

Request for Proposals

Refurbishment of an Existing Wind-Diesel Power Plant In Kokhanok, Alaska

August 14, 2017

Section 1. INTRODUCTION & INSTRUCTIONS

1.1 Purpose of this Request for Proposals (RFP)

The purpose of this solicitation is to establish a contract for providing the Kokhanok Village Council (KVC) with design, engineering, and installation services for the tasks articulated in the statement of work below.

1.2 Minimum Contractor Requirements to Respond

Contractors who are interested in responding to this solicitation must demonstrate that they meet the following minimum requirements:

1. Will have a current Alaska business license before award would be issued
2. Have current mechanical and electrical engineer licensed in Alaska
3. Have a minimum of three years' experience providing design-engineering support for remote diesel-renewable hybrid microgrids. The Contractor must have a demonstrated understanding of these systems, both on the mechanical and electrical side, including renewable integration.
4. Have experience in directing/implementing renewable integration projects.

1.3 Issuing Office

Kokhanok Village Council
Contact: Clarissa Quinlan, Project Manager
Email: KVCenergy@acsalaska.net

1.4 Mailing Address and Deadline for Receipt of Proposals

Offerors will submit a copy of their proposal to the Issuing Office in electronic format to the above email address. The email subject line should state

ATTN: Clarissa Quinlan (Energy RFP)

Proposals must be received electronically no later than **4:00 pm local time, Monday September 11, 2017**. Failure to meet the deadline will result in disqualification. Any interested proposers are strongly encouraged to register with KVC by contacting the Project Manager at the above email address in order to receive any issued addendums.

1.5 Questions about the RFP

Any technical or procedural questions regarding the RFP or contractual documents should be directed to the Project Manager. All questions that require clarification or interpretation of this RFP that cannot be answered by careful review of the document must be received via email at least 5 days before the due date for proposals. The Project Manager will respond via email if the question cannot be answered by directing the offeror to the appropriate section of the RFP. Copies of any written response to questions will be made available to all registered parties that receive the RFP.

Any technical or procedural questions or correspondence concerning protest of the intent to award of a contract (See sections 2.2 and 2.26) should be addressed to the Project Manager.

1.6 Location of Work

The contract being awarded under this RFP will involve work in Kokhanok, AK. The contractor will need to work closely with key stakeholders, primarily the utility, while on site.

1.7 Funding of the Contract

The budget for the work detailed in this RFP is coming through Alaska Energy Authority (AEA) from two separate sources. Phase 1 funding (see below) originates from the U.S. Environmental Protection Agency's Clean Diesel Program, while Phase 2 funding is from the Alaska Renewable Energy Fund. The budget for this entire scope of work is \$260,000.

KVC will provide housing for contractor(s) in Kokhanok.

1.8 Period of Performance

KVC will review the responses and expects to issue an award and Notice to Proceed by September 18, 2017. Phase 1 activities are to be completed by December 11, 2017, while Phase 2 activities are to be completed by December 31, 2018.

1.9 Solicitation and Advertising

Notice of this solicitation for proposals may be viewed in The Plans Room, <http://www.theplansroom.com>. Notices are also being e-mailed to vendors/contractors who are known to have done work like this before in Alaska. Additionally, an ad will be placed in Alaska Dispatch News for one week and on the Alaska Energy Authority's website (<http://www.aideaaeprocurement.org/>).

1.10 RFP/Contract Management

KVC must approve the contract and any amendments prior to execution. The Project Manager will be responsible for contract administration, including accepting proposals for changes, approving invoices and deliverables and evaluating performance. The Project Manager will report to KVC and its designated representatives on a regular basis regarding status of the previous items.

Section 2. STANDARD PROPOSAL INFORMATION

2.1 Proposal Preparation Costs

KVC will not pay any cost associated with the preparation/submittal/presentation of any proposal.

2.2 Required Review – Protests Prior to Award

Offerors must carefully review the RFP for defects and questionable or objectionable material. Such defects must be reported to the Project Manager in writing and received 5 days prior to the deadline for receipt of proposals. This will allow sufficient time for the Project Manager to issue an addendum if warranted, and will help prevent the evaluation of proposals based on a defective RFP. Protests based on an omission, error, or the content of the RFP will be disallowed if notice of the defect is not made as set out above.

2.3 Addenda to the RFP

Addenda to this request for proposals may be issued at KVC's option. An interested offeror, however, may request modifications to the scope, specifications, or administrative requirements. Final acceptance or denial of the request is the decision of the Project Manager. Failure of the Project Manager to respond in writing to a request for addenda to the RFP shall be considered a rejection of the request. All addenda will be in writing and issued to all persons who are known to have received a copy of this RFP.

2.4 Correction, Modification, or Withdrawal of Proposals

A proposal may be corrected, modified or withdrawn by providing a written request from an authorized agent of the offeror to the contact person before the time and date set for receipt of the proposals. After proposals are opened, modifications may be allowed prior to completion of the evaluation process if the Evaluation Committee determines that it is in the best interest of KVC to solicit modifications for best and final offers.

2.5 Authorized Signature

Proposals must be signed by an individual authorized to bind the offeror to its provisions. The proposal must remain valid for at least sixty (60) days from the proposal receipt deadline.

In responding to this RFP the individual signing the response is certifying under penalty of perjury that the price submitted was independently arrived at without collusion.

2.6 Offeror's Certification

By signature on their proposal, offerors certify that they are complying with: 1) the laws of the state of Alaska; 2) the applicable portion of the Federal Civil Rights Act of 1964; 3) the Equal Employment Opportunity Act, the Americans with Disabilities Act (ADA) and the regulations issued thereunder by the federal government; and 4) all terms and conditions set out in this RFP. If any offeror fails to comply with 1) through 4) of this paragraph, KVC reserves the right to disregard the proposal, terminate the contract, or consider the contractor in default.

2.7 Human Trafficking

By signature on their proposal, the offeror certifies that the offeror is not established and headquartered or incorporated and headquartered in a country recognized as Tier 3 in the most recent United States Department of State's Trafficking in Persons Report.

The most recent United States Department of State's Trafficking in Persons Report can be found at the following website: <http://www.state.gov/g/tip/>.

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

2.8 Conflict of Interest

Each proposal shall include a statement indicating whether or not the firm or any individual working on the contract has a possible conflict of interest. If there is a conflict of interest or appearance of such a conflict, a brief description of the nature of the conflict must be included in the statement. KVC will evaluate the nature of the conflict and the bidders' statement and make a determination whether in its opinion a conflict of interest exists. This decision shall be made solely in KVC's best interest. If KVC determines that there is a conflict of interest the offer shall be determined to be non-responsive. If a conflict of interest is discovered after contract award, KVC, after review of the facts surrounding the conflict, may terminate the contract.

2.9 Licenses

All offerors are required to hold a valid Alaska business license by the time of award and the necessary applicable professional licenses required by Alaska Statute. For more information on these licenses, contact the Department of Community and Economic Development, Division of Occupational Licensing, P.O. Box 110806, Juneau, Alaska 99811-0806. Telephone (907) 465-2538, www.dced.state.ak.us/occ/.

2.10 Subcontracts

The offerors may subcontract portions of the project tasks. Offerors will be required to submit the names and addresses of all subcontractors and the type and approximate percentage of work (no more than a 10% range) they will be providing.

The successful contractor must supply proof of appropriate subcontractors' Alaska business licenses and the necessary applicable business licenses for those businesses that will be doing work inside Alaska within a reasonable time after the Notice of Intent to Award is issued.

2.11 Right of Rejection

Offerors must comply with all of the terms of the RFP and with all applicable local, state, and federal laws, codes, and regulations.

KVC, through the Project Manager and based on recommendations of the Evaluation Committee, may reject any proposals that do not comply with all of the material and substantial terms, conditions, and performance requirements of the RFP.

Minor informalities, that do not affect responsiveness; that are merely a matter of form or format; that do not change the relative standing or otherwise prejudice other offers; that do not change the meaning or scope of the RFP; that are trivial, negligible, or immaterial in nature; that do not reflect a material change in the work; or, that do not constitute a substantial reservation against a requirement or provision, may be waived by the Project Manager.

2.12 Evaluation of Proposals

All responsive proposals received will be reviewed by an Evaluation Committee that will be comprised of KVC staff, the Project Manager, and selected technical experts. Other representatives may be added as appropriate, provided the Evaluation Committee is made up of at least the designated Project Manager and one KVC staff. Each member shall exercise independent judgment, but the KVC will determine collectively who to award. The evaluation will be based on the evaluation factors set out in Section 7 of this RFP.

2.13 Interviews for Clarification

The Evaluation Committee may require offerors to provide clarification of certain points in their proposals prior to completion of the evaluation process. The purpose of these interviews is to ensure that the Evaluation Committee has a more complete understanding of the contractor's proposal. Material changes to proposals or negotiations are not allowed in this process. Information requested for the purposes of clarification will be limited to verification of statements made in the Offeror's proposal. All offerors will be given similar opportunities, as required, for clarification. Interviews will be conducted in such a manner that information derived from competing offerors is not disclosed. Interviews will be scheduled at the convenience of KVC and Evaluation Team.

2.14 Contract Negotiations

Upon completion of the evaluation process, contract negotiations will commence. It is anticipated that all contract negotiations will be held via teleconference or at KVC's headquarters in Kokhanok.

2.15 Failure to Negotiate

If the selected offeror fails to provide the necessary information for negotiations in a timely manner, negotiate in good faith, or cannot perform a substantial portion of the contract within the amount of budgeted funds available for the project, KVC may terminate negotiations and negotiate with the next highest ranked contractor, or terminate the award of the contract.

2.16 Notice of Intent to Award

After completion of the evaluation process and contractor negotiations, KVC will issue a Notice of Intent to Award to all offerors. This notice will contain the names and addresses of all the offerors including the intended recipient of the contract.

Section 3. STANDARD CONTRACT INFORMATION

3.1 Contract Type

The contract awarded as a result of this RFP will be for design and construction services as described in Section 6 Scope of Work, Tasks, Deliverables, and Schedule. Note that applicable federal Davis-Bacon wages will apply. The applicable Alaska wages are discoverable on the following link: <https://www.wdol.gov/dba.aspx>. It is the offeror's responsibility to ensure the appropriate wage rates are paid and certified payrolls filed. Reference <http://labor.alaska.gov/lss/lssforms.htm> for additional information on certified payrolls.

3.2 Contract Approval

This RFP does not, by itself, obligate KVC. KVC's obligation will commence when they approve the contract. Upon written notice to the Contractor, KVC may, if it wishes, set a different starting date for the contract. KVC will not be responsible for any work done by the Contractor, even work done in good faith, if it occurs prior to the contract start date set by KVC.

3.3 Insurance Requirements

The successful offeror must secure satisfactory liability and professional insurance coverage. Failure to provide evidence of adequate coverage is a material breach and grounds for termination of the contract. KVC also requires a certificate of insurance naming the village as an additional insured.

3.4 Standard Contract

The successful offeror will be required to sign a contract.

3.5 Proposal as Part of the Contract

All or part of the final proposal may be incorporated into the final negotiated contract.

3.6 Additional Terms and Conditions

KVC reserves the right to include additional terms and conditions during the contract negotiations. These terms and conditions must be within the scope of the original RFP and contract documents, and will be limited to cost, clarification, definition, and administrative and legal requirements.

If after award of a contract: 1) a conflict arises between terms offered in the Contractor's proposal and the terms of the contract or RFP, the terms of the contract or RFP will prevail. 2) If KVC's rights would be diminished as a result of application of the Contractor's supplemental term or condition included in the Contractor's proposal, the supplemental term or condition will be considered null and void.

3.7 Payment Procedures

KVC intends to pay the contractor a negotiated sum based upon satisfactory achievement of tasks and milestones described in Table 3. Summary of Tasks and Milestones.

No payment shall be made until the invoice has been approved and authorized by the Project Manager. Under no condition will KVC be liable for the payment of any interest charges associated with the cost of the contract.

KVC is not responsible for and will not pay any local, state, or federal taxes. All costs associated with the contract must be stated in U.S. currency. If the Contractor is delinquent on payment of state taxes the payment provisions of the contract may be subject to review and approval by the Department of Revenue prior to award.

3.8 Contract Personnel

KVC reserves the right to approve or disapprove any change in the successful Offeror's project team members whose participation in the project is specifically offered in the proposal. Similarly, changes in the amount of participation by key project members will require Council approval. This is to ensure that persons with vital experience and skill remain fully involved in the project.

Requests for any change in contractor personnel shall be submitted in writing to KVC for KVC's review and sign-off before the change is made. Contractor personnel changes, not approved by KVC, may be cause for KVC to terminate the contract.

3.9 Subcontractors

KVC must approve the use or replacement of subcontractors. Provide a list of potential subcontractors and a one-page resume for each subcontractor including brief descriptions of previous work and three references. Replacement of subcontractors may only be made in accordance with approval of the Project Manager and the terms of the final negotiated contract.

3.10 Disputes

Any contract dispute associated with this RFP or the contract will be resolved by KVC.

3.11 Contract Invalidation

If any provision of the contract awarded as a result of this RFP is found to be invalid, such invalidation will not be construed to invalidate the entire contract.

3.12 Termination for Default

If the Contractor refuses or fails to perform the work, or any separable part thereof, with such diligence as will ensure its completion within the written contracted time frame, KVC may, by written notice to the Contractor, terminate the right to proceed with the work or such part of the work as to which there have been delays. This clause does not restrict Council termination rights under provisions of the approved contract.

3.13 Assignment

The Contractor may not assign any portion of the contract without prior written approval from the Project Manager.

3.14 Contract Changes

During the course of performing the work required by this contract, the Contractor may be requested to perform additional work within the general scope of the contract. When additional work is required, the Project Manager shall forward to the Contractor a description of the work to be accomplished and request that a proposal be offered within a given time period. No additional work shall commence by the Contractor without an approved written contract amendment by the Project Manager.

3.15 Confidentiality and Ownership of Documents

All data, maps, drawings, photographs, mosaics, plans, reports, recommendations, estimates, documents, computer files and all other data compiled by or received by the Contractor under this Contract shall be treated by the Contractor as confidential and shall be delivered only to the KVC Project Manager or other authorized officials as required in the contract. Their contents shall not be made known by the Contractor to any person other than personnel of the Contractor performing services under this Contract without written consent of KVC.

3.16 Reimbursement to KVC for Unacceptable Deliverables

The Contractor is responsible for quality, occurrence and completion of all work identified by the contract. All work shall be subject to evaluation and inspection by KVC at all times to assure satisfactory progress, to be certain that work is being performed in accordance with the contract specifications, terms and conditions, and to determine if corrections and modifications are necessary. Should such inspections indicate substantial failure on the part of the Contractor, KVC may terminate the contract for default. Furthermore, KVC may require the Contractor to reimburse any monies paid (pro rata based on the identified proportion of unacceptable products received) and any associated damage costs.

Section 4. BACKGROUND INFORMATION

Kokhanok Village, population 166, is a community in the Lake and Peninsula Borough, Alaska. Kokhanok is located on the south shore of Lake Iliamna, 22 miles south of Iliamna and 88 miles northeast of King Salmon. Kokhanok is accessible by air and water. A State-owned 2,920' long by 60' wide gravel airstrip and a seaplane base serve scheduled and charter air services from Anchorage, Iliamna, and King Salmon.

The original site of Kokhanok, called “Asyiguq”, was located 2 ½ miles down the beach from the present location of Kokhanok. This fishing village was first listed in the U.S. Census in 1890 by A.B. Schanz. The village has a mixed Native population, primarily Aleut. Subsistence activities are the focal point of the culture and lifestyle. The village is served by the Saints Peter and Paul Russian Orthodox Church, which is on the National Register of Historic Places.¹



4.1 Kokhanok Power System

Kokhanok currently has four (4) diesel engine-generator sets and two non-operating wind turbines. See Table 1 for a summary of recent generation statistics and Table 2 for a summary of the existing diesel generation system units.

Table 1. Power generation statistics for fiscal years 2015 and 2016.

Period	Diesel Generation (kWh)	Non-Diesel Generation (kWh)	Sales (kWh)	Diesel Used (gal)	Generation Efficiency (kWh/gal)	Fuel Cost	Annual Non-Fuel Expenses
July 2014- June 2015	408,000	8,261	354,821	41,364	9.86	\$204,955	\$71,800

¹ http://www.lakeandpen.com/residents/about_1_p_b/villages/kokhanok/

July 2015- June 2016	420,600	0	363,116	35,332	11.90	\$145,144	\$56,201
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Table 2. Description of existing diesel generation units as of March 16, 2017 based on discussion with power plant operator. Note: some conditions may have changed since March 2017.

Unit	Make/Model	Capacity (kW)	Hours	Condition/Notes
1	John Deere	60	16,881	Mostly used to parallel with unit #2 during winter. Could carry whole load in summer if 100 kW capacity.
2	John Deere	115	70,952	Base load unit. Needs front oil seal, and probably overhaul.
3	John Deere	150	9,460	Runs poorly by itself or in parallel. Noisy and causes lights to flicker.
4	John Deere	115	17,511	Rear seal failing, dual filter is problem, fuel injectors short-lived

Existing wind turbine generators are two 90 kW Vestas V17s on 85-foot lattice towers, manufactured in 1991 and remanufactured in 2010 by Halus Power systems. Other wind systems components include 336 kWh of battery storage, electric boilers and controllers, a grid forming inverter, and a synchronous condenser. The wind system has not generated power since 2014, and the functionality of the battery, grid forming inverter, and synchronous condenser are unknown but expected to be inoperative.

The load connected to the generators consists of typical village loads (e.g. housing, school, clinic, small commercial, etc.) and an electric boiler to supplement two conventional oil-fired boilers producing hot-water for space heating at the school and to heat the diesel generators (during winter) so they can operate at optimum efficiency.

Additional available background information, including powerhouse design and as-built drawings from AEA power system upgrades, recent Power Cost Equalization (PCE) program statistics, and wind resource and load data are provided in a Google Drive file: [Kokhanok RFP - Shared Files](#). If Proposer does not have a Google account and wants to receive these files directly, Proposer must email request to Project Manager for available background files.

Proposers, at the Proposers' own responsibility and risk, are allowed to visit and examine the Kokhanok project site and its surroundings and to obtain all information that may be necessary for preparing their proposals and entering into a contract with KVC. The costs of visiting the Site shall be at the Proposers' own expense.

Section 5. OBJECTIVES

The objectives of the project are to:

1. **Upgrade the Existing Diesel System.** The project will replace the 2003 John Deere 4045 non-certified 60 kW prime power engine (unit #1) with a John Deere 4045AFM85 Tier 3 Marine Repower 100 kW prime power engine or equivalent product. This will include any controls and switchgear necessary for power plant automation. Depending on available funds, a second diesel engine and generator may be considered for procurement and installation. This objective will be addressed by Phase 1 activities described below.
2. **Integrate the Wind System with the Diesel Powerhouse and Controls.** The project aims to

result in a fully functional wind-diesel system that is capable of operating in unattended, automated mode. This objective will be addressed by Phase 2 activities described below.

Section 6. SCOPE OF WORK, TASKS, DELIVERABLES, AND SCHEDULE

Work under this project will be conducted in two phases that address the grant requirements of the base funding through Alaska Energy Authority (AEA) from the U.S. EPA’s Diesel Emission Reduction Act (DERA) program (Phase 1) and the Renewable Energy Fund (Phase 2).

The Contractor will work with KVC and its technical representative to perform the work specified in this section and deliver final products that satisfy the requirements described here. KVC will ensure that work completed is acceptable to project funder AEA and may request review of deliverables by appropriate AEA staff.

Table 3 provides a summary of tasks and milestones/deliverables for work to be conducted under this project as well as the anticipated schedule for completing the work. KVC will consider proposals with tasks, deliverables, and due dates that vary from the template below if they are judged to adequately address project objectives. Project tasks and milestone/deliverables are described in detail following the table.

Table 3. Summary of Tasks and Milestones

Phase	Task	Milestone/Deliverable	Due Date	Payment
1. Upgrade Diesel Power System	1.1 Initiate project	Notice to Proceed issued by KVC.	18-Sep-17	\$40,000
	1.2 Refine design of diesel power system upgrade.	Final design of diesel system upgrade accepted by KVC.	9-Oct-17	20,000
	1.3 Order long lead time and major system upgrade components.	Purchase order for long lead time and major system upgrade components.	16-Oct-17	40,000
	1.4 Substantially complete diesel system upgrade.	New engine gen-set(s) capable of operating in parallel with other units in unattended automated mode.	20-Nov-17	65,000
	1.5 Complete commissioning of upgraded diesel power system.	Commissioned system accepted by KVC.	11-Dec-17	20,000
			TOTAL PHASE 1	\$185,000
2. Integrate Wind Turbines into Diesel System	2.1 Prepare preliminary design of wind-diesel system.	Preliminary design accepted by KVC.	9-Oct-17	\$15,000
	2.2 Prepare final design of wind-diesel	Final design accepted by KVC.	6-Nov-17	15,000

	system.			
	2.3 Substantially complete integration of wind turbine and diesel generation system.	Wind turbines operate in parallel with diesel system and meet performance objectives to a reasonable level.	8-Jan-17	20,000
	2.4 Complete commissioning of wind-diesel power system.	Commissioned system accepted by KVC.	31-Dec-18	25,000
			TOTAL PHASE 2	\$75,000
			TOTAL PHASE 1-2	\$260,000

PHASE 1: Upgrade Diesel Power System

Task 1.1 Initiate project

1.1 Description. Following negotiation and finalization of the grant contract, KVC will issue a Notice to Proceed (NTP) to the Contractor in hard copy and/or electronic form.

1.1 Milestone/Deliverable. After receiving the NTP the Contractor may invoice KVC for the amount stated in Table 3.

Task 1.2: Refine design of diesel power system upgrade

1.2 Description. The Contractor will inspect and review the current diesel system to identify issues, collect data, and prioritize work for replacing unit #1 and ensuring safe and reliable operation. Based on this assessment the Contractor will prepare a final design report that includes drawings, specifications, a detailed material list, a detailed project cost estimate, a construction plan, and appropriate narrative.

While the design should focus primarily on developing a system that satisfies Phase 1 objectives, the Contractor should consider design features that will facilitate integration of the wind system addressed in Phase 2.

1.2 Milestone/Deliverable. The Contractor will deliver the final design report to KVC for review. KVC and their technical team will review the design report, provide comments, and request changes as necessary. The milestone will be considered complete and billable after KVC sends written notice of acceptance in hard copy or electronic form.

Task 1.3: Order long lead time and major system upgrade components.

1.3 Description. The Contractor will identify major system items such as the replacement engine generator(s), control equipment, and specialized hardware that must be procured as soon as possible to meet the schedule in Table 3

1.3 Milestone/Deliverable. The Contractor will submit a proposed purchase order to KVC for review. As above, the milestone is considered completed and billable upon KVC's written notice.

Task 1.4: Substantially complete diesel system upgrade.

1.4 Description. The Contractor will complete engine generator installation; connection to existing fuel, cooling, and exhaust systems; installation and programming of switchgear and controls; and other work necessary to result in a diesel generation system capable of operation and dispatch in parallel at optimum efficiency without an operator present.

1.4 Milestone/Deliverable. KVC will work with the Contractor to test system performance at a range of representative conditions. Following successful testing, KVC will provide to the Contractor 1) written notice that the system is to be considered Substantially Complete, and 2) a punchlist of items that must be addressed to complete system commissioning. As above, the milestone is considered completed and billable upon KVC's written notice.

Task 1.5: Complete commissioning and document upgraded diesel power system.

1.5 Description. The Contractor will complete punchlist items above and request a final inspection.

In addition, the Contractor shall provide electronic documentation of new, updated, and modified equipment and systems resulting from Phase 1 activities, including drawings, schematics, bills of material, protective settings/ranges, and programmable logic controller (PLC) flow charts or process diagrams. Systems operator sequencing or switching checklist(s) for safe and reliable normal operations shall be included. Two electronic copies (one PDF and one editable in native file format) will be provided and delivered to KVC, for archiving and future uses.

1.5 Milestone/Deliverable. KVC will perform a final project inspection to ascertain that the punchlist items have been addressed. Following successful completion and receipt of required documentation, KVC will provide notice that Phase 1 has been successfully completed. As above, the milestone is considered completed and billable upon KVC's written notice.

PHASE 2: Integrate Wind Turbines into Diesel System

Task 2.1: Prepare preliminary design of wind-diesel system.

2.1 Description. The Contractor will inspect and review the condition, operability, and past operation issues of the existing wind turbine generators, controllers, powerhouse connection, electric boilers and controls, synchronous condenser, and other wind-diesel system components. Based on this assessment the Contractor will prepare a preliminary design report that includes 1) narrative and schematics describing proposed system modifications, 2) expected technical and economic performance, 3) a description of anticipated operation and maintenance requirements for the proposed wind-diesel system, and 4) a preliminary project cost estimate.

2.1 Milestone/Deliverable. The Contractor will deliver the preliminary design report to KVC for review. KVC will review the design package, provide comments, and request changes as necessary. The milestone will be considered complete and billable after KVC sends written notice of acceptance in hard copy or electronic form.

Task 2.2 Prepare final design of wind-diesel system.

2.2 Description. The Contractor will prepare a final design report that includes drawings, specifications, a detailed material list, a detailed project cost estimate, a construction plan, a description of expected system performance characteristics under a range of wind and load conditions, and narrative sufficient to guide necessary construction, replacement of system components, programming of controls, and other activities required for a successful project.

2.2 Milestone/Deliverable. The Contractor will deliver the final design package to KVC for review. KVC will review the design package, provide comments, and request changes as necessary. The milestone will be considered complete and billable after KVC sends written notice of acceptance in hard copy or electronic form.

Task 2.3: Substantially complete integration of wind turbine and diesel generation system.

2.3 Description. The Contractor will implement construction and other activities as described in the final design package.

2.3 Milestone/Deliverable. KVC will work with the Contractor to test the wind-diesel system performance at a range of representative conditions. Following 90 days of demonstrated reliable parallel operation of diesel and wind units and accomplishment of performance goals established in the final design to a reasonable level, KVC will provide to the Contractor 1) written notice that the system is to be considered Substantially Complete, and 2) a punchlist of items that must be addressed to complete system commissioning. As above, the milestone is considered completed and billable upon KVC's written notice.

Task 2.4: Complete commissioning and document wind-diesel power system.

2.4 Description. The Contractor will complete punchlist items above. Over the six months KVC will operate the system and, with assistance from the Contractor, modify operation activities and control programming to optimize system performance.

The Contractor shall provide:

1. Electronic documentation of new, updated, and modified equipment and systems resulting from Phase 2 activities, including drawings, schematics, bills of material, protective settings/ranges, and programmable logic controller (PLC) flow charts or process diagrams. Systems operator sequencing or switching checklist(s) for safe and reliable normal operations shall be included.
2. A final technical report that provides a descriptive overview of the wind-diesel system modifications that were made during the project.

Two electronic copies (one PDF and one editable in native file format) will be provided and delivered to KVC, for archiving and future uses.

12.4 Milestone/Deliverable. Based on its assessment that the wind-diesel system has met the performance goals established in the final design, punchlist items have been addressed, and receipt of required documentation, KVC will provide notice that the project has been successfully completed and implement project close-out.

Section 7. OUTCOME AND PERFORMANCE STANDARDS

All work, including testing and documentation, shall be in conformance with applicable industry standards, including, but not limited to:

- NEMA MG 1 (2009): “Motors and Generators”
- IEEE 1547: “Standard for Interconnecting Distributed Resources with Electric Power Systems”
- ANSI C84.1 (2016): “Electric Power Systems and Equipment— Voltage Ratings (60 Hertz)”
- NFPA 70: National Electrical Code (NEC)
- National Electrical Safety Code (NESC)/ANSI C2

Technical drawings related to the safety and reliability of the power system shall be reviewed and stamped by a professional engineer.

Section 8. PAYMENT

Payment will be billable upon completion of milestones as laid out in Table 3. Following achievement of each milestone, KVC will prepare a letter that confirms that the Contractor has completed the milestone and deliver it to the contractor in hard copy and/or electronic form. Following receipt of this letter, the contractor may invoice KVC for the corresponding amount and KVC will pay this amount to the Contractor.

Section 9. REPORTS

The Contractor shall submit the following reports to KVC as further described in Section 6. All deliverables shall be submitted with the Contractor's name, contract title, and contract number clearly identified.

Phase 1:

1. Final Design of Diesel System Upgrade (Task 1.2)
2. Electronic Documentation of Completed Diesel System Upgrade (Task 1.5)

Phase 2:

1. Preliminary Design Report of Wind-Diesel System (Task 2.1)
2. Final Report of Wind-Diesel System (Task 2.2)
3. Final Technical Report (Task 2.4)

Section 10. PROPOSAL SUBMISSIONS FORMAT

KVC requests that Offerors follow this format and should be limited to the requested information. Please keep proposals on task. KVC is discouraging unnecessarily lengthy and costly proposal preparation, yet all proposals must contain the following information, formatted as requested.

Failure to follow this format for a proposal or failure to include complete information as requested may result in a lower score or disqualification of the proposal depending on the severity of the discrepancy.

10.1 Introduction

Include a letter of transmittal containing the complete name and address of the firm; name, mailing address, and telephone number of the contact person for the proposal; Alaska Business license number or proof of having a valid Alaska business license; and a statement with regard to any perceived or potential conflicts of interest.

Include a title page showing:

- RFP #
- Firm's Name
- Date of Proposal
- Include a Table of Contents

10.2 Understanding of the Project and Commitment

Include a brief discussion of your understanding of the services required, your relevant experience and why this work would be a good fit for your company. Provide a brief summary of how you meet the minimum contractor requirements listed in section 1.2. Discuss similarities and differences between working with KVC and other clients you may have.

Include a summary of any potential problems you believe may be encountered in the performance of the contract and creative suggestions for addressing these problems. Also include your expectations of the KVC's Project Manager, KVC, or other entities that may be involved in this process.

Describe your availability to commit to this work as requested. Include other work or projects that you have or may have during the period of performance. Discuss any possible conflicts that could arise during the performance of work for KVC.

10.3 Personnel & Firm Qualifications, Experience

Include a statement of qualifications or resumes for all personnel designated to perform work under this RFP. This statement of qualifications must clearly describe education, and certifications held; include all dates thereof. Include identification of any key partners or subcontractor's personnel and how they relate to your organization. The statement of qualifications should also include:

1. Detailed resumes of all key personnel, including subcontractors, who will be directly involved in this contract, listing similar types of projects they may have been involved in.
2. A schedule of expected availability of key personnel over the term of the contract.

In addition to information about the individual's experience, provide documentation verifying the qualifications and experience of the firm and its subcontractors as they relate to carrying out the services solicited in this RFP.

Demonstrate experience in working on similar projects in Alaska. Provide examples of no more than five projects similar to this RFP that you or your partners have completed. Include for each:

1. A brief description of the type of project, tasks, and deliverables.
2. The names of key individuals involved in the project.
3. Describe how the project was kept on schedule and within budget, and if not describe what were the down falls.
4. Include three (3) references: Client's name, and address, current telephone number, and contact person who can respond to queries concerning their experience with the Offeror's firm.

10.4 Approach

Discuss methods you would use to complete the tasks identified in the scope of work.

- A. Provide a brief description of the resources you have or would need to acquire to perform the tasks under contract.
- B. Provide a discussion of what, if any, other services you may be able to offer
- C. Detail features, and capabilities of the solution offered.
- D. Include any suggestions you may have for performing all tasks more efficiently or in a timelier manner.

Section 11. EVALUATION AND AWARD PROCESS

11.1 Evaluation Process

A committee of KVC, the Project Manager, and technical advisors shall evaluate proposals. Other representatives may be added if needed.

Proposals will be opened and evaluated in a manner that avoids disclosure of the contents to competing vendors during the evaluation process and negotiations.

Proposals will initially be reviewed for the following minimum responsiveness requirements:

1. Was the proposal received by the deadline for receipt of proposals?
2. Does the contractor demonstrate they meet the minimum experience and qualifications requirements of Section 1.2 Minimum Qualifications?

Proposals that fail to meet these requirements will be rejected as non-responsive and will not be evaluated. The Evaluation Committee will evaluate the remaining proposals based on the evaluation criteria and weighting listed in this section.

After the Committee has completed its evaluation and a ranking is established, KVC may begin negotiations with the highest ranked firm without further discussion with the other proposers. However, if the Committee desires they may request additional information for the purpose of clarification (Section 2.14), or develop a list of proposals reasonably susceptible for award, or request best and final offers. Re-evaluation of proposals after discussions will be conducted by the same Evaluation Committee using the same criteria and weights laid out in this section.

11.2 35% Understanding of the Project and Commitment

At a minimum, this section may be evaluated against the following questions:

- a) Does the Offeror's proposal demonstrate an in-depth knowledge of small diesel microgrids and the integration of renewables, especially wind energy, into those systems?
- b) Does the Offeror's proposal demonstrate an understanding of the KVC's goals, objectives and tasks that may be required under this RFP?
- c) Have they identified potential problems or issues that might affect the ability to complete the tasks as defined, and if so, what are their proposed solutions?
- d) Are they interested in making a long-term commitment to work with Kokhanok?

11.3 35% Personnel and Firm Qualifications, Experience

At a minimum qualifications and experience may be evaluated against the following questions:

- a) Does the Offeror have experience working with remote communities doing similar work as defined in Section 6?
- b) Does the Offeror demonstrate that they have the ability and capacity to perform the work?
- c) Is Offeror planning on outsourcing this work; has this been done before and are there preferred vendors who have worked with the offeror in the past?
- d) Do individuals assigned to this project have unique experience or qualifications that would be especially beneficial to Kokhanok?

11.4 30% Approach

At a minimum methodology may be evaluated against the following questions: Has the Offeror clearly identified how the project will be conducted? Did they provide a clear plan and methodology for accomplishing? Did they address any qualifications or conditions that will impact their performance? Do they provide any alternative recommendations on processes? Does the Offeror have any terms or conditions that they would want in a final contract? Can the proposed wind-diesel system control hardware and software be maintained, upgraded, or otherwise modified by other contractors to suit future conditions?

11.5 Vendor Selection

Upon completion of the evaluations, the Project Manager will review the evaluation process to assure procedures were followed in accordance with this RFP. This process may include reviewing score sheets, proposals, discussions or any other materials presented to the Evaluation Committee. The Project Manager may recommend that proposals be reevaluated prior to beginning negotiations if there is reason to suspect an error was committed during the evaluation process.

The final decision of the Evaluation Committee will be documented in writing and made a part of the contract file. The Evaluation Committee will recommend for negotiations to the Project Manager the Contractor whose proposal best meets the requirements of the project based on the criteria in this RFP.

The apparent successful Contractor will be required to provide the following information during contract negotiations before award of the final contract.

- Certificate of Insurance
- Proof of any Subcontractor's Alaska Business Licenses
- Additional information that may be needed for clarification of the Contractor's proposal.