



एनएचपीसी लिमिटेड
NHPC LIMITED

(A GOVT. OF INDIA ENTERPRISE)
IS/ISO-9001:2015, IS 14001:2015,
IS 45001:2018 Certified Company
CIN-L40101HR1975GOI032564

Office of Senior Manager
Cont. & Proc. Division.
Sewa-II Power station, Mashka
Tehsil- Basohli, Distt: Kathua (J&K)
Postal Add: P.O: Khairi
Distt: Chamba- 176 325 (H.P)
FAX: 01899-263355
Email: sewa-ii-cont@nhpc.nic.in

अवार्ड पत्र / Letter of Award

Category: MSME-Small

सं० : एनएच/सेवा-II/संविदा/EW-583/2023-24/ अ०प०-32/175

दिनांक:- 21.11.2023

No. NH/Sewa-II/Cont./EW-583/2023-24/LOA No.-32/175

Dated :- 21.11.2023

मैसर्स एटीसी इंजीनियरिंग सिस्टम्स प्राइवेट लिमिटेड,
ई-128, सेक्टर-63, नोएडा (यूपी)

M/s ATC ENGINEERING SYSTEMS PVT. Ltd.
E-128, SECTOR-63, NOIDA (U.P.)-201301
Email ID: pawanydv.atc@gmail.com

विषय: Up-gradation of Automatic Reservoir Monitoring and Control (ARMAC) System at Dam complex of Sewa-II Power Station (EW-583).

संदर्भ: i) GEM Bid No. GEM/2023/B/3692614 Dated 27.07.2023

ii) Contract No: GEMC-511687742302921 Dated 21/11/2023

ii) Your Technical Bid opened on dated 13.09.2023 & Price Bid opened on 30.10.2023;

महोदय,

उपरोक्त के संदर्भ में, हमें " **Up-gradation of Automatic Reservoir Monitoring and Control (ARMAC) System at Dam complex of Sewa-II Power Station (EW-583)**" के कार्य के लिए अनुलग्नक-I के अनुसार, कुल संविदा राशि रुपये 76,72,500/- (रुपये छहत्तर लाख बहत्तर हजार पांच सौ मात्र) सभी टैक्स सहित एवं निविदा दस्तावेज़ में उपलब्ध कार्य का विवरण, विशेष नियम एवं शर्तें, तकनीकी विनिर्देश, ड्राइंग एवं मात्रा के बिल के साथ अवार्ड पत्र आपको देते हुए हर्ष हो रहा है। मात्रा एवं मूल्य की सारणी, अनुलग्नक-I के रूप में संलग्न है। नियम एवं शर्तें निम्न के अनुसार होंगी:-

With reference to above, we are pleased to place the order on you for "**Up-gradation of Automatic Reservoir Monitoring and Control (ARMAC) System at Dam complex of Sewa-II Power Station (EW-583)**" at a total Contract price of Rs. 76,72,500/- (Rupees Seventy Six Lakh Seventy Two Thousand Five Hundred Only) inclusive of all taxes and as per Scope of Work, SCC, Technical Specification, Drawing & BOQ of tender document. The Schedule of Quantity and Prices shall be as per Annexure-I. The terms and conditions shall be as under:

नियम व शर्तें/ TERMS & CONDITIONS :-

यहां उल्लिखित नियम और शर्तें निविदा दस्तावेज़ के सामान्य नियम और शर्तें और एससीसी के साथ पढ़ी जाएंगी। किसी भी विवाद की स्थिति में, एससीसी प्रबल होगी।

The terms and conditions mentioned hereunder shall be read in conjunction with the General Terms & Condition and SCC of tender document. In case of any dispute, the SCC shall prevail.

1. पूर्णता अवधि :-उक्त कार्य को निर्धारित पूर्णता अवधि 18 जून 2024 तक पूरा किया जाना है।

Completion period: work is to be completed by the scheduled completion period of 18 June 2024.

2. आयकर या किसी अन्य वैधानिक देनदारियों की कटौती वास्तविक के अनुसार की जाएगी।

Income tax or any other statutory liabilities shall be deducted as per actual.

3. आपसे निम्नलिखित दस्तावेज जमा करने का अनुरोध किया जाता है:-

You are requested to submit the followings documents:-

- i. जम्मू-कश्मीर के 100/- रुपये मूल्य के गैर-न्यायिक स्टाम्प पेपर पर अनुबंध समझौते के 03 सेट विधिवत हस्ताक्षरित, अवार्ड पत्र जारी होने की तारीख से 30 दिनों के भीतर जमा करना है। अनुबंध की 01 प्रति हस्ताक्षर के बाद ठेकेदार को वापस कर दी जाएगी। निर्धारित समय के अंदर स्टाम्प पेपर जमा नहीं किए जाने पर शुल्क रु. 500/- प्रति दिन, अधिकतम रु. 5000/- (केवल पांच हजार रुपये) लगाया जाएगा। अनुबंध की 01 प्रति हस्ताक्षर के बाद ठेकेदार को वापस कर दी जाएगी।

Duly signed 03 Sets of Contract Agreement on Non judicial stamp paper worth Rs.100/- of J&K State to be submitted within 30 days from the date of issue of LOA. 01 copy of Contract agreement shall be return to the contractor after signature, failing which charges of Rs. 500/- per day subject to maximum Rs. 5000/- (Rs. Five Thousand only) shall be levied.

- ii. अवार्ड पत्र जारी होने की तारीख से 28 दिनों के भीतर, निष्पादन सुरक्षा/सुरक्षा जमा राशि 7,67,250/- रुपये ठेकेदार के द्वारा जमा करना आवश्यक है। यदि ठेकेदार किसी वैध कारण के बिना, अपेक्षित निष्पादन सुरक्षा जमा नहीं करता है, तो नियोक्ता निष्पादन सुरक्षा जमा करने में विलंब की अवधि के लिए लागू निष्पादन सुरक्षा की पूरी राशि (लागू करों के साथ, यदि कोई हो) पर 12% प्रति वर्ष की दर से साधारण ब्याज लगाएगा।

DD/BC amounting to Rs. 7,67,250/- only towards Performance Security / Security Deposit need to be submitted within 28 days from the date of issue of LOA. In case, the contractor does not submit performance security without a valid reason, the Employer shall impose simple interest @ 12% per annum on the full amount of applicable performance security (along-with applicable taxes, if any) for the period of delay in submission of performance security.

4. कार्य के निष्पादन और विनियमन के लिए "GeM 4.0 (संस्करण 1.9) दिनांक 31 मार्च 2023 की सामान्य नियम और शर्तें" लागू होंगी।

For execution and regulating the work "General Terms & Condition on GeM 4.0(Version 1.9) dated 31 March 2023 shall be applicable.

5. निविदा की विशेष शर्तें, तकनीकी विशिष्टताएं और ड्राइंग लागू होंगी।

Special Conditions of Contract, Technical Specification & Drawing of tender shall be applicable.

6. प्रभारी अभियंता: वरिष्ठ प्रबंधक (सिविल), बाँध परिसर सेवा- II पावर स्टेशन।

Engineer-in-Charge: Senior Manager (Civil), Dam Complex Sewa-II Power Station.

7. भुगतान प्राधिकारी: उपमहाप्रबंधक (वित्त), सेवा-II पावर स्टेशन।

Paying Authority: DGM (Fin), Sewa-II Power Station.

8. सक्षम क्षेत्राधिकार की अदालत: इस समझौते की किसी भी शर्त पर शुरू की गई कार्यवाही पर कोई भी कार्रवाई केवल कठुआ (जम्मू-कश्मीर) की स्थानीय अदालत के तहत सक्षम क्षेत्राधिकार वाली अदालत में ही की जाएगी।

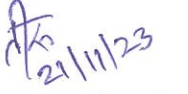
Court of Competent Jurisdiction: Any action taken on proceedings initiated on any of the terms of this agreement shall be only in the court of competent jurisdiction under local court at Kathua (J&K).

यह अवार्ड पत्र आपको दो प्रतियों में जारी किया जा रहा है। कृपया नियम और शर्तों को स्वीकार करने के प्रतीक के रूप में सभी पृष्ठों पर विधिवत हस्ताक्षरित इस आदेश की डुप्लिकेट प्रति इस कार्यालय को लौटा दें। यदि अवार्ड पत्र जारी होने की तारीख से 10 दिनों के भीतर विधिवत हस्ताक्षरित और मुहर लगी डुप्लिकेट प्रति प्राप्त नहीं होती है, तो यह माना जाएगा कि यह अवार्ड पत्र आपको स्वीकार्य है।

This Letter of Award is being issued to you in duplicate. Kindly return the duplicate copy of this order to this office duly signed on all the pages in token of having accepted the terms and conditions. In case, the duplicate copy duly signed and stamped is not received within 10 days from the date of issue of Letter of Award, it shall be presumed that this Letter of Award is acceptable to you.

सधन्यवाद।

कृते एनएचपीसी लिमिटेड,

 21/11/23

वरि. प्रबन्धक(सी&पी)

मात्राओं एवं मूल्यों की सारणी / SCHEDULE OF QUANTITIES & PRICES

कार्य का नाम: Up-gradation of Automatic Reservoir Monitoring and Control (ARMAC) System at Dam complex of Sewa-II Power Station (EW-583)

Sl. No.	Description of Item	Unit	Qty.	Rate Including GST (Rs./ Unit)	Amount including GST (in Rs.)
1	Supply Of Automatic Reservoir Monitoring And Control (ARMAC) System	Set	1	6508125.00	6508125.00
2	Installation, Testing & Commissioning and Calibration & Integration of existing sensors/ instrument etc. with new ARMAC system	Job	1	1164375.00	1164375.00
Total Amount (in Rs.)					76,72,500.00

(Rupees Seventy Six Lakh Seventy Two Thousand Five Hundred Only)

कृते एनएचपीसी लिमिटेड,

21/11/23

वरि. प्रबन्धक(सी&पी)

प्रतिलिपि:

- 1) समूह महाप्रबंधक(प्रभारी), सेवा-II पावर स्टेशन - को कृपया सूचनार्थ ;
- 2) महाप्रबंधक(सिविल), सेवा-II पावर स्टेशन - को कृपया सूचनार्थ ;
- 3) उप महाप्रबंधक(वित्त),सेवा-II पावर स्टेशन - को सूचनार्थ (BE 2023-24 & BE 2024-25, HOA 410608);
- 4) वरिष्ठ प्रबन्धक(सिविल), बाँध परिसर,सेवा-II पावर स्टेशन
- 5) परियोजना सतर्कता अधिकारी, सेवा-II पावर स्टेशन;
- 6) मास्टर अवार्ड पत्र फाइल ;

Note:- Following points to be consider for preparation of Performance Bank Guarantee:-

1. BG to be issued in favour of :-
NHPC Limited,
Sector-33, Faridabad (Haryana)
2. Stamp Paper should be purchased by BG issuing bank.
3. First Party – Issuing Bank
4. Second Party – NHPC Limited
5. Description of Guarantee – Letter of Guarantee
6. Validity of BG – Ninety (90) days beyond the defect liability period.
7. Bank Guarantee shall be as per Format enclosed as Form-2.
8. The blank space in the BG Format to be filled as per Letter of Award details.

Form-2

PERFORMANCE GUARANTEE FORM

BANK GUARANTEE

(To be stamped in accordance with Stamp Act if any, of the Country of the issuing Bank)

Bank Guarantee No.....

Date.....

To,

[Employer's Name & Address]

Dear Sir,

In consideration of the [Employer's Name](hereinafter referred to as the 'Employer' which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators and assigns) having awarded to M/s..... [Contractor's Name] with its Registered/ Head Office at..... (Hereinafter referred to as the 'Contractor', which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns), a Contract by issue of Employer's Letter of Acceptance No..... dated and the same having been acknowledged by the contractor, for [Contract sum in figures and words] for [Name of the work] and the Contractor having agreed to provide a Contract Performance Guarantee for the faithful performance of the entire Contract equivalent to..... (*) of the said value of the aforesaid work under the Contract to the Employer.

We[Name & Address of the Bank]having its Head Office at.....(hereinafter referred to as the 'Bank', which expression shall, unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) do hereby guarantee and undertake to pay the Employer, on demand any and all monies payable by the Contractor to the extent of(*) as aforesaid at any time up to(@)[days/month/year] without any demur, reservation, contest, recourse or protest and/or without any reference to the Contractor. Any such demand made by the Employer on the Bank shall be conclusive and binding notwithstanding any difference between the Employer and the Contractor or any dispute pending before any Court, Tribunal, Arbitrator or any other authority. The Bank undertakes not to revoke this guarantee during its currency without previous consent of the Employer and further agrees that the guarantees herein contained shall continue to be enforceable till the Employer discharges this guarantee or till(+)[days/month/year] whichever is earlier.

The Employer shall have the fullest liberty, without affecting in any way the liability of the Bank under this guarantee, from time to time to extend the time for performance of the Contract by the Contractor. The Employer shall have the fullest liberty, without affecting this guarantee, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against the Contractor, and to exercise the same at any time in any manner, and either to enforce or to forbear to enforce any covenants, contained or implied, in the Contract between the Employer and

the Contractor or any other course or remedy or security available to the Employer. The Bank shall not be released of its obligations under these presents by any exercise by the Employer of its liberty with reference to the matters aforesaid or any of them or by reason of any other act or forbearance or other acts of omission or commission on the part of the Employer or any other indulgence shown by the Employer or by any other matter or thing whatsoever which under the law would, but for this provision have the effect of relieving the Bank.

The Bank declares that this Bank Guarantee is issued by the Bank, utilizing the credit limit of M/s (name of the contractor) and Bank also agrees that the Employer at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Contractor and notwithstanding any security or other guarantee the Employer may have in relation to the Contractor's liabilities.

- i) Our liability under this Bank Guarantee shall not exceed _____ (*).
- ii) This Bank Guarantee shall be valid up to _____ (+).
- iii) We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if Employer serves upon Bank a written claim or demand on or before _____ @.

Dated thisday of..... 20.....at.....

WITNESS

1. Signature _____

Name _____

Official Address:

2. Signature _____

Name _____

Official Address:

Signed for and on behalf of the Bank

Signature _____

Name _____

(Designation with Bank Stamp)
Including staff Authority No. with Complete Address with
Bank's Tele-Fax Nos.:

Communication address of the Bank

Name of the contact person

Tel. No. _____

Fax No. _____

Email: _____

Note: 1.

- i) (*) This sum shall be ten percent (10%) of the Contract Price denominated in the types and proportions of currencies.
 - ii) (@) This date will be thirty (30) days beyond the Contract period as specified in the Contract. The Bank Guarantee shall be released after completion of job and upon certification by Engineer/ Officer -in-charge.
2. The stamp papers of appropriate value shall be purchased in the name of guarantee issuing Bank.
 3. Vendor's stamp with full details i.e. name of the Employer in whose favour for which this stamp paper has been purchased, should be invariably mentioned on the back side of the stamp paper.
 4. Bank Guarantee is required to be submitted directly to the Employer by the issuing bank (on Behalf of the Contractor) under the registered post (A.D.). The Contractor can submit an advance copy of Bank Guarantee to the Employer. However, in case of exceptional circumstances where efficient postal services are not in force, the Bank Guarantee may be submitted by the Contractor directly to the Employer and the issuing Bank shall submit an unstamped duplicate copy of Bank Guarantee directly under the registered post (A.D.) to the Employer, with a forwarding letter.

AK

Contract | अनुबंध



Contract No | अनुबंध क्रमांक: GEMC-511687742302921

Generated Date | अनुबंध तिथि: 21-Nov-2023

Bid/RA/PBP No. | बोली/आरए/पीबीपी संख्या: GEM/2023/B/3692614

Organisation Details संगठन विवरण		Buyer Details खरीदार विवरण				
Type प्ररूप :	Central PSU	Designation पद :	DM CNP			
Ministry मंत्रालय :	Ministry of Power	Contact No. संपर्क नंबर :	-			
Department विभाग :	NA	Email ID ईमेल आईडी :	buyer93.nl.jk@gembuyer.in			
Organisation Name संगठन का नाम :	NHPC Limited	GSTIN जीएसटीआईएन :	-			
Office Zone कार्यालय क्षेत्र :	Nhpc	Address पता :	Sewa II Power Station, NHPC Limited, Mashka, Tehsil Basohli, Distt. Kathua, Jammu and Kashmir (Post office Khairi-176325 for postal address), KATHUA, JAMMU & KASHMIR-184201, India			
Financial Approval Detail वित्तीय स्वीकृति विवरण		Paying Authority Details भुगतान प्राधिकरण विवरण				
IFD Concurrence आईएफडी सहमति :	No	Role :	PAO			
Designation of Administrative Approval प्रशासनिक अनुमोदन का पदनाम :	GM	Payment Mode भुगतान का तरीका :	NHPC			
Designation of Financial Approval वित्तीय अनुमोदन का पदनाम :	DGM (F)	Designation पद :	DGM Finance			
		Email ID ईमेल आईडी :	pao10.nl.hr@gembuyer.in			
		GSTIN जीएसटीआईएन :	01AAACN0149C3ZB			
		Address पता :	Sewa II Power Station, NHPC Limited, Mashka, Tehsil Basohli, Distt. Kathua, Jammu and Kashmir (Post office Khairi-176325 for postal address), KATHUA, 184201, KATHUA, JAMMU & KASHMIR-184201, India			
Seller Details विक्रेता विवरण						
GeM Seller ID जेम विक्रेता आईडी :	W4TQ210002406828					
Company Name कंपनी का नाम :	ATC ENGINEERING SYSTEMS PRIVATE LIMITED					
Contact No. संपर्क नंबर :	09811196960					
Email ID ईमेल आईडी :	ashoktaruchoudhuri@yahoo.co.in					
Address पता :	E-128, Sector-63, Noida, Noida, noida, Uttar Pradesh-201301, India					
MII Status एमआईआई स्थिति :	True					
MSME verified एमएसएमई सत्यापित :	No					
MSME Registration number एमएसएमई पंजीकरण संख्या :	UDYAM-UP-28-0005574					
MSE Social Category एमएसई सामाजिक श्रेणी :	General					
MSE Gender एमएसई लिंग श्रेणी :	Male					
GSTIN जीएसटीआईएन :	09AAICA9175D2ZF					
*GST / Tax invoice to be raised in the name of जिसके नाम के पक्ष में GST/TAX इनवॉइस पेश किया जाएगा - Consignee						
Delivery Instructions वितरण निर्देश : NA						
Product Details उत्पाद विवरण						
#	Item Description आइटम विवरण	Ordered Quantity आइटम विवरण	Unit इकाई	Unit Price (INR) इकाई मूल्य (INR)	Tax Bifurcation (INR) कर विभाजन (INR)	Price (Inclusive of all Duties and Taxes in INR) मूल्य (INR में सभी शुल्क और कर सहित)
1	Product Name उत्पाद का नाम : PLC and SCADA Brand ब्रांड : ARMAC System Brand Type ब्रांड प्रकार : Unbranded Catalogue Status कैटलॉग की स्थिति : Catalogue not verified by OEM Selling As कैसे बेचा जा रहा है : Reseller not verified by OEM Category Name & Quadrant श्रेणी का नाम और चतुर्थांश : PLC and SCADA (Q3) Model मॉडल : L72 HSN Code एचएसएन कोड : HSN not specified by seller	1	set	6,508,125	NA	6,508,125
2	Product Name उत्पाद का नाम : PLC and SCADA Brand ब्रांड : ARMAC System Brand Type ब्रांड प्रकार : Unbranded Catalogue Status कैटलॉग की स्थिति : Catalogue not verified by OEM Selling As कैसे बेचा जा रहा है : Reseller not verified by OEM Category Name & Quadrant श्रेणी का नाम और चतुर्थांश : PLC and SCADA (Q3) Model मॉडल : L72 HSN Code एचएसएन कोड : HSN not specified by seller	1	set	1,164,375	NA	1,164,375
Total Order Value कुल ऑर्डर मूल्य (in INR)						7,672,500

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Consignee Detail | परेषिती विवरण

S.No क्र.सं.	Consignee परेषिती	Item वस्तु	Lot No. लॉट नंबर	Quantity मात्रा	Delivery Start After दलिक के बाद डिलीवरी शुरू करना है	Delivery To Be Completed By वितरण पूरा कब तक करना है
1	Designation पद :- Email ID ईमेल आईडी : con32.nl.jk@gembuyer.in Contact संपर्क :- 8257835421- GSTIN जीएसटीआईएन :- Address पता : Sewa II Power Station, NHPC Limited, Mashka, Tehsil Basohli, Distt. Kathua, Jammu and Kashmir (Post office Khairi-176325 for postal address), KATHUA, 184201, KATHUA, JAMMU & KASHMIR-184201, India	PLC and SCADA	-	1	21-Nov-2023	18-Jun-2024
		PLC and SCADA	-	1	21-Nov-2023	18-Jun-2024

Product Specification for PLC and SCADA

Specification विनिर्देश	Sub-Spec उप-विनिर्देश	Value मूल्य
Custom Specification	Custom Specification	Yes

Seller Specification Document | विक्रेता विशिष्टता दस्तावेज़:

1. SpecificationDocument1	mkp.gem.gov.in/catalog_data/catalog_support_document/52/71/722/CatalogAttrs/SpecificationDocument/2021/5/20/2021_05_20_20_48_28_sa-170221-r0_2021-05-20-20-48-31_543b2948b32711337da31ae27af063d8.pdf
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Buyer Specification Document | खरीदार विशिष्टता दस्तावेज़:

1. DrawingDocument	mkp.gem.gov.in/catalog_data/catalog_support_document/buyer_documents/9750709/54/78/703/CatalogAttrs/DrawingDocument/2023/7/14/drawing_2023-07-14-12-27-02_6ee5c376cad5248e145abd0cd1b5b70b.pdf
2. SpecificationDocument	mkp.gem.gov.in/catalog_data/catalog_support_document/buyer_documents/9750709/54/78/703/CatalogAttrs/SpecificationDocument/2023/7/14/tech_spec_2023-07-14-12-27-02_7e258045d388b69ba6b7e1ecaf421e1f.pdf

Product Specification for PLC and SCADA

Specification विनिर्देश	Sub-Spec उप-विनिर्देश	Value मूल्य
Custom Specification	Custom Specification	Yes

Seller Specification Document | विक्रेता विशिष्टता दस्तावेज़:

1. SpecificationDocument1	mkp.gem.gov.in/catalog_data/catalog_support_document/52/71/722/CatalogAttrs/SpecificationDocument/2021/5/20/2021_05_20_20_48_28_sa-170221-r0_2021-05-20-20-48-31_543b2948b32711337da31ae27af063d8.pdf
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Buyer Specification Document | खरीदार विशिष्टता दस्तावेज़:

1. DrawingDocument	mkp.gem.gov.in/catalog_data/catalog_support_document/buyer_documents/9750709/54/78/703/CatalogAttrs/DrawingDocument/2023/7/14/drawing_2023-07-14-12-33-01_4a08595b72b2dc1e606821ce99371953.pdf
2. SpecificationDocument	mkp.gem.gov.in/catalog_data/catalog_support_document/buyer_documents/9750709/54/78/703/CatalogAttrs/SpecificationDocument/2023/7/14/tech_spec_2023-07-14-12-33-01_76d8c5e460d5a5249db0d0e8ab46f6b4.pdf

Corrigendum | शुद्धिपत्र

- Extended Upto | तक बढ़ाया गया : 2023-08-26 16:00:00
- Extended Upto | तक बढ़ाया गया : 2023-09-06 16:00:00
- Extended Upto | तक बढ़ाया गया : 2023-09-13 16:00:00

Buyer added Bid Specific Additional Scope of Work | खरीदार द्वारा जोड़ी गई बोली का विशिष्ट अतिरिक्त कार्य

S.No क्र.सं.	Document Title दस्तावेज़ का शीर्षक	Description विवरण	Applicable i.r.o. Items लागू आईआरओ सामान
1	Bill of Quantities View	Bill of Quantities	Supply Of Automatic Reservoir Monitoring And Control (ARMAC) System(1)

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Advisory Bank सहायकार बैंक :	State Bank of India
eBPG Detail पूर्ण निजीकरण (%) :	10.00
The bidder shall furnish eBPG as applicable as per bid's terms and conditions बोली लगाने वाले को बोली के नियमों और शर्तों के अनुसार लागू ईपीबीजी प्रस्तुत करना होगा	

Terms and Conditions | नियम और शर्तें

1. General Terms and Conditions-

- 1.1 This contract is governed by the General Terms and Conditions, conditions stipulated to this Product/Service as provided in the Marketplace.
- 1.2 This Contract between the Seller and the Buyer, is for the supply of the Goods and/ or Services, detailed in the schedule above, in accordance with the General Terms and Conditions (GTC) unless otherwise superseded by Goods / Services specific Special Terms and Conditions (STC) and/ or BID/Reverse Auction Additional Terms and Conditions (ATC), as applicable

2. Buyer Added Bid Specific Terms and Conditions-

- 2.1 *Buyer Added Bid Specific ATC:*
Buyer Added text based ATC clauses

Note:- Bidder should submit the Demand Draft/Bank Guarantee for EMD at the given address: -

Senior Manager (C&P), Sewa-II Power Station, Mashka, Post Box No. 2, Post Office- Khairi Distt.- Chamba, Himachal Pradesh, PIN-176325.

1. To qualify for award of the Contract, bidder should have

The bidders must fulfil the following minimum Qualifying Criteria:

All bidders shall include the following information and documents with their bids in, qualification Information unless otherwise stated:

- (a) Copies of original documents defining the constitution or legal status, Memorandum of Understanding & Articles of Association, place of registration and principal place of business; written Power of Attorney along with a copy of board resolution. In case of General Power of Attorney, a true copy of the POA shall be notarised/ self-attested and in case of a specific Power of Attorney, the original POA.
- (b) Work experience of supported by satisfactory performance certificate to demonstrate meeting the criteria stipulated below as Clause d(i). The work experience shown shall be supported with certificate(s) from the Engineer-in-charge/ Project Head of the concerned work. In case the contractor produces the experience of a private work, the TDS certificate shall be submitted to establish that the particular work of particular value has actually been done by the contractor.
- (c) Information on financial criteria i.e. The average annual financial turnover during the last three years ending 31st March of the previous financial year to the year of NIT should be at least ₹ 25,79,550.00 (Rupees Twenty Five Lakh Seventy Nine Thousand Five Hundred Fifty only), 30% of estimated cost (Last three years are FY 2020-21, 2021-22 & FY 2022-23). Copy of Certificate of CA mentioning Financial Turnover of last 3 (three) years is required to submit for ascertaining the bidder's meeting the financial criteria.
- (d) To qualify for award of the Contract, bidder should have:
- (i) Satisfactorily completed at least one similar work equal in value to 80% of estimated cost i.e. ₹ 68,78,800.00 (Rupees Sixty Eight Lakh Seventy Eight Thousand Eight Hundred only) or two works equal in value to 50% of estimated cost i.e. ₹ 42,99,250.00 (Rupees Forty Two Lakh Ninety Nine Thousand Two Hundred Fifty only) or three works equal in value to 40% of estimated cost i.e. ₹ 34,39,400.00 (Rupees Thirty Four Lakh Thirty Nine Thousand Four Hundred only) in last seven (07) years.

Similar nature of work means: Supply, Installation, testing & commissioning of Instrumentation and redundant PLC/RTU/PLC-SCADA/DCS or Process Automation in any Industry.

2. The reference date for considering the period for eligibility/ qualification requirements above shall be the last day of the month previous to the one in which tenders are invited. The start and end dates of the works considered for claiming the experience shall fall within 7 years.

3. Bids of only those Bidders who are meeting the Eligibility Criteria specified above will be considered for evaluation and award of the Contract.

2.2. Generic.

Bidder shall submit the following documents along with their bid for Vendor Code Creation:

- Copy of PAN Card.
- Copy of GSTIN.
- Copy of Cancelled Cheque.
- Copy of EFT Mandate duly certified by Bank.

2.3. Generic.

Buyer Organization specific Integrity Pact shall have to be complied by all bidders. Bidders shall have to upload scanned copy of signed integrity pact as per Buyer organizations policy along with bid. [Click here to view the file](#)

2.4 Generic:

Data Sheet of the product(s) offered in the bid, are to be uploaded along with the bid documents. Buyers can match and verify the Data Sheet with the product specifications offered. In case of any unexplained mismatch of technical parameters, the bid is liable for rejection.

2.5 Scope of Supply:

Scope of supply (Bid price to include all cost components) : Supply Installation Testing and Commissioning of Goods

2.6 Service & Support:

Escalation Matrix For Service-Support : Bidder/OEM must provide Escalation Matrix of Telephone Numbers for Service Support.

2.7 Certificates:

Bidder's offer is liable to be rejected if they don't upload any of the certificates / documents sought in the Bid document, ATC and Corrigendum if any.

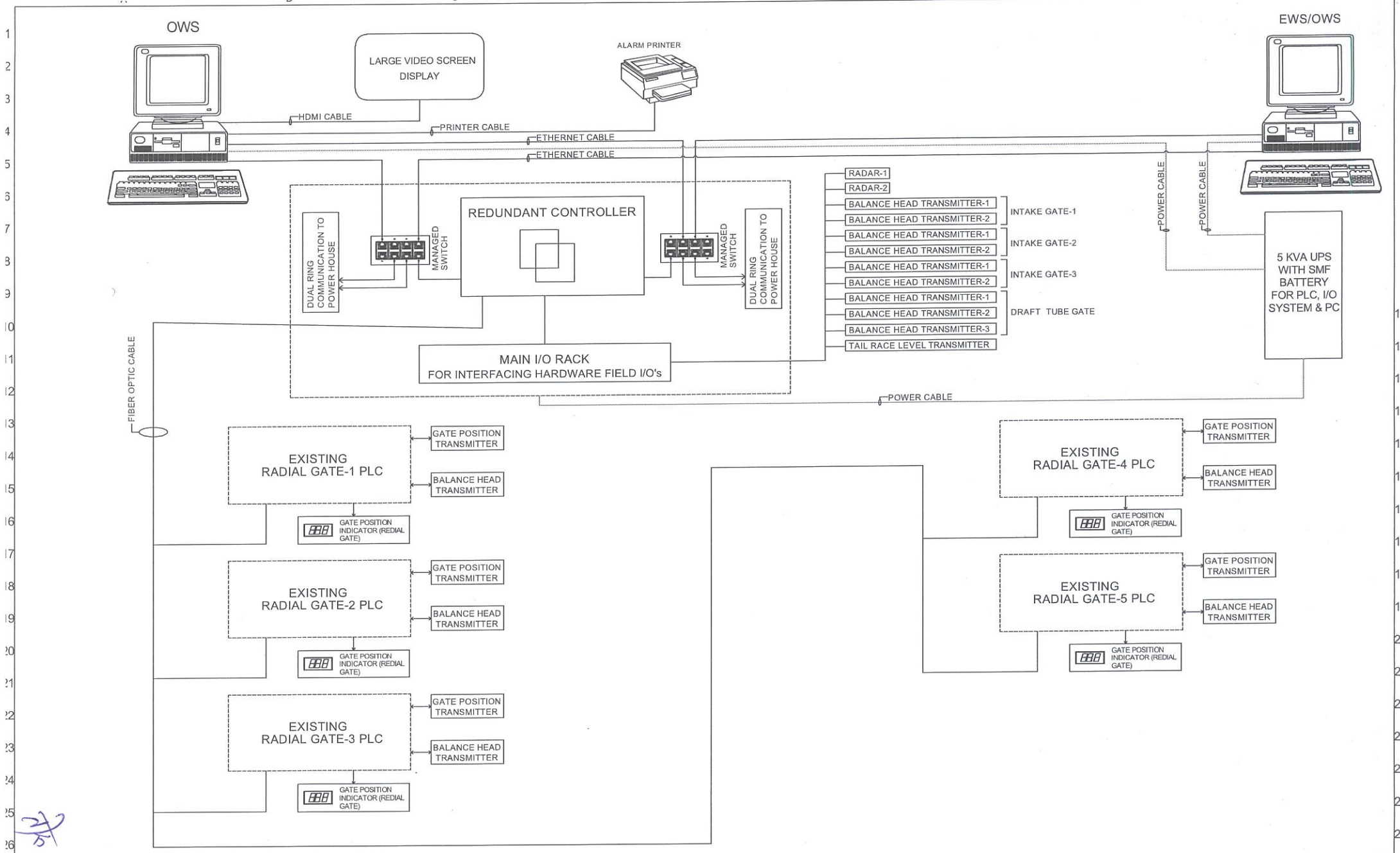
2.8 Buyer Added Bid Specific ATC:

Buyer uploaded ATC document [Click here to view the file](#).

Note: This is system generated file. No signature is required. Print out of this document is not valid for payment/ transaction purpose.

नोट: यह सिस्टम जनरेटेड फाइल है। कोई हस्ताक्षर की आवश्यकता नहीं है। इस दस्तावेज़ का प्रिंट आउट भुगतान/लेनदेन उद्देश्य के लिए मान्य नहीं है।

21/11/23



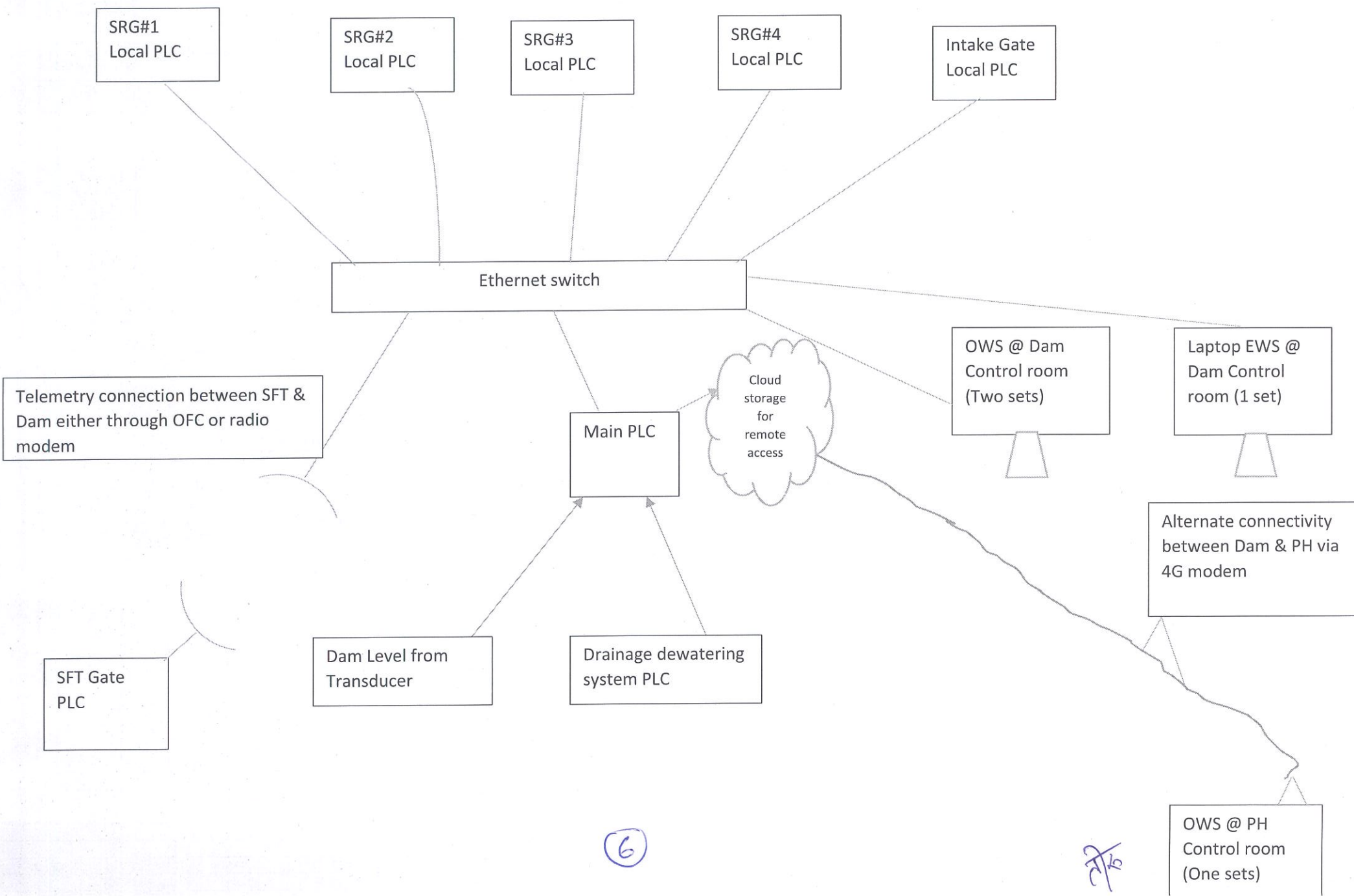
No.	REVISIONS	DATE	SIGN
00	ORIGINAL ISSUE	17/02/21	

CLIENT	NHPC
END USER	-
PROJECT	-
-	-
-	-
-	-



TITLE	SYSTEM CONFIGURATION		
DOC. No.			
DWG. No.			
DRAWN	ON: 17/02/21	BY: S.NANDI	SCALE:N.T.S. 01 OF 01
CHECKED	ON: 17/02/21	BY: ARGHA	FILE: NHPC-SC

5



6

Handwritten signature or initials

OWS @ PH Control room (One sets)

Design, Supply, Erection, Testing and Commissioning of ARMAC system at Sewa-II Dam.	
Enclosure	
Functionality/Description	Specification
Make	Rittal/Pyrotech/Any reputed make
Size	Adequate to complete house all the hardware based on configuration and IO count.
Type	Free Standing enclosed type
Access	Front and rear access doors
Doors	To be provided with Lockable handles and concealed hinges with pull pins for easy door removal
Lifting Hooks	Removable hooks to be provided for lifting purpose.
Cable Entries	From Bottom
Material of Construction	Cold rolled Steel sheet suitably reinforced to prevent warping and buckling.
Ventilation	Manned Station Fans in each Cabinet Vent Louvers with Fly screen.
Grounding Lug	To be provided. All metal parts of the cabinet shall be electrically continuous and shall be provided with a common grounding lug.
Base Plate	Cable glands shall be provided for incoming/ outgoing cables to prevent excessive stress on the individual terminals.
Colour	Cabinet-RAL 7035 (Siemens Grey) Channel base- Black
Paint	Three coat of epoxy paint for non-glossy satin finish
MOC	Cabinet-2mm thick cold rolled steel sheet Door-1.6 mm thick cold rolled steel sheet Top & Side Panels- 1.5 mm thick cold rolled steel sheet Base Plate-3 mm thick cold rolled steel sheet
Push Button switches and Lamps	Hardware push button. Lamps to be provided to show the status
Ingress Protection rating	IP-42
Relays	Each digital output shall be extended to the field through relay. Suitable relays to be considered for each DO. Omron/ Pheonix make contact ratings/type to be finalised during detailed engineering
Weight	Bidder to specify
Panel Lights	Each Panel to have suitable panel light on front and rear side Light to be controlled by door switch
Redundant PLC	
Parameters	Technical Specification
Redundancy	Hot Back-up redundancy
Memory	Minimum 1 MB.

Memory Card	2GB Required. Max Capacity 32 GB Optional
Interfaces	Interface types
	• RJ 45 (Ethernet) Yes,
	• Number of ports 2
	• integrated switch Yes Protocols
	• IP protocol Yes; IPv4
	• ETHERNET IO Controller Yes
	• communication Yes;
	Controller Redundacny
	— Autoswitchover
	Network topology- DLR, Star, Linear
	— Switchover time on line break, typ. 200 ms; ETHERNET
	Node Support- 24 Nos
	Communication
	• Ethernet communication Yes
• TCP/IP- Yes	
• MODBUS- Yes; MODBUS TCP	
Communication	TCP/IP, Modbus
Ambient Temperature	0 to 60 deg C
Mounting	DIN Rail Mount
Power Supply	18.....32V DC From Supply
IO MODULE	
Digital Input	32 Channel Digital Input with required Accesories- 3 Nos
Digital Output	32 Channel Digital Outputwith required Accesories- 3 Nos
Analog Input	12 Channel Analog Inputwith required Accesories- 1 Nos
Analog Output	12 Channel Analog Outputwith required Accesories- 1 Nos
EtherNet Switch	
Parameters	Technical Specification
Type	Unmanaged
Make	AB, Hirshmann, Cisco, Weidmuller or any reputed make
No of Ports	2 Nos of 8 RJ45 Port
supply voltage	24 VDC
Relative humidity	5-95% Non-Condensing
IECx Temp Code	T4
Protection class IP	IP30
Software	
Licensed Software	Bidder to Supply following Licensed software's with Lifetime License: - Ladder Logic Software (Make and Model- Bidder to specify)- 1 Nos Human Machine Interface Software for Programming/ Engineering terminal with no limitation Tags (Make shall be same as the PLC)- 1 Nos for Editing Software and 3 Nos Runtime Software. Interface Software, if any. (Make and Model- Bidder to Specify) Note:- IEC 61131-3 compliance software should be supplied.
Operator Station PC	

Parameters	Technical Specification
Processor	Intel i7 11 generation or better
Ram	8 GB or more
Storage	256 GB SSD and 1TB HDD
Ports	HDMI/DP, Two Ethernet Port, USB PORT
Operating System	Windows 11 Pro or better/latest Window OS
Software	MS Office 2019/22 or the latest with Lifetime license
Monitor	24" FHD Monitor or better
Make	HP/Dell/Any reputed make
Quantity	3 Nos
Portable Engineering Station	
Parameters	Technical Specification
Processor	Intel i7 11 generation or better
Ram	8 GB8 GB or more
Storage	1TB HDD
Ports	HDMI/DP,Ethernet Port, USB PORT
Operating System	Windows 11 Pro or better/latest Window OS
Software	MS Office 2019/22 or the latest version with Lifetime license
Make	HP/Dell/Any reputed make
Quantity	1 Nos

Local PLC for Spillway Radial gate	
Standalone PLC	
Parameter	Technical Specification
Number of Inbuilt digital Input	Minimum 24 Nos
Number of Inbuilt Digital Output	Minimum 20 Nos
Provision for Plugin Module and Expansion IO	Yes
Operating Voltage	10...26 VDC
Temperature Operating	IEC 600682-1
Communication protocol Support	Inbuilt EtherNet IP, Modbus TCP/IP, DF1
IO MODULE	
Analog Input	
Parameter	Technical Specification
Number of Inputs, Single Ended	4 Channel
Analog Normal Operating ranges	Voltage: 0.....10V DC Current: 0.....20 mA
Resolution, Max	12 Bits unipolar, with software selected option for 50 Hz, 60 Hz, 250 Hz, 500 Hz
Data range	0.....65535
Input impedance	Voltage Terminal: > 220K Ohm, Current terminal: 250 Ohm

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Overall Accuracy	Voltage: +/- 1% Full Scale @25 deg Celsius Current: +/- 1% Full Scale @ 25 Deg Celsius
Input Channel Configuration	Through Configuration software or the User Program
Update Time	180 ms per Enabled Channel or better as per offered product
Temperature Operating	IEC 600068-2-1
Analog Output	
Parameter	Technical Specification
Number of Inputs, Single Ended	2 Channel
Analog Normal Operating ranges	Voltage: 10V DC Current: 0.....20 mA
Resolution, Max	12 Bits unipolar
Output Count Range	0.....65535
D/A Conversion Rate	2.5 ms or better as per offered product
Overall Accuracy	Voltage: +/- 1% Full Scale @25 deg Celsius Current: +/- 1% Full Scale @ 25 Deg Celsius
Open and Short Circuit Protection	Yes
Output Overvoltage Protection	Yes
Temperature Operating	IEC 600068-2-1
EtherNet Switch	
Parameters	Technical Specification
Type	Unmanaged
Make	AB, Hirshmann, Cisco, Weidmuller, Any reputed make
No of Ports	4 Nos of 5 RJ45 Port
supply voltage	24 VDC
Relative humidity	5-95% Non Condensing
IECx Temp Code	T4
Protection class IP	IP30
Local PLC for Intake gate	
Standalone PLC	
Parameter	Technical Specification
Number of Inbuilt digital Input	Minimum 24 Nos
Number of Inbuilt Digital Output	Minimum 20 Nos
Provision for Plugin Module and Expansion IO	Yes
Operating Voltage	10...26 VDC
Temperature Operating	IEC 600682-1
Communication protocol Support	Inbuilt EtherNet IP, Modbus TCP/IP, DF1
IO MODULE	
Analog Input	
Parameter	Technical Specification
Number of Inputs, Single Ended	4 Channel
Analog Normal Operating ranges	Voltage: 0.....10V DC Current: 0.....20 mA
Resolution, Max	12 Bits unipolar, with software selected option for 50 Hz, 60 Hz,

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A/B

	250 Hz, 500 Hz
Data range	0.....65535
Input impedance	Voltage Terminal: > 220K Ohm, Current terminal: 250 Ohm
Overall Accuracy	Voltage: +/- 1% Full Scale @25 deg Celsius Current: +/- 1% Full Scale @ 25 Deg Celsius
Input Channel Configuration	Through Configuration software or the User Program
Update Time	180 ms per Enabled Channel or better as per offered product
Temperature Operating	IEC 600068-2-1
Analog Output	
Parameter	Technical Specification
Number of Inputs, Single Ended	2 Channel
Analog Normal Operating ranges	Voltage: 10V DC Current: 0.....20 mA
Resolution, Max	12 Bits unipolar
Output Count Range	0.....65535
D/A Conversion Rate	2.5 ms or better as per offered product
Overall Accuracy	Voltage: +/- 1% Full Scale @25 deg Celsius Current: +/- 1% Full Scale @ 25 Deg Celsius
Open and Short Circuit Protection	Yes
Output Overvoltage Protection	Yes
Temperature Operating	IEC 600068-2-1
EtherNet Switch	
Parameters	Technical Specification
Type	Unmanaged
Make	AB, Hirshmann, Cisco, Weidmuller, Any reputed make
No of Ports	1 Nos of 5 RJ45 Port
supply voltage	24 VDC
Relative humidity	5-95% Non Condensing
IECx Temp Code	T4
Protection class IP	IP30
Local PLC for SFT gate	
Standalone PLC	
Parameter	Technical Specification
Number of Inbuilt digital Input	Minimum 24 Nos
Number of Inbuilt Digital Output	Minimum 20 Nos
Provision for Plugin Module and Expansion IO	Yes
Operating Voltage	10...26 VDC
Temperature Operating	IEC 600682-1
Communication protocol Support	Inbuilt EtherNet IP, Modbus TCP/IP, DF1
IO MODULE	
Analog Input	
Parameter	Technical Specification
Number of Inputs, Single Ended	4 Channel

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A/B

Analog Normal Operating ranges	Voltage: 0.....10V DC Current: 0.....20 mA
Resolution, Max	12 Bits unipolar, with software selected option for 50 Hz, 60 Hz, 250 Hz, 500 Hz
Data range	0.....65535
Input impedance	Voltage Terminal: > 220K Ohm, Current terminal: 250 Ohm
Overall Accuracy	Voltage: +/- 1% Full Scale @25 deg Celsius Current: +/- 1% Full Scale @ 25 Deg Celsius
Input Channel Configuration	Through Configuration software or the User Program
Update Time	180 ms per Enabled Channel or better as per offered product
Temperature Operating	IEC 600068-2-1
Analog Output	
Parameter	Technical Specification
Number of Inputs, Single Ended	2 Channel
Analog Normal Operating ranges	Voltage: 10V DC Current: 0.....20 mA
Resolution, Max	12 Bits unipolar
Output Count Range	0.....65535
D/A Conversion Rate	2.5 ms or better as per offered product
Overall Accuracy	Voltage: +/- 1% Full Scale @25 deg Celsius Current: +/- 1% Full Scale @ 25 Deg Celsius
Open and Short Circuit Protection	Yes
Output Overvoltage Protection	Yes
Temperature Operating	IEC 600068-2-1
EtherNet Switch	
Parameters	Technical Specification
Type	Unmanaged
Make	AB, Hirshmann, Cisco, Weidmuller, Any reputed make
No of Ports	1 Nos of 5 RJ45 Port
supply voltage	24 VDC
Relative humidity	5-95% Non Condensing
IECx Temp Code	T4
Protection class IP	IP30
Local PLC for Drainage & Dewatering system	
Standalone PLC	
Parameter	Technical Specification
Number of Inbuilt digital Input	Minimum 24 Nos
Number of Inbuilt Digital Output	Minimum 20 Nos
Provision for Plugin Module and Expansion IO	Yes
Operating Voltage	10...26 VDC
Temperature Operating	IEC 600682-1
Communication protocol Support	Inbuilt EtherNet IP, Modbus TCP/IP, DF1
IO MODULE	

Analog Input	
Parameter	Technical Specification
Number of Inputs, Single Ended	4 Channel
Analog Normal Operating ranges	Voltage: 0.....10V DC Current: 0.....20 mA
Resolution, Max	12 Bits unipolar, with software selected option for 50 Hz, 60 Hz, 250 Hz, 500 Hz
Data range	0.....65535
Input impedance	Voltage Terminal: > 220K Ohm, Current terminal: 250 Ohm
Overall Accuracy	Voltage: +/- 1% Full Scale @25 deg Celsius Current: +/- 1% Full Scale @ 25 Deg Celsius
Input Channel Configuration	Through Configuration software or the User Program
Update Time	180 ms per Enabled Channel or better as per offered product
Temperature Operating	IEC 600068-2-1
Analog Output	
Parameter	Technical Specification
Number of Inputs, Single Ended	2 Channel
Analog Normal Operating ranges	Voltage: 10V DC Current: 0.....20 mA
Resolution, Max	12 Bits unipolar
Output Count Range	0.....65535
D/A Conversion Rate	2.5 ms or better as per offered product
Overall Accuracy	Voltage: +/- 1% Full Scale @25 deg Celsius Current: +/- 1% Full Scale @ 25 Deg Celsius
Open and Short Circuit Protection	Yes
Output Overvoltage Protection	Yes
Temperature Operating	IEC 600068-2-1
EtherNet Switch	
Parameters	Technical Specification
Type	Unmanaged
Make	AB, Hirshmann, Cisco, Weidmuller, Any reputed make
No of Ports	1 Nos of 5 RJ45 Port
supply voltage	24 VDC
Relative humidity	5-95% Non Condensing
IECx Temp Code	T4
Protection class IP	IP30

INSTRUMENTATION & CABLING

Supply of Online UPS	Industrial grade suitable UPS 5kVA or more with battery bank providing min. backup of Four hour on full load.
Supply of 4G/5G router	SIM based 4G/5G modem/router to establish the communication between dams and power house.

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ATK

755178/2023/SEC-DAM-HM

Supply of Web-based monitoring system	Web based monitoring, auto mailing, Auto messaging with cloud storage charges for 2 years etc.
Printer	LaserJet Colour Printer, 1 Nos , Any Reputed make
Cat-6 Cable	Cat-6 Cable Armoured As required Lapp/Equivalent/ Any Reputed make
Optical Fiber Cable	Optical Fiber Cable 6-core, Armoured, Single Mode- 2000 mtr Polycan/Equivalent make/ Any Reputed make.
LIU Box	LIU Box 6-port Bidder to mention the required quantity.
Gate Position indicator 230VAC 4-20mA	Rishabh/Mutispan/Any other Reputed make, 16 Nos
Water Level Indicator	Rishabh/Mutispan/ Any other Reputed make, 2 Nos
Discharge Indicator	Rishabh/Mutispan/ Any other Reputed make, 1 Nos
Annunciator 16 windows	Minilec/any other reputed make, 1 Nos
Ammeter with selector switch	AE & KAYCEE/any other reputed make
Voltmeter with selector switch	AE & KAYCEE/any other reputed make

Switchgear for the 90 HP Pump (4 Nos)

Hardware	Make	Qty
3P MCCB 160A 50KA Thermal Magnetic Release based Trip Unit, S/C & O/L Protection with Loto Arrangement with Rotary Handle Spreader	Schneider/ Siemens/any other reputed make	1
Power contactor, AC-3e/AC-3 -150A,230V,AC	Schneider/ Siemens/any other reputed make	1
Contactor relay, 2 NO + 2 NC, 230 V AC, 50 / 60 Hz, Size S00, screw terminal	Schneider/ Siemens/any other reputed make	4
Add On Block For Auxiliary Contactor (2NO+2NC)	Schneider/ Siemens/any other reputed make	4
Indication Light	Schneider/ Siemens/any other reputed make	3
Push Button	Schneider/ Siemens/any other reputed make	2
Selector Switch	Schneider/ Siemens/any other reputed make	1
CT 150A/5A, 5VA, CL- 1 Resin Cast	AE/Kappa/any other reputed make	3
6A,DP MCB For Controlling	Schneider/ Siemens/any other reputed make	2
Ammeter, With Selector Switch Range: 0- 200A, Size 96x96 Digital Type	AE/RISHAB/SALZER/any other reputed make	1

Note: - Any other Associated Accessories required as per site requirement for installation and commissioning of ARMAC system at Sewa-II Dam, but are not specifically mentioned in the BoQ/TS/Any other document shall be considered as part of the BoQ, for which no extra payment shall be made by NHPC to contractor/Firm.

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SI. No.	Item	Description	Qty.	Unit	Make	Remarks
B INSTRUMENTATION & CABLING						
1	Supply & installation of latest version Portable Engineering station (1 no.) and Operating station (3 nos.) along with online UPS is in Firm's scope.	CPU comprising the following minimum accessories: (Intel i7 11 generation, min. 8 GB DDR3 RAM, 1 TB Hard Disk, 24" LED Monitor, Windows 11 Pro OS, CD/DVD R/W, 10/100/1000 Gigabit LAN port 2 Nos. key board, Optical mouse)	4	Nos.	Any Reputed make	
2	Supply of Online UPS	Industrial grade suitable UPS 5KVA with battery bank providing min. backup of Four hour on full load.	1	Nos.	Any Reputed make	
3	Supply of 4G/5G router	SIM based 4G/5G modem/router to establish the communication between dams and power house.	2	Nos.	Any Reputed make	
4	Supply of Web-based monitoring system	Web based monitoring, auto mailing, Auto messaging with cloud storage charges for 2 years etc.	1	Nos.	Any Reputed make	
5	Cat-6 Cable	Cat-6 Cable Armoured	1000	Meter	Belden/Lapp/ Polycab/or any other equivalent	
6	Optical Fiber Cable	Optical Fiber Cable 6-core, Armoured, Single Mode	2000	Meter	Belden/Dlink/ Finolex/or any other equivalent	
7	LIU Box	LIU Box 6-port	As Req.	Nos.	UL/Axis/or any other equivalent	

NOTE: Any other Associated Accessories/device/equipment etc. required as per site requirement for installation and commissioning of ARMAC system at Sewa-II Dam, but are not specifically mentioned in the BoQ/TS/Any other document shall be considered as part of the BoQ, and shall be in the scope of firm, for which no extra payment shall be made by NHPCC to contractor/Firm.

NOTE: Software Programming for PLC conform to standard given below:

Standard
IEC 61131-3
Standard for PLC Programming

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Scope of the Work

Sub: Supply, installation, testing and commissioning of ARMAC system at Dam of Sewa-II Power Station, Mashka.

1. Supply, installation, testing and commissioning of ARMAC system spares/accessories and development/programming of Software required for Main PLC for ARMAC system and for Local PLC's of Spillway Radial Gates, Intake Service Gates, SFT gate and drainage & dewatering system is in the scope of the firm. The software supplied for PLC/SCADA/Android application must be software with valid lifetime license until the same got obsolete. Further the software supplied for PLC/SCADA/Android application shall be free from any malicious code.
2. Hardware and software system should be of latest version and availability of hard ware components should be available for near future. Further the obsolescence should be intimated to us (NHPC), so that further inventory will be maintained by Sewa-II Power Station.
3. The firm shall provide latest version of ARMAC software with life time validity along with OWS (03 Nos.) and Portable laptop-based Engineering work station (01No.);
4. The firm shall provide backup of logic program of software developed for Main PLC for ARMAC system and for Local PLC's of Spillway Radial Gates, Intake Service Gate, SFT gate and drainage & dewatering system.
5. In the aforesaid work, all data from local Programmable Logic controllers (PLC's), all sensors/instruments, field devices over Modbus & Ethernet/IP communication protocol shall be collected at a central ARMAC server located at DAM control room for control & monitoring and analysis of critical process parameters.
6. Dismantling of old spares/items for installation of new spares/items is also in the scope of Firm
7. Accessories like Signal cable, control cable laying and rewiring of terminals of existing controllers. The power, ethernet, optical fibre cables and control cables required for programming of Main PLC system & Local PLC's of Spillway Radial Gates, Intake Service Gates, SFT gate and drainage & dewatering system in the SCADA of ARMAC system shall conforms to latest IS or IEC standards.
8. Integration/interfacing of local PLC's of all panels provided for 4 nos. Spillway Radial Gates, 2 nos. Intake Service Gates, 2 nos. SFT gate and 01 nos. drainage dewatering system consists of four pump of 90HP each with main PLC system shall be in the scope of the firm. No additional payment shall be made by NHPC for Integration/interfacing with local PLC of aforesaid gates.
9. All DAM Site data shall be enabled for view using new 4G gateway system from Powerhouse Site. The firm shall also make provision for operation of Dam ARMAC system from Power House control room. Communication shall be made through new 4G gateway system (latest technology/version)

10. Replacement of all the existing local PLC panels supplied and installed by M/s Om Metal for 4 nos. Spillway Radial Gates & 2 nos. Intake Service Gates, 2 nos. SFT gates and drainage & dewatering system with latest upgraded PLC's and integration of it with Dam Control room main PLC through OFC/Ethernet Cable is in the scope of firm.
11. Supply & installation of latest version Operating station and Engineering station along with 5 KVA online UPS is in the scope of Firm.
12. The firm shall take into consideration a 5% extra DI, DO, AI & AO as spare in each PLC and main controller IO's of actual used signals.
13. Any devices, inputs and data required for installation of ARMAC system other than the mentioned will be in the scope of Firm. NHPC shall not provide any backup software or data and any other devices required for installation.
14. Generation of the reports as per NHPC requirement with Auto mailing system is to be done.
15. Web based monitoring, Auto mailing, auto messaging with cloud storage charges to be provided for 2 years etc.
16. Supply, installation, testing and commissioning of Instruments (Gate position indicators, pressure transmitters and other accessories are in the scope of the firm.
17. Calibration, Integration of existing sensor such as radar type reservoir water level monitoring sensor/transmitter (2 nos.), DG start stop analogs signal with ARMAC system is in scope of firm. The inflow & discharge calculation to be done by contractor.
18. For complying statutory requirements, environmental flow is discharged through other piping arrangements installed at Sewa-II Dam. The firm has to make provision in Engineering & Operating station for showing separate E-flow. Further the firm has to make provision for real time migration of E-flow data to different parties as per direction of EIC through web based /App based client system with multiple user Id's and passwords.
19. All or any such items, not explicitly mentioned herein but necessary for successful installation, testing, commissioning and smooth operation of the ARMAC system at Dam and power house shall be deemed to be included in the scope of work for which no extra payment shall be made by NHPC.
20. Providing and relaying of Power/Signal/Ethernet cable and rewiring of terminals of new controllers is in the scope of firm. The supply of Power cables, Control cables and Optical fiber cable and accessories shall conform to latest IS or IEC standard and also meet the temperature variation/severe weather condition at Sewa-II Dam site. Laying of Power cables, Control cables and Optical fiber cable is in the scope of firm. The firm shall select the most suitable cable routes and raceways ensuring a minimum of interference with other installations.
21. Installation of Android based application/web base portal with valid lifetime license until the same got obsolete for detailed analysis (i.e. Alarm, fault & tripping messages, Radial gate opening & discharge

readings, real time discharge profiles, Intake gate opening/closing reading etc.) and report generation of aforesaid parameters from ARMAC system is in the scope of firm. Further the firm may be asked to incorporate any other requirement of NHPC in the Android based application/web base portal as per instruction of Engineer-in-charge.

22. All electrical components supplied shall be properly earthed by the Contractor for the safety of the system, operating staff as well as the system.
23. The firm shall be responsible for providing all material and services specified or otherwise which are required to complete the work successfully.
24. Training to the NHPC personals who shall be operating the system to be provided free of cost by the firm.
25. For better understanding of existing ARMAC system installed at site and site condition, the firm may visit the site before submitting the tender. Any expenditure incurred for visiting the site shall be in the scope of the firm.
26. Documents/Reports:
 - (a) The firm shall furnish the OEM test report, if any, in respect of the supplied spares/items and also spares/items have interchangeability with existing item wherever applicable.
 - (b) The firm shall submit hard copies of as-built drawings/manuals/documents (3 Sets) along with soft copies (CDs/DVD/Pen drive) to Sewa-II P o w e r Station after successful commissioning of ARMAC system.

SPECIAL CONDITIONS OF CONTRACT

These Special Conditions of Contract shall be read and construed, along with the General Conditions of Contract for Supply, Installation, testing and commissioning of ARMAC system and in case of any conflict or inconsistency between these Special Conditions of Contract and General Conditions of Contract, the provisions of these Special Conditions contained herein shall prevail.

1.0 BRIEF SCOPE OF WORK:

The supply of ARMAC system shall be complete with all spares/items and accessories, which are necessary, for their efficient performance and satisfactory maintenance under the prevailing atmospheric conditions specified hereinafter. In addition, if bidder proposes to do some additional work/modification in the existing equipment/ components, to meet the performance requirement, the same shall be allowed. However, cost of these shall be considered as inclusive in the scope of bidder and it will not be the part of price schedule.

2.0 COORDINATION:

If the firm is offering spares/parts manufactured by different manufacturers, it will be his responsibility to fully coordinate the activities of each manufacturer in such a way that the complete equipment contracted for, is manufactured, supplied and generated for successful operation as per the requirement of the specification. This shall specifically apply to among other things, the agreed time schedule, quality control, testing process, dispatch, installation and commissioning etc.

3.0 COMPLETION PERIOD:

Supply, installation, testing and commissioning of spares/parts, Software and accessories of ARMAC system shall be completed within 07 Months from the next date of issue of Letter of award.

4.0 DOCUMENTS & REPORTS:

The Contractor shall furnish the manufacturers/OEM test certificates & datasheets in respect of the all supplied components & in confirmation with the latest IS /IEC standard, product specifications wherever applicable.

5.0 PRICES AND TAXES & DUTIES:

- Prices shall be 'Firm' in all respects till the completion of the Contract. The Prices shall be at F.O.R. Sewa-II Power Station, Mashka, J&K basis, including all cost of the spares/items charges for packing & forwarding, transportation, cost of labor/Service Engineer, insurance, dismantling, installation, testing & commissioning as per scope of work.
- All applicable taxes, duties & levies including Goods & Service Tax (GST) etc. as applicable shall be included in Price Bid.
- Tax deducted at source, shall be applicable as per rules.

6.0 TERMS OF PAYMENT:

A. FOR SUPPLIES:

- i. 70% payment of the supply contract price of the spares/parts after supply and receipt of spares/parts at Sewa-II Power Station along with 100% taxes and duties subject to documentary evidence against presentation of the following document:
 - Invoice in triplicate
 - RR/LR/GR
 - Detailed packing list/challan duly acknowledged by the consignee
 - Guarantee/ Warrantee certificate.
 - Inspection report
 - Insurance document.
 - OEM Test report, if any
- ii. Balance 30% of supply contract price of the material supplied shall be paid upon successful Erection, Testing & Commissioning of ARMAC System.

B. INSTALLATION, ERECTION AND COMMISSIONING:

- 100% of installation work related payment shall be made after Dismantling of existing spares/items, successful Erection, Testing & Commissioning of ARMAC along with Calibration & integration of existing sensors/instruments with new ARMAC System.

7.0 PERFORMANCE BANK GUARANTEE (PBG)

The Firm shall submit a Performance Bank Guarantee (PBG) within 28 days of award of contract equivalent to 10% of total Contract value which shall be valid up to 90 days beyond the entire defect liability period i.e. 24 months from the date of successful testing & commissioning of ARMAC system. The PBG shall be submitted as per Performa enclosed with the tender document.

8.0 DEFECT LIABILITY PERIOD

The Firm shall provide guarantee/warranty certificate that all the supplied spares/items, software and accessories will be new & original and in accordance with the Contract Documents and will be free from incompatibility, defects in design, programming/development, material and workmanship. The ARMAC System along with all auxiliaries and accessories shall be capable of Performing intended duties under Climatic conditions prevalent at site. The Contractor shall provide guarantee/warranty for the reliability, performance of the supplied spares/items of ARMAC system, software and accessories as follows:

- 8.1** For a period of 24 (twenty four) calendar months commencing upon the setting to work of Plant, the Contractor shall remain liable to replace any defective parts that may develop in the Plant of his own manufacture or those of his Sub-contractor under the conditions provided in the Contract under proper use and arising solely out of faulty design, materials or workmanship, provided always that such defective parts as are not , repairable at site and are not essential in the meantime to the maintenance in commercial use of the Plant are promptly returned to the Contractor's works at the expense of the Contractor unless otherwise arranged.
- 8.2** If it becomes necessary for the Contractor to replace or renew any defective parts of the Plant under this clause, the provisions of the first para, of this clause shall apply to the parts of the plant so replaced or renewed until the expiration of six months from the date of such

replacement or renewal or until the end of the above mentioned period of twenty four months, whichever may be later.

8.3 If any defect is not remedied within a reasonable time, the Purchaser may proceed to do the work at the Contractor's risk and expense, but without prejudice to other rights, which the Purchaser may have against the Contractor in respect of such defects.

8.4 At the end of the warranty period, the Contractor's liability shall cease. In respect of goods not covered by the first paragraph of this clause, the Purchaser shall be entitled to the benefit of such guarantee given to the Contractor by the original manufacturer of such goods.

9.0 LIQUIDATED DAMAGE:

Firm is also advised to take all necessary efforts to complete the Supply, Erection, Testing and Commissioning work in stipulated time as provided in this contract to the satisfaction of Engineer-in-charge. If the firm fails to attain completion of the work or any part thereof within the prescribed time for completion, the firm shall pay to the Purchaser liquidated damages equal to the amount computed @ ½ (half) percent per week or part thereof of Contract Price. The aggregate amount of such Liquidated damages shall in no case exceed 10% of the Contract Price.

10.0 ENGINEER IN-CHARGE:

Senior Manager (C), Dam-HM Division, Sewa-II Power Station or his authorised representative shall be the Engineer-in-Charge of the said contract.

11.0 CONSIGNEE:

Senior Manager (E&C), Store Division, Sewa-II Power Station, Mashka, J&K.

12.0 PAYING AUTHORITY:

Deputy General Manager (F), Finance Division, Sewa-II Power Station, Mashka, J&K.

13.0 LODGING AND TRANSPORTATION:

To and fro travelling expenses up to Sewa-II Power Station, Mashka shall be in the scope of the Contractor. Transportation from Mashka to Sarthali, Local transportation at site and lodging (at NHPC guest house) will be provided by NHPC free of cost to the staff of firm executing the work at site. Food and meal charges of the staff shall be borne by the firm.

14.0 Bidder should submit the duly signed copy of Annexure-I, II, III, IV & V on their letter head.

15.0 Bidder should submit the accepted copy of Scope of Work, Special Conditions of Contract attached in Buyer Added Bid Specific Terms and Conditions & complete bid documents.

16.0 Bidder should submit the accepted copy of Technical Specification & Drawings & Bill of Quantities.