

Alaska Energy Authority

SMALL PROCUREMENT DOCUMENTS

for Construction Related Professional Services - RFP, Proposal & Award per AS 36.30.320 and 2 AAC 12.400

PART A - REQUEST FOR PROPOSALS

GENERAL INFORMATION

These documents consist of three parts (Part A - Request for Proposals; Part B - Proposal Form; Part C - Contract Award, Notice to Proceed & Invoice Summary), -- plus the current edition dated April 2014 of the Standard Provisions Booklet (DOT&PF Standard Provisions for Small Procurements of Construction Related Professional Services) that is hereby incorporated by reference. The Booklet will not be distributed with any of the three parts; however a

copy may be obtained in person at the Contracting Agency's office or by telephoning the Agency to obtain instructions for receiving an electronic copy. The Booklet contains copies of the Small Procurements Procedure (Chapter 2 of the PSA Manual), Appendix A (General Conditions), Appendix C (Compensation), Exhibit C-1 (Methods of Payment), Appendix D (Indemnification and Insurance), and Appendix E (Certification for Licenses and Insurance).

Project Title: Operating Cordwood System Audits & Itinerant		Contracting Agency:		
Training		Alaska Energy Authority 813 West Northern Light		
Project Number(s): 402110	RFP # : 20016	Anchorage, AK 99503		
Project Site (City, Village, etc.) Various, Alask	a			
Agency Contact: Jake Tibbe, Contracting O	fficer	Phone: (907) 771-3990	Fax: (907) 771-3044	
Estimated Amount of Proposed Contract:	less than \$50,000 \$100,000 to \$150,000	☐ \$50,000 to \$100,000 ☑ \$150,000 to \$200,000		
REQUIRED SERVICES: are des	scribed in the enclos	ure consisting of 10 page	s, dated 9/4/2019.	
This solicitation may be awarded to Multiple Contractors. The contract(s) have a combined overall Not-to-Exceetotal of \$200,000 for the initial Period of Performance plus all possible contract extensions. The initial Period of Performance ends January 31, 2020 with the option to add Two (2) One-Year extensions. Work beyond 12/31/2019 and \$70,000 requires an Amendment to the contract(s).				
Minimum Qualifications: Several years expertise in Cordwood boiler operation & Maintenance; Electrical, structural, and mechanical system specifications; Logistical management of wood harvesting, ability to provide training in operations, logistics, maintenance, and troubleshooting.				
Note: Offerors shall carefully review this solicitation for defects and questionable or objectionable material. Comments concerning defects and objectionable material must be made in writing and received by the purchasing authority before proposal due date. This will allow issuance of any necessary addenda. It will also help prevent the opening of a defective solicitation and exposure of Offeror's proposals upon which award could not be made. Protests based upon any omission, error, or the content of the solicitation will be disallowed if not made in writing before the proposal due date.				

PROPOSAL FORMAT

Begin: October 2019

Written proposals to provide the required services shall consist of the enclosed "Part B - Proposal Form", completed as indicated, plus a *letter not to exceed five (8.5" x 11") pages.* If a Price Estimate

PERIOD OF PERFORMANCE:

is required, the page limit does not include the Price Estimate. Proposals that exceed the page limit may be disqualified. Proposals may be faxed or hand delivered to the Contracting Agency.

End: January 31, 2020

PRICE AND METHOD OF PAYMENT

☐ A Price Estimate is NOT required with your
proposal. The selected Offeror shall submit a Price
Estimate within one business day following a request
from the Contracting Agency.
A Price Estimate is required with your

A Price Estimate is required with your proposal.

A Price Estimate shall include all tasks to perform the contract and be prepared in the format shown below. Note that a Price Estimate is not a bid. It is a negotiable offer. A Fixed Price contract is desirable; however, a Cost Reimbursement contract may result if a Fixed Price cannot be negotiated.

PRICE ESTIMATE FORMAT (if required per above)

Cost proposals must include the hourly rate and breakdown detail of the hourly rate. Cost proposals must estimate the total cost to complete the performance of the contract in one community assuming travel costs and per diem will be paid at State of Alaska rates. For the purpose of this RFP only, base estimate upon the community of Tanana, AK.

Task	Unit	Unit Price	Quantity	Total
Staff – hourly rate	Per Hour		8	
Breakdown of hourly rate:				
Base	Per Hour	(A)		
Fringe	Per Hour			
Overhead	Per Hour			
Profit	Per Hour			
Expenses (travel, supplies, etc)	Lump Sum		All	
			TOTAL:	

SUBMITTAL DEADLINE AND LOCATION

DATE: September 26, 2019 PREVAILING TIME: 2:00 PM Email: jtibbe@aidea.org Hand deliver proposal directly to following location, and person, if named; or Fax to a number above:

Alaska Energy Authority Attn: Jake Tibbe 813 West Northern Lights Anchorage, AK 99503 When submitting proposals, please make sure to identify the project title and the RFP number on the outer envelope of the submittal package

Late proposals will not be considered. *Offerors* are responsible to assure timely delivery and receipt and *are encouraged to respond at least four business hours prior to the above deadline*. Any addendum issued less than 24 hours prior to a Deadline will extend that Deadline by a minimum of an additional 24 hours. The Contracting Agency shall not be responsible for any communication equipment failures or congestion and will not extend the deadline for any proposals not received in their entirety prior to the deadline. Except for hand delivered proposals, confirmation of receipt by telephone or other means four hours or less prior to deadline will *not* be provided. (An out-of-town/state Offeror may electronically transmit their proposal to a local personal representative who may reproduce a copy of it and deliver it "in person" to the submittal location prior to the deadline.)

BASIS OF SELECTION

This solicitation does not guarantee that a contract will be awarded. All proposals may be summarily rejected. Our intent, however, is to select a Contractor based on the following criteria:

- 1) Project Understanding and Commitment
- 2) Methodology and Work Plan
- 3) Personnel & Firm Qualifications, Experience
- 4) Price Estimate (if required with proposal).
- 5) Schedule

Proposals will be evaluated per Chapter 2 of the DOT&PF PSA Manual.

END OF PART A



Biomass Cordwood System Audits and In-Community Training

Overview

The Alaska Energy Authority is soliciting proposals for one or more qualified contractor(s) to perform audits to biomass cordwood systems in rural Alaska and to provide training to community members including maintenance staff, operators, among others.

Contract, Schedule, & Location of Work

This contract is a **TIME AND EXPENSES** contract with on-site work for the remainder of 2019 with the option to add two (2) additional one (1) year renewals. Each optional renewal year requires an extension and approval of funding source before execution and will be negotiated in the final two (2) months of the period of performance.

The approximate contract schedule is as follows:

- Issue RFP -September 12, 2019
- Deadline for Receipt of Proposals September 26, 2019
- State of Alaska issues Notice of Award September 30, 2019
- State of Alaska issues contract October 7, 2019
- Contract start October 8, 2019
- Complete audits/training in 5 communities December 31, 2019
- Complete reports, outlined in deliverables January 31, 2020

The location(s) the work is to be performed, completed and managed for this project will be at various locations in the state of Alaska.

The state **WILL NOT** provide workspace for the contractor. The contractor must provide its own workspace.

The contractor should include in their price proposal:

- Hourly Rate with detailed breakdown. For this purpose of this RFP, assume the location is 4 facilities (2 hours each, 8 hours total) in Tanana, Alaska.
- All expenses to travel & perform all necessary work and deliverables (list out recommended Maintenance Supplies for annual maintenance in the main proposal)
- Transportation, lodging and per diem will be reimbursed at State of Alaska rates.

By signature on their proposal, the offeror certifies that all services provided under this contract by the contractor and all subcontractors shall be performed in the United States.

If the offeror cannot certify that all work will be performed in the United States, the offeror must contact the contracting officer in writing to request a waiver at least 10 days prior to the deadline for receipt of proposals.

The request must include a detailed description of the portion of work that will be performed outside the United States, where, by whom, and the reason the waiver is necessary.

Failure to comply with this requirement or to obtain a waiver may cause the state to reject the proposal as non-responsive, or cancel the contract.

STATEMENT OF WORK

Program Goals and Intent of the Alaska Wood Energy Development Task Group

The goals of the Alaska Statewide Wood Energy Team corresponds directly with the goals and intent of the Wood Innovations Program, including:

- Help communities displace fossil fuels and reduce heating costs through the use of locally sourced woody biomass; reduce "economic leakage" and create local employment
- Build markets for the products of forest treatments aimed at improving forest health, reducing wildfire hazard, and improving wildlife and/or fisheries habitat
- Promote the use of woody biomass, such as forest residues and manufacturing by-products, as viable alternatives to fossil fuels for uses such as heating and power generation.
- Support the Tongass Wood-To-Energy Initiative and use it as a model for biomass energy cluster development in other regions of Alaska

Objective

The intent of this demonstration project is to assess the condition of existing cordwood heating systems, provide in-community operating and maintenance training, and investigate any concerns with business management plans, and to aid communities in the development of resolution plans for identified deficiencies. This project shall also assess potential in each community for the expansion of the existing wood heating system or the installation of additional systems. By auditing the existing wood energy systems to assure continued successful operation and by working to evaluate expansion opportunities, this project shall support the expansion of the wood energy market, directly aligning with the AWEDTG's mission statement. Wood heating systems will continue to provide a use for wood harvested for hazardous fuels and forest health initiatives and continue to provide jobs/economic development in underserved, predominately Native communities of high poverty and unemployment.

The objective of this RFP is to select a qualified term contractor(s) to provide these comprehensive condition audits of the existing cordwood heating systems. Working with the AWEDTG and the boiler manufacturer checklists and comprehensive audit plans/templates will be developed and customized for the individual wood heating systems. The focus of this initial demonstration shall be GARN boilers. Please see appendix 1 for a list of systems installed in Alaska.

The contractor's comprehensive inspection (2015 IMC) shall include:

- Safety Processes
- Boiler installation standards and condition
- Piping standards and condition
- Electrical and controls standards and condition
- Verification of proper operations of controls (set points, alarms, interlocks, etc.)
- Fuel management process including wood moisture readings
- Financial management questions
- Environmental concerns
- Maintenance processes and spare parts

Detailed checklist shall be provided for each site. The selected contractor(s) shall attend a meeting at Alaska Energy Authority to provide info and to finalize the checklists. See Appendix 1 for examples of checklists.

The contractor shall use this comprehensive audit as a training opportunity for the current and potential new operators and mechanics. The consultant shall perform audits with the assistance of the existing management, maintenance, and operations staff. The consultant shall verify that staff understand the installation and controls of the system and have the necessary skills to troubleshoot common problems.

Finally, the contractor shall evaluate heating system expansion potential. The consultant shall identify buildings that could potentially be heated with the wood heating system and gather basic feasibility information, including annual fuel usage, existing boiler type and heating distribution characteristics.

After completion of the audit, the consultants submit a final report with all findings and recommendations to Alaska Energy Authority and the owner of the boiler system.

Expertise Required

The contractor(s) must have expertise that includes:

- 1. Cordwood boiler operation and maintenance
- 2. Electrical, structural, mechanical system specifications
- 3. Logistical management of wood harvest
- 4. Ability to provide training in operations, logistics, maintenance, and troubleshooting.

Selection of Communities

Communities with operating cordwood systems shall be required to complete an application to participate in the program. They shall be required to commit to having the operators and managers work with the consultant while she/he is in the community. As applications are approved, the term contractor(s) shall complete a project cost estimate and will be dispatch to the community when the estimate is approved.

18 communities have operating cordwood systems and two communities have systems in construction. In the first year of this demonstration project, the contractor is expected to complete the in-community training and audit in at least five communities.

Project Outcomes and Deliverables

This project is a demonstration of the audit and in-community training concept and shall target the completion of training/audits in 5 communities by December 31, 2019. The program will be evaluated for effectiveness in order to best serve the other 16 communities and communities with other wood heating technologies. The communities shall be grouped into clusters to minimize travel costs. Reports documenting the current condition of the boiler, the training tasks completed, participant names/contact information, recommended system upgrades, and procedural changes to assure the long life of the boiler systems shall be received by each community and the AWEDTG within 30 days of the completed inspection. AEA will accept or request edits to the report within one week of receipt. This project will follow 2015 International Mechanical Code (IMC).

The outcomes of this project shall be operators that are fully trained and confident in operating and maintaining their wood heating systems for the life of the equipment. This shall be measured by a post-training survey. Communities that are interested in expanding their wood heating systems and have project potential shall have the opportunity to apply for a prefeasibility study through the AWEDTG. This project shall result in the long term successful operation of wood heating systems in Alaska that continue to reduce the cost of heating in our communities.

Deliverables

Task	Start Date	End Date	Contractor Deliverables	AEA Deliverable
Project Planning Meeting - Working with AWEDTG Staff, finalize Audit Checklists for GARN systems	10/8/2019	10/22/2019	Audit Forms/Checklists for: Safety Processes Boiler installation standards and condition Piping standards and condition Electrical and controls standards and condition Verification of proper operations of controls (set points, alarms, interlocks, etc.) Fuel management process including wood moisture readings Financial management Environmental concerns Maintenance processes and spare parts	Acceptance of checklists provided via email
Cost Proposal/ Estimate	10/22/2019	12/9/2019	Rolling cost estimates for audit/training in each community based once the communities have been selected by AWEDTG	Notice to proceed
Report	10/22/2019	1/30/2020	Rolling trip reports documenting the current condition of the boiler, the training tasks completed, participant names/contact information, recommended system upgrades, and procedural changes to assure the long life of the boiler systems. To be sent to community and the AWEDTG within 30 days of the completed inspection.	Notice of receipt via email
Reimbursement Request	10/22/2019	1/31/2020	All reimbursement requests to AEA PM and AEA accounts payable within 30 days of trip completion.	Reimbursement

Proposal Format and Content

Proposals must be in narrative format including details on how the offeror would approach a typical community in order to set up trips, involve existing staff including operations and maintenance and the offeror's training philosophy. The narrative must include the firms experience with cordwood boilers including design, operations, and maintenance with specific experience with <u>GARN</u> or other cordwood boilers. In the narrative of qualifications please include experience with maintenance and operations checks/tasks, design and commissioning tasks including specification compliance and controls confirmation.

In order for the state to evaluate proposals fairly and completely, offerors must provide all information requested. Proposals must include the complete name and address of offeror's firm and the name, mailing address, and telephone number of the person the state should contact regarding the proposal. Proposals must also confirm that

the offeror will comply with all provisions in this IRFP; and, if applicable, provide notice that the firm qualifies as an Alaskan bidder. Proposals must be signed by a company officer empowered to bind the company. An offeror's failure to include these items in the proposals may cause the proposal to be determined to be non-responsive and the proposal may be rejected.

Proposal Evaluation

Proposals will be evaluated based upon the criteria listed on page 2 of Part A – RFP **Basis of Selection**. This includes being evaluated on their previous experience and expertise with operation and maintenance including electrical, structural, and mechanical specifications of cordwood systems. The proposal must show proof of expertise in developing checklists and audits, familiarization with rural Alaska, demonstrated ability to provide training and training materials, understanding of biomass in Alaska, and familiarity with heating system expansion potential. Consideration will also be given to the quality of the proposal, ability to meet the minimum number of trainings in communities, the plan for training materials and activities and the understanding of the contract. The cost and schedule will also be considered in choosing the contractor(s).

Community Prioritization

Following the selection of the contractor(s) the Alaska Wood Energy Development Task Group (AWEDTG) will solicit applications from all communities with operating cordwood systems funded through the Alaska Energy Authority. For the complete list please see appendix 1. Communities will be prioritized for the first pilot round of training based on the communities previous and recent training opportunities and the age of the biomass system. The final prioritization will be determined by the AWEDTG. The first pilot round of training may be in at least five communities. **Appendix 1**

ALASKA INSTALLED CORDWOOD SYSTEMS (non-industrial) – 8/2019

Count	Community	Facility(s)	Biomass System
1.	Ambler	Water Treatment Plant/Washeteria	In construction - GARN (1) -cordwood
2.	Anvik*	City/tribal office, community hall, washeterias/water plant, health clinic	GARN (2) -cordwood
3.	Coffman Cove	Southeast Island School District, Howard Valentine School	GARN (3) -cordwood
4.	Elim*	Elim Water Plant	GARN (1) -cordwood
5.	Gulkana*	Gulkana Village Council, District Heating System	GARN (2) and Tarm (1) -cordwood & pellets

6.	Hollis	Southeast Island School District, Hollis School	GARN (1) -cordwood
7.	Hughes*	City/tribal office, post office, washeteria/water plant	GARN (2) -cordwood
8.	Huslia*	Water Treatment Plant	In construction - <u>GARN</u> (1) -cordwood
9.	Hydaburg	School	In construction - GARN (2) -cordwood
10.	Kasaan*	Southeast Island School District, Kasaan School	GARN (1) -cordwood
11.	Kasilof	Ionia "Longhouse" Community Center	GARN (1) -cordwood
12.	Kobuk*	Water plant	GARN (1) -cordwood
13.	Kokhanok*	Lake and Pen Borough, Kokhanok Community Office	GARN (1) -cordwood
14.	Koyukuk*	City/tribal office, health clinic, washeteria/water plant	GARN (1) -cordwood
15.	Minto*	Native Village of Minto, lodge and clinic	GARN (2) -cordwood
16.	Naukati	Southeast Island School District, Naukati School	GARN (1) -cordwood
17.	Tanacross*	Community Center, Water Treatment Plant	In construction – GARN (3) -cordwood
18.	Tanana*	Water Treatment Plant	GARN (3) -cordwood
19.	Tanana*	School	GARN (4) -cordwood
20.	Tanana*	Firehall	GARN (1) -cordwood
21.	Tanana*	Greenhouse	In construction - GARN (1) -cordwood
22.	Tanana*	City Teacher Triplex	GARN (1) -cordwood

23.	Tanana*	City Shop	Econoburn (1) - cordwood
24.	Tanana*	Single Family Teacher Housing	Econoburn (1) cordwood
25.	Tanana*	City Teacher Duplex	Econoburn (1) cordwood
26.	Tanana*	City Log Teach Duplex	Econoburn (1) cordwood
27.	Tazlina*	City Buildings	GARN (1) -cordwood
28.	Thorne Bay	Southeast Island School District, Thorne Bay School	GARN (2 – 3200's) -cordwood
29.	Whale Pass	Southeast Island School District, Whale Pass School	GARN (1) -cordwood

^{*}Native community, project or ownership

Appendix 2 - Example Checklists

EXAMPLE #1

CORDWOOD SYSTEM AUDIT - ELECTRICAL CHECKOUT

Isol	ation
	Confirm the controller is isolated
	An independent ground rod is not connect to the <u>GARN</u> unit. Unit is set on the foam.
	Blower motor is isolated through the isolation kit.
Ins	talling Digital Controller:
	Sensor wires for digital controller are outside of any insulation that is contact with the unit
	Sensor wires 2"+ from of any power source or current carrying wires. Sensor wires are not attached or zip tied to
	any power sources or other high current wires. (<u>GARN</u> manual – Page 55)
Ou	tdoor temperature sensor:
	Mounted at chest height, on the north side of building, protected from direct sunlight, and kept away from heat
	sources.
Ho	t water supply and hot water return sensors:
	Nylon tie used to fasten the sensor to the supply and return piping. Insulation is taped over the sensor. The HWS
	sensor is best located after the system mixing valve if one is used.
Dig	tital controller:
	Controller mounted within reach of the motor power cord and flue gas sensor lead. All sensor wires route
	through the opening above the outlet on the side of the controller. The opening is sealed. The controller is
	powered by a dedicated 15 amp, 120 vac single phase circuit.
	Sensor wires connected to controller circuit board-connect based on images on pg 57-59
	Low water cut-off and tank temp sensor stem: connected through manway cover with plastic flange nut securing
	sensor stem (prior to 9/2015); split manway covered connected with zipties and according to images on page 63
	All wires are securely terminated
Uni	ts with electric heating elements:
	Unit is ground to a single point run through the panel providing power for the electric elements- the only ground
	connection is through the sequencer box

Ensure unit is grounde	ed through the elem	ent box by attaching the ground	wire to one of the	e studs in the el
element box. The gro	und wire must ultim	ately run back to ground of the n	neter/panel suppl	ying power to t
electric elements.				
Motor isolation bushi	ngs are installed cori	rectly (pg 84)		
	Control	Loop Verification #1		
Community:				
GARN Boiler				
Location:				
	Boiler			
Loop Name:	Combustion		Date:	
200p	Air Blower		24.6.	
	Control			
		Flue Gas Temperature		
Key Components:	Blower	Thermocouple		
	Canalanatian	Hot Water Supply		
	Combustion Air Damper	Temperature	Inspector(s):	
	All Dallipel	Thermocouple		
		Hot Water Return		
	Controller	Temperature		
		Thermocouple		
	Tank Temperature			
	Thermocouple			
	memocoupie			
Please complete the	following checkout	t sequence and input data an	d initials in ORA	NGE blocks
as the steps are comp	oleted.			
It will take approxima	ately 2 hours to co	mplete this task.		
Operating So	equence	Verification - Indication of Successful Operation	Value	Initials
Turn power Switch On	on Controller to	Digital readout turns on		
Record the temperature of the GARN Water Tank		Use controller view button to switch between digital readouts		
Fill Combustion Zone	e with cardboard	_		
and wo		Visual		
Start fire and Reco				
Start Ti	me			

Hold Down START button on controller for 5 seconds	Combustion Air Damper will open. When damper triggers the position switch, the blower will start.	
Close door to combustion zone	Visual	
Record Time when Combustion Fan shuts down	Visual	
Record Tank Temperature when Blower Turns Off	Visual	
Record Flue Gas Temperature	Visual	
Confirm complete combustion by observing combustion zone	Visual	
Confirm combustion air damper has closed	Visual	
Orange Blocks require input		



Alaska Energy Authority

SMALL PROCUREMENT DOCUMENTS PART B - PROPOSAL FORM

I AKI B-I KOI	OOAL I OIKW				
THIS COMPLETED FORM MUST BE THE FIRST	PAGE. NO OTHER COVER SHALL BE USED.				
Project Title: Operating Cordwood System Audits & Itinerant Training IRFP No.: 20016					
DDODOSAL DEC	DUIDEMENTS				
Proposals shall demonstrate comprehension of the objectives and services for the proposed contract; include a brief overview of what will be done; and show a sequence and schedule for each important task. Assumptions made in formulation of the proposal and the support expected from the Contracting Agency shall be defined. The key individuals who will perform services shall be named (including all who would be "in responsible charge" (Ref: AS 08.48) for Architecture, Engineering and/or	Land Surveying with their Alaska registration number). Include a brief about one paragraph statement for each person named which describes experience directly related to the service(s) they will perform. Proposed subcontracts, if any, shall be explained. Resources support personnel, facilities equipment, etc current and projected workload could be summarized. Any unique qualifications or knowledge of the project, project area, or services to be provided, should be identified.				
ALASKA STATUTORY PREFERENCES are	are not applicable to this contract.				
_ ,	>>				
PROPO	2041				
The undersigned has reviewed Part A - RFP of these documents, understands the instructions, terms, conditions, and requirements contained therein and in the Standard Provisions Booklet, and proposes to provide the required services described in Part A in accordance with the attached letter which constitutes our proposal to complete the project.	will be placed if this contract is awarded and that failure to comply with these Certifications is a fraudulent act. The Contracting Agency is hereby authorized to request any entity identified in this proposal to furnish information deemed necessary to verify the reputation and capabilities of the Offeror and Subcontractors. This proposal is valid for at least ninety days.				
By my initials below, I certify that the Offeror and all Subcontractors identified in the Proposal shall comply with all requirements for the following items	Signature and Data				
as explained in the Standard Provisions Booklet:	Signature <i>and Date</i>				
 Alaska Licenses and Registrations. Insurance, including Workers' Compensation, Comprehensive or Commercial General Liability, and Comprehensive Automobile Liability. Professional Liability Insurance as follows: As available. 	Name				
Minimum of \$300,000. I further certify that I am a duly authorized representative of the Offeror; that this Proposal accurately represents capabilities of the Offeror and Subcontractors identified for providing the services	Federal Tax Identification No: Type of Firm (Check one of the following): Individual Partnership Corporation in state of: Other (specify)				

indicated. I understand that these Certifications are material representations of fact upon which reliance