

DESIGN AND ENGINEERING SERVICES REQUEST FOR PROPOSALS (RFP)

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

September 25, 2017

Section 0. PROJECT SCOPE

The Kokhanok Village Council (KVC) has received funding to refurbish its existing wind-diesel power plant. The overall scope of the project is to replace an existing generator set with a replacement prime power generator set or equivalent product that is compliant with US Environmental Protection Agency (EPA) Diesel Emissions Reduction Act (DERA) program. Included are necessary power plant repairs and controls necessary for power plant automation with capability of future integration of low- to medium-penetration supplemental wind power from an existing 90 kW wind turbine(s). Work also includes upgrade of existing power plant remote monitoring system and, lastly, actual integration of the wind turbines with separate funding from the Alaska Renewable Energy Fund (REF).

The total project will be conducted in three distinct phases:

Phase 1 – Design and Engineering Services (this solicitation) to include an onsite technical assessment of the existing power plant and operational status of the existing remote monitoring system; detail required repairs and associated costs to successfully integrate a replacement diesel generator into the power system; prepare the replacement generator-set bid specifications for separate procurement and installation construction services contract in Phase 2. The firm selected from this RFP process will provide design and engineering services for the tasks above in addition to automation of the diesel power plant controls with the capability for future integration of supplemental power. Other engineering services to be provided under this RFP will be technical review of the construction contract bids under Phase 2 (described below) and onsite commissioning of Phase 2 upon completion of construction activities.

Phase 2: Issuance of a competitive Construction Contract for supply, installation and testing of the replacement diesel generator; completion of specified power plant repairs; installation and/or upgrade of the existing remote monitoring system and diesel generators controls.

Phase 3: Design and integration of additional controls to allow for integration of one of the existing wind turbines.

Due to the community's immediate need for a new diesel generator set, time is of the essence and one of the evaluation criteria for Phase 1 proposers will be timetable for completion.

This Request for Proposal is only for Phase 1- Design and Engineering Services.

Section 1. 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 2½ 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



1.1 Kokhanok Power System

Kokhanok currently has four (4) diesel engine-generator sets and two non-operating wind turbines.

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

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 |
| July 2015-June 2016 | 420,600 | 0 | 363,116 | 35,332 | 11.90 | \$145,144 | \$56,201 |

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, originally manufactured in 1991 and remanufactured in 2010 by Halus Power systems for installation in Kokhanok. 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, Kokhanok Wind-Diesel Project documentation, recent Power Cost Equalization (PCE) program statistics, and wind resource and load data are provided in Drop Box at the following link: https://www.dropbox.com/sh/xyragd89zfpp4ee/AACx_KRZsghFwwC_kQK8kd7Va?dl=0. Drop Box registration is not required to download directly.

Section 2. INTRODUCTION & INSTRUCTIONS

2.1 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 and Engineering Services for the scope articulated in the statement of work below.

1. Minimum Engineer Requirements to Award

1. Registered as a licensed architect or engineer in the State of Alaska. Both professional licensing and Engineer registration will be required for the appropriate entities and members of the Design and Engineering Services' Project Team.
2. Have a current Alaska business license and Alaska certificate of incorporation prior to contact award.
3. Have a minimum of three years' experience providing successful design-engineering services for remote diesel power plants, remote monitoring and control systems.
4. Have a demonstrated understanding of these systems, both on the mechanical and electrical side, including renewable integration.

2.2 Issuing Office

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

2.3 Mailing Address and Deadline for Receipt of Proposals

Proposers 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 Design and Engineering Services RFP)

Proposals must be received electronically no later than **4:00 pm local Alaska time, Monday, October 16, 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.

2.4 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 proposer 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 a contract (See sections 2.2 and 2.6) should be addressed to the Project Manager.

2.5 Location of Work

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

2.6 Funding of the Contract

The budget for the overall work detailed in this Design and Engineering Services RFP is coming through Alaska Energy Authority (AEA) from two separate sources. Phase 1 and Phase 2 funding originates from the U.S. Environmental Protection Agency's Diesel Emissions Reduction Act/Clean Diesel Program, while Phase 3 funding is from the Alaska Renewable Energy Fund.

Additional information can be found at the following websites.

<http://www.akenergyauthority.org/Programs/DERA>
<https://www.epa.gov/cleandiesel>

KVC will provide housing for Engineer(s) while in Kokhanok during onsite project work.

2.7 Period of Performance

KVC will review the responses and expects to issue an award and Notice to Proceed by November 6, 2017. Phase 1 activities are to be completed no later than January 31, 2018. Phase 2 engineering services—commissioning of power plant—will be dependent on securing diesel generator-set and related construction activities. Selected Engineering and Design services firm under this Phase 1 selection must be available to perform commissioning and related services upon completion of Phase 2 construction activities.

2.8 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/Engineers who are known to have done work like this before in Alaska. Additionally, an ad will be placed on the Alaska Energy Authority's website (<http://www.aideaaeaprocedurement.org>) and on the Lake and Peninsula Borough's website (www.lakeandpen.com).

2.9 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 monthly basis regarding status of the previous items.

Section 3. STANDARD PROPOSAL INFORMATION

3.1 Proposal Preparation Costs

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

3.2 Required Review – Protests Prior to Award

Proposers must carefully review the Design and Engineering Services 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.

3.3 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.

3.4 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 Project Manager 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.

3.5 Authorized Signature The proposal must be signed by an individual authorized to bind the offeror to the submitted proposal. 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.

3.6 Offeror's Certification

By signature on their proposal, Proposers 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 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 Engineer in default.

3.7 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 or KVC to reject the proposal as non-responsive, or cancel the contract.

3.8 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.

3.9 Business Licenses/ Registrations

Engineer and all Sub engineers shall comply with the following applicable requirements of Alaska Statutes prior to contract award unless otherwise noted:

1. Alaska Business License required for Engineers and sub engineers prior to award of subcontract.
2. Certificate of Registration for Engineers.
3. Certificate of Registration for each individual to be in "responsible charge" for Architecture, Engineering.
4. Certificate of Incorporation (Alaska firms) or Certificate of Authorization for Foreign Firm ("Out-Of-State" firms). All corporations, regardless of type of services provided, must have one of the certificates.
5. Partnerships and Joint Ventures, regardless of type of services provided, must be licensed/registered in the legal name of the Partnership or Joint Venture as used in this proposal.

3.10 Subcontracts

The successful Engineer must supply proof of appropriate sub engineers' 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.

3.11 Right of Rejection

Proposers 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.

3.12 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 10 of this RFP.

3.13 Interviews for Clarification

The Evaluation Committee may require Proposers 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 Engineer'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 Proposers will be given similar opportunities, as required, for clarification. Interviews will be conducted in such a manner that information derived from competing Proposers is not disclosed. Interviews will be scheduled at the convenience of KVC and Evaluation Team.

3.14 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.

3.15 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 Offeror, or terminate the award of the contract.

3.16 Notice of Intent to Award

After completion of the evaluation process and Offeror negotiations, KVC will issue a Notice of Intent to Award to all Proposers.

Section 4. STANDARD CONTRACT INFORMATION

4.1 Contract Type

The contract awarded as a result of this RFP will be for design and engineering services as described in Section 6 Scope of Work, Tasks, Deliverables, and Schedule.

4.2 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 Engineer, KVC may, if it wishes, set a different starting date for the contract. KVC will not be responsible for any work done by the Engineer, even work done in good faith, if it occurs prior to the contract start date set by KVC.

4.3 Insurance Requirements

The Engineer will ensure that it and all sub engineers have insurance coverage to include:

1. Workers’ Compensation for all employees engaged in work under this Project. The coverages shall include Waiver of Subrogation against the Kokhanok Village Council, the State of Alaska, the Alaska Energy Authority and to include Employers’ Liability Protection at \$500,000 each accident/each employee and \$500,000 policy limit.
2. Commercial General Liability on an occurrence policy form covering all operations under this Project with combined single limits not less than:
 - \$1,000,000 Each Occurrence
 - \$1,000,000 Personal Injury; and
 - \$1,000,000 Product-completed Operations Aggregate.

The Alaska Energy Authority and the Kokhanok Village Council shall be named as additionally insured.

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. Engineering Services

| | |
|------------------------|---|
| <u>Contract Amount</u> | <u>Minimum Required Limits</u> |
| Under \$100,000 | \$300,000 per Occurrence/Annual Aggregate |

4.4 Proposal as Part of the Contract

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

4.5 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 Engineer'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 Engineer's supplemental term or condition included in the Engineer's proposal, the supplemental term or condition will be considered null and void.

4.6 Payment Procedures

KVC intends to pay the Engineer a negotiated sum based upon satisfactory achievement of tasks and milestones described in Table 3. Summary of Phase 1 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 Engineer 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.

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

4.8 Sub Engineers

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

4.9 Disputes

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

4.10 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.

4.11 Termination for Default

If the Engineer 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 Engineer, 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.

4.12 Assignment

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

4.13 Contract Changes

During the course of performing the work required by this contract, the Engineer 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 Engineer a description of the work to be accomplished and request that a price proposal be offered within a given time period. No additional work shall commence by the Engineer without an approved written contract amendment by the Project Manager.

4.14 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 Engineer under this Contract shall be treated by the Engineer 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 Engineer to any person other than personnel of the Engineer performing services under this Contract without written consent of KVC.

4.15 Reimbursement to KVC for Unacceptable Deliverables

The Engineer 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 Engineer, KVC may terminate the contract for default. Furthermore, KVC may require the Engineer to reimburse any monies paid (pro rata based on the identified proportion of unacceptable products received) and any associated damage costs.

Proposers, at the Proposers' own responsibility and risk, are invited 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 offeror should not merely duplicate the Statement of Services, but must demonstrate the comprehension and capability of performing the services described in Section 6.

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

Work under this project will 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 and the State of Alaska's Renewable Energy Fund.

The Engineer 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 Phase 1 Tasks and Milestones

| Activity | Task | Milestone/Deliverable | Due Date | Price |
|-----------------------------|---|--|-------------------------------|--------------|
| Upgrade Diesel Power System | 1.1 Initiate project | Notice to Proceed (NPC) issued by KVC. | November 6, 2017 | |
| | 1.2 Refine design of diesel power system upgrade. | Final design of diesel system upgrade accepted and genset bid spec accepted by KVC. | No Later Than January 31 2018 | |
| | 1.3 Technical review of <u>Phase 2 Bids</u> . | Technical reviews and recommendations of all submitted bids provided to KVC. | <i>To be determined</i> | |
| | 1.4 Commissioning of power plant refurbishment. | Acceptance testing performed satisfactorily and submission of as-built documentation | To be determined | |
| | | | | TOTAL |

PHASE 1: DESIGN AND ENGINEERING SERVICES

Task 1.1: Initiate project

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

Task 1.2: Site Inspection and diesel power system upgrade design completion.

Perform site inspection and identification of specific operational and maintenance problems of the current diesel system to include, but not be limited to:

- Manual and automated generator set control issues.
- Functionality of cooling system to include coolant condition and filtering.
- Fuel quality issues, if any.

- Itemized power plant repair/maintenance recommendations and costs, including justification for replacement of a particular diesel generator-set.
- Identification of any other issues that impact the efficient and long term operation of the power plant.

Detail specific recommended repairs and maintenance tasks essential to ensuring safe and reliable operation of the power plant once a replacement generator-set is installed.

Develop a bid specification for a competitive Phase 2 procurement to replace an existing Kokhanok generator-set with the following:

John Deere Model 4045AFM85 or equal
Tier 3 Marine Repower
100 kW Prime Power Rating

NOTE: The bid specification for the replacement engine must comply with all DERA regulations and requirements.

Prepare draft final design report for KVC review that includes drawings, specifications, a material/equipment list and Phase 2 cost estimate. Provide electronic documentation of new, updated, and proposed modified equipment and systems 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.

The report will include a materials/equipment takeoff list of system items such as control equipment, parts and specialized hardware with estimated costs.

While the design should focus primarily on developing a system that satisfies Phase 1 objectives, the Engineer must incorporate components and design features that will facilitate integration of the wind system addressed in Phase 3 of the project.

Included will be preparation of a Power Plant Operating Manual to include daily power plant log and required service intervals for expendable supplies such as fuel filters, air filters, coolant servicing, etc.

KVC and its technical team will review the design report, provide comments, and request changes as necessary. Upon acceptance by KVC, the Engineer will provide required Phase 2 construction drawings, materials and equipment takeoff lists to be added to the diesel generator set procurement for inclusion in the construction bid documentation.

Task 1.3: Technical Review of Phase 2 Supply and Installation Proposals.

Engineer will provide a written technical compliance review of each of the construction proposals received noting any deviations and/or exceptions in the proposal.

Task 1.4: Assist KVC in commissioning the power plant construction bid.

The Engineer will develop an itemized list of power plant upgrade commissioning criteria and assist KVC's Project

Manager and other KVC representatives in commissioning the project upon notice of substantial completion. As needed, a punch list will be prepared jointly by KVC and the Engineer. The Engineer may be consulted, as needed, to review contractor's response to the punch list until commissioning is complete.

The engineer shall then issue as-built drawings in two electronic copies (one PDF and an editable format) that will be provided and delivered to KVC, for archiving and future uses.

Section 7. OUTCOME AND PERFORMANCE STANDARDS

All work 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 Engineer has completed the milestone and deliver it to the Engineer in hard copy and/or electronic form. Following receipt of this letter, the Engineer may invoice KVC for the corresponding amount and KVC will pay this amount to the Engineer.

Section 9. PROPOSAL SUBMISSIONS FORMAT

KVC requests that Proposers 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.

9.1 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; 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

9.2 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 Engineer requirements listed in Section 2.1. 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. Discuss any possible conflicts that could arise during the performance of work for KVC.

9.3 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 sub engineer's personnel and how they relate to your organization. The statement of qualifications should also include:

1. Detailed resumes of all key personnel, including sub engineers, who will be directly involved in this contract, listing similar types of projects they 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 sub engineers 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 if the project was not kept on schedule and/or within budget, and why that occurred.
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.

9.4 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. Include any suggestions you may have for performing all tasks more efficiently or in a timelier manner.

9.5 Price Proposal and Timeline

Use Table 3 as the Price Proposal page by completing the Price column and, if Task 1.2 can be completed before January 31, 2018, identify the completion date.

Section 10. EVALUATION AND AWARD PROCESS

10.1 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 proposers 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 Offeror 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.

10.2 25% 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?

10.3 25% Design and Engineering Services Team (Prime and sub engineers)

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?

10.4 25% Approach

At a minimum methodology may be evaluated against the following questions:

- a) Has the Offeror clearly identified how the project will be conducted?
- b) Did they provide a clear plan and methodology for accomplishing?
- c) Did they address any qualifications or conditions that will impact their performance?
- d) Do they provide any alternative recommendations on processes?
- e) Does the Offeror have any terms or conditions that they would want in a final contract?

10.5 10% Timeline for Completion of Tasks 1.1 and 1.2.

Because of the need for the Kokhanok diesel generator replacement to be completed as soon as possible, the Offeror's schedule for completing Tasks 1.1 and 1.2 will be evaluated.

10.6 15% Price Proposal

Complete the "Price" column for each task listed in Table 3. This "Total" is Fixed Price.

Section 11. ENGINEER 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 Offeror whose proposal best meets the requirements of the project based on the criteria in this RFP.

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

- Certificates of Insurance
- Required Alaska Business Licenses and Engineer registrations.
- State of Alaska incorporation and partnership documentation as needed.
- Additional information that may be needed for clarification of the Engineer's proposal.