,113 for the Deering, Buckland, and Noorvik wind-diesel projects.

PASSED AND ADOPTED THIS 27th DAY OF JANUARY 2015

Carl Weisner, Assembly President

PASSED AND APPROVED THIS 27th DAY OF JANUARY 2015.

Reggie Joule, Mayor

SIGNED AND ATTESTED TO THIS 27th DAY OF JANUARY 2015.

for

Stella Atoruk, Borough Clerk

ATTEST:

Alaska Energy Authority Grant Agreement Amendment

ALASKA ENERGY AUTHORITY

Grant Agreement Number	CFDA#	Amount of Funds	AEA use only
2195377	NA	$ 10,758,928	Managed ☐ Pass-thru ■
Project Code(s) 410042	Proposal No.	Period of Performance: From: August 20, 2008	To: June 30, 2016*

Project Title
Buckland, Deering, Noorvik Wind Farm Construction

GRANTEE			GRANTOR		
Name Northwest Arctic Borough			Alaska Energy Authority		
Street/PO Box P.O. Box 1110			Street/PO Box 813 W. Northern Lights Blvd.		
City/State/Zip Kotzebue, Alaska 99752			City/State/Zip Anchorage, AK 99503		
Contact Person Ingemar Mathiasson			Contact Person Tim Sandstrom, Project Manager		
Phone 907-442-2500	Fax 907-442-2930	Email: imathiasson@nwabor.org	Phone 907-771-3082	Fax 907-771-3044	Email: tsandstrom@aidea.org

AMENDMENT 9

Extend the Period of Performance to June 30, 2016.

* It is the Authority's intent that a request for extension of the appropriation, will be requested annually to coincide with the expected completion date of June 30, 2016.

Increase the Amount of Funds by $ 2,697,113 for a total budget of $ 10,758,928.

Appendix B #1,Grant Funding Sources, replace with the following:

1. Grant Funding Sources

This Grant is subject to appropriation and availability of funds as listed below:

State of Alaska	$ 10,758,928	SLA 2008 Ch. 29, Sec. 13, Pg. 87, Lines 20-22
Match In-Kind	162,500	NANA Regional Corporation
Total Project Funding	$ 10,921,428	

Grantee acknowledges that if additional grant funds are made available they are subject to the terms and conditions of this Agreement and any amendment.

Grantee		Authority Project Manager		Executive Director or Designee	
Signature	Date	Signature	Date	Signature	Date
Reggie Joule, Mayor	1/27/15	Tim Sandstrom, Project Manager		Sara Fisher-Goad AEA Executive Director	

Appendix C Grantee Proposals/Scope of work, replace with the following:

The Northwest Arctic Borough (NWAB) is proposing to complete pre-construction, final design, permitting, construction, erection, startup and commissioning of wind diesel systems in the NWAB communities of Deering, Buckland and Noorvik. This grant agreement is providing funding from the Renewable Energy Fund Round I, with an in-kind match of $162,500 from the NANA Regional Corporation for the pre-construction activities in all three communities. Remaining funds for construction activities in each community remain unallocated until the final design has been accepted by the Authority for that community.

To keep track of community project costs, all requests for reimbursement must contain a Financial Report and Progress Report for each individual community. However, requests for reimbursement for milestone 1 do not need to be separated by community; as all costs from Milestone 1 will be divided equally between all three communities (Deering, Buckland and Noorvik).

The authority has accepted the wind resource reports for Buckland, Deering and Noorvik, the conceptual designs for Buckland and Deering and the 95-percent design for Buckland. The grantee may proceed with all milestones for which funding is allocated in the table below.

Milestones	Reimbursable Tasks	Budget	Start Date	End Date	Deliverables
1) Renewable Energy Fund Grant is in place		$ 291,000	Jan 2010	Feb 2012	
	1.1 Purchase, ship and erect met tower – Buckland, Deering, Noorvik	20,500			
	1.2 Draft and final wind resource analyses	252,500			Provide the Authority with a final wind resource report for each community.
	1.3 Demobilize met towers	18,000			
2) AEA accepts wind resource report for Buckland		$ 103,806	Mar 2012	Jul 2012	
	2.1 Refine electric and heating load assessment	3,749	Mar 2012	Jul 2013	
	2.2 Wind Diesel Integration and Power House Assessment	9,322	Mar 2012	Jul 2013	
	2.3 Site selection ROW	4,237	Mar 2012	Jul 2013	
	2.4 Business Plan, Construction and O&M estimates	11,946	Mar 2012	Jul 2013	
	2.5 Conceptual design and bid documents for EPC bid	12,816	Mar 2012	Jul 2013	
	2.6 Two village meetings and site visits	6,330	Mar 2012	Jul 2013	
	2.7 Draft and final conceptual design report	38,209	Mar 2012	Jul 2013	Provide the Authority with a final conceptual design.
	2.8 Misc. expenses	2,197	Mar 2012	Jul 2013	
	2.9 NWAB project management	15,000	Mar 2012	Jul 2015	

3) AEA accepts wind resource report for Deering		$ 91,470	Apr 2012	Jul 2013	
	3.1 Refine electric and heating load assessment	509	Apr 2012	Jul 2013	
	3.2 Wind Diesel Integration and Power House Assessment	15,914	Apr 2012	Jul 2013	
	3.3 Site selection ROW	25,000	Apr 2012	Jul 2013	
	3.4 Business Plan, Construction and O&M estimates	5,000	Apr 2012	Jul 2013	
	3.5 Conceptual design and bid documents for EPC bid	8,066	Apr 2012	Jul 2013	
	3.6 Two village meetings and site visits	6,030	Apr 2012	Jul 2015	
	3.7 Draft and final conceptual design report	14,223	Apr 2012	Jul 2013	Provide the Authority with a final conceptual design.
	3.8 Misc. expenses	1,500	Apr 2012	Jul 2013	
	3.9 NWAB project management	15,228	Apr 2012	Jul 2015	
4) AEA accepts wind resource report for Noorvik		$ 93,868	Mar 2012	Jul 2014	
	4.1 Refine electric and heating load assessment	1,397	Mar 2012	Jul 2014	
	4.2 Wind Diesel Integration and Power House Assessment, plus Wind Feasibility Report	22,011	Mar 2012	Jul 2014	Provide the Authority with a copy of the feasibility report
	4.3 Site selection ROW	23,068	Mar 2012	Jul 2014	
	4.4 Business Plan, Construction and O&M estimates	3,202	Mar 2012	Jul 2014	
	4.5 Conceptual design and bid documents for EPC bid	4,491	Mar 2012	Jul 2014	
	4.6 Two village meetings and site visits	10,495	Mar 2012	Jul 2014	
	4.7 Draft and final conceptual design report	12,643	Mar 2012	Jul 2014	Provide the Authority with a final conceptual design.
	4.8 Misc. expenses	1,561	Mar 2012	Jul 2015	
	4.9 NWAB project management	15,000	Mar 2012	Jul 2015	
5) Buckland feasibility analysis is complete and conceptual design is accepted by the Authority		$ 533,043	Jul 2012	Apr 2014	
	5.1 Geotech desktop study and field investigation	161,015	Jul 2012	Apr 2014	Provide the Authority with a copy of the Geotech report.

	5.2 Permitting and environmental	27,989	Jul 2012	Jun 2014	Provide the Authority with a copy of all permits and applications
	5.3 Final Design activities	344,039	May 2013	Jun 2014	Provide the Authority with all documents for 95% design
6) Deering feasibility analysis is complete and conceptual design is accepted by the Authority		$ 353,447	Jul 2012	Apr 2014	
	6.1 Geotech desktop study and field investigation	5,154	Jul 2012	Apr 2014	Provide the Authority with a copy of the Geotech report.
	6.2 Permitting and environmental	15,473	Jul 2012	Jun 2014	Provide the Authority with a copy of all permits and applications
	6.3 Final Design activities	332,820	May 2013	Jun 2014	Provide the Authority with all documents for 95% design
7) Noorvik feasibility analysis is complete and conceptual design is accepted by the Authority		$ 412,398	Jul 2012	Apr 2014	
	7.1 Geotech desktop study and field investigation	157,682	Jul 2012	Sep 2014	Provide the Authority with a copy of the Geotech report.
	7.2 Permitting and environmental including avian	18,588	Jul 2012	Sep 2014	Provide the Authority with a copy of all permits and applications
	7.3 Final Design activities	184,696	May 2013	Apr 2014	Provide the Authority with all documents for 95% design
	7.4 AVEC design and integration costs for Noorvik	31,640	Jan 2013	Jun 2014	
	7.5 Met Tower Hotham peak	19,792	Aug 2014	Feb 2016	
8) NWAB project management and travel		$ 30,000	May 2014	Jun 2015	
	8.1 Buckland Construction phase	15,000	Aug 2014	Sep 2015	
	8.2 Deering Construction phase	15,000	Aug 2014	Oct 2015	
9) AEA approves which projects should proceed to construction					
10) Buckland Construction		$ 5,919,801			
	10.1 Preconstruction Procurement	1,053,385	May 2014	Mar 2015	
	10.2 General Conditions	258,685	May 2014	Mar 2015	
	10.3 Mobilization	685,070	May 2014	Jul 2014	
	10.4 De-mobilization	100,000	May 2014	Mar 2015	
	10.5 Pit Development	300,000	May 2014	Mar 2015	

	10.6 Roadway Construction	463,200	Aug 2014	Sep 2014	
	10.7 Turbine installation	200,000	Jun 2014	Apr 2015	Final commissioning paperwork
	10.8 Turbine Foundation Installation	330,000	May 2014	Sep 2014	
	10.9 High Voltage Electrical	783,470	May 2014	Dec. 2014	
	10.10 Pile Driving	200,000	May 2014	Oct 2014	
	10.11 Turbine Electrical, PP Mech and Electric	320,000	May 2014	Apr 2015	
	10.12 Wind turbine Procurement	981,491	Jun 2014	April 2015	
	10.13 Communication links	32,000	Jan 2015	Jun 2015	
	10.14 KEA Engineering & Integration Support Buckland	25,000	Jan 2015	Dec 2015	
	10.15 Final Integration	187,500	July 2014	Jun 2015	
11) Deering Construction		$ 3,092,595			
	11.1 Preconstruction Procurement	1,059,875	Aug 2014	Oct 2015	
	11.2 General Conditions	210,950	Aug 2014	Sep 2015	
	11.3 Mobilization	125,000	Aug 2014	Mar 2015	
	11.4 De-mobilization	147,600	Sep 2015	Sep 2015	
	11.5 Roadway and pad Construction	148,800	Jun 2015	Aug 2015	
	11.6 Turbine foundation Installation	71,000	Jun 2015	Jul 2015	
	11.7 Turbine Installation	72,500	Jul 2015	Oct. 2015	Final commissioning paperwork.
	11.8 High Voltage Electrical	212,000	Jul 2015	Oct 2015	
	11.9 Turbine Elec., PP Mech	110,625	Aug. 2015	Oct 2015	
	11.10 Turbine & Power plant Electrical/mechanical	434,000	Jul 2015	Oct 2015	
	11.11 Wind turbine Procurement	380,200	Mar. 2014	Jul 2015	
	11.12 shipping Kotzebue/Deering.	64,699	Jul 2015	Jul 2015	
	11.13 Communication Links	40,346	Jul 2015	Oct 2015	
	11.14 KEA Engineering & Integration Support Deering	15,000	Jul 2015	Dec 2015	
Total allocated budget		**$ 10,921,428**			

The following can either be placed in Appendix C or another section to describe the Authority's criteria for 95% design:

Final design and permitting

Northwest Arctic Borough will complete permitting and a 95% design for each community consisting of:

1) Electrical system overview including one-line drawing
2) Performance modeling of diesel system and wind turbine and required diversion loads
a) HOMER analysis of diesel loading and recommended sizing, excess electricity, thermal loads, maximum renewable penetration and storage systems
b) Distributed generation analysis such as voltage rise/drop, estimated power factor, VARs considerations, transmission line impedance/capacitance estimates, load flow analysis if needed.
3) System integration design including switchgear, all thermal loads, controls, dispatch strategy
4) Detailed electrical design documents for powerhouse, wind farm, switchgear, SCADA, transmission line, and any needed upgrades to the distribution system
5) Geotechnical analysis
6) Detailed foundation design, site layout and other civil design documents such as access roads, site work, security fencing, site lighting, ancillary foundations.
7) Detailed mechanical design
8) Operational business plan – How will electrical and secondary load system be operated and maintained and rolled into rate structure? How will excess power be billed?
9) Avian and environmental studies
10) Complete permitting process
11) High confidence construction budget and project schedule including mobilization and demobilization
12) Financing plan
13) A short, 3- to 10-page narrative addressing the preceding 12 categories.

Attachment # 1, Financial Report/Request for Reimbursement Form, Replace with the form provided below:

All other terms and conditions remain unchanged.

Attachment 1 Financial Report/Request for Reimbursement Form

THIS REQUEST IS FOR FINAL PAYMENT ☐

Grantee: Northwest Arctic Borough **Project:** Buckland, Deering, Noorvik Wind Farm Construction

Period: _____ to _____ **Grant Number:** 2195377

BUDGET SUMMARY	A TOTAL GRANT BUDGET	B PRIOR EXPENDITURES	C EXPENDITURES THIS PERIOD	D = B + C TOTAL EXPENDITURES	E = A – D GRANT BALANCE
BY TASK OR MILESTONE					
1.1 Purchase, ship and erect met tower – Buckland, Deering, Noorvik	20,500				
1.2 Draft and final wind resource analyses	252,500				
1.3 Demobilize met towers	18,000				
2.0 Buckland CDR	0				
2.1 Refine electric and heating load assessment	3,749				
2.2 Wind Diesel Integration and Power House Assessment	9,322				
2.3 Site selection ROW	4,237				
2.4 Business Plan, Construction and O&M estimates	11,946				
2.5 Conceptual design and bid documents for EPC bid	12,816				
2.6 Two village meetings and site visits	6,330				
2.7 Draft and final conceptual design report	38,209				
2.8 Misc. expenses	2,197				
2.9 NWAB project management	15,000				
3.0 Deering CDR	0				
3.1 Refine electric and heating load assessment	509				
3.2 Wind Diesel Integration and Power House Assessment	15,914				
3.3 Site selection ROW	25,000				
3.4 Business Plan, Construction and O&M estimates	5,000				
3.5 Conceptual design and bid documents for EPC bid	8,066				
3.6 Two village meetings and site visits	6,030				
3.7 Draft and final conceptual design report	14,223				
3.8 Misc. expenses	1,500				
3.9 NWAB project management	15,228				
4.0 Noorvik CDR	0				
4.1 Refine electric and heating load assessment	1,397				

4.2 Wind Diesel Integration and Power House Assessment, plus Wind Feasibility Report	22,011				
4.3 Site selection ROW	23,068				
4.4 Business Plan, Construction and O&M estimates	3,202				
4.5 Conceptual design and bid documents for EPC bid	4,491				
4.6 Two village meetings and site visits	10,495				
4.7 Draft and final conceptual design report	12,643				
4.8 Misc. expenses	1,561				
4.9 NWAB project management	15,000				
5.0 Buckland Geotech and permits	0				
5.1 Geotech desktop study and field investigation	161,015				
5.2 Permitting and environmental	27,989				
5.3 Final design activities	344,039				
6.0 Deering Geotech and permits	0				
6.1 Geotech desktop study and field investigation	5,154				
6.2 Permitting and environmental	15,473				
6.3 Final design activities	332,820				
7.0 Noorvik Geotech and permits	0				
7.1 Geotech desktop study and field investigation	157,682				
7.2 Permitting and environmental including avian	18,588				
7.3 Final design activities	184,696				
7.4 AVEC design review costs	31,640				
7.5 Met Tower Hotham peak	19,792				
8.1 NWAB project management	15,000				
8.2 NWAB project management	15,000				
10.1 Preconstruction Procurement	1,053,385				
10.2 General conditions	258,685				
10.3 Mob	685,070				
10.4 Demob	100,000				
10.5 Pit Development	300,000				
10.6 Roadway Construction	463,200				
10.7 Turbine Installation	200,000				
10.8 Turbine Foundation/Installation	330,000				
10.9 High Voltage Electrical	783,470				
10.10 Pile driving	200,000				
10.11 Turbine elec, PP Mech and Electric	320,000				

10.12 Windturbine Procurement	981,491				
10.13 Communication links	32,000				
10.14 KEA Engineering & Integration Support Buckland	25,000				
10.15 Final Integration	187,500				
11.1 Preconstruction procurement	1,059,875				
11.2 General conditions	210,950				
11.3 Mob	125,000				
11.4 Demob.	147,600				
11.5 Roadway and Pad construction	148,800				
11.6 Turbine Foundation Installation	71,000				
11.7 Turbine Installation	72,500				
11.8 High voltage and electrical	212,000				
11.9 Turbine & Power plant electrical/mechanical	110,625				
11.10 Turbine and Power plant elec.	434,000				
11.11 Wind Turbine Procurement	380,200				
11.12 Shipping Kotzebue/Deering	64,699				
11.13 Communication link	40,346				
11.14 KEA Engineering & Integration Support Deering	15,000				
TOTAL	**$10,921,428**				
BY BUDGET CATEGORIES					
Direct Labor and Benefits	75,228				
Travel	22,855				
Equipment	1,361,691				
Contractual Services	9,461,654				
TOTAL	**$ 10,921,428**				
BY FUND SOURCES					
Grant Funds	$ 10,758,928				
Grantee Match – In-Kind	162,500				
TOTAL	**$ 10,921,428**				

Please submit this form and the supporting documentation to aeapayables@aidea.org

CERTIFICATION

Form requires two original signatures. The person certifying must be different from the person preparing the report. One signature should be the authorized representative of the Grantee organization or highest ranking officer; the other should be the person who prepared the report.

I certify to the best of my knowledge and belief that the information reported on both the Financial Report above and the attached Progress Report are correct. In addition, funds were spent and work performed in accordance with the grant agreement terms and conditions.

Certified By: _____ Prepared By: _____

Printed Name: _____ Printed Name: _____

Title: _____ Date: _____ Title: _____ Date: _____