

# REQUEST FOR QUOTATIONS ("RFQ")

**December 6, 2017** 

# SUPPLY AND DELIVERY OF VARIABLE FREQUENCY DRIVE (VFD) and MAG METER PROJECT

# RFQ NO. ASPA18.009.ESD-WTR

Issuance Date: December 6, 2017

Closing Date/Time: January 3, 2018 at 2:00 pm Proposal Delivery Location: Procurement Office

Tafuna Power Plant Compound

APPROVED FOR ISSUANCE: UTU ABE MALAE ASPA Executive Director

#### NOTICE TO OFFERORS

ISSUANCE DATE: December 6, 2017

RFQ NO. **RFQ NO. ASPA18.009.ESD-WTR** 

SUPPLY AND DELIVERY OF VARIABLE FREQUENCY DRIVE AND MAG

METER PROJECT

CLOSING DATE/TIME: January 3, 2018 at 2:00 pm American Samoa time

The American Samoa Power Authority (ASPA) invites Quotations for the Supply and Delivery of Variable Frequency Drives (VFDs) and Mag Meters.

<u>Materials and Equipment Specifications</u>: The complete description of required deliverables is listed in the attached Materials and Equipment Specification

#### **Documents:**

This RFQ may be viewed online on ASPA Website <u>www.aspower.com</u>. Offerors may also pick up a complete package at:

ASPA Procurement Office New Operations Building Tafuna, American Samoa 96799

For more information about this RFQ, you may contact ASPA:

Ioana S. Uli Procurement Manager ASPA Procurement Office tel. (684) 248-1234 aspabids@aspower.com

# The American Samoa Power Authority reserves the right to:

- 1. Reject all Quotations and reissue a new or amended RFQ;
- 2. Request additional information from any Offeror submitting a Quotation;
- 3. Negotiate a Contract with the firm selected for award; and
- 4. Waive any non-material violations of rules set up in this RFQ at its sole discretion.

**Approved for Issuance: Utu Abe Malae, Executive Director** 

#### **QUOTATION INVITATION**

AMERICAN SAMOA POWER AUTHORITY: PROCUREMENT OFFICE PO BOX PPB PAGO PAGO, AS 96799 (684) 248-1250

ISSUANCE DATE: **DECEMBER 6, 2017** 

QUOTATION INVITATION NO: RFQ NO. ASPA18.009.ESD-WTR

This Request for Proposal shall require an original, one PDF electronic copy, and five hard copies to be submitted in a sealed envelope, box, or other enclosure addressed to Ioana S. Uli, ASPA Procurement, P.O. Box PPB, Pago Pago, AS 96799. All submittals must be received at ASPA Procurement Office - no later than **January 3, 2018 at 2:00 pm American Samoa time.** 

The envelope or box must be labeled:

# RFQ NO. ASPA18.009.ESD-WTR SUPPLY AND DELIVERY OF VARIABLE FREQUENCY DRIVES (VFDs) AND MAG METER PROJECT

Quotations must be in the actual possession of the Procurement Office at the location indicated, on or prior to the exact date and time indicated above.

A copy of this solicitation and any addenda may be obtained from our Internet Website at: http://www.aspower.com by selecting the Procurement link and the associated solicitation number.

Late submittals will not be opened or considered and will be determined as non-responsive. The prevailing clock shall be ASPA Procurement clock. All Offerors shall provide sufficient written and verifiable information that responds to the requirements set forth herein, the Contract Documents, and in the Materials and Equipment Specifications.

Offerors may submit their Quotations through the following mean:

Electronic File Transfer – The Offeror may submit the Proposal using the electronic mail facility. This will enable the Offerors to upload Quotation file by email attachment. The Quotations must be uploaded before 2:00 PM on **January 3**, **2018**, American Samoa Time.

#### NOTICE TO OFFERORS:

This Quotation is subject to the attached General Terms and Conditions of the REQUEST FOR QUOTATIONS ("RFQ") for the:

# RFQ NO. ASPA18.009.ESD-WTR SUPPLY AND DELIVERY OF VARIABLE FREQUENCY DRIVES (VFDs) and MAG METER PROJECT

The undersigned offers and agrees to furnish within the time specified, the articles and services at the price stated opposite the respective terms listed on the schedule provided, unless otherwise specified by an Offeror. In consideration of the expense of the American Samoa Power Authority in opening, tabulating, and evaluating this and other Quotations, and other considerations such as the schedule, the undersigned agrees that this Quotation shall remain firm and irrevocable for One Hundred Twenty Day (120) calendar days from the listed Quotation opening date or until a services agreement may be jointly enacted between ASPA and the undersigned party.

It is the responsibility of each Offeror before submitting a Quotation to (a) examine the documents contained in the Quotation package thoroughly; (b) visit the site or to otherwise become familiar with local conditions that may in any manner affect cost, progress, or performance of the work; (c) become familiar with federal, territorial, and local laws and ordinances, rules and regulations that may in any manner affect cost, progress, or performance of the work; (d) study and carefully correlate OFFEROR'S observations with the Quotation package documents; and (d) notify ASPA of all conflicts, errors, or discrepancies in the Quotation package documents.

has or is seeking	to do bu	y gift, gratuity, favor, entertainment, kickback or any items of monetary value from any person who siness with ASPA is prohibited. Any vendor knowing of this type of activity is encouraged to report legal department so the matter can be dealt with.
SIGNED:		DATE
		AMERICAN SAMOA POWER AUTHORITY
		SPECIAL NOTICE TO PROSPECTIVE OFFERORS
attached to a Pr	oposal I	o read the Sealed Quotation Solicitation Instructions and General Terms and Conditions invitation to ascertain that all of the following requirements (see check boxes) of the in the Quotation envelope at the date and time for Quotation opening.
[x]	1.	QUOTATION FORMS  Attachment A: OFFEROR'S Transmittal Form  Attachment B: OFFEROR'S Proposal Form  Attachment C: Materials and Equipment Specifications  Attachment D: OFFEROR'S Qualifications Sheet  Attachment E: Disclosure Statements  Attachment F: Non-Collusion Affidavit of Prime Offeror
[x]	2.	BUSINESS LICENSE
		s must submit current business AND current contractor's license as stated below (see Terms and Condition for more information).
[x]	3.	QUOTATION
	The pro	sposal must include all of the following to be deemed responsive:
		<ul><li>a. The OFFEROR'S Quotation price for the supply and delivery of all materials listed in the OFFEROR'S Transmittal form.</li><li>b. All items as listed above in #1 from Attachments A to F.</li></ul>
		ned and returned in the Quotation envelope. Failure to comply with requirements will and rejection of the Quotation.
I,receipt of this spe	ecial rem	, authorized representative of, acknowledged inder to prospective Offerors together with Quotation Invitation Number No.:
RFQ NO. ASPA	18.009.H	ESD-WTR SUPPLY AND DELIVERY OF VARIABLE FREQUENCY DRIVES
(VFDs) AND M	IAG ME	TER PROJECT, thisdate of2017.

OFFEROR'S Representative's Signature

# TERMS AND CONDITIONS OF THE REQUEST FOR QUOTATIONS ("RFQ") (SUPPLY CONTRACTS)

#### QUOTATION PREPARATION INSTRUCTION

The Quotation must contain two (2) parts. Offerors shall prepare their QUOTATIONS in detail accordingly.

- 1. Prior Related Experience/Past Performance A description of the OFFEROR'S related experience, background, past performance and credentials as stated on the Offeror Qualification Sheet, Attachment D, which is incorporated herein as if fully set forth. This part includes a dossier of personnel qualifications. Offeror should provide references (4 or more) and a project history that verifies a minimum of three (3) years of specific or related experience. Offeror must hold appropriate and current business license(s) and contractor's license(s) for these services.
- 2. Contract Price The OFFEROR'S Quotation price for all services and materials, including a breakdown of project costs (e.g. estimated costs for materials, cost for labor, shipping, etc.) must be provided on the Quotation Form, Attachment C.

All blank spaces in the Quotation form must be completed in ink. Prices Quotations shall be in United States dollars in both words and figures where required. No changes shall be made in the phraseology of the forms. Written amounts shall govern in cases of discrepancy between the amounts stated in writing and the amounts stated in figures. In case of discrepancy between unit prices and totals, unit prices will prevail. Any Quotation shall be deemed informal which contains omissions, erasure, alterations or additions of any kind, or prices uncalled for, or in which any of the prices are obviously unbalanced, or which in any manner shall fail to conform to the conditions of the Notice to Offerors. The Offeror shall sign the Quotation in the space provided. If the Offeror is a corporation, the legal name of the corporation shall be set for the above, together with the signature of the officer or offices authorized to sign Contracts on behalf of the corporation. The typewritten name shall be inserted with each signature. If the Offeror is a partnership, the true name of the firm shall be set forth above, together with the signature of the partner or partners authorized to sign Contracts on behalf of the partnership. If signature is by an agent, other than an officer of a corporation or a member of a partnership, a notarized power-of-attorney must be on file with ASPA prior to opening of Quotations or submitted with the Quotation, otherwise the Quotation will be regarded as not properly authorized.

Offerors are expected to examine the specifications, invitations, and all instructions. Failure to do so will be at the OFFEROR'S risk.

QUOTATIONS must be in ink or printed on the Quotation form(s) furnished herewith. Quotations submitted in partial will be rejected. QUOTATIONS containing alterations will be rejected unless the alterations are crossed out and corrections thereof printed in ink or typewritten adjacent thereto and initialed by the person signing the Quotation. In addition, a statement must be furnished with the Quotation signed by the Offeror explaining the correction of the alteration or erasure.

If the Offeror is a partnership, a letter of authorization shall be furnished and signed by all of the general partners. If the Offeror is a proprietor, and the person signing the Quotation is other than the owner, a letter of authorization signed by the owner shall be furnished.

The Offeror must sign his Quotation correctly and in ink. If the Quotation is offered by an individual or partnership, his name, office and post addresses must be shown. If offered by a corporation, the person signing the Quotations must give his name, title and business address. Anyone signing a Quotation as agent must file legal evidence of his authority to do so, and that the signature is binding upon the firm or corporation.

Alternate Quotations will not be considered unless authorized by the invitation. Alternate Quotations those offered which do not meet the specification and are not considered approved equal to the item specified.

When not otherwise specified, the Offeror must state a definite time of proposed delivery.

Time, if stated as a number of days will include Sundays and holidays.

### **Submission of Quotations:**

All interested parties must submit an original or PDF electronic copy, and five hard copies to be submitted in a sealed envelope, subject to the Terms and Conditions of the Request for Quotations and General Conditions, which are incorporated herein by reference, and such other provisions and specifications are attached or incorporated by reference. Each section proposed must be complete. Partial offerings on a section will be considered non-responsive.

Quotations shall be submitted to ASPA Procurement Office <u>no later **than January 3, 2018 at 2:00 pm**</u> American Samoa Time.

#### **Rejection of Quotations**

ASPA may, after opening but prior to award and within the time specified for acceptance, reject any or all Quotations, or the Quotation for any one or more commodities or contracted services included in the proposed contract, when the public interest will be served thereby.

#### **ATTACHMENTS**

Attachment A: Offeror's Transmittal Form Attachment B: Offeror's Proposal Form

Attachment C: Materials and Equipment Specifications

Attachment D: Offeror's Qualifications Sheet

Attachment E: Disclosure Statements

Attachment F: Non-Collusion Affidavit of Prime Offeror

#### PRE-QUOTATION QUESTIONS

Any pre-quotation questions and/or clarifications shall be submitted in writing to the <u>Procurement Office via aspabids@aspower.com</u> through electronic mail or in hard copy. All pre-Quotation questions must be received no later than **4:00 p.m. on December 13, 2017**. After that time, ASPA will issue addenda to address any questions and/or clarifications as may be necessary.

#### **PAYMENT TERMS**

20% down payment upon signing of Contract. An invoice will be required for any payment.

40% due upon arrival of Materials.

40% Due 30 days after Materials arrival at ASPA Tafuna Warehouse and inspection approval of the complete order.

Offerors may offer and negotiate with ASPA for acceptable payment terms.

#### TYPE OF CONTRACT

Services, materials, product or equipment provided and delivered by the successful Offeror will be performed under a firm fixed-price, lump sum contract agreement. The successful Offeror, as an independent contractor shall furnish the necessary equipment, personnel, tools, parts, supplies, insurance, licenses, and all other required items and services and otherwise do all things necessary to meet the requirements specified in these documents to the satisfaction of ASPA on a per unit cost basis.

The Contractor shall be an independent contractor and not an agent or employee of ASPA.

ASPA will not be held responsible in any way for claims filed by the Contractor or its employees for services performed under the terms of this RFO or the contract.

#### AWARD OF CONTRACT

Within twenty (20) calendar days after the opening of Quotations, unless otherwise stated in the Notice to Offerors, ASPA will accept one of the Quotations in accordance with the section entitled "Basis of Award," below. The acceptance of the Quotation will be by written Notice of Award, mailed or delivered to the office designated in the Quotation. In the event of failure of the lowest responsive, responsible Offeror to sign and return the Contract with acceptable payment and performance bonds, as prescribed herein, ASPA may award the contract to the next lowest responsive, responsible qualified Offeror. Such award, if made, will be made within ninety (90) days after the opening of QUOTATIONS. Before a Contract is finalized, ASPA may require the apparent low Offeror to submit a complete statement of the origin, composition, manufacture and availability of replacement parts and services for any or all materials to be used in the work, together with samples. These samples may be subjected to the tests provided for in these Contract Documents to determine their quality and fitness for the work.

#### PRIMARY OFFEROR

The award, if made, will be to a single Offeror. The selected primary Offeror will be responsible for successful performance of all subcontractors and support services offered in response to this Quotation. Furthermore, the ASPA will consider the primary Offeror to be the sole point of contact regarding contractual matters for the term of the Agreement. The Offeror must not assign financial documents to a third-party without prior written approval by ASPA, and an amendment to the resulting Agreement.

#### **BUSINESS LICENSE**

All Offerors shall be appropriately licensed in accordance with the state, territory, and/or country of the Offeror's origin and shall be skilled and regularly engaged in the general type and capacity of work called fo under this RFQ.

#### **INSURANCE**

The Contractor shall obtain the insurance coverage designated herein and pay all costs associated therewith. Such insurance shall be for the coverage of the shipment of materials to ASPA, Pago Pago Port.

#### **BASIS OF AWARD**

Award is made to the lowest responsive, responsible Offeror providing the best value to the American Samoa Power Authority.

At the time of Quotation opening, each Quotation will be checked for the presence or absence of required information in conformance with the submission requirements of this RFO.

ASPA will evaluate each Quotation to determine its responsiveness to the published requirements.

Unless the Procurement Manager determines that satisfactory evidence exists that a "mistake" has been made, as set forth in Procurement Rule § 3-114, Offerors will not be permitted to revise their QUOTATIONS after Quotation opening.

Negotiations are not allowed and price is the major determining factor for selection and award.

Quotations will be evaluated according to ASPA's Procurement Rules and criteria set forth in these Quotation documents.

ASPA reserves the right to award by section or sections. ASPA also reserves the right as a whole package of all sections.

#### QUALIFICATION OF OFFEROR

ASPA may make such investigations as it deems necessary to determine a OFFEROR'S ability to enter into and perform the agreement, and the Offeror shall furnish to ASPA such information and data for this purpose as ASPA may request, or the Offeror may be deemed non-responsive.

#### MULTIPLE QUOTATIONS - COLLUSION

If more than one Quotation is submitted by any one party or in the name of its clerk, partner or other person; all Quotations submitted by said party may be rejected by ASPA. This shall not prevent an Offeror from submitting alternate Quotations when called for. A party who has proposed prices on materials is not thereby disqualified from quoting prices to other Offerors or from submitting a Quotation directly to ASPA.

If ASPA believes that collusion exists among any Offerors, none of the participants in such collusion shall be considered.

Quotations in which the contract prices are unbalanced or unrealistic may be rejected at ASPA's sole discretion.

#### OFFEROR'S UNDERSTANDING

Each Offeror must understand and acknowledge the conditions relating to the execution of the work and it is assumed that it will make itself thoroughly familiar with all of the Contract Documents prior to execution of the written contract.

Each Offeror shall inform itself of, and shall comply with, federal and territorial statutes and ordinances relative to the executing of the work. This requirement includes, but is not limited to, applicable regulations concerning protection of public and employee safety and health, environmental protection, historic preservation, the protection of natural resources, fire protection, burning and non-burning requirements, permits, fees, and similar subjects.

<u>Costs of Transportation</u>. The Contractor will be expected to include in its Quotation, among other things, costs of transporting product, equipment and materials to and from American Samoa.

#### WITHDRAWAL OF QUOTATION

Any Quotation may be withdrawn prior to the scheduled time for the opening of Quotations by notifying ASPA in a written request. No Quotation may be withdrawn after the time schedule for opening of Quotations.

#### OPENING AND EVALUATION OF QUOTATIONS

In accordance with ASPA Procurement Rule §3-110, QUOTATIONS will be opened and recorded on the assigned date and at the time indicated above at the Procurement Conference Room located at the ASPA New Tafuna Operations Building or in another place designated by the ASPA Procurement Manager in writing.

#### **EXECUTION OF CONTRACT**

The Contractor shall, after receiving the Notice of Award, sign a contract within ten (30) days and deliver to ASPA the contract, together with all any requirements included in this Quotation document.

#### ASSIGNMENT

The Contractor shall not assign, transfer, convey or otherwise dispose of the award or the contract, or its right, title or interest therein, or its power to execute such contract, to any other persons, firms or corporations without the prior consent in writing of ASPA.

#### TIME IS OF THE ESSENCE

Time is of the essence in completing the work to be performed under the contract. Delays and extensions of time will not be allowed, and a penalty fee of \$100 per day shall be assessed for not meeting any of the milestones agreed upon between ASPA Procurement and the contractor based on the supply schedule and shall consist of (at a minimum) material submittals and equipment shipping.

#### **RFQ CONDITIONS**

This RFQ does not commit ASPA to award a contract or to pay any cost incurred in the preparation of a Quotation. The American Samoa Power Authority reserves the right to:

Reject any Offeror for being non-responsive to Quotation requirements contained in this RFQ or for being non-responsible;

Reject all QUOTATIONS and reissue an amended RFQ;

Negotiate a contract with the Offeror selected for award; and

Waive any non-material violations of rules contained in this RFQ.

ASPA reserves the right to issue any addendum to this RFQ. Offerors shall send ASPA a signed form confirming receipt of any addendum, and shall submit supporting/additional information as required by any addendum. In the event that an Offeror fails to acknowledge receipt of any such addendum in the space provided, such OFFEROR'S Quotation shall be considered irregular and will be accepted by ASPA only if it is in ASPA's best interest, as determined by ASPA in its sole discretion. In the event that addenda are not received until after the Offeror has submitted its Quotation, a supplementary Quotation may be submitted revising the original Quotation. Such supplementary Quotations must be received by ASPA prior to the scheduled time for opening of Quotations.

#### **COMPLIANCE WITH LAWS**

Offerors who are awarded a contract under this solicitation shall comply with the applicable standards, provisions and stipulations of all pertinent Federal and/or local laws, rules and regulations relative to the performance of this contract and the furnishing of goods.

#### AWARD, CANCELLATION, AND REJECTION

Contract award shall be made to the responsible Offeror submitting the lowest responsive Quotation. No other factors or criteria shall be used in the evaluation.

ASPA reserves the right to waive any minor irregularities in the Quotation received. The Procurement Manager shall have the authority to award, cancel, or reject Quotations, in whole or in part for any one or more items if she determines it is in the best public interest. It is the policy of ASPA to award contracts to qualified Offerors. ASPA reserves the right to increase or decrease the quantity of the items for award and make additional awards for the same type items based on the quotation prices for a period of thirty (30) days after the original award.

#### OFFEROR'S QUALIFICATION DATA

It is the intention of ASPA to award a contract only to the Contractor who is able to furnish satisfactory evidence that it has the requisite experience and ability and that it has sufficient capital, facilities and plant to enable it to perform the work successfully and promptly and to complete it within the term set forth in the contract. Each Offeror shall submit as part of the total Quotation package, the following information:

Name of organization;

Address and phone number of home office, principal place of business and locations and contact information for any branch offices;

Type of business structure, e.g., corporation, partnership, joint venture, proprietorship;

Place of organization or state of incorporation;

Names and addresses for all owners for businesses other than corporations;

For corporations, list the names and addresses of directors, officers and stockholders with twenty percent (20%) ownership interest or greater;

Places, including individual states and territories of the United States, where registered as a foreign corporation;

Name of awarding agency or owner for which work was performed;

Dates of performance;

Whether performance was completed within the specified time under the contract and, if not, why; and

The names and addresses of three references, at least one of which should be a bank or other lending institution, governmental agency or bonding company.

#### **Delivery and Remedies for Default**

All proposed prices are to include delivery to the place designated by ASPA which shall be the American Samoa Power Authority (ASPA) Tafuna Warehouse.

Shipping charges shall include: Customs 5% excise tax, Customs & Scanning Fees.

All prices Quotation are to be FOB destination. Contractor shall be responsible for filing all claims for damage or loss resulting from shipment, and shall provide timely remedy to ASPA for any loss thereby incurred.

All items covered by this contract shall be subject to inspection and acceptance at destination. Any material found to be damaged, as well as broken seals on packages or unmarked packages shall be removed and replaced by the Contractor at no cost to ASPA.

In the event any item furnished by the Contractor in performance of the contract should fail to comply with the specifications established as a basis for award of the Invitation, ASPA may reject the same, and it shall thereupon become the duty of the Contractor to reclaim and remove the same forthwith without expense to ASPA, and immediately to replace all such rejected items with others conforming to said specifications; provided that should the Contractor fail, neglect or refuse to do so, ASPA shall thereupon have the right to purchase in the open market, at the then prevailing price, a corresponding quantity of any such items, and to deduct from any monies due or that may thereafter become due to the Contractor the difference between the price named in the contract and the actual cost thereof to ASPA. In addition and without limiting any other remedies available to ASPA, the Contractor shall be liable for all losses, costs and expenses incurred by ASPA.

Acceptance of items at destination shall not relieve the Contractor from the obligation to correct any incomplete, inaccurate, or defective deliveries in accordance with these General Conditions.

The time of delivery as set forth herein is an integral part of this Invitation and resulting contract. If Contractor fails to make delivery within the time established and agreed upon by both parties, ASPA may, at its option, declare the Contractor to be in default, and his Quotations and resulting contract to be null and void or ASPA shall charge the Contractor a fee of \$100 per day until the default has been remedied.

Contractors shall be excused from performing hereunder during the time and to the extent that they are prevented from obtaining, delivering, or performing in the customary way because of fire, strike, acts of God, partial or total interruption, providing it is satisfactorily established that the non-performance is not due to fault or negligence of the party not performing.

Offeror shall indicate in its Quotation the lead time for delivering the order to American Samoa.

ASPA shall be notified by the vendor if the product ordered cannot be delivered within the time period to give ASPA the opportunity to secure product elsewhere.

ASPA reserves the right to purchase products on open market if vendor cannot supply products within time specified in this contract.

#### **Prices**

All prices Quotation shall be firm and not subject to increase if accepted during the acceptance period. Quotations containing an "escalation clause" will not be considered unless specifically authorized by ASPA in the Invitation for Quotations.

For each item Quotation, a unit price and a total for the quantity must be stated. The unit price shall always control.

All prices shall be F.O.B. (Free On Board) destination. The seller hereunder must at his own expense and risk, transport the goods to the named place and there tender delivery.

#### **Product Guarantee**

Products sold under the contract must be guaranteed by the vendor.

Orders not filled and partials shall be indicated on the packing list. Vendor shall inform the Procurement Manager of anticipated delivery date for unfilled and partial orders.

#### **Return Policy**

Products can be returned for full credit within 30 days from the date of delivery. If an item is received damaged or defective, the vendor will replace the item at no charge. Should ASPA encounter a warranty/return issue, the product will be returned to the vendor for full credit or a replacement.

#### **Specifications**

All specifications included as a part of this Invitation are designed to set forth the level of quality and performance desired by ASPA, and is intended to be descriptive, not restrictive. Whenever any article, material, or equipment is described by use of a product or brand name, or by using the name of a manufacturer or vendor, the use of same is for informative purposes only, and the term "or equal" if not inserted, is implied.

Offerors may submit alternate offers on items they deem to be equal or superior in quality and performance to the specifications set forth. However, such offers must designate the manufacturer, brand or trade name, and model number of the items offered, and be accompanied by descriptive material in the form of literature, catalog cuts and specifications fully describing the items proposed, and detailing any deviations from the specification established by ASPA. Failure to provide this information will be at OFFEROR'S risk and may be cause for rejection of the items offered.

ASPA reserves the right to require such additional information, samples and, if practicable, demonstration of items offered as may be necessary to allow a full and complete evaluation of all Quotations. Samples and/or demonstrations will be supplied promptly and free of charge to ASPA. Failure to provide samples within a set of business days agreed upon by both parties may be grounds for Quotation rejection. Samples will upon request, and if not destroyed by testing, be returned at the OFFEROR'S expense.

The responsibility to determine the equivalence of quality and performance of any item offered to the specifications established for this Invitation rests solely with ASPA and its decision shall be final.

ASPA reserves the right to require such additional information, samples and, if practicable, demonstration of items.

#### Warranty

The Contractor warrants;

- that goods, supplies, materials, and equipment covered by this contract conform to the specifications, design, drawings, samples and other descriptions referred to in this contract;
- that such goods, supplies, materials, and equipment are free from defects in materials and workmanship, patent or latent; and

• that such goods, supplies, materials and equipment are fit for ordinary purposes for which they are used, and fit for such particular purposes as the Contractor has reason to know or should know.

### **Conflict of Interest**

No member, officer, or employee of ASPA during his/her tenure or for one year thereafter shall have any interest, direct or indirect, in any property included, or any contract for property, materials, or services to be furnished or used in connection with this contract or the proceeds thereof.

#### **Assignment**

The Contractor's obligation and duties under this contract shall not be assigned in whole or in part by the Contractor without the prior written approval of ASPA.

#### **Indemnification**

Contractor agrees to investigate, defend and hold ASPA harmless from and against any and all loss, damage, liability, claims, demands, detriments, cost, charges and expense (including attorney's fees), and causes of action of whatsoever character which ASPA may incur, sustain or be subjected to, arising out of or in any way connected to the services to be performed by Contractor or subcontractor under this Contract and arising from any cause, except the sole negligence of ASPA.

# ATTACHMENT A

# OFFEROR'S TRANSMITTAL FORM

Date:
AMERICAN SAMOA POWER AUTHORITY American Samoa Government
To Whom It May Concern:
The undersigned (hereafter called an Offeror),(Corporation, Partnership or Individual)
hereby proposes and agrees to furnish all the necessary information pertaining to:
RFQ NO. ASPA18.009.ESD-WTR SUPPLY AND DELIVERY OF VARIABLE FREQUENCY DRIVES (VFDs) AND MAG METER PROJECT
In accordance with the Scope of Purchase Proposal Form (Attachment F), General Terms and Conditions, the item Specifications and other procurement requirements specified in this document for the prices stated in the itemized proposal form(s) attached hereto, plus any and all sums to be added and/or deducted resulting from all extra and/or omitted work in accordance with the unit and/or lump sum prices stated in the itemized proposal form attached hereto.
The undersigned has read and understands the proposal requirements, and is familiar with and knowledgeable of the local conditions at the island-wide location(s) where the work is to be performed. The Offeror has read the RFQ Instructions and General Terms and Conditions attached to ascertain that all of the requirements (see boxes) of the Quotation are submitted in the Quotation envelope, with an original, one PDF electronic copy, and five (5) hard copies, at the date and time for Quotation opening. (See Page 6 of this document, "SPECIAL NOTICE TO PROSPECTIVE OFFERORS" to verify that all submittal requirement boxes have been checked).
Signed
Date

#### ATTACHMENT B

#### OFFEROR'S PROPOSAL FORM

In compliance with the above REQUEST FOR QUOTATIONS, the undersigned proposes to provide all materials in strict accordance with the General Conditions, General Requirements, Technical Specification Schedules,

Specifications for the <u>Supply and Delivery of Variable Frequency Drives (VFDs) and Mag Meter (SEE</u>

# MATERIALS AND EQUIPMENT SPECIFICATIONS)

ТО:	American Samoa Power Authority, Attn: Procurement Manager
ADDRESS:	PO Box PPB, Pago Pago, American Samoa96799
TITLE:	SUPPLY AND DELIVERY OF VARIABLE FREQUENCY DRIVES (VFDs) and MAG METERS
RFQ NO.:	RFQ NO. ASPA18.009.ESD-WTR
OFFEROR:	
DATE:	, 2017
Lead time must be listed	for the supply and delivery of VFDs and Mag Meters:

All blanks on the Quotation Form shall be typewritten or handwritten in blue or black ink.

Item	QTY	UNIT	DESCRIPTION	U/COST	AMOUNT
MECH	IANICAI	L EQUIPM	MENT AND MATERIALS		
1	1	EA	25 HP, Dansfoss VLT® Brand Aqua Drive Variable		
			Frequency Drive (VFD), 3X380 – 500 VAC,		
			IP66/NEMA 4X enclosure, 460 volts, Three (3) Phase,		
			60 hzAC with conformal coating, drive disconnect,		
			Modbus and MCB 109 advanced analog I/O with spare		
			fuses (packed of 3) – Vaipito Well # 183		
2	1	lot	2 year parts warranty		
3	1	EA	30 HP, Dansfoss VLT® Brand Aqua Drive Variable		
			Frequency Drive (VFD), 3X380 – 500 VAC,		
			IP66/NEMA 4X enclosure, 460 volts, Three (3) Phase,		
			60 hzAC with conformal coating, drive disconnect,		
			Modbus and MCB 109 advanced analog I/O with spare		
			fuses (packed of 3) – <b>Tafuna Well # 77</b>		
4		lot	2 year parts warranty		
5	4	EA	20 HP, Danfoss VLT® Brand Aqua Drive Variable		
			Frequency Drive (VFD), Single (1) Phase input and		
			Three (3) Phase output power supply, IP66/NEMA 4X		
			enclosure, 230 volts, 60 hzAC with conformal coating,		
			drive disconnect, Modbus and MCB 109 advanced		
			analog I/O with spare fuses (packed of 3) – Manua-		

			Tau Well # 213, 214, Afono Well # 176 & FMF Well		1
			# 181		
6		lot	2 year parts warranty		
7	4	EA	10 HP, Danfoss VLT® Brand Aqua Drive Variable		
			Frequency Drive (VFD), Single (1) Phase input and		
			Three (3) Phase output power supply, IP66/NEMA 4X		
			enclosure, 230 volts, 60 hzAC with conformal coating,		
			drive disconnect, Modbus and MCB 109 advanced		
			analog I/O with spare fuses (packed of 3) – <b>Masefao</b>		
			Well # 242 Ofu Well # 202		
8	1	lot	2 year parts warranty		
9	8	EA	5 HP, Danfoss VLT® Brand Aqua Drive Variable		
			Frequency Drive (VFD), Single (1) Phase input and		
			Three (3) Phase output power supply, IP66/NEMA 4X		
			enclosure, 230 volts, 60 hzAC with conformal coating,		
			drive disconnect, Modbus and MCB 109 advanced		
			analog I/O with spare fuses (packed of 3) – <b>Aasu Well</b>		
			# 128, Fagaitu'a Well # 164, Aoa # 152, Aunu'u		
			Well # 302 and Ofu Well # 203		
10	1	lot	2 year parts warranty		
11	3	EA	3 HP, Danfoss VLT® Brand Aqua Drive Variable		
			Frequency Drive (VFD), Single (1) Phase input and	Ť	
			Three (3) Phase output power supply, IP66/NEMA 4X		
			enclosure, 230 volts, 60 hzAC with conformal coating,		
			drive disconnect, Modbus and MCB 109 advanced		
			analog I/O with spare fuses (packed of 3) – <b>Fitiuta</b>		
			Well # 207, and Fagaalu Well # 179		
12	1	lot	2 year parts warranty		
13	4	EA	10 HP, Franklin submersible motor, Three (3) Phase,		
			230 volts, 60hzAC – <b>FMF Well # 181, Manua Well #</b>		
	ļ		213, 214 and Afono Well # 176		
14	3	EA	5 HP, Franklin submersible motor, Three (3) Phase,		
			230 volts, 60hzAC – Aasu Well # 128, Masefao Well		
1.7		-	# 242 and Ofu Well # 202		
15	4	EA	2 HP, Franklin submersible motor, Three (3) Phase,		
			230 volts, 60hzAC – Fagaitu'a Well # 164 , Aunu'u		
1.5			Well # 302 , Ofu Well # 203, Aoa Well # 152		
16	2	EA	1.5 HP, Franklin submersible motor, Three (3) Phase,		
			230 volts, 60hzAC – Fitiuta Well # 207 and Fagaalu		
17	10	TA	Well # 179		
17	10	EA	Danfoss compact pressure transducer, MBS3000, 0-		
			100 psi, pressure range, 4-20mA, 316SS wetted parts,		
10	1	EA	1/2"Ø connection – For ten (10) wells		
18	4	EA	4"Ø Series 80DI/SS VFD submersible pump		
			Flowmatic check valve, Female NPT with fusion epoxy		
			– Vaipito Well # 183, Tafuna Well # 77, FMF Well #		
10	1	CET	181 and Manua Well # 213		
19	4	SET	4"Ø MJK brand Mag Flux flow meter, 7200 sensor,		
			ANSI, 304 SS carbon steel flanges, 316 SS electrodes		
			with SCADA, ModBus, RS485, USB & Bluetooth		
			communication module Vaipito Well # 183, Tafuna		
20	1	CET	Well # 77, FMF Well # 181 and Manua Well # 213		
20	4	SET	MJK Mag Flux converter and display with wall		
			mounting housing (with sensor mounted connection		
	1	<u> </u>	board, 120 VAC) - <b>Vaipito Well # 183, Tafuna Well #</b>		

			77, FMF Well # 181 and Manua Well # 213		
21	4	SET	MJK flow sensor IP68/NEMA 6P, wall mounted		
			electronics, sensor cable and connection board -		
			Vaipito Well # 183, Tafuna Well # 77, FMF Well #		
			181 and Manua Well # 213		
22	4	EA	4"Ø 316SS grounding ring flange - Vaipito Well #		
			183, Tafuna Well # 77, FMF Well # 181 and Manua		
			Well # 213		
			Il costs such as, shipping, insurance and taxes and other costs of the Bid Documents.	st that may be	incurred to
Total Base Bid ( FOB/CIF ASPA Tafuna):					
		(1	Amount in Words)		
The Offe	eror shall	submit tog	ether with this bid all other resources, together with a corn	responding sc	hedule required

The Offeror shall submit together with this bid all other resources, together with a corresponding schedule required to complete the job. Bids without the foregoing will be considered non-responsive and may cause the rejection of the bid at ASPA's sole discretion. All blanks on the Bid Form shall be typewritten or handwritten in blue or black ink.

1. SUBCONTRACTORS. A list of intended subcontracting firms or businesses together with the type or description of the work to be subcontracted shall be attached to this Bid Form.

IN WITNESS THEREOF, the undersigned has caused this instrument to be executed by its duly authorized officers on this \_\_\_\_\_\_ day of \_\_\_\_\_\_\_2017.

OFFEROR:

Company:

Name:

Title:

# ATTACHMENT C MATERIALS AND EQUIPMENT SPECIFICATION

# **SUBMERSIBLE MOTOR**

The motor shall be of submersible induction type, non-rewindable, rated at 460 volts (for Three (3) Phase) and 230 volts (for Single (1) Phase input and Three (3) Phase power supply output) - as indicated on the operating requirements, 3450 rpm, 60 hertz AC. The motor shall be designed for continuous duty operation and shall have a minimum service factor of 1.10. The motor shall be water filled and shall incorporate a mechanical seal to restrict foreign matter from entering the motor. The thrust bearings shall be of ample capacity to carry the weight of all rotating parts plus the hydraulic thrust and shall be an integral part of the driver. It shall be equipped with expansion diaphragm to compensate for filling water expansion/contraction due to temperature changes.

**OPERATING REQUIREMENTS** – The VFD and Submersible Motor shall meet the following operating requirements: The Variable Frequency Drive (VFD) and the Submersible Motor shall be manufactured by Danfoss and Franklin respectively or ASPA approved equal.

Item	DESCRIPTION			
1	Variable Frequency Drive			
	(VFD) Motor Control,			
	Three (3) Phase, 460 volts,	30 HP	25 HP	
	60 hzAC			
2	Franklin Motor			
	Horsepower Rating, HP	NA	NA	
3	RPM	NA	NA	
4	Maximum diameter of			
	submersible motor	6 inches	6 inches	
5	Voltage Rating, Volts	460 V	460 V	
6	Phase / Hertz	Three (3)	Three (3)	
		Phase / 60	Phase / 60	

Item	DESCRIPTION				
1	Variable Frequency Drive				
	(VFD) Motor Control,				
	Single (1) Phase input and	20 HP	10 HP	5 HP	
	Three (3) Phase output				
	voltage, 230 volts, 60				
	hzAC				
2	Franklin Submersible				
	Motor Rating, Three (3)	10 HP	5 HP	2 HP & 3 HP	
	Phase, 230 volts, 60hzAC				
3	RPM	3450	3450	3450	

4	Maximum diameter of			
	submersible motor	6 inches	4 inches	4 inches
5	Voltage Rating, Volts	230 V	230 V	230 V
6	Phase / Hertz	Single (1)	Single (1)	Single (1)
		Phase Input -	Phase Input -	Phase Input -
		Three (3)	Three (3)	Three (3)
		Output	Output	Output Voltage
		Voltage / 60	Voltage / 60	/ 60 hzAC
		hzAC	hzAC	

Item	DESCRIPTION	
1	Variable Frequency Drive	
	(VFD) Motor Control,	
	single (1) phase input and	3 HP
	three (3) phase output	
	voltage, 2300 volts, 60	
	hzAC	
2	Franklin Submersible	
	Motor Rating, Three (3)	1-1/2 HP
	Phase, 230 volts, 60hzAC	
3	RPM	3450
4	Maximum diameter of	
	submersible motor	4 inches
5	Voltage Rating, Volts	230 V
6	Phase / Hertz	Single (1)
		Phase Input -
		Three (3)
		Output
		Voltage / 60
		hzAC

# VARIABLE FREQUENCY DRIVE (VFD) MOTOR CONTROL

# **VARIABLE FREQUENCY DRIVE (VFD)**

The Danfoss VLT Drive Variable Frequency Drive (VFD) shall be **IP66 / enclosed type NEMA 4X.** The Drive shall meet the following requirement listed below:

#### Main Supply:

# For Single (1) Phase Input and Three (3) Phase Output Power Supply:

Supply Voltage: 180 - 250 Volts, ± 10%

Supply Frequency: 60 hzAC
Displacement Power factor (cos Ø) near unity: (> 0.98)
Switching on Input Supply L1, L2: 1 - 2 times/min

Output Data (U, V)

Output Voltage: 0 - 100% of Supply

Switching on Output: Unlimited

Ramp Times: 1 - 3600 seconds Closed Loop: 0 - 132 Hz

For Three (3) Phase Power Supply:

Supply Voltage: 380 - 500 Volts, ± 10%

Supply Frequency: 60 hzAC
Displacement Power factor (cos Ø) near unity: (> 0.98)
Switching on Input Supply, L1, L2, L3: 1 - 2 times/min

Output Data (U, V, W)

Output Voltage: 0 - 100% of Supply

Switching on Output: Unlimited

Ramp Times: 1 - 3600 seconds Closed Loop: 0 - 132 Hz

**Digital Inputs** 

Programmable Digital Inputs: 6\*

Logic: PNP or NPN Voltage Level: 0 - 24 VDC

\* Two of the inputs can be used as digital outputs

**Analogue Reference Inputs** 

Analogue Inputs: 2

Modes: Voltage or Current

Voltage Level: -10 to + 10 V (scaleable)

Current Level: 0/4 to 20 mA (scaleable)

**Pulse Inputs** 

Programmable Pulse Input: 2

Voltage level: 0 - 24 VDC (PNP positive logic)

Pulse Input Accuracy: (0.1 - 110 kHz)

\* Two of the digital inputs can be used for pulse inputs

**Analogue Output** 

Programmable analogue outputs: 1

Current range @ analogue output: 0/4 - 20 mA

**Relay Outputs** 

Programmable relay outputs: (240 VAC, 2A & 400 VAC, 2A)

**Field Bus Communication** 

ModBus, RTU, ModBus TCP, BacNet, DeviceNet, ProfiBus, CanOpen, Ethernet and

Profinet, SCADA connection

**Temperature** 

Ambient Temperature: up to 55°C

**BUILT - IN PROTECTION** 

System Overload

Motor Failures

Motor & Drive overloading

Voltage Disturbances

**Power Surges** 

Loss of Phase

Phase to Phase and Phase to Ground Short Circuit

**Ground Fault** 

Switching on Input/Output Electrical disturbances

Over Voltage

**Over Current** 

Under Voltage External Fault Over Temperature

### **Compact Pressure Transducer**

Type: Danfoss MBS3000

Accuracy, max.: 1.00% Accuracy, typical 0.5%

Output signal type: 4 - 20 mA, 2 - wire transmitter

Operating temp.:

Process Connection:

Pressure Range:

Pressure unit reference:

- 40 to 185 °F

1/2" NPT, Male

0 - 7 Bar

Gauge (relative)

Response time, max. (ms) 4 ms

Pressure connection standard: ANSI/ASME B1.20.1

# **ELECTRO-MAGNETIC MAG METER**

#### SYSTEM DESCRIPTION

Sensors, signal processors, displays, hardware and wiring to produce flow indication, flow totals, data logging, flow trend lines, SCADA system communications, control I/O and alarm data along with transmitting a linear signal proportional to the current flow rate in the closed pipe location indicated in the plans.

The electromagnetic flow measurement system shall consist of a Flow Sensor which uses Faradays law of electromagnetic induction along with a microprocessor based Flow Converter and Display.

The flow meter shall have built in self-diagnostics, technician service functions and be suitable for use with the manufacturer's system certifying kit to confirm meter's sensor functions, accuracy of electronics including a calibration check of electronics at a zero flow and a mid-range flow rates, and for confirming all components meet factory specifications for accuracy and feature operation.

#### FLOW SENSOR

Construction: The sensor shall be produced from 304 stainless steel pipe, coils, 316L stainless steel electrodes and a hard rubber liner, soft rubber liner, or PTFE liner as required for compatibility with the media. The sensor shall have a stainless steel outer jacket or carbon steel outer jacket, carbon steel or stainless steel ANSI 150 psi or optionally ANSI 300 psi, ANSI Class D or ANSI Class E flanges. Carbon steel exterior components as well as the exterior of the flow tube shall be protected with two part epoxy coating for corrosion resistance.

Installation: A minimum of 3 pipe diameters up stream and 2 pipe diameters down stream of straight smooth pipe are recommended. (Consult Factory for any variations.)

- a. Flow Sensor Operating Temperature shall be: Media Temperature -25°C to 110°C (-13°F to +230°F), Ambient Temperature -30°C to 80°C (-22°F to +176°F).
- b. Flow Sensor Sizing shall conform to the manufacturer's sizing recommendations for the expected flow rates per the table below:

#### Flow Sensor Sizing

Min and	max flow:							
	Qmin:	Qmax:		Qmire	Qmax:		Qmint	Qmax:
See	0.6 fts	30 fts	Size:	0.6 fts	30 fts	Size:	0.6 fts	30 fts
	[gpm]	[gpm]		[gpm]	[gpm]		[gpm]	[gpm]
			%*	0.995	49.76	255	10.52	523.9
			1"	1.550	77.82	3"	15.03	796.0
			1%*	2.540	127.4	4"	24.87	1246
36*	0.001	4.45	155*	3.984	199.7	5"	38.92	1946
36"	0.550	28.0	2*	6.226	310.7	6"	55.91	2800
Min and	max flow:							
	Qmin:	Qmax:		Qmin:	Qmax:		Omin:	Qmax:
Size:	0.6 fts	30 fts	Size:	0.6 fts	30 fts	Size:	0.6 fts	30 fts
	[gpm]	[gpm]		[gpm]	[gpm]		[gpm]	[gpm]
8*	99.50	4070	18"	506.3	25210	36"	2017	100800
10*	155.4	7780	20"	620.8	31120	40"	2497	124500
12"	224.1	11206	24"	900.1	44010	48"	3584	179300
14"	305.1	15258	28"	1220	74020	20mA o	utput is fact	ory preset
16*	200 5	10010	225	1604	70620		to Omex	

- c. Flow Sensor shall be capable of being installed for permanent burial or submergence up to 30 ft. (IP 68/NEMA 6P) using manufacturer's submergence and waterproofing kits. Flow sensor shall be capable of temporary (30 minutes) submergence up to 3 ft. (IP 67) without a submergence kit.
- d. Flow Sensor shall be full bore internal diameter throughout to reduce liner erosion and reduce turbulence at high flow ranges.
- e. Flow Sensor shall be factory calibrated and wet tested to deliver ±0.25% reading accuracy for sizes from ¼ inch up to 12 inch diameters, and ±0.5% reading accuracy up from 14 inch to 20 inch diameters, ±1% reading accuracy from 24 inch to 40 inch diameters, and ±2% reading accuracy in sizes above 40 inches diameter. Accuracies will be NIST Traceable.
- f. Flow Sensor shall be delivered with a calibration certificate for verification of performance.
- g. The Flow Sensor shall have calibration and flow set up data marked on the sensor.
- h. No tools or instruments shall be required to enter or confirm calibration data during set-up.
- i. The Flow Sensor shall have no electronic components except the electrodes and coils.

- j. Flow Sensor shall be capable of operating in 100% humidity on a permanent basis with manufacturer's recommended gel potting.
- k. Flow sensor shall be capable of being mounted in at angles up to 45° from vertical around the centre axis of a horizontal pipe.
- 1. Flow Sensor shall be capable of being installed in any direction without regard to flow direction.
- m. The Flow Sensors 316L electrodes shall be lobed so as to create a scouring effect with flow through the tube.
- n. The Flow Sensor shall also include a grounding electrode to eliminate the need for grounding rings in wastewater applications (except when using non-conducting pipe).

# **FLOW CONVERTER**

- a. Flow Converter shall have an enclosure rating of IP 67 (NEMA 6).
- b. Flow Converter shall have a measurement accuracy of  $\pm 0.1\%$ .
- c. Flow Converter shall energize and detect signals generated at the flow Sensor electrodes and self-adjust frequency and amplitude to maximize accuracy across a wide range of flow velocities.
- d. Flow Converter shall include program for periodic self-cleaning off the Flow Sensor electrodes using cyclic reverse polarization systems to prevent material attachment and to detach plated materials.
- e. Flow Converter shall be capable of measuring fluid velocities in low 0 to 0.2m/S (0.6ft/sec.) and up to a maximum velocity up to 10m/s (30ft/sec).
- f. Maximum accuracies shall be achieved from 2% of the flow sensors maximum flow rate up through the sensors maximum flow rate.
- g. Flow Converter shall be a flow rate transmitter with a fully scaleable 4-20mA output proportional to all or part of the full-scale flow rate and capable of transmitting with a maximum line load of  $800~\Omega$ .
- h. The Flow Converter shall be capable of transmitting a 4-20mA output proportional to the flow in either direction, or 4-20 mA proportional to flow in both directions, selectable after installation.
- i. Flow Converter shall have one voltage free electromechanical relay rated for a maximum of 50VDC at 1 Amp one voltage free relay rated for 50VAC/VDC 120mA

- max. Both relays are programmable for totalizer counter output, batch counters, high/low flow alarm, system error, empty pipe alarm, and flow direction indication.
- j. The Flow Converter shall accept one external digital input rated at a maximum of 30VDC with a signal less than 5VDC registered as = 0 and a signal greater than 10 VDC as registered as = 1, minimum pulse length 100ms. Digital input can be used for reset of batch counters, start and stop batches or alarm acknowledgement.
- k. The Flow Converter shall be capable of reading flow in both directions and have three re-settable totalizers and three non-resettable totalizers capable of totalizing the total flow or net flow in both directions.
- 1. The Flow Converter shall have two batch counters utilizing dynamic adaptive batch counting to minimize under shooting and over shooting of batch volume by self-adjusting the batch cycle based on actual batch size measurement results.
- m. Flow Converter shall have a MODBUS RTU-mode for control and communication using either the MJK MagFlux Display unit or for communication with a PLC. The manufacturer shall supply a document with the list of program registers upon request.
- n. Flow Converter shall use an RS 485 communication interface capable of transmitting up to 3000 ft. the controls and data in the MODBUS RTU mode to a PLC or MJK Display Unit.
- o. Flow Converter shall be capable of operating without a display, with a remote display, with an integral display or as a member of a group of two to four converters working from a single display.
- p. Flow converter shall be capable of being operated remote to the Flow Sensor.
- q. Converter shall have CE conformance for radio signal input and output immunity.
- r. Flow converter shall have user adjustable low flow cut off for automatic zeroing of flow rate, totalizing and mA output. No external switching shall be required to achieve zero flow.
- t. Flow Converter dimensions with cover or display unit attached shall not exceed 6.4" W x 5.9"H x 3.5"D.
- u. Flow Converter and must be capable of interchanging with any other flow sensor from the same manufacturer, without the use of electronic memory media exchange.
- v. Flow Converter must be capable of being remote mounted up to 150 ft from the flow sensor and require only one set of communication cabling to the sensor for operation.

#### **DISPLAY UNIT**

- a. Display Unit shall be a white dot matrix 64 x128 pixel graphic backlit display.
- b. Display Unit shall allow up to four lines of customizable text with automatic font scaling allowing maximum size up to ½ an inch for the primary measurement parameter.
- c. Display Unit shall indicate flow, flow direction, volume, totalizers, configuration, and set-up operations in plain English text.
- d. The Display Unit shall display a graphical trend line of the flow history which can be expanded to show greater detail down to 5 minutes increments of flow rates.
- e. The Display Unit shall collect 160,000 flow data points with date and time at user specified time intervals, and data log daily flow totals.
- f. The Display Unit shall communicate with the Flow Converter using a MODBUS RTU mode using RS485 communications on standard twisted wires for distances up to 3000 ft.
- g. The Display Unit shall be capable of controlling, configuring, and data logging for up to four Flow Converters and flow sensors at the same time with simultaneous displays of measurements.
- h. The Display unit shall also have options for Modbus or Profibus data transmission in addition to the Converter communications modes.
- i. The Display Unit shall hold all settings in a flash memory in the event of a power outage. Battery back-up is not acceptable.
- j. The Display Unit shall have a USB port for connection or options for Blue Tooth communication to a personal computer for downloading data in CSV file types suitable for use with commonly available spreadsheet and data management software. The USB port shall also be capable of letting the operator store all flow meter settings as a file on a PC, configure the flow meter converter from a PC, upload software updates, and upload standard configurations.
- k. The Display Unit shall be able to be remote mounted up to 3000 feet from Flow Converters.
- 1. The Display Unit shall have four keypad buttons for configuration and operation by the user and for use as a digital input for control.
- m. The Display unit shall be capable of showing 'pop-up' alarm messages which shall persist as long as the alarm condition exists and will disappear 5 minutes after alarm stops.

#### **MATERIALS**

- 1. All instruments and sensors shall be supplied by one manufacturer to ensure consistent fit and system-wide functioning.
- 2. Provide:
- a. Flow Sensor compatible with flow rate and media.
- b. Flow Converter capable of converting conductive liquid velocity signal into flow rate and transmitting proportional signal, totalizing signal and relay signals.
- c. Display Unit capable of displaying all measurements and set-up functions, and capable of providing data logging functions and program uploads.
- d. Provide MJK MagFlux Electromagnetic Flow Meter System and recommended spare parts.
- e. Calibration shall be by registering the Flow Sensor's serial number to the Flow Converter by keying it into the Display Unit. Use of memory chips or other electronic media for this purpose is not allowed.
- 2. System shall start-up and accurately measure immediately after Flow Sensor registration.
- a. Operator shall use the integral keypad on the Display unit to program relays for error alarms, limit alarms, totalizer output, batch control output, digital inputs and all operating parameters and variables.
- b. Operator shall use an alarm re-set to manually cancel alarm messages.
- c. The flow meter shall have built in self-diagnostics, technician service functions and be suitable for use with a system certifying kit to confirm meter's sensor functions and accuracy of electronics including a calibration check of electronics at a zero flow and a mid-range flow rate for confirming all components meet factory specifications for accuracy and feature operation.
- 3. Warranty
- a. The Vendor or manufacturer of the electro magnetic mag meter shall guarantee for two (2) years of operation that the equipment shall be free from defects in design, materials and workmanship.

Vendor shall, at no cost to the owner, repair or replace any component that is proven to have failed during the warranty period due to a manufacturing defect

### ATTACHMENT D

#### OFFEROR'S QUALIFICATION SHEET

(Please Print or Type and Complete All Sections. An incomplete section will be considered

Non-responsive. Use additional sheets if necessary.) 1. Name of Offeror 2. Name of Official Representative \_\_\_\_\_ 3. Business Address/e-mail 4. Telephone, Fax and Official Contact Person 5. Type of Business Structure (Please check) Corporation Partnership Joint Venture Proprietorship NOTE: Corporations must complete the recordation of their Articles of Incorporation, which is evidenced by the Certificate of Incorporation issued by the Treasurer of the American Samoa Government. Copies of partnership agreements and articles of incorporation should be submitted to the Revenue Branch along with this application form and relevant documents. Aliens cannot operate sole ownership enterprises, and partnerships with aliens are subject to review by the Immigration Board. Number of years the Offeror has been engaged in its current company business under the present firm name 6. indicated \_\_\_\_\_ 7. Type of work generally performed by Offeror 8. List all major projects of a similar nature to the purchase delivery of RFQ NO. ASPA18.009.ESD-WTR SUPPLY AND DELIVERY OF VARIABLE FREQUENCY DRIVES (VFDS) AND MAG METER, which have been completed by the Offeror within the last three years, the total dollar amount of each project and the owner/contact person as a reference (attach additional sheets as necessary). Order Name Date Completed \_\_\_\_\_Total Order Cost \$\_\_\_\_ Name of Owner\_\_\_\_ Owner's phone number Order Name \_\_\_ Date Completed\_\_\_\_\_Total Order Cost \$\_\_\_\_ Name of Owner Owner's phone number\_\_\_\_\_ ATTACHMENT E

# DISCLOSURE STATEMENTS

This	form must be completed	by all Offerors and submitted with	the Quotation.	
I			(Name of owner or	
partne the at	er- all partners must cortached Quotation:	nplete a form) of	, the Offeror that has submit	ited
	(Name of company)			
	(Complete one of the	e two following statements)		
1.	I <b>have no</b> immediate Samoa Power Autho		ngs) who are currently employed by the Ameri	can
		(Title)	(Sign	ed)
2.	I have immediate rel	atives (parents, children or siblings)	who are currently employed by ASPA.	
	Their names and pos	itions in are as follows.		
	Name	Relationship to Offeror	Position in ASPA	
	(Signed)	(Title)		

Note: It is <u>not</u> against ASPA procurement rules for the relatives of ASPA employees to Quote on and receive government contracts provided they disclose such relationships at the time of Quotation Opening.

# ATTACHMENT F

# NON-COLLUSION AFFIDAVIT OF PRIME OFFEROR

being first duly sworn deposes and says that:					
1. Repr	He/She isesentative or Agent) of			(Owner, Feror that has submitted	Partner,
	tation.				
2. circu	He is fully informed regarding mustances regarding such Quotation		and contents of the atta	ched Quotation and of	f all pertinent
3.	Such Quotation is genuine and	l is not a collusive	or false Quotation.		
indir Cont such conf agree Cont	Neither the said Offeror nor es in interest, including this affi ectly with any other Offeror, firm ract for which the attached Quota Contract, or has in any manner, of erence with any other Offeror, ement any advantage against Am ract; and  The price or price Quotations asion, conspiracy, connivance or esentatives, owners, employees, or	ant, has in any we nor person to substitution has been submidirectly or indirectly or to secure through the secure and a power in the attached (a unlawful agreem)	vay colluded, conspired mit a collusive or false mitted or to refrain from ly, sought by agreemen ugh any collusion, co wer Authority or any Quotation are fair and ment on the part of the	d, connived or agreed e Quotation in connect in Quotationding in con- t or collusion or com- inspiracy, connivance person interested in proper, and are not ta	d, directly or ction with the nnection with nunication or or unlawful the proposed
	(Signed)				
	(Title)				
Subs	cribed and sworn to before me				
This	da	y of	, 2017		
	(Signed)	(Title)			
Му (	Commission expires on:				