AMERICAN SAMOA POWER AUTHORITY



REQUEST FOR PROPOSALS (RFP)

INDEPENDENT POWER PRODUCERS FOR

WIND POWER GENERATION

RFP NO. ASPA18.064.PG

September 10, 2018

RFP NO. ASPA18.064.PG – INDEPENDENT POWER POWER PRODUCERS (IPP) FOR WIND POWER GENERATION

UTU ABE MALAE EXECUTIVE DIRECTOR

AMERICAN SAMOA POWER AUTHORITY





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NOTICE TO OFFERORS REQUEST FOR PROPOSALS (RFP)

ISSUANCE	DATE:	September 10, 2018
RFP No.		ASPA18.064.PG
PROJECT: POWER		INDEPENDENT POWER PRODUCERS (IPP) FOR WIND GENERATION
CLOSING I	DATE/TIME:	October 22, 2018 @ 2:00 p.m. American Samoa Time
Producers fo Office locate the Gate will	r Wind Generation. And at in the New Opera direct you to the Proc	hority (ASPA) requests proposals from qualified Independent Power complete RFP package may be picked up from the ASPA Procurement tions Building at the Tafuna Power Plant compound (Security Guard at turnement Office). You may also view this online at www.aspower.com nore information about this RFP, please contact the following person(s):
	Ioana S. Uli	
	Procurement Mana	ger
	Tel. 684.248-1234	
	bids@aspower.com	
ASPA Procu INDEPEND Ioana Uli and hard copies of Compound n	rement Manager. The ENT POWER PRO d show date and time of the proposal must be	posals in a sealed envelope, box, or other enclosure addressed to the sealed envelope or box must be labeled RFP NO. ASPA18.064.PG – DUCERS (IPP) FOR WIND POWER GENERATION , Attention: of proposal opening. An original, one PDF electronic copy, and four (4) the received in the Procurement Office located in the Tafuna Power Plant on October 22, 2018. Late submittals will not be opened or considered ensive.
The America	n Samoa Power Autho	rity reserves the right to:
1.	Reject all proposals a ASPA;	nd reissue a new or amended RFP or addenda as deemed necessary by
2.	· · · · · · · · · · · · · · · · · · ·	formation from any Offeror;
3.		rd based on "least cost" and other factors (e.g. capability to complete on or proven technical capabilities);
4.		rith the successful Offeror; and/or
5.	Waive any non-mater	ial violations of rules set up in this RFP at its sole discretion.

Date

Utu Abe Malae, Executive Director

PROPOSAL INVITATION

IOANA S. ULI, PROCUREMENT MANAGER AMERICAN SAMOA POWER AUTHORITY Procurement Office P.O. BOX PPB PAGO PAGO, AS 96799 (684) 248-1234 bid@aspower.com

DATED ISSUED: September 10, 2018

PROPOSAL INVITATION NO: RFP No. ASPA18.064.PG

INSTRUCTIONS:

- This REQUEST FOR PROPOSAL shall require a <u>Cost Proposal</u> to be submitted in a separate sealed envelope, box, or other enclosure
- 2) All required submittals, including the Cost Proposal, must be addressed to the ASPA Procurement Manager at the above-listed address.
- 3) An original, four (4) hard copies and one (1) PDF of the complete proposal must be received at the ASPA Procurement Office no later than October 22, 2018, @ 2:00 pm American Samoa Time.
- 4) The envelope or box must be labeled "RFP No. ASPA18.064.PG-Independent Power Producers (IPP) for Wind Power Generation Project."
- 5) Late submittals will not be opened or considered and will be determined as non-responsive.
- 6) A **Pre-proposal telephone conference and site visit will be held** at the Materials Management Conference Room on **Friday**, **September 21**, **2018 at 10:00 a.m.**
- 7) Any and all **pre-proposal questions** and/or clarifications shall be submitted to Ioana Uli by email at bid@aspower.com or procurement\$aspower.com no later than **September 28, 2018 before 4:00 p.m.**
- 8) ASPA shall issue addend to address questions and/or clarifications as necessary.

NOTE TO OFFERORS:

This proposal is subject to the attached General Terms and Conditions of "RFP No. ASPA18.064.PG-Independent Power Producers (IPP) for Wind Power Generation".

The undersigned Offeror agrees to furnish within the time specified, the articles and services at the price stated opposite the respective terms listed on the schedule of the cost proposal. In consideration of the expense to the American Samoa Power Authority in opening, tabulating, and evaluating this and other proposals, and other considerations such as the schedule, the undersigned agrees that this proposal shall remain firm and irrevocable within **Sixty (60)** calendar days from the closing date to supply any or all of the items for which prices are quoted.

Signed:	Date:

AMERICAN SAMOA POWER AUTHORITY SPECIAL REMINDERS TO PROSPECTIVE OFFEROR

Where applicable, Offeror (Offeror) are reminded to read the Proposal Solicitation Instructions and General Terms and Conditions attached to the Proposal Invitation to ascertain that all of the following (see boxes checked) requirements of the proposal are submitted in the proposal envelope at the date and time for proposal opening.

[x]	1.	PROPOSAL FORMS
		a. Proposal Invitation Form (Attachment A)
		b. Proposal Transmittal Form (Attachment C)
[x]	2.	TECHNICAL PROPOSAL
		The Technical Proposal shall follow the Scope of Work –
		Also, complete Offeror Qualification Sheet. (Attachment D)
[x]	3.	CONTRACT COST PROPOSAL
		The Offeror shall submit a PPA price as stated in page16
[x]	4.	BOND REQUIREMENTS, PRE and POST DEVELOPMENT DEPOSITS
		must be signed and returned with the technical proposal envelope. Failure to comply with may result in disqualification and rejection of the proposal.
I,		authorized representative of
	·	acknowledge receipt of this special reminder to prospective Offeror
togeth	er with	Proposal Invitation RFP NO. ASPA 18.064.PG WIND GENERATION IPP as of
this da	ate	, 2018.
OFFE	ROR'S	Representative Signature

SIGNIFICANT DATES

The following are significant anticipated Scheduling and Contract Dates for this RFP:

September 10, 2018	RFP Issuance Date
September 21, 2018	Pre-proposal phone conference and Site Visit
September 28, 2018	Deadline for submitting questions, inquiries, and/or clarifications to ASPA.
October 15, 2018	ASPA Deadline to Issue any Addenda to address questions and or clarifications as necessary.
October 22, 2018	Closing Date. See details of how to send proposals on the Proposal Invitation Form page 4 of this RFP.

PROPOSAL SUBMITTAL REQUIREMENTS

All Offeror shall provide a collated binder that includes tab separators. Also provide electronic version of all submittals. An original of the complete technical proposal and Financial Proposal must be submitted and received in the Office of Procurement no later than 2:00 p.m. local time on or before **October 22, 2018.**

- Late submittals will not be opened or considered and will be determined as non-responsive.
- Offeror shall provide sufficient written and verifiable information that responds to the requirements of the RFP, and in accordance with the SOW.

The binder shall be organized as follows.

- 1. **Transmittal Form** (Letter on Offeror's Letterhead) The Offeror shall submit a completed Attachment C "Proposal Transmittal Form
- 2. **Tab 1 Proposal Submission Forms** The Offeror shall complete and include in Tab 1 all required forms as provided for in this RFP.
 - (i) Offeror's Qualifications Form (Attachement D).
 - (a) The Offeror shall furnish satisfactory evidence and the requisite experience, ability, including sufficient capital, facilities and plant, which are necessary to prosecute the work successfully and promptly within the terms set forth in the RFP.
 - (b) The Offeror shall submit additional documentation regarding the qualifications of the firm.
 - (c) The Offeror shall list and submit a dossier of personnel qualifications and professional credentials.
 - (d) The Offeror shall submit a list of three or more references and a project history to document a minimum of seven (7) years of specifically related experience.
 - (ii) Licenses The Offerors must hold an appropriate and current professional certification and business licenses for the requested professional services. A copy of any and all professional certifications and business licenses is required in this Tab.
 - (iii) Security Bond, Letter of Credit, etc: Pursuant to the terms of the PPA, any Offeror entering into a PPA will be required to provide Pre-Construction, Construction Security and Performance Security to support their obligations to achieve Commercial Operation Date and to perform their obligations under the PPA thereafter, respectively. This security may take the form of cash collateral, a letter of credit, or a payment and performance guaranty from a creditworthy parent company or other Affiliate.
- 3. **Tab 2 Technical Proposal** The Offeror shall submit a full and detailed Technical Proposal, as required in this RFP, which describes the goods, services, and procedures that completely addresses the requirements presented in the Scope of Work (Attachment A). Outline below a brief objectives of the technical proposals more detail is provided in the Scope of Works.
 - **Project Goals and Objectives** The Offeror shall describe the system goals and objectives, project methodology and specifications that meet the proposed Wind Generation system.

- **Technical System Design and Specifications** Technical description of the proposed system. Technical drawings at a minimum shall include the following
 - (a) Layout of the proposed facility at the site General Arrangement
 - (b) Electrical One-Line Diagram
- **Technical System Monitoring** The Technical description shall include type of monitoring information of the Wind Generation system through SCADA.
- (iv) Wind Generation System Capacity, Energy and Energy Storage System— The Technical description shall include the Proposed Wind Generation system generating capacity (MW), capacity factor and energy (MWh) performance benchmarks. Proposed energy storage system (MWh) for grid stability. The Offeror shall submit tables and forms outlining matrixes of the Wind Generation system on capacity, energy and energy storage for each site.
- (v) Interconnection and Transmission System The Technical description shall include interconnection, transmission line to the Tafuna Power Plant and substations.
- **(vi)** Project Timetable and Milestones The Offeror shall submit all timetables, schedules and milestones of tasks from design work, system fabrication, shipping to installation, testing and final commission of the Wind Generation system. (It is preferred to use MS Project with soft copy inserted in this Tab).
- (vii) Testing The Offeror shall provide a Plan defining testing requirements of the Wind Generation system prior to interconnection to ASPA's grid. The tasks or system, by sequence of operations shall be accepted by ASPA. These tests shall be conducted prior to the commissioning of the whole Wind Generation system.
- (viii) **Permits and Compliance** The Offeror shall comply with all permits and environmental regulations.
- (ix) Offeror's Professional and Installation Team The Offeror shall describe the individuals and qualifications of the project team with assigned tasks.
- (x) Subcontractors The Offeror shall identify, list and submit the tasks to be subcontracted and submit the complete names, business address, and license classification of the subcontractor(s).
- **4. Tab 3 General Terms and Conditions** The Offeror must provide a description of any and all proposed deviations from the ASPA General Terms and Conditions.
- **Tab 4 Additional Information** The Offeror may include additional information, including company and product brochures.

Definitions and Abbreviations

Capitalized terms and abbreviations used in this RFP are defined below.

"AC" shall mean Alternating Current, the form of electricity which is delivered to businesses and residences.

"Affiliate" shall mean a person or entity that controls, is controlled by, or is under common control with, Offeror.

"A.P.A" shall mean the American Samoa Administrative Procedure Act

"A.S.C.A" shall mean the American Samoa Code Annotated.

"ASPA" shall mean the American Samoa Power Authority.

"Authority" shall mean the American Samoa Power Authority.

"Authority-Identified Site" shall mean a Site identified by ASPA that is available for Offerors to propose for the location of a Generation Facility.

"Commercial Operation" shall mean that each Generating Facility comprising the Project commences operations in a safe, reliable, sustained, commercial basis, and in compliance with all applicable laws, permits, and regulations, as further described in the PPA.

"Commercial Operation Date" shall mean the date on which the Generating Facility comprising the Project commences Commercial Operation, as further described in the PPA.

"Construction Security" has the meaning given in the PPA.

"DC" shall mean Direct Current.

"Development Security" – 1.5% of project cost. Seller shall provide to ASPA the Development Security, to be held and applied by ASPA as described in the PPA. The Development Security will be returned to Seller in full on (i) the Commercial Operation Date or (ii) the PPA is terminated and agreed between the parties to the Agreement.

"Environmental Attributes" shall mean any and all environmental, renewable energy, carbon reduction, greenhouse gas reduction, or air quality credits, offsets, allowances, or other benefits related to the ownership or operation of the Generating Facility or the generation of electric energy at the Generating Facility, the sale of electric energy to ASPA under the PPA, or the other transactions contemplated thereunder, as further described in the PPA. Environmental Attributes shall exclude tax credits or other tax benefits resulting from ownership, use, operation or maintenance of the Generating Facility.

"Generating Facility" shall mean each Wind Generation system with a unique point of interconnection that produces the Product sold by Offeror and purchased by ASPA pursuant to the PPA.

"Gross Power Rating" shall mean the value, in MW AC, which is the sum of all Wind Turbine Generating ratings to be installed at the Generating Facility.

"IA" shall mean an Interconnection Agreement to be negotiated between ASPA and the IPP.

"PNRS" shall mean the American Samoa Government Project Notification & Review System Board

"PPA" shall mean a Power Purchase Agreement to be negotiated between ASPA and the IPP.

"Pre-bid Conference" shall mean the conference to be held in ASPA's office facilities in American Samoa.

"**Product**" shall mean all Wind electric energy (AC) produced by each Generating Facility comprising the Project and delivered to ASPA at the Generating Facility's delivery point (as defined in the PPA), net of station use, and all associated ancillary services, capacity attributes, and Environmental Attributes of

the gross energy generated.

"**Product Price**" shall mean the price, in US Dollars, payable by ASPA for each MWh of electric energy and other Products delivered under the PPA.

"**Project**" shall mean all of the Generating Facilities collectively that are proposed by Offeror in a Proposal or subject to a PPA, as applicable.

"Proposal" shall mean an Offeror's submittal in response this RFP.

"Performance Security" shall mean on or before the Commercial Operation Date, the Seller shall provide to ASPA the Performance Security in the amount of 1.5% of the project cost, to be held and applied by ASPA to be described in the PPA.

"Offeror" shall mean an independent power producer or other entity that responds to this RFP by submitting a Proposal in accordance with the requirements herein.

"Offeror-Identified Site" shall mean a Site identified by the Offeror for location of a proposed Generation Facility.

"RFP" shall mean this Request for Proposals from Independent Power Producers for Wind Generation.

"SEB" shall mean the Source Evaluation Board selection committee designated by ASPA to review and evaluate Proposals.

"Site" shall mean the site for a Generating Facility, which may be an Authority-Identified Site or an Offeror-Identified Site.

"**Taxes**" shall mean federal, state, territorial, and local taxes, including ad valorem, income, or gross receipts taxes, or import or customs taxes, duties, or fees, excise taxes, or other fees, duties, or taxes.

"Technical Proposal". The Proposal must include a complete Technical Proposal, completed by the Offeror with precision and accuracy, for the Proposal to be considered responsive. The Technical Proposal contains information for a Proposal, including Offeror information, Project information, interconnection and technical information, Proposal pricing information, and the Project generation profile.

"USEPA" shall mean the U.S. Environmental Protection Agency

GENERAL TERMS AND CONDITIONS

Request for Proposals (RFP) From Independent Power Producers for Wind Power Generation

1. Overview

The American Samoa Power Authority is soliciting proposals from qualified Offerors (Offerors) to design, fabricate, deliver, install, operate and maintain grid interconnected Wind Power Generation system under a Power Purchase Agreement ("PPA") with ASPA.

Offeror must demonstrate the ability to perform the work described in the Scope of Services set forth in this Solicitation and have significant experience successfully performing comparable work.

This solicitation seeks responses from suitably qualified developers from which ASPA intends to select one, or more, Offeror(s) to negotiate Power Purchase Agreements (PPA) and to install Wind generation facilities that best fit ASPA's needs.

ASPA is seeking the installation of 30MW to 35MW (AC) of Wind generating capacity which is expected to generate approximately 65% to 75% of renewable energy annually, with the remaining generation from Solar PV and Diesel generation. This is based on an annual energy sale of 145,000 MWh per year.

The developer must also propose storage batteries for grid stability and to prevent curtailing as much as practical. The successful IPP will be responsible for operating and maintaining all facets of the Generating Facility (ies) and for generating the required output as described in this RFP and correct any negative impact on the supply quality as a result of the renewable energy source. Battery storage system will be required to mitigate grid instability and to deliver energy during periods of low wind generation.

The successful Offeror will be responsible for financing, designing, engineering, constructing, installing, operating, and maintaining the Wind Generation system(s) at the development site(s).

The scope of services requested in this RFP shall include, but not be limited to, securing sites, all permits, and approvals from governing agencies, and providing all labor, services and equipment necessary to design, procure, install, construct, test, commission, monitor, operate, and maintain fully operational Generating facilities. The proposal shall contain a detailed explanation of the complete project and a delineation of all work tasks to be performed by the successful Contractor.

ASPA will assist/provide potential investors in identifying land suitable for Wind turbine installation. "Authority-Identified Site" will be provided for investors. Offerors can also identify their own sites but will have to provide ASPA with an "Offeror-Identified Site" list to enable ASPA to determine the suitability of site for grid interconnection.

ASPA has recently conducted a Renewable Energy Grid Stability and Wind Studies. These studies will be made available to interested offerors.

The Authority will give more favorable consideration to Proposals that demonstrate the following characteristics, not necessarily listed in the order of importance:

- Product Price [\$/MWh (AC)] broken down as
 - o Wind Generator Rate [\$ / MWh (AC)]
 - o Battery Energy Storage System [\$ / MWh (AC)]

- o Transmission and Substation [\$ / MWh (AC)]
- o Total PPA Rate [\$ / MWh (AC)]
- Experience
- Strength of Development & Construction Plan
- Strength of Operations & Maintenance Plan
- Financial Strength of Offeror & Other Project Participants

The Authority does not intend to participate as a bidder or to propose a self-build option.

This Request for Proposal (RFP) does not commit the Authority to the award of a contract or contracts, nor to pay any cost incurred in the preparation and submission of proposals in anticipation of a contract

2. Background

American Samoa, a group of five volcanic islands located in the South Pacific Ocean, depend on imported diesel fuel and other fossil fuel products for power generation. These relatively small isolated power systems with no interconnections results in high electricity tariffs. Increasing concerns about environmental impacts, growth in electricity demand, and oil price volatility create urgent needs for providing a path toward less oil-dependence, lower cost, lower environmental impact and sustainable energy future for the American Samoa.

The American Samoa Power Authority (ASPA) is the sole utility operating in American Samoa. It is an entity of the government and serves 12,467 customers. ASPA's electrical distribution system on Tutuila operates at a nominal 13.2 kilovolts (kV). ASPA maintains two 34.5KV substations, approximately 170 miles of 13.2-kV lines, and 1,560 miles of low-voltage lines. There are twelve 13.2 kV distribution feeders consisting of underground and overhead feeders. Because of the relatively small size of the island, there is no transmission system per se, but there is a single 34.5-kV tie line between the Tafuna and Satala power plants. The tie line is 9.5 miles long with 4/0 copper underground cable in duct. The Tafuna plant is located on the western side of the island mainly provides the airport, small commercials, schools and residential loads. The Satala plant is located among the more industrial (tuna canneries) and commercial (government building) loads along Pago Pago Harbor.

A summary of basic power system information for the island of Tutuila of American Samoa can be seen in **Table 1**.

Table 1 Tutuila power system information

Installed capacity (diesel power)	38.0 MW
Peak load	25.0 MW
Base load	16 MW
2017 peak load forecast	24 MW
Current customers (2018 data)	12,155
Projected annual load growth	1-2%

2.1 RENEWABLE ENERGY SOURCES

A total of 5.0 MW of PV is connected to the ASPA grid. 4.1 MW are ground mounted while the other 900 kW are roof mounted at different locations. The addition of up to 20 MW (DC) of PV system is anticipated to be installed by 2020.

With the installation of 30MW to 35MW of Wind Generation, grid instability and supply quality issues will need to be considered. Energy storage systems should be sized to store excess energy and deliver energy when required. Offerors must allow for these requirements in both their design and price offer.

3. Basis for Selection

Each Proposal will be subject to an evaluation by a Source Evaluation Board (SEB) as designated by the Authority. The Authority's SEB will make a selection and its recommendation to the Executive Director for approval.

- A. Contract award will be made by the ASPA in accordance with the evaluation criteria set forth herein and with the ASPA Procurement Rules.
- B. Proposals will be evaluated by a Source Evaluation Board (SEB).
 - SEB members shall be nominated by the Procurement Manager and approved by ASPA's Executive Director.
 - 2. The ASPA Officers may also serve as additional SEB Members.
 - 3. Submission of a proposal shall constitute a waiver of any challenge or dispute of the SEB process.
- C. The SEB will evaluate proposals, as determined by the Procurement Manager.
 - 1. Discussions may be conducted by the SEB with any or all of the Offerors.
 - 2. Such discussions shall only be conducted for the purpose of obtaining clarification from the Offeror on its proposal in order to ensure full understanding of, and responsiveness to, the RFP requirements.
 - 3. Discussions shall be conducted on an "as-needed" basis with individual Offerors
 - 4. Care shall be exercised to ensure that no information derived from competing Offeror's proposals is disclosed.
 - 5. Each Offeror with whom discussions are conducted shall be accorded an opportunity to revise their proposals in response to specific clarifications based on the discussions.
- D. The SEB will forward its recommendation to the Procurement Manager. The Procurement Manager in turn will review and forward his/her recommendation to the Executive Director.
- E. Final Approval is required by the ASPA Board of Directors.

4. Power Purchase Agreement

Selected Offerors will be invited to negotiate a Power Purchase Agreement (PPA).

5. Site Selection and Control

Offerors may propose to locate Generating Facilities on Sites identified by the Authority or on Sites identified by the Offeror, or on a combination of each.

5.1. The Authority-Identified Sites

The Authority has identified sites that may be available for Wind Generating Facilities. The AWS True Power Final Report on "Wind Resource Maps and Data of American Samoa" will be provided with the RFP. Attachment H – Authority-Identified Sites ("Authority-Identified Sites"). Offerors may propose Generating Facilities located on the Authority-Identified Sites and should contact the Authority for additional information regarding such sites. Separate lease arrangements will be made for these sites. The

Authority will not be responsible for Site conditions, including environmental conditions, zoning and use restrictions, access, underground obstructions, safety or security of the Site, or the ability of the Site to support any specific size or technology of Wind Generating Facilities, all of which must be verified by Offeror. Offeror, and not the Authority, will be responsible for all costs associated with developing the Site, including, but not limited to, Site preparation and governmental permits and approvals required to locate, construct or operate Generating Facilities on any Site, including Authority-Identified Sites.

5.2. Offeror-Identified Sites

Offerors also may propose Generating Facilities located at Sites identified by the Offeror. Offeror will need to demonstrate the ability to obtain site control for the term of the proposed PPA for each Generating Facility it proposes, if not located on an Authority-Identified Site. All costs associated with Offeror-Identified Sites will be the responsibility of the Offeror.

6. Evaluation Criteria

The Authority will give favorable consideration to Proposals that demonstrate the following characteristics, not necessarily listed in the order of importance set forth in Table 2 below:

- Price (\$/MWh AC) broken down as follows:
 - Wind Generation Rate [\$ / MWh (AC)]
 - o Battery Energy Storage System Rate [\$ / MWh (AC)]
 - o Transmission and Substation Rate [\$ / MWh (AC)]
 - o Total PPA Rate [\$ / MWh (AC)]
- Experience
- Strength of Development & Construction Plan
- Strength of Operations & Maintenance Plan
- Financial Strength of Offeror & Other Project Participants

The Authority may select one or more short-listed Proposal(s) for final consideration and initiate negotiations with the short-listed Offeror(s).

Table 2

Category	Category Weight	Category Score
Price \$/MWh (AC) broken down as follows: • Wind Generator Rate - [\$ / MWh (AC)] • Battery Energy Storage System Rate - [\$ / MWh (AC)] • Transmission and Substation Rate - [\$ / MWh (AC)] • Total PPA Rate - [\$ / MWh (AC)] The total economic value to The Authority Expected ability to execute project at proposed price Value of alternative pricing proposed, if applicable	60	
Experience Offeror's demonstrated record and depth of experience in developing, financing, constructing, and operating Wind Generation systems inclusive of battery storage system	15	

EPC Firm's demonstrated record and depth of experience in designing and constructing Wind Generation system, if applicable		
Equipment Manufacturers' demonstrated record and depth of experience in providing Wind Turbine equipment		
Operations & Maintenance Firm's demonstrated record and depth of experience in operating Wind Turbine equipment		
Strength of Development & Construction Plan	~	
Technical merits of the Proposal	5	
Demonstration of site control, or Quality of plan for obtaining site control, if Offeror-Secured Sites are proposed		
Strength of procurement, design, and construction plan		
Strength of permitting plan		
Ability to meet proposed project schedule		
Suitability of design and construction plan to tropical and island environments		
Strength of Operations & Maintenance Plan Completeness and quality of proposed Operations and Maintenance plan	5	
Strength of equipment and construction warranties		
Suitability of operations and maintenance plan to tropical and island environs		
Financial Strength of Offeror & Other Project Participants	10	
Financier's financial condition, creditworthiness, and experience	10	
Offerors' financial condition and creditworthiness		
EPC Firm's financial condition and creditworthiness, if applicable		
Operation and Maintenance firm's financial condition and credit worthiness, if applicable		
Other factors	5	
Offeror's use of local contractors and labor		
Overall completeness, clarity, quality, and responsiveness of the Proposal		

7. Term of The PPA

Offerors must be willing to enter into Power Purchase Agreements (PPAs) with the ASPA for a term of twenty five years (25) with possible extension options.

Under the PPA, Projects will be required to achieve the Commercial Operation Date by the eighteenth month after signing of the PPA.

8. Power Purchase Price

\$/MWh (AC) broken down as follows:

Wind Generator Rate	[\$ / MWh (AC)]
Battery Energy Storage System Rate	[\$ / MWh (AC)]
Transmission and Substation Rate	[\$ / MWh (AC)]
Total PPA Rate	[\$ / MWh (AC)]

ATTACHMENT A SCOPE OF WORK

Scope of Work

The scope of work provided by the selected Offeror shall include all tasks required to design, fabricate, deliver, install, operate, and maintain between 30MW to 35MW (AC) Wind generating system for ASPA under a Power Purchasing Agreement (PPA). The wind generating system will include adequate storage system to maintain grid stability and ESS to store excess energy as the Wind power capacity will be higher than ASPA system customer load demand. Curtailment of wind energy output should also be considered should the energy produced exceed the storage capacity of the ESS.

The cost of the land lease shall be the responsibility of the developer or IPP.

The scope of services shall also include, but not be limited to, securing all permits and approvals from governing agencies, all labor, taxes, services, and equipment necessary to produce a fully operational Wind Generation system.

All costs and expenses associated with developing and/or submitting a Proposal in response to this RFP and/or any related activity following the submission of any such Proposal shall be borne by the Offeror.

The Proposal should include the following submittals;

1.0 Cover Letter

Offeror shall prepare a cover letter, which summarizes the key points in the RFP response. If the Offeror believes any information, data, process or other material in its RFP response should be considered by ASPA to be confidential or proprietary, the Offeror shall identify that material with specificity as to the page and paragraph and on what basis it believes the material is proprietary or confidential. Include your company's address, contact, phone number and fax number.

2.0 Technical Plan

The Design of the Wind Generation system is to maximize the wind energy resources, taking into consideration the ASPA's electrical demand and load patterns, proposed installation site, available wind resources, existing site conditions, proposed future site improvements, and other relevant factors.

Adequate storage system must be included to ensure grid stability and also to store surplus energy should wind capacity (MW) exceed customer system demand (MW). Should storage capacity levels prove to be inadequate after the project is commissioned and tested – the Offeror will be responsible, and will be required to cure this defect. ASPA will not permit the Wind Generation system to supply power into its grid until the defect is corrected.

Sufficient fault current contribution by the proposed Wind system must also be addressed by the Offeror. Under the interconnection agreement (IA) power system studies will be conducted to ensure grid stability is maintained. As protection, co-ordination relays, fuses, etc. will operate only if sufficient fault current is produced by the generating power plants on line. Fault currents generated by the Wind generators be sufficient to enable protection systems to operate as intended under grid fault conditions. Types of faults that are considered include: three-phase, phase-to-phase, double-phase-to-ground, and phase-to-ground faults that can be located at different points throughout the system. The current fault levels and protection settings for the ASPA grid system will be provided.

Attachment G shows the Feeder Topography and Capacity by Feeder sets forth the approximate RFP NO. ASPA18.064.PG 15
Independent Power Producers for Wind Power Generation

maximum capacity of each feeder in ASPA's distribution system.

A. Technical Information

The technical information/specification applicable for the proposed project are listed below.

- Design standards and codes must be in compliance or equivalent to IEEE 1547, UL1741 and National Electric Code - NFPA 70 Codes and Standards
- Technical information for the facility including wind turbine type, model, make, configuration, plant layout diagrams, nameplate capacity rating, net plant capacity, annual net output, forecast capacity factor, commercial operation date, service/design life, etc
- Wind turbine capacity rating and expected energy production in kWh/MWh by month and by year, annual production throughout the PPA term based on expected derated values of wind system, production output due to maintenance
- Technical information on the type and capacity of the battery storage system. Dispatch strategy to stabilize grid due to of loss of wind capacity.
 - Proposals shall demonstrate a proven, comprehensive data acquisition system with current and historical data available remotely through a real-time internet site capable of tracking, but not be limited, to the following:
 - O Site-specific actual kWh/MWh production (average and cumulative totals)
 - O Site-specific instantaneous kW/MW capacity output
 - Expected annual hourly output profile
- A comprehensive timeline indicating the ability to achieve commercial operation within required timeline
- ASPA Interconnection point and metering point, including any expected equipment upgrade requirements, if known
- Construction warranties, including balance of plant warranties
- Decommissioning of the Project and restoration of the Sites upon the expiration of the PPA, including Offeror's program for removing or recycling of the wind turbine and associated equipment
- Proposals shall provide evidence that the proposed technology and equipment would meet or exceed all currently applicable and proposed safety and interconnection standards. All equipment components must be listed or recognized by an appropriate safety laboratory (e.g., Underwriter's Laboratory [UL]), and meet existing facility structural and fire safety requirements.
- Electrical interconnection to ASPA grid and metering requirements
- Facility limitations that may constrain operation

Awarded Contractor shall secure from governing agencies, all required rights, permits, approvals, etc at no additional cost to ASPA.

3.0 Project Schedule

The Notice to Proceed (NTP) shall be granted when ASPA receives all necessary approvals from the contractor from all the permitting agencies. Proposals shall provide the anticipated schedule for the permitting, regulatory approvals, design, manufacture, delivery, construction, startup and commission for sites identified.

4.0 Electrical Interconnections

Supply and install all equipment required to interconnect the Wind Generation systems to the ASPA Grid via a transmission line to the Tafuna power plant. The successful Contractor will fulfill all application, studies, and testing procedures to complete the interconnection process. All costs associated with utility interconnection shall be borne by the awarded Contractor.

5.0 Commissioning and Acceptance Testing

During the start-up, ASPA, and/or its Contractor, shall observe and verify each system performance. Required commissioning and acceptance test services include:

6.0 Monitoring

Monitoring of system performance shall be integrated to the ASPA SCADA system. Provide a turnkey data acquisition and display system that allows ASPA to monitor, analyze, and display historical and live wind electricity generation data. The regularly collected data should reflect, but not be limited to, the following:

- System performance
- System availability
- Average and accumulated output
- Capacity factor
- Degradation

The data acquisition system shall be designed for turnkey, remote operation. Data shall be transmitted via Internet or telephone from the site to a server managed by the Contractor or service provider. Data storage, management, and display will be the responsibility of the Contractor.

7.0 Plan for Regulatory and Environmental Compliance

The successful Offeror must comply with the American Samoa building standard codes, utility requirements, wind uplift requirements per the American Society of Civil Engineers Standard for Minimum Design Loads for Buildings and Other Structures, applicable FAA requirements, as well as Occupational Health and Safety Administration (OSHA) requirements or equivalent. In addition, the successful Offeror is exclusively responsible for obtaining and maintaining all required federal, state and local permits, licenses, approvals and/or variances, current or future. Offerors are required to demonstrate that they are capable of obtaining all required permits and licenses or provide a specific timeline for approval.

8.0 Financial Proposal (no page limitation)

The Financial Proposal must be submitted with the rest of the Proposal as one Proposal.

9.0 Codes, Standards, and Methodologies

All products and components outlined herein must conform to the following codes, standards, and rating methodologies:

- A. The **wind turbine** installation **codes** including, but not limited to, the National Electrical **Code**, ANSI/NFPA 70, the National Electrical Safety **Code** (NESC), and NFPA 79 or equivalent.
- B. Must comply with wind uplift requirements per the American Society of Civil Engineers Standard for Minimum Design Loads for Buildings and Other Structures (ASCE 7), or equivalent and must be able to withstand cyclone wind speeds in excess of 170mph.
- C. All outdoor enclosures should be at minimum rated NEMA 3R or equivalent.

10.0 Qualifications

Company Overview

Please provide the following information:

- Status (private/publicly-held, Corporation, Joint Venture, LLC, etc.)
- Number of employees
- States and countries in which you do business
- Target customers (residential, commercial, industrial, government, etc.)

Project team profile, including:

- Resumes of personnel to be directly involved with the development of the proposed systems
- Team leader identification for the entire Proposal, including full contact information
- Identification of each entity, sub-contractor, person or firm involved in the Proposal and their role/responsibility, e.g. design, installation, permitting, equipment supply by component, operations and maintenance
- Identification of the lead person responsible for each of the entities or firms described in above
- Team organization chart

11.0 EXPERIENCE AND REFERENCES

Offeror must provide comprehensive information for five (5) commercial grid-connected Wind Energy projects installed over the last five (5) years. Experience will not be considered unless all the reference data in the following table is provided completely, including at least one (1) customer reference for each project listed. ASPA may solicit, from previous customers, relevant information concerning the Offeror's record of past performance. Also include project profiles for each listed project. In any of these projects can be reviewed on-line, please provide the URL for such project.

12.0 FINANCIAL CAPABILITY

Experience and Reference Information	Referenced Project #1 (Required)	Referenced Project #2 (Required)	Referenced Project #3 (Required)	Referenced Project #4 (Required)	Referenced Project #5 (Required)
Exact role(s) your organization performed for the project					
Name of lead contractor					
Location					
Application description (Product name / type, etc)					
Date installed					
Project cost					
MW rating					
Cumulative MWh produced since system installation					
Current operational status of system					
Customer Name					
Customer Title at time of Project					
Customer's Role in Project					
Customer's Address					
Customer's Telephone					
Customer's Email					

The RENEWABLE ENERGY GRID STUDY Final Report will be provided for reference material.