MR 73/2018

TENDER FOR SUPPLY OF ELECTRIC ARC FLASH PROTECTIVE CLOTHING

FIJI ELECTRICITY AUTHORITY

REVISION HISTORY & DOCUMENT CONTROL

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1. INTRODUCTION AND SCOPE OF WORK

Fiji Electricity Authority (FEA) is responsible for generation, transmission and distribution of electricity in Viti Levu, Vanua Levu, Ovalau and Tavueni in Fiji. By the end of 2016, the FEA had 174,530 customers. This included residential, commercial and institutional customers.

FEA is seeking tender bids from reputable manufactures and suppliers for the supply of Electric Arc Flash Protective Clothing as required for safe Switch Gear Operation in its Distribution Network.

The Electric Arc Flash Protective Clothing shall include the following:

a) **Coat** : *Torso and Sleeves protection*

b) **Bib Overalls** : *Leg protection*

c) **Hood** : *Face protection*

d) **Arc Rated Glove** : *Hand protection*

e) **Carry Bag** : *For Kit*

All supplied Electric Arc Flash Protective Clothing must be manufactured and tested to the standards outlined in these specifications.

The tenderer shall state any non-compliance with the specification in the tender submission using the forms in the Appendix. FEA reserves its right to accept or reject any non-compliance.

The Sizes and Quantity require for the Electric Arc Flash Protective Coating is a follows:

Description	Size	Quantity
Electric Arc Flash Protective Clothing Kit (Coat, Bib Overalls, Hood, Arc Rated Gloves and Carry Bag)	Medium	7
	Large	12
	Extra Large	11
	2XL	7
	3XL	8

2. INSTRUCTION TO BIDDERS

2.1. Definitions

a) "**The Purchaser**" or **"Buyer"** means the Fiji Electricity Authority. Herein referred to as FEA.

b) **"The Bidder or tenderer**" means the individual or firm who participates in this Tender and submits its bid.

c) "**The Contractor/Supplier"** means the individual or firm supplying the goods under the contract.

d) **"The Goods**" means all the equipment, machinery, and/or other materials which the bidder is required to supply to the Purchaser under the contract.

e) **"The Purchase Order" /"Work order"** means the order placed by the Purchaser on the supplier signed by the Purchaser including all attachments and appendices thereto and all documents incorporated by reference therein. The purchase order shall be deemed as **"Contract"** appearing in the document.

f) **"The Contract Price"** means the price payable to the Supplier under the purchase order for the full and proper performance of its contractual obligations.

2.2. Eligible Bidders

The invitation is open to all Bidders who have sound Financial Background, and have previous experience in design, manufacture and supply of Electric Arc Flash Protective Clothing.

Bidders shall provide such evidences of their continued eligibility satisfactory to FEA as FEA shall reasonably request. Bidders who are not manufacturers of Electric Arc Flash Protective Clothing shall provide evidence of agency.

Bidders shall not be under a declaration of ineligibility for corrupt or fraudulent practice.

2.3. Bid Document

Bidding documents should be submitted in the enclosed form. All the pages of Bidding document should be signed by the Bidder.

Sealed original Bidding document may be deposited in the tender box provided for the purpose in the office up to anytime from 8am to 4:30pm Monday to Thursday and 8am to 4:00pm Friday Fiji time.

The bidder is expected to examine carefully the contents of this Bidding document. Failure to comply with the requirements of bid submission will be at the bidder's own risk. Bids which are not substantially responsive to the requirements of the bidding documents will be rejected.

2.4. Clarification of Bidding Document

A prospective bidder requiring any clarification of the bidding documents may notify FEA in written by fax (hereinafter the term "fax" is deemed to include electronic transmission such as facsimile, cable and telex), or email address to:

Tuvitu Delairewa
General Manager Corporate Services
2 Marlo Street, Suva, Fiji.
Phone: 679 3224 185
Facsimile: 679 331 1882
Email: TuvituD@fea.com.fj

FEA will respond to any request for clarification which it receives earlier than 10 days prior to the deadline for submission of bids.

2.5. Amendment of Bidding Document

At any time prior to the deadline for submission of bids, FEA may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the bidding documents by issuing addenda.

2.6. Language of Bid

The bid, and all correspondence and documents related to the bid, exchange between the bidder and the FEA shall be written in the English language.

2.7. One Bid Per Bidder

Each bidder shall submit only one bid. A bidder who submits or participates in more than one bid will cause all those bids to be rejected.

2.8. Cost of Bidding

The bidder shall bear all costs associated with the preparation and submission of its bids and FEA will in no case be responsible or liable for those costs.

2.9. Bid Prices

Unless specified otherwise, Bidders shall quote for the entire facilities on a "single responsibility" basis such that the total bid price covers all the Supplier's obligation mentioned in or to be reasonably inferred from the bidding documents in respect of the design, manufacture, including procurement and subcontracting (if any), testing and delivery.

Bidders shall give a breakdown of the prices in the manner and detail called for in this bidding document, or any issued addenda.

The rates quoted should remain current for a maximum period of 150 days from the date of acceptance of the tender. "DISCOUNT, if any offered by the bidders shall not be considered unless they are specifically indicated in the price schedule. Bidders desiring to offer discount shall therefore modify their offers suitably while quoting and shall quote clearly net price taking all such factors like Discount, free Installation, etc. into account". The point of delivery shall be FEA's Navutu Depot in Lautoka.

The bidder shall clearly indicate the quoted price whether its VIP or VEP. Bidders are also required to indicate mode of transportation and who is responsible for the transportation cost.

Prices shall be quoted in a single currency only.

2.10. Format and Signing of Bids

The bidder shall prepare one original and one copy of the technical and financial proposals clearly marking each one as: "ORIGINAL-TECHNICAL & PRICE PROPOSAL", "COPY NO. 1 – TECHNICAL & PRICE PROPOSAL", etc. as appropriate. In the event of discrepancy between the original and any copy, the original shall prevail.

The original and all copies of the bid shall be typed or written in indelible ink (in the case of copies, Photostats are also acceptable) and shall be signed by a person or persons duly authorized to sign on behalf of the bidder. All pages of the bid where entries or amendments have been made shall be initialled by the person or persons signing the bid.

The bid shall contain no alterations, omissions or additions, except those to comply with instructions issued by FEA, or as necessary to correct errors made by the bidder, in which case such corrections shall be initialled by the person or persons signing the bid.

2.11. Sealing and Marking of Bids

The bidder shall seal the original copy of the technical proposals and the original copy of the price proposals and each copy of the technical proposals and each copy of the price proposal in separate envelops clearly marking each one as: "ORIGINAL-TECHNICAL & PRICE PROPOSAL", "COPY NO. 1 – TECHNICAL & PRICE PROPOSAL", etc. as appropriate.

The bidder shall seal the original bids and each copy of the bids in an inner and outer envelope, duly marking the envelopes as “ORIGINAL”, “COPY NO. 1”, etc.

The inner and outer envelopes shall:

a) Be addressed to FEA at the following address

   Tuvitu Delairewa

   General Manager Corporate Services

   2 Marlow Street, Suva, Fiji.

   Phone: 679 3224 185

   Facsimile: 679 331 1882

   Email: TuvituD@fea.com.fj

   And

b) bear the following identification:

   - Bid for: TENDER FOR SUPPLY OF ELECTRIC ARC FLASH PROTECTIVE CLOTHING BID Tender Number: **MR 73/2018**
   - DO NOT OPEN BEFORE: 1600 hours (Fiji Time), **22nd March, 2018.**

In addition to the identification required, the inner envelope shall indicate the name and address of the bidder to enable the bid to be returned unopened in case it is declared “late” pursuant to Deadline for Submission of Bids.

If the outer envelope is not sealed and marked as above, FEA will assume no responsibility for the misplacement or premature opening of the bid.

2.12. Deadline for Submission of Bids

Bids must be received by FEA at the address specified above no later than 1600 hours (Fiji Time), **Wednesday 21st March, 2018**.

FEA may, at its discretion, extend the deadline for submission of bids by issuing an addendum, in which case all rights and obligations of FEA and the bidders previously subject to the original deadline will thereafter be subjected to the deadline extended.

2.13. Late Bids

Any bids received by FEA after the deadline for submission of bids prescribed above will be rejected and returned unopened to the bidder.

2.14. Modification and Withdrawal of Bids

The bidder may modify or withdraw its bid after bid submission, provided that written notice of the modification or withdrawal is received by FEA prior to the deadline for submission of bids.

The bidder’s modification or withdrawal notice shall be prepared, sealed, marked and delivered in accordance with Sealing and Marking of Bids, with the outer and inner envelopes additionally

marked “MODIFICATION’ or “WITHDRAWAL”, as appropriate. A withdrawal notice may also be sent by fax but must be followed by a signed confirmation copy.

No bid may be modified by the bidder after the deadline for submission of bids.

2.15. Rejection of One or All Bids

FEA reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids, at any time prior to award of Contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the ground for the rejection.

2.16. Process to be Confidential

Information relating to the examination, clarification, evaluation and comparison of bids and recommendations for the award of a contract shall not be disclosed to bidders or any other persons not officially concerned with such process. Any effort by a bidder to influence FEA’s processing of bids or award decisions may results in the rejection of the bidder’s bid.

2.17. Clarification of Bids

To assist in the examination, evaluation and comparison of bids, FEA may, at its discretion, ask any bidder for clarification of its bid. The request for clarification and the response shall be in writing or by fax, but no change in the prices or substance of the bid shall be sought, offered or permitted except as required to confirm the correction of arithmetic errors discovered by FEA in the evaluation of the bids in.

3. GENERAL CONDITION OF CONTRACT

The General Conditions of Contract shall be based upon AS 4911 – 2003 General conditions of contract for the supply of equipment without installation.

The Conditions of Contract comprise two parts;

1. Part 1 – General Conditions; and
2. Part 2 – Conditions of Particular Application

4. REFERENCES

4.1. Applicable Standards

The Electric Arc Flash Protective Clothing supplied shall be in accordance with the latest edition of the Standards specified below and all amendments issued prior to the date of closing of tenders except where varied by this specification.

ASTM F 1506	*Standard Performance Specification for Flame Resistant Textile Materials for Wearing Apparel for Use by Electrical Workers Exposed to Momentary Electric Arc and Related Thermal Hazards*
ASTM F-1959	*Standard Test Method for Determining the Arc Rating of Materials for Clothing*
NFPA 70E	*Hazard Risk Category 4*

4.2. Applicable Laws

The supplier warrants (without limiting any other warranties or conditions implied by law) that all goods have been produced, sold and delivered to FEA in compliance with all applicable laws (including all workplace health and safety and electrical safety legislations and codes of conduct).

5. ENVIRONMENTAL CONDITIONS

The Electric Arc Flash Clothing will be exposed to the following environmental conditions:

Description		Conditions
Temperature	:	Peak: 40°C
	:	24 Hour Average: 30°C
	:	Annual Average: 22°C
Relative Humidity	:	90%

6. TECHNICAL REQUIREMENTS

6.1. Electric Arc Flash Protective Clothing Design

The Electric Arc Flash Protective Clothing shall be designed in accordance with ASTM F 1506 and be designed to give maximum protection against thermal of an electrical arc. All layer of the Arc protection clothing shall be made of inherently flame resistant material.

The garments used for Arc Protective Clothing must be sewn with inherently flame resistant thread of same rating as the garment. The front, back, legs and sleeves must be of same arc rated material.

The Fabric used for the Electric Arc Flash Protection Clothing shall be aramid fabric. The Arc protection Clothing must have no exposed external or internal metal or melting parts. The weight of the fabric used should not be more than 510 grm/m² and shall be machine washable.

6.2. Protective Coat

The Protective Coat shall have an Arc Thermal Performance Value (ATPV) of not less than 40 cal/cm². The Protective Coat zipper shall be of high temperature plastic and must be of inherently FR material. There shall be no metallic zip throughout the Coat

6.3. Protective Bib Overalls

The Bib Overalls shall have an Arc Thermal Performance Value (ATPV) of not less than 40 cal/cm² and shall cover the occupant form waist to toe.

6.4. Protective Hood

The Protective Hood shall have an Arc Thermal Performance Value (ATPV) of not less than 40 cal/cm² and shall have a facility for sufficient air flow for breathing and adequate visibility. The visor shall be True Colour recognition with high visibility.

6.5. Protective Glove

The Protective Glove shall have an Arc Thermal Performance Value (ATPV) of not less than 40 cal/cm^2 and shall have a large protective cuff. The Protective Glove Shall be of Class 4 and suitable for operation on voltage levels of at least 36kV.

6.6. Carry Bag

The Protective Clothing shall be provided with a suitable carry bag.

6.7. Workmanship

The Eelectric Arc Protective Clothing shall be manufactured with workmanship of the highest quality throughout and shall be free from defects that affect the appearance, efficiency or serviceability.

The Electric Arc Flash Protective Clothing shall show no sign of marks, spots or stains incurred during manufacture.

6.8. Labelling

The Arc protection suit label has to show the Arc Thermal Protective Value (ATPV) or class on the garment. More detailed information about suit with higher protection may be given in the manufacturer's instruction of use.

7. INSPECTION AND TESTING

The Bidder shall provide detailed test certification proving the arc flash performance of both the material offered and the electric arc protective clothing at the specified minimum arc rating.

The Protective Clothing shall be tested in accordance with ASTM F-1959 and shall meet NFPA 70E requirements.

Bidders are required to provide test certificates as evidence for compliance to relevant standards.

8. RELIABILITY

Bidders are required to comment on the reliability of the items supplied under the specified environmental conditions in clause 5.

Bidders shall provide evidences in support of the reliability and performance claimed.

9. ENVIRONMENTAL CONSIDERATIONS

Supplier are required to comment on the environmental soundness of the design and the material used in the manufacture of the items offered. In particular, comments should address such issues as recyclability and disposability at the end of service life

10. PACKAGING AND MARKING

The packaging of items by the supplier must ensure that they are capable of being delivered undamaged giving due consideration to the quantity, distance of transportation and the preferred method of handling at each location.

The supplier shall take all necessary precautions to ensure safe handling of the items supplied.

11. QUALITY REQUIREMENTS

Supplier are required to submit evidence that the design, manufacture and testing of the Electric Arc Flash Protective Clothing is in accordance within a quality framework. In particular, comments should address such issues as recyclability and disposability at the end of service life.

12. INFROMATION TO BE PROVIDED

The supplier is required to supply the following:

- Complete Specific Technical Requirement (Appendix A)
- Departure from Specifications (Appendix B)
- Relevant performance certificate with regard to quality of design and manufacture of the Electric Arc Flash Protective Clothing items
- Constructional feature of material used and relevant technical literature
- All relevant test certificates
- List showing similar equipment supplied to or on order for other utilities
- Evidence of quality management systems

Suppliers may be asked to provide additional information during tender assessment period or following award of contact.

APPENDIX A: SPECIFIC TECHNICAL REQUIREMENT

	Item	Required	Tendered
1	**Name of Manufacturer**		
2	**Manufacturer's Address**		
3	**Country of Origin**		
4	**Arc Flash Protection Items**		
	AFP Coat (Yes/No)	Yes	
	AFP Coat ATPV (cal/cm²)	40 cal/cm² or more	
	AFP Bib Overall (Yes/No)	Yes	
	AFP Bib Overall ATPV (cal/cm²)	40 cal/cm² or more	
	AFP Hood (yes/No)	Yes	
	AFP Hood ATPV (cal/cm²)	40 cal/cm² or more	
	AFP Gloves (Yes/No)	Yes	
	AFP Gloves ATPV (cal/cm²)	40 cal/cm² or more	
	Carry Bag (Yes/No)	Yes	
5	**AFP Fabric Details**		
	Fabric Type	Aramid fabric	
	Weight of Fabric (grm/m²)	510 grm/m² or Less	
	Heat attenuation factor	Not Specified	
	Colour Available	Not Specified	
	Size available	M, L, Xl, 2XL, 3XL	
	Confirm to NFPA 70E	Yes	
	Other information if any	Not Specified	
6	**AFP Hood**		
	Fabric Type	Not Specified	
	Weight	Not Specified	

	Confirm Standard	Not Specified	
7	**AFP Glove**		
	Rated Voltage (kV)	36 kV minimum	
	Material Used	Not Specified	
	Size	16” to 18”	
	Confirm to which Standards	Not Specified	
8	**Expected life of Flash Resistant Clothing**	**Not Specified**	
9	**Guarantee Period**	**Not Specified**	

APPENDIX B: DEPARTURE FROM SPECIFICATIONS

The supplier shall nominate the Clause or relevant section of the tender specification and describe the departure.

Tender Specification Reference	**Departure**

Note: Where possible, the Tender shall refer to the specific clause of the tender specification.

Tender Submission - Instruction to bidders

It is mandatory for Bidders to upload a copy of their bid in the **TENDER LINK** Electronic Tender Box no later than **4:00pm, on Wednesday 21st March, 2018**

To register your interest and tender a response, view 'Current Tenders' at:
https://www.tenderlink.com/fea

For further information contact The Secretary Tender Committee, by e-mail
TDelairewa@fea.com.fj

In additional, hard copies of the tender, one original and one copy must be deposited in the tender box located at the FEA Head Office, 2 Marlow Street, Suva, Fiji no later than **4:00pm, on Wednesday 21st March, 2018 -** Addressed as

Tender – MR 73/2018 Supply of Electric Arc Flash Protective Clothing

The Secretary Tender Committee
Fiji Electricity Authority
Head Office
Suva
Fiji

- **Hard copies of the Tender bid will also be accepted after the closing date and time provided a soft copy is uploaded in the e-Tender Box and hard copy is dispatched to courier before the closing date and time. Please note courier submission date should be forwarded to FEA with your bid.**

Tenders received after **4:00pm** on the closing date of **Wednesday 21st March, 2018**

- will not be considered.
- Lowest bid will not necessarily be accepted as successful bid
- **It is the responsibility of the bidder to pay courier chargers and all other cost associated with the delivery of the hard copy of the Tender submission including any Duties/Taxes. Hard copies of the Tender submission via Post Box will not be considered.**