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# ASSAM POWER GENERATION CORPORATION LIMITED

BIDDING DOCUMENTS
(NATIONAL COMPETITIVE BIDDING)

### **FOR**

HYDROMECHANICAL WORKS
CONTRACT PACKAGE FOR KARBI
LANGPI MIDDLE-II HYDRO POWER
PROJECT (24 MW)

(ASSAM, INDIA)

Bid No: KLM-II-HPP/PKG-2

**VOLUME-IV** 

**BID FORMS** 

**AUGUST 2025** 

### 1. BID FORMS AND SCHEDULES

### 1.1. SCHEDULE-1

1.

2.

3.

#### **BID FORM**

(To be submitted on letter head of Bidder)
Reference No:
Date:
То
The Chief General Manager (NRE)
Assam Power Generation Corporation Limited
Bijulee Bhawan, Guwahati-781001
Subject: Design, manufacture, procurement, supply, fabrication, shop assembly, painting, shop testing, transportation & delivery to project site, receipt & storage at site, erection, testing & commissioning including packing & forwarding for shipment and trial operation of all Hydro-Mechanical Equipments and steel liner of pressure shaft including all associated works for KARBI LANGPI MIDDLE II HYDRO Power PROJECT (3 x 8 MW), West Karbi Anglong, Assam as detailed in the tender document. Detailed Scope can be found under Volume-III
Dear Sir,
We have read and examined the tender documents relating to the subject cited works (hereinafter referred to as "Works") at ' SHP'" as issued by you:
Having examined the Bidding Documents, including Addenda/Corrigendum, we the undersigned, offer to construct such Works and remedy the defects therein in conformity with the Conditions of Contract, EMPLOYER's Requirements, Bid Proposal Sheets for the sum of:
(Prices to be left blank in Envelope-1 submission)(Insert amounts in words) (
Attached to this letter are copies of original documents defining
(a) Our legal status,
(b) The principal place of business, and

4. 'EMPLOYER' and its authorized representatives are hereby authorized to conduct

partnerships or individually owned firms).

(c) The place of incorporation (for bidders that are corporations), or the place of registration and the nationality of the EMPLOYERs (for Bidders that are

any inquiries or investigations to verify the statements, documents, and information submitted in connection with this Bid, and to seek clarifications from our bankers and employers regarding any financial and technical aspects. This Bid shall also serve as authorization to any individual or authorized representative of any institution referred to in the supporting information to provide such information deemed necessary andas requested by you to verify statements and information provided in this bid, such as the resources, experience, and competence of the Bidder.

- 5. We agree to keep this Bid open for acceptance for 180 days, or such other extended period as may be required by you and agreed by us, from the due date of submission of the Bid, and also agree not to make any modifications in its terms and conditions of our own accord.
- 6. A sum of Rs ...... (Rs....... only) is hereby forwarded in the form as Bid security (hereinafter "Bid Security"). We agree if we fail to keep the validity of Bid open, as aforesaid, or we make any modification in the terms and conditions of our Bid of our own accord or after the acceptance of our Bid if we fail to execute an Agreement as prescribed in the Tender Documents or fail to submit the required Performance Security or we are found to indulge in corrupt or fraudulent practices, as provided in the Tender Documents, we shall become liable for forfeiture of the Bid Security. In such an event you shall, without prejudice to any other right or remedy, be at liberty to invoke the said Bid Security.
- 7. We certify that the Bid submitted by us is strictly in accordance with the terms, conditions, specifications etc. as contained in the Tender Documents, and it is further certified that it does not contain any deviations to the aforesaid documents and that deviations or variations, if any, are duly disclosed by us separately in as envisaged in the Instructions to Bidders.
- 8. The bid is made with the full understanding that:
  - (a) Bids will be subject to verification of all information submitted at the time of bidding.
  - (b) EMPLOYER reserves the right to:
    - (i) Amend the scope and value of any work under this tender.
    - (ii) Reject or accept any bid, cancel the tender process and reject all bidders by giving a written notice.
  - (c) EMPLOYER shall not be liable for any actions taken under (b) (i) and (ii) above.
- 9. We confirm that the bid as well as any resulting agreement, will be signed so as to legally bind all partners, jointly and severally.
- 10. We undertake, if our bid is accepted, to commence the Works immediately upon issue of Order to Commence date and to complete and deliver the whole of works comprised in the contract within the period stated and in compliance with the tender conditions.
- 11. We confirm our agreement to treat the Tender Documents, our Bid, drawings and other records connected with the Works as secret and confidential documents and shall not communicate information contained therein to any person other than the person authorized by 'EMPLOYER' or use such information in any manner

prejudicial to the safety and integrity of the Works.

Subject to the terms of the Agreement as may be executed, this Bid, together with your Letter of Award, shall constitute a binding Contract between us, but without prejudice to your right to withdraw such award as governed by the Tender/Contract conditions.

- 12. We understand that you are not bound to accept the lowest or any bid you may receive.
- 13. The undersigned declares that the statements made, and the information provided in the Bid and formats are complete, true, and correct in all aspects.

We have gone through carefully all the Bid conditions and solemnly declare that we will abide by any penal action such as disqualification or blacklisting or termination of contract or any other action deemed fit, taken by the EMPLOYER against us, if it is found that the statements, documents, certificates produced by us are false / fabricated.

**Date of Submission:** 

(Signature of the Bidder) (Seal)

#### Note:

Bidders may note that no prescribed proforma has been enclosed for Power of Attorney. Bidders may use their own proforma, incorporating all essential ingredients constituting a valid "Power of Attorney".

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### 1.2. SCHEDULE-2

#### **DECLARATION**

(To be executed on a non-judicial stamp paper of appropriate value)

render invited by Assam Power Generation Corporation Limited (APGCL)
Tender for:
Name of Tenderer :
Tender No. and date of opening:
In Consideration of the EMPLOYER, having treated the Tenderer to be an eligible to bid, the Tenderer hereby agrees to the condition that the proposal in response to the above invitation shall not be withdrawn within six months (or any extension there of agreed to, by us) from the due date of submission of the tender, also to the condition that if thereafter the Tenderer does withdraw his proposal within the said period, the Bid Security by him may be forfeited to the EMPLOYER and at the discretion of the EMPLOYER, the EMPLOYER may debar the tenderer from tendering as the extant Govt. of India policy and guidelines.
Signed thisday of20
PlaceSigned by
Witness Tenderer
1. Full Signature
2. Name
3. Designation

### 1.3. **SCHEDULE - 3**

#### **WARRANTY FORM**

To, APGCL,
Subject: Tenderer's Warranty against tender nodatedfor EPC execution of
Dear Sir,
having invited subject tender for the subject works to be executed at
We, M/s
We M/s hereby submit our tender and undertake to keep our tender valid up to
We hereby further undertake that during the said period, we shall not vary / alter or revokeour tender.

- 1. We are familiar with and undertake to fulfil earnestly Price Schedule (Bill of Quantities) of the tender.
- 2. We have investigated the site and satisfied ourselves regarding the character of thework and local conditions that may affect the work of its performance.
- 3. We are satisfied that the work can be performed and completed as required in thetender documents.
- 4. We accept all risks directly or indirectly connected with the performance of the contract.
- 5. We have no collusion with other contractors or with any other person to execute thesaid works.
- 6. We have not been influenced by any statement or promise of the EMPLOYER but only bythe tender documents.
- 7. We are financially solvent.
- 8. We have experience and competency to perform the contract to the satisfaction of the EMPLOYER.
- 9. The statements submitted by us, are true.

10. We are familiar with all general and special laws, Act, Ordinances, Rules and Regulations of the Municipalities, District, State and Central Government that may affect the work, its performance or personnel employed therein.

Should this tender be accepted, we also agree to abide by and fulfill and comply with all the terms, conditions and provisions of the above-mentioned tender documents.

Yours faithfully,		
Place:	Name:	
Dated:	Address:	
Witnesses: 1.	2.	

### 1.4. **SCHEDULE - 4**

#### FORM OF BANK GUARANTEE FOR BID SECURITY

(On non judicial stamp paper of appropriate value)

То,
,
Sir,
WHEREAS, Messers
AND WHEREAS the Tenderer is required to furnish to you a Bank Guarantee for the sum of Rs (Rs only) as Bid Security against the Tenderer's offer as aforesaid.
AND WHEREAS We(Name of the Bank, hereinafter called the 'Bank'),
at request of the Tenderer, agree to give you this guarantee as hereinafter contained.
NOW THEREFORE, in consideration of the promises we, the undersigned, hereby covenant that the aforesaid tender of the tenderer shall remain open for acceptance by you during the period of validity as mentioned in the tender or any extension thereof as you and the tenderer may subsequently agree and if the tenderer shall, for any reason back out, whether expressly or impliedly, from his said tender during the period of its validity or any extension thereof as aforesaid we hereby guarantee to Assam Power Generation Corporation Limited.
(APGCL) (the "EMPLOYER") the payment of the sum of Rs

a) That you may, without affecting this guarantee grant time or other indulgence to or negotiate further with the tenderer in regard to the conditions contained in the said tender and thereby modify these conditions or add these to any further conditions as may be mutually agreed upon between you and the tenderer.

- b) That the guarantee herein before contained shall not be affected by any change in the constitution of the tenderer.
- c) That this guarantee commences from the date thereof and shall remain in force till the tenderer, if his tender is accepted by you, furnishes the security as requiredunder the said conditions and executes a formal agreement as therein provided or till three months after the period of validity or the extended period of validity, as the casemay be, of the tender, whichever is earlier.
- d) That the expressions 'The Tenderer' and 'The Bank' and 'EMPLOYER' herein used shall, unless such and interpretation is repugnant to the subject or context include their respective successors and assigns.
- e) That any account settled between you and the tenderer shall be conclusive evidence against us of the amount due hereunder and shall not be questioned by us.

Notwithstanding anything contained hereinabove,

i)	Our liability under	this guarantee shall not exceed
----	---------------------	---------------------------------

ii)	This guarantee shall be valid up to 180 days from bid opening date

iii)	The Claim period shall be valid up to 6(six) months beyond guarantee
	period

iv) We are liable to pay the guaranteed amount or any part thereof under this guarantee only and only if the EMPLOYER serves upon the bank a written claim or demand on or before\_\_\_.

Yours faithfully

Signature of Authorised Official of Bank with seal of Bank

#### **SCHEDULE - 5** 1.5.

2.

### PROFORMA FOR BANK GUARANTEE AGAINST PERFORMANCE (PBG)SECURITY

	To.
	THIS DEED OF GUARANTEE MADE ON THE
	office at
	AND WHEREAS, in accordance with the provision of the contract, the Contractor shall furnish to the EMPLOYER a bank guarantee for the sum specified therein as security for compliance with the Contractor's performance obligations in accordance with the Contract.
	Now This Deed Witnesses as Follows:
1.	In consideration of the promises the Guarantor hereby undertakes that the Contractor shall duly execute the complete hydromechanical works strictly in accordance with the Contract, failing which the Guarantor shall pay to the EMPLOYER on demand such amount or amounts as the Guarantor may be called upon to pay to the maximum aggregate of Rsbeing 10% of the Contract value
	The Guarantor shall pay to the EMPLOYER the sum under clause 1 above unconditionally, irrevocably and on its first demand without any demur, reservations, recourse, contest or protest and without requiring the EMPLOYER to invoke any legal remedy that may be available to it to compel the guarantor to pay the same or to compel suchperformance by the Contractor.
r c c	This guarantee shall come into force the date hereof and shall remain valid for 12 months beyond the last Final Acceptance Certificate issued under the Contract i.e., up today of
3.	The guarantee herein contained shall not be affected by any change in

- 4. The Guarantor shall not, during the term of this guarantee or any extension thereof, revoke the same in any manner whatsoever.
- The neglect or forbearance of the EMPLOYER in enforcement of payment of any
  moneys the payment whereof is intended to be hereby secured or the giving of
  time by the EMPLOYER for the payment thereof shall in no way relieve the
  Guarantor of its liability under this deed.
- 6. The Guarantor hereby agrees unequivocally and unconditionally to pay within 48 hours on demand made by EMPLOYER in that behalf and discharge the liabilities of the Contractor under the said terms and conditions of Contract in case of any act, commission, negligence, default or breach whatsoever on the part of the Contractor and pay such as may be payable by the Contractor to the EMPLOYER under the said Contract to the extent of the Guarantor's Guarantee namely Rs. ......(Rupees ) only
- 7. The EMPLOYER and the Contractor will be at liberty to carry out any modifications in the said Contract during the time of the said contract and any extension thereof, notice ofwhich modifications to the Guarantor is hereby waived.
- 8. The expressions 'The EMPLOYER' and 'The Guarantor' and 'The Contractor' shall unless there be any thing repugnant to the subject or context include their respective successors and assigns.
- These presents shall be governed by and construed in accordance with the IndianLaws. The Courts at Guwahati shall have exclusive jurisdiction in respect of all matters

arising out of or relating to the obligation undertaken by the Guarantor.

i) Our liability under this bank guarantee shall not exceed

written claim or demand on or before .....

Notwithstanding anything contained hereinabove,

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 the EMPLOYER serves upon the ban	k a

iv) Claim period is for 1 year beyond guarantee period of 12 months.

Signed by(For and on behalf of Guarantor)

#### IN WITNESS WHERE OF

For and on behalf of the Guarantor has signed this deed on the day and year first abovewritten.

Witness:

1.

2.

#### 1.6. **SCHEDULE - 6**

#### FORM OF AGREEMENT

This Agreement made this day of between the, (Address) (hereinafter called the "the EMPLOYER") of the One Part and M/s(hereinafter called "The Contractor") of the Other Part.
Whereas, the EMPLOYER is desirous that the Contractor should construct for the EMPLOYER (hereinafter referred to as the "Works")
AND WHEREAS pursuant to the Bid submitted by the Contractor dated (hereinafter referred to as "the Proposal"), the EMPLOYER has agreed to award the Contract for the execution and completion of the Works and to remedy any defects therein, on terms and conditions in accordance with the conditions of the Tender Documents in addition to the conditions included hereinafter

AND WHEREAS the Contractor has agreed to undertake, execute and complete the Works and has furnished a Performance Guarantee pursuant to Article 30 of the GCC.

#### NOW THIS AGREEMENT WITNESSES AS FOLLOWS:

- 1. In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the Tender Documents.
- 2. The following documents shall be deemed to form and be read and construed as part of this Agreement:
  - (i) The Special Conditions of the Contract
  - (ii) The General Conditions of the Contract
  - (iii) The Technical Specification
  - (iv) Bill of Quantities
  - (v) Tender Drawings
  - (vi) Project Profile
  - (vii) Any other document, as mutually agreed.
- The foregoing documents shall be harmoniously construed as complementary and mutually explanatory to one another. In the event of any ambiguity or discrepancy or
- 4. inconsistency between the provisions of the documents mentioned above, the order of precedence of these documents shall, subject to the General Conditions of Contract and to the extent of such ambiguity or discrepancy or inconsistency, be as listed above.

#### 5. Scope of Works

The contractor shall perform everything required to be performed and shall provide and furnish all the labour, materials, tools and equipment required to perform and complete, in a workman like manner, all the work covered by the contract documents,in strict accordance with the EMPLOYER's Requirements and conditions of contract, technical provisions (including annexures and list of corrections and amendments to specifications and drawings, conditions of contract and technical provisions), whichall are a part of this contract documents and shall do everything required by this contract and other documents constituting a part thereof.

- 6. In consideration of payments to be made by the EMPLOYER to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the EMPLOYER to perform, execute and complete the Works and remedy any defects therein in conformity in all respects with the provisions of the Contract.
- 7. The EMPLOYER hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein the contract price as specified in the Special Conditions of the Contract as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
- It is agreed by the Contractor that the entire Works shall be completed by the Contractor within the Time for Completion as defined in the General Conditions of Contract.

IN THE WITNESS WHEREOF THE PARTIES HERETO HAVE CAUSED THIS AGREEMENT TO BE EXECUTED THE DAY AND YEAR FIRST BEFORE WRITTEN.

Signed, Sealed and delivered by:		Signed, Sealed and delivered by	
Name:		Owner:	
For and on behalf of the contractor		For and on behalf of the Owner	
Name:	1.	Name:	
Address:		Address:	
Name:	2.	Name:	
Address:		Address:	
	ne:  Address:  Address:  Address:	Name: 2.  Address:	

### 1.7. SCHEDULE-7

#### **BANK GUARANTEE FOR ADVANCE PAYMENT**

(To be stamped in accordance with Indian Stamp Act)

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 bearing No
We [Name and address of the Bank]
The FMPI OYFR shall have the fullest liberty without affecting in any way the

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 vary the Advance payment or 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 law would but for this provision have the effect of relieving the Bank.

The 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 that the EMPLOYER may have in relation to the Contractor's liabilities.

Notwithstanding anything contained herein:

1.Our liability under this Bank Guarar	ntee shall not exceed
	lid upto 60 days beyond Final Acceptance
3.Claim period is for 1 yea	r beyond guarantee period of ABG
	amount or any part thereof under this Bank DYER serve upon Bank a written claim or
Dated this day of	at
WITNESS	
(Signature)	(Signature)
(Name)	(Name)
(Official Address)	(Designation with Bank Stamp)
	Attorney as per Power of Attorney No Dated

#### Notes:

- 1. (@) This date shall be One (1) year beyond the date of validity of ABG.
- 2 The stamp papers of appropriate value shall be purchased in the name of the Bankissuing the guarantee, issued after the signing of Contract agreement.
- 3. Claim period shall be 1 year beyond validity of ABG.
- 4 Amount of guarantee may be progressively reduced by the amount of the advance payment repaid by the Contractor as indicated in copies of interim statement or payment certificate which shall be presented to the Employer.

### 2. QUALIFICATION FORMS

### 2.1. FORM-1

#### SCHEDULE OF GENERAL PARTICULARS GENERAL INFORMATION

1	Name of Bidder/:			
2	2 Head office address:		Local office addres	ss (if any):
3	Contact name:		Contact name:	
	Telephone:	Mob. No.	Telephone:	Mob. No.
4	Fax:		Fax:	
	E-mail ID:		E-mail ID:	
5	Place of incorporation/re	egistration:	Year of incorporati	on/registration:
6	Main lines of business:			
7	Nationality of owners/sta	akeholders		
	Nam	е	Natio	onality
	1			
	2			
	3			
	4			
	5			

Signature with seal of bidder

.

#### 2.2. FORM-2

#### STRUCTURE AND ORGANIZATION

- 1. The Bidder is
  - a) a proprietary firm
  - b) a firm in partnership
  - c) a Limited Company or Corporation / Government undertaking
- 2. Number of years of experience
  - (i) in own Country
  - (ii) other Countries (specify Country)
- 3. For how many years has your organization been in business of similar work under itspresent name?
- 4. What were your fields when your organization was established?
- 5. Whether any new fields were added in your organization? And if so, when?
- 6. Were you ever required to suspend construction for a period of more than six monthscontinuously after you started? If so, give the name of project(s) and reasons thereof.
- 7. Have you ever left the work awarded to you incomplete? (If so, give name of project and reasons for not completing work.)
- 8. Attach an Organization Chart showing the structure of the company/association, including the names of the Directors and position of officers.

Signature with seal of bidder

### 2.3. FORM-3

#### TURNOVER RECORD IN ALL CLASS OF CONSTRUCTION WORKS ONLY

Name of Bidder:

SI .No.	Year	Turnover (Rs.)	Ref. to Page No. of Bidder'sDocuments
(1)	(2)	(3)	(4)
1			
2			
3			
4			
5			
	Total	-	-

### Signature with seal of bidder

#### Note:

- 1. All individual bidders must complete the information inthis form.
- 2. The information provided shall be certified by Chartered Accountant and supported byAudited Balance Sheets.

#### 2.4. FORM-4

#### **FINANCIAL CAPABILITY**

#### Name of Bidder

Banker	Name of B	anker				
	Address of	Address of Banker				
	Telephone	l	Contact Na	ame and Tit	le	
	Fax		Telex E-mail ID			
	Actual: Pre	Actual: Previous five financial years				
		-		-	-	
1. Total assets						
2. Current assets						
3. Total liabilities						
4. Current liabilities						
5. Profits before taxes						
6. Profits after taxes						
7. Net worth (Paid up share capital + reserves & surplus) as per Vol I (financial criteria)						
8. Average Net worth for lastFive Years						
Working Capital as per Vol I(financial criteria)						

#### Signature with seal of bidder

- 1. Bidder must fill in the form.
- 2. Copies of the Audited Financial Statements, including Balance Sheets certified by a Chartered Accountant for the last five years along with certified copy of Income Tax return for last five years submitted in the Income Tax Office (for the Bidder) are to be attached. Firms owned by individuals or partners may submit their balance sheets certified by a Chartered Accountant, along with certified copy of income tax return for last three years.
- 3 The information provided shall be certified by Chartered Accountant and supported by Audited Balance Sheets.
- 4 Attach certificate from a Chartered Accountant that the bidder has not suffered losses in not more than two financial year out of the last five financial years for any reasons whatsoever.

### 2.5. FORM-5

#### **GENERAL EXPERIENCE CRITERIA**

Name of Bidder:

a)	Name of Work:	
	Name of Client:	
	Contract Value:	
	Reference to page	no. of Bidders Document:
	Year	Amount executed (Rs)
	Total	

1. This criterion is to be met by a Bidder. Othermembers need not submit the details.

Signature with seal of bidder

### 2.6. FORM-6

#### PROJECT EXECUTION EXPERIENCE OF BIDDER

(Specific Experience)

	(0000000 = 20000	<b>,</b>	
PROJE	CT DATA SHEET (Separate sheets sh	all be given for each	of the projects)
NAME (	OF THE COMPANY/FIRM :		
PROJE	CT NAME :		
LOCATI	ON (City and Country ) :		
OVERA	LL CAPACITY (MW) :		
CAPTIA	L COST :		
S.No.	Criteria	Particulars of claimed experience	Page Reference No. of the claimed experience
	Experience: As per Technical Criteria in volume - III of bidder and other manufacture.		
	Time lines:  a) Date of Commencement of work  b) Scheduled date of    Commissioning of the project  c) Actual date of Commissioning of    the Project  d) Reasons for delay (if any)		
3	Contract Value:		
	Name, Address and Contact Numbers of Client (for reference)		
Please e experier	enclose copy of performance certificate nce	dother testimonials a	s proof of claimed
	Designation	· ·	ith seal of bidder

Company Seal

**Note:** Please use separate sheets for different project experience and different firms.

### 2.7. FORM - 7

#### PROJECTS EXECUTED IN LAST TWENTY YEARS

(Hydro-mechanical)

	(Hyuro-inechanical)
(FROMTO	)
Name of Bidder	

SI.No.	Name of Work and Name of Client	Contract Value (Rs)	Date of Award	Completion Date/probable completion date	Value of Work done	Copy of Performance Certificate at Page No.
	Total			Total		

#### Signature with seal of bidder

#### NOTE:

1. Provide copies of Completion/ Work Certificates for each project. Payment received in each year, certified by the Project Authority. Work orders/testimonials may be verified if required for last 5 years.

### 2.8. FORM-8

#### LITIGATION HISTORY

Name of Bidder or Lead Member:

Year	Award For or Against Bidder	Name of client, cause of litigation, and matter of dispute	Disputed amount (currentvalue in Rs.)	Actual awarded Amount (in Rs.)
				_

Biddersshould provide information on any history of litigation or arbitration resulting from contracts executed in the last five years or currently under execution. A separate sheet should be used for each member of a consortium.

Signature with seal of bidder

### LIST OF SCHEDULES

Schedule	Schedule	Page
No.		No.
I	Manufacturer's Authorization Form	1
II	Proposed Departure/Deviations from Particular Specifications (List of Deviations)	2
III	Construction Work Program (time schedule)	3
IV	List of Subcontractor/(s)	4
V	List of Site Erection Force	5
VI	List HM of Contractor's Major Equipment	6
VII	Supply, Transportation, Erection and Commissioning Plan, Methods and Sequence of Work.	7
VIII	Experience of Personnel	10
IX	Financial Capability	13
Х	Work Experience	15

# SCHEDULE I MANUFACTURER'S AUTHORIZATION FORM

To:
<del></del>
WHEREAS (Name of manufacturer)
(Signature for and on behalf of Manufacturer)
<b>Note</b> : This letter of authority shall be on the letterhead of the manufacturer and should be signed by a person competent and having power of attorney to bind the manufacturer and the Contractor. Such letter shall be appended to this Schedule I.

#### **SCHEDULE II**

#### PROPOSED DEPARTURE/DEVIATIONS FROM PARTICULAR SPECIFICATIONS

(List of Deviations)

Clause No. of Particular Specifications	Outline of Departure	Reason for Departure	Increase in Tender Price	Decrease in Tender Price

The specification shall prevail over any information contained in any document forming a part of our Bid, except only to the extent of deviations indicated in the above table.

Signature of the Tenderer:	
For and on behalf of:	
Date:	

#### Note:

- 1. In case of award, only specially agreed deviations from this list shall form part of the LOA/ Contract, while the remaining deviations shall be treated as withdrawn/ null and void.
- 2. Where there is no deviation, this statement shall be returned duly signed with an endorsement indicating "No Deviations".
- 3. Attach separate sheet if necessary if the original space is insufficient

#### **SCHEDULE III**

#### **EXECUTION WORK PROGRAM (TIME SCHEDULE)**

Applicant shall establish the Supply, Transportation, Erection and Commissioning time schedule to meet the requirements specified in this Tender using attached sheets. The Execution Work Program shall match with the Execution Schedules (and their milestone) as specified in tender document. The first month shall be the date of issue of the Engineer's Order to Commence.

Work Item	Months						
	1	2	3				

Signature of the Tenderer:	
For and on behalf of :	
Date:	

Note: The Work Program shall contain each individual item/activity in the Schedule of Prices

#### **SCHEDULE IV**

#### LIST OF SUBCONTRACTORS/(S)

We understand that the Contract or any part of thereof or any benefit or interest therein or there under shall not be assigned without the prior written consent of the Employer and the main Works shall not be sub-let except those permitted by written consent of the Employer in accordance with relevant clauses of Conditions of Contract.

We also understand that such consent given by the Employer shall not relieve us from any liabilities or obligations under the Contract and that we shall be fully responsible for acts, defaults, or neglects of any subcontractor, his agents, servants or workmen as fully as if they were our own. Upon receipt of written notice from the Employer requiring us to terminate the subcontract for the reasons stated therein, we shall undertake to dismiss the said subcontractor immediately from site and to execute the said part of the works with our own task force.

With the above understanding, we undertake to employ the subcontractor(s) listed below for the work item (s) proposed therein and confirm that our prices tendered reflect the same. We understand that the Employer may not grant consent on the subcontractor(s) if their purpose of engagement is de clared herein or if the proposed list is altered by us.

Item No.	Particulars	Name	of	Address	of
		Subcontractor		Subcontractor	

Signature of	the	Tend	erer:
For and on b	ehal	f of :	

Date:

#### Note:

- 1. The address of the sub contractor(s) shall be full business address with phone number and cable address.
- 2.Particular shall be given for each manufacturer, material supplier of major items and for those involved in erection
- 3.Full evidence signed by authorized representative of sub-contractor(s) showing that he shall work as sub-contractor shall be attached
- 4. Numbers of registered engineers and technicians shall also be presented

### SCHEDULE V LIST OF SITE ERECTION FORCE

- The Tenderer shall fill up the estimated erection forces both local and foreign for each month of the Contract Period
- 2. A detailed CV of the Project Manager shall be submitted along with this Schedule VI.

	Month								
Type of	1	2	3	4					
Labor									
Force									
Expatriate									
Resident									
Manager									
Supervisor									
Skilled									
Labor									
Others									
Local									
Foreman									
Heavy									
Equipment									
Operator									
Mechanics									
Electrician									
Unskilled									
Labors									
Others									

Signature of the Tenderer:	
For and on behalf of :	
Date:	

### SCHEDULE VI LIST OF TENDERER'S MAJOR EQUIPMENT

The Tenderer's list of major equipment shall be prepared as per this Schedule VII and included in the Bid. No material modification (other than formatting) is allowed.

Item	Description	Qty	Capacity or Output	Country of Origin	Model	Present Location	Manufacture Year	Ownership* Type	Estimated Present Value
						_			_

Signature of the Tenderer:
For and on behalf of :
Date:

**Note**: (\*) Clearly indicate present ownership such "owned", "to be purchased" or "to be hired". Employer or Engineer may inspect the equipment before issuing the Letter of Acceptance Use as many pages as required

#### **SCHEDULE VII**

## SUPPLY, TRANSPORTATION, ERECTION AND COMMISSIONING PLAN, METHODS AND SEQUENCE OF WORK

Applicant's Execution Plan attached to his Tender shall also be attached hereto without any modification. Following information shall be contained but not limited to.

#### (1) Execution Method and Sequence of Works

- Work quantities of major structures
- ii. Explanations on design including the material, manufacturing, quality control and testing including destructive and non destructive, transportation including at site (method of lowering of pipe shall in respective location), installation sequence and NDT Testing, and dry and wet Testing & Commissioning of hydro-mechanical works.
- iii. Proposed methods for safety and protection for manpower, equipment and other structures during transportation and installation.
- iv. Labour force by trades for above works.
- v. Detailed Execution time schedule of major works. (Detail breakdown for design, fabrication, transportation, installation, testing and commissioning).

#### (2) Organization Chart

- i. Diagram of organization divided into such sections as control, administration, Engineering, Construction, etc.
- ii. Name of staff to be assigned and their grades and assignment period of each staff for this project.
- (3) Layout of Temporary Storage at site
  - Plan of temporary storage area including the space required for storing the plant and equipment, penstock pipe shells and their protection from surrounding and construction time schedule.
- (4) Layout of Office, Quarter, workshop and Other Necessary Buildings
  - i. Plan of temporary buildings including location, names, quantities, floor areas, accommodation, capacity, water supply system, sewerage treatment, Environmental control measures, furniture, etc. and Construction time schedule.
- (5) Layout of Electric Power Supply System
  - i. Plan of electric power supply system including schematic diagrams. 11 kV branch lines, step-down facilities, supply line beyond the Employer's power delivery points, emergency Diesel generation units, etc.
- (6) Layout of Telecommunication System
  - i. Plan of telecommunication system
- (7) Plan of medical Services

- (8) Schedule of Land Arrangement on temporary Works
  - i. Location and area of the Temporary works which is or are to be located.
  - ii. The target date by when the Applicant desires to arrange his plan and layout of the temporary works.
- (9) Layouts of Other Temporary Facilities

Descriptions, drawing, specification, conditions, schedule or other items necessary to clarify the other temporary facilities proposed shall be covered.

Signature of the Tenderer:	
For and on behalf of :	
Date:	

#### SCHEDULE VIII

#### **EXPERIENCE OF PERSONNEL**

We	undertake to provide and e	mploy for	the duration	of the con	tract a proj	ect mana	ger, an
assi	stant project manager (if an	y) and	(num	ber of pers	ons) senior	· site staff	whose
profe	essional experience is as s	tated. In a	ddition to su	uch senior	staff we als	so underta	aken to
prov	ide and employ	(number	of persons)	Mechanic	al, Electric	al and $\_$	
(nun	nber of persons) engineer(s	s) qualified	for the other	er engineer	ing field as	required	by the
cons	struction Time Schedule. Pr	ofessional	records of	our site sta	ff engaged	in the wo	rks are
as p	er attached.						
	/nama at	f musicat u	managar) ba	a a braad	ove orion o	a in the	field of
nroi	•		nanager) ha		-		
	ect similar to or larger thar ects to meet the requiremer			•			
-	od of the Co			supported		-	least
•		•	J		•		
	and						
	and			\'.	141110 01 001	nor one o	ian).
PRC	FESSIONAL RECORDS O	F FIELD F	PERSONAL				
1.	Name: .						
2.	Date of birth:						
3.	NI-4:						
4.							
5.	Charielity						
6.	D 11 0						
7.	Length of service with:						
	Applicant:		Years fron	າ	to		
				n			
8.	Years of experience:						
9.	If he has worked in other	firms tha	n the Applic	ant give na	ames and	length of	service
	with pervious employers:						
	Name of Employer	Length	of Services				
				_years fron	າ	_ to	
				_years fron	າ	_ to	
10.	Construction experience:						
	(This should cover the pas	t 15-year	experience.	Use as mar	ny pages a	s necessa	ary)
	(1) Name of Project						
	(2) Name and address of o						
	(3) Name and address of t	he				<del> </del>	
	Engineer (consultant	<u>.</u> )					
	For supervision:						
	(4) Indicate the features of						
	Project (size of struct	ures,					
			9				

work volumes and any other particular interest connected with the project):		
(o) contract / unicant		
(Equivalent in Indian		
Rupee)		
Position		
Works for which the		
(Personnel was		
responsible)		<del></del>
	month	year
From	month	year
	Signature of the Tenderer:	
	For and on behalf of :	
	Date:	

# SCHEDULE XI FINANCIAL CAPABILITY

Name of the Tenderer offering Tender:

Tenderer shall provide financial information to demonstrate requirement of the Employer as set forth in Vol I "Instruction to Tenderers".

Banker information shall be furnished as follows:

Tenderer	Name of the Bank	
	Address of the Bank	
	Telephone	Contact Name
	Fax	Email

Actual assets and liabilities shall be summarized at the corresponding year for the previous five calendar years. Based on the known commitments, summarize projected assets and liabilities for the next two calendar years.

Financial Information		Pre	vious Fiv	e Years		Projected Next Tv Years		
Illiorillation	5	4	3	2	1	1	2	
1. Total Assets								
2. Current Assets								
3. Total Liabilities								
4.Current Liabilities								
5. Profit Before								
Taxes								
6. Profit After Taxes								

Signature o	f the Tend	derer:	 
For and on	behalf of:		
Date:			

#### Note:

- 1.Use additional sheets if necessary. Submit the information in the format prescribed above.
- 2.A copy of audited balance sheet shall be submitted by Tenderer.

# SCHEDULE XIII WORK EXPERIENCE

#### Name of Tenderer.

Project Name	Owner's Name and Address	Nature and Kind of Works	Contra			Reference Attached
			Total	Tenderer's Share		

Signature of the Tenderer:	
For and on behalf of :	
Date:	

#### Note:

- 1. Use additional sheets where required.
- 2. References to support the information must be attached

#### ASSAM POWER GENERATION CORPORATION LIMITED

#### **FORMAT of QUERIES**

SI No	Clause IFT/GCC/PCC etc	No	Tender Specifications	Queries Bidder	APGCL Reply

# Annexures (Technical Data sheets)

#### **Annexure-I**

# List of Documents to be submitted along with Bid as per the Technical Specifications

Sr. No.	Documents
1.	Basic Design calculations/ General arrangement drawings
2.	Estimated weights
3.	Hoist capacity calculations
4.	Technical particulars on Annexure-II
5.	Gate wise schedule of submission of design calculations, drawings, fabrication, erection, testing and commissioning on AnnexIII
6.	Deviations from Technical Specifications on Annex IV
7.	Erection methodology
8.	List of erection equipment/cranes etc.

The above list of documents is not exhaustive, however the bidder shall have to submit the documents as per relevant clauses of bid documents and as advised by the employer.

(Signature of Bidder)

# **Annexure-II**

1.	DATA	SHEET
	1.1.	BARRAGE STOPLOG AND GANTRY CRANE
		BARRAGE RADIAL GATE AND HYDRAULIC HOIST
		INTAKE TRASHRACK
		INTAKE EMERGENCY GATE (FIXED WHEEL TYPE) AND HOIST
		INTAKE SERVICE GATE (FIXED WHEEL TYPE) AND HOIST
		SURGE SHAFT GATE AND HOIST
		DRAFT TUBE GATE AND HOIST
		MISCELLANEOUS EQUIPMENT
		PRESSURE SHAFT
		BIFURCATION & BRANCH PIPES

#### 1. DATA SHEET

# 1.1. BARRAGE STOPLOG AND GANTRY CRANE

#### MANUFACTURER

ITEM	DESCRIPTION	UNIT	DATA
1.0	Stoplog		
	Number of stoplog sets	Sets	
	Number of units per sets	Nos	
	Size of stoplog		
	Clear Width	mm	
	Clear height	mm	
	Design Head	m	
	Elevation of the Sill	m a.s.l	
	Type of lifting beam		
	Dimension of lifting beam	mm	
	Guaranteed leakage under	l/sec	
	any water level		
1.1	Gantry Crane		
	Manufacturer		
	Span	mm	
	Wheel base	mm	
	Clear height	mm	
	Capacity	KN	
	- rail size	Kg/m	
	Motors		
	Manufacturer		
	Туре		
	Rated power		
	a) Hoist	KW	
	b) Long Travel	KW	
	Rated voltage	V	
	Rated current	А	
	Starting current	А	
	Relative duty factor	%	
	Insulation class		
	Hoist Break		
	Manufacturer		
	- Type		
	Torque	NM	
	Number of breaks	Nos_	
	Long travel break		
	Manufacturer		

	Туре		
	Torque	NM	
	Number of breaks	Nos.	
	Reduction Gear Box		
	Manufacturer		
	Туре		
	Operation speed		
	Travel speed		
1.2	Controls & Instrumentation		
	Control Panel		
	Туре		
	Enclosure Type		
	Material		
	Limit Switches		
	Manufacturer		
	Quantities	Nos	
	Туре		
2.0	MATERIALS		
	Stop log		
	Skin Plate		
	Main Girder		
	Bearing Plate		

#### 1.2. BARRAGE RADIAL GATE AND HYDRAULICHOIST

#### **MANUFACTURER**

ITEM	DESCRIPTION	UNIT	DATA
1.0	Radial Gate		
	Number of gates	Nos.	
	Size of gate		
	Clear Width	mm	
	Clear Height	mm	
	Design Head	m	
	Max. Operating Head	m	
	Elevation of the Sill	m a.s.l.	
	Elevation of trunnion	m a.s.l.	
	Guaranteed leakage under	l/sec	
	Operating mechanism of dogging device		
	Operating speed		
	Opening	m/mim	

ITEM	DESCRIPTION	UNIT	DATA
	Closing	m/min	
	Type of Trunion bearing		
2.0	Hydraulic Hoist		
	Manufacturer		
	Numbers	Nos.	
	Stroke	Mm	
	Operating Oil Pressure bar	Bar	
	Maximum creeping value of gate during any opening position	mm	
	Type of bearing for hoist cylinder mounting		
	Hoist capacity per cylinder	kN	
3.0	Hoist Power pack		
	Manufacturer		
	Type/ Numbers		
	Size of oil unit (W/H/D)	mm	
	Oil Pressure	bar	
	Type of oil		
	Oil Pump		
	Manufacturer		
	Nos. of pumps	Nos.	
	Туре		
	Flow	l/sec	
	Pressure	bar	
	Speed	rpm	
	Capacity	kW	
3.1	Motors		
	Manufacturer		
	Туре		
	Rated power	kW	
	Rated Voltage	V	
	Rated Current	А	
	Starting Current	А	
	Relative duty factor	%	
	Insulation class		
3.2	Hand Pump		
	Туре		
	Max. operation manpower force on handle	N	
	Rated speed of opening	m/min	
3.3	Control Valves & Pressure Relief vales		

ITEM	DESCRIPTION	UNIT	DATA
	Manufacturer		
	Туре		
	Quantities	Nos.	
3.4	Pressure Gauges and switches		
	Manufacturer		
	Туре		
	Dial size of gauge	mm	
	Quantities	Nos.	
	Accuracy	%	
	Ambient Temperature range	°C	
	Humidity range	% RH	
	Type of over pressure protection		
3.5	Control Panel		
	Туре		
	Enclosure type		
4.0	Control & Instrumentation		
4.1	Mechanical Position Indicator		
	Manufacturer		
	Туре		
	Quantities	Nos.	
4.2	Limit Switches		
	Manufacturer		
	Quantities	Nos.	
	Type (Proximity/ snap action)		
	Protection class		
	Ambient Temperature Range	οС	
	Humidity Range	% RH	
5.	MATERIAL		
5.1	Gate		
	Skin Plate		
	Gate Arms		
	Other structural members		
	Type and material of gate seals		
5.2	Embedded Parts		
	Sealing frame		
	Seal Seats		
	Sill Beam		
	Trunion bracket		
5.3	Hydraulic Hoist		
	Material		

ITEM	DESCRIPTION	UNIT	DATA
	Cylinder tube		
	Piston		
	Piston Rod		
	Type of seals		
	Hoist-cylinder trunion pin		
	Anchor bolts and nuts		
	Material for oil piping		

# 1.3. INTAKE TRASHRACK

#### **MANUFACTURER**

#### MAIN DATA

ITEM	DESCRIPTION	UNIT	DATA
1.0	Trash rack		
	Size of trash rack		
	Clear Width	mm	
	Clear height	mm	
	Number of Trash rack	Nos.	
	Size of each panel	mm	
	Design Head	m	
	Max. choking considered	%	
2.0	MATERIALS		
2.1	Trash Rack		
	Material		
	Bar Size	mm	
2.2	Embedded Parts		

# 1.4. INTAKE EMERGENCY GATE (FIXED WHEELTYPE) AND HOIST

#### **MANUFACTURER**

ITEM	DESCRIPTION	UNIT	DATA
1.0	Intake Emergency Gate		
	Number of gates	Nos	
	Type of gate		
	Size of gate		
	Clear Width	mm	
	Clear height	mm	
	Design Head	m	
	Max. Operating Head	m	

	Elevation of the Sill	m a.s.l.	
	Guaranteed leakage under any	l/sec	
	water level	., 555	
1.2	Rope Drum Hoist		
	Manufacturer		
	Capacity	kN	
	Clear Height	Mm	
	Operating Speed		
	Opening	m/min	
	Closing	m/min	
1.2.1	Motors		
	Manufacturer		
	Туре		
	Rated power	kW	
	Rated Voltage	V	
	Rated Current	А	
	Starting Current	А	
	Relative duty factor	%	
	Insulation class		
1.2.2	Hoist Breaks		
	Manufacturer		
	Туре		
	Number of breaks	Nos.	
	-		
	Torque	NM	
1.2.3	Reduction Gear Box	NM	
1.2.3	<u> </u>	NM	
1.2.3	Reduction Gear Box  Manufacturer  Type	NM	
2.0	Reduction Gear Box  Manufacturer  Type  Controls & Instrumentation	NM	
	Reduction Gear Box  Manufacturer  Type	NM	
2.0	Reduction Gear Box  Manufacturer  Type  Controls & Instrumentation	NM	
2.0	Reduction Gear Box  Manufacturer Type Controls & Instrumentation Control Panel Type Enclosure type	NM	
2.0 2.1	Reduction Gear Box  Manufacturer  Type  Controls & Instrumentation  Control Panel  Type  Enclosure type  Material	NM	
2.0	Reduction Gear Box  Manufacturer Type Controls & Instrumentation Control Panel Type Enclosure type Material Limit Switches	NM	
2.0 2.1	Reduction Gear Box  Manufacturer  Type  Controls & Instrumentation  Control Panel  Type  Enclosure type  Material  Limit Switches  Manufacturer		
2.0 2.1	Reduction Gear Box  Manufacturer Type Controls & Instrumentation Control Panel Type Enclosure type Material Limit Switches Manufacturer Quantities	NM Nos.	
2.0 2.1	Reduction Gear Box  Manufacturer Type Controls & Instrumentation Control Panel Type Enclosure type Material Limit Switches Manufacturer Quantities Type (Proximity/ snap action)		
2.0 2.1 2.2 3.0	Reduction Gear Box  Manufacturer  Type  Controls & Instrumentation  Control Panel  Type  Enclosure type  Material  Limit Switches  Manufacturer  Quantities  Type (Proximity/ snap action)  MATERIALS		
2.0 2.1	Reduction Gear Box  Manufacturer Type Controls & Instrumentation Control Panel Type Enclosure type Material Limit Switches Manufacturer Quantities Type (Proximity/ snap action) MATERIALS Intake Emergency gate		
2.0 2.1 2.2 3.0	Reduction Gear Box  Manufacturer Type Controls & Instrumentation Control Panel Type Enclosure type Material Limit Switches Manufacturer Quantities Type (Proximity/ snap action) MATERIALS Intake Emergency gate Skin Plate		
2.0 2.1 2.2 3.0	Reduction Gear Box  Manufacturer Type Controls & Instrumentation Control Panel Type Enclosure type Material Limit Switches Manufacturer Quantities Type (Proximity/ snap action) MATERIALS Intake Emergency gate Skin Plate Main Girders		
2.0 2.1 2.2 3.0	Reduction Gear Box  Manufacturer Type Controls & Instrumentation Control Panel Type Enclosure type Material Limit Switches Manufacturer Quantities Type (Proximity/ snap action) MATERIALS Intake Emergency gate Skin Plate Main Girders Bearing Plate		
2.0 2.1 2.2 3.0	Reduction Gear Box  Manufacturer  Type  Controls & Instrumentation  Control Panel  Type  Enclosure type  Material  Limit Switches  Manufacturer  Quantities  Type (Proximity/ snap action)  MATERIALS  Intake Emergency gate  Skin Plate  Main Girders  Bearing Plate  Rollers & Pins		
2.0 2.1 2.2 3.0 3.1	Reduction Gear Box  Manufacturer Type Controls & Instrumentation Control Panel Type Enclosure type Material Limit Switches Manufacturer Quantities Type (Proximity/ snap action) MATERIALS Intake Emergency gate Skin Plate Main Girders Bearing Plate Rollers & Pins Gate Seals		
2.0 2.1 2.2 3.0	Reduction Gear Box  Manufacturer  Type  Controls & Instrumentation  Control Panel  Type  Enclosure type  Material  Limit Switches  Manufacturer  Quantities  Type (Proximity/ snap action)  MATERIALS  Intake Emergency gate  Skin Plate  Main Girders  Bearing Plate  Rollers & Pins  Gate Seals  Embedded Parts		
2.0 2.1 2.2 3.0 3.1	Reduction Gear Box  Manufacturer Type Controls & Instrumentation Control Panel Type Enclosure type Material Limit Switches Manufacturer Quantities Type (Proximity/ snap action) MATERIALS Intake Emergency gate Skin Plate Main Girders Bearing Plate Rollers & Pins Gate Seals Embedded Parts Side Guide frames		
2.0 2.1 2.2 3.0 3.1	Reduction Gear Box  Manufacturer Type Controls & Instrumentation Control Panel Type Enclosure type Material Limit Switches Manufacturer Quantities Type (Proximity/ snap action) MATERIALS Intake Emergency gate Skin Plate Main Girders Bearing Plate Rollers & Pins Gate Seals Embedded Parts Side Guide frames Roller track plates		
2.0 2.1 2.2 3.0 3.1	Reduction Gear Box  Manufacturer Type Controls & Instrumentation Control Panel Type Enclosure type Material Limit Switches Manufacturer Quantities Type (Proximity/ snap action) MATERIALS Intake Emergency gate Skin Plate Main Girders Bearing Plate Rollers & Pins Gate Seals Embedded Parts Side Guide frames		

	Hoist Structure	
	Rope drum	
	Gears	
	Wire rope	
	Power Cables	

# 1.5. INTAKE SERVICE GATE (FIXED WHEEL TYPE)AND HOIST

# MANUFACTURER

ITEM	DESCRIPTION	UNIT	DATA
1.0	Intake Service Gate		
	Number of gates	Nos	
	Type of gate		
	Size of gate		
	Clear Width	mm	
	Clear height	mm	
	Design Head	m	
	Max. Operating Head	m	
	Elevation of the Sill	m a.s.l.	
	Guaranteed leakage under any water level	l/sec	
2.0	Rope Drum Hoist		
	Manufacturer		
	Capacity	kN	
	Clear Height	Mm	
	Operating Speed		
	Opening	m/min	
	Closing	m/min	
2.1	Motors		
	Manufacturer		
	Туре		
	Rated power	kW	
	Rated Voltage	V	
	Rated Current	А	
	Starting Current	А	
	Relative duty factor	%	
	Insulation class		
2.2	Hoist Breaks		
	Manufacturer		
	Туре		
	Number of breaks	Nos.	
	Torque	NM	
2.3	Reduction Gear Box		
	Manufacturer		
	Type		

3.0	Controls & Instrumentation		
3.1	Control Panel		
	Type		
	Enclosure type		
	Material		
3.2	Limit Switches		
	Manufacturer		
	Quantities	Nos.	
	Type (Proximity/ snap action)		
4.	MATERIALS		
4.1	Intake Service gate		
	Skin Plate		
	Main Girders		
	Bearing Plate		
	Rollers & Pins		
	Gate Seals		
4.2	Embedded Parts		
	Side Guide frames		
	Wheel/ side track plates		
	Sill Beam		
4.3	Rope Drum Hoist		
	Hoist Structure		
	Rope drum		
	Gears		
	Wire rope		
	Power Cables		

# 1.6. SURGE SHAFT GATE AND HOIST

#### **MANUFACTURER**

ITEM	DESCRIPTION	UNIT	DATA
1.0	Surge Shaft Gate		
	Number of gates	Nos	
	Type of gate		
	Size of gate		
	Clear Width	mm	
	Clear height	mm	
	Design Head	m	
	Max. Operating Head	m	
	Elevation of the Sill	m a.s.l.	
	Guaranteed leakage under any water level	l/sec	
2.0	Rope Drum Hoist		
	Manufacturer		
	Capacity	kN	
	Clear Height	Mm	

	Operating Speed		
	Opening	m/min	
	Closing	m/min	
2.1	Motors		
	Manufacturer		
	Type		
	Rated power	kW	
	Rated Voltage	V	
	Rated Current	A	
	Starting Current	А	
	Relative duty factor	%	
	Insulation class		
2.2	Hoist Breaks		
	Manufacturer		
	Type		
	Number of breaks	Nos.	
	Torque	NM	
2.3	Reduction Gear Box		
	Manufacturer		
	Туре		
3.0	Controls & Instrumentation		
3.1	Control Panel		
	Type		
	Enclosure type		
	Material		
3.2	Limit Switches		
	Manufacturer		
	Quantities	Nos.	
	Type (Proximity/ snap action)		
4.0	MATERIALS		
4.1	Surge Shaft Gate		
	Skin Plate		
	Main Girders		
	Bearing Plate		
	Rollers & Pins		
	Gate Seals		
4.2	Embedded Parts		
	Side Guide frames		
	Wheel/ side track plates		
	Sill Beam		
4.3	Rope Drum Hoist		
	Hoist Structure		
	Rope drum		
	Gears		
	Wire rope		
	Power Cables		

# 1.7. DRAFT TUBE GATE AND HOIST

#### **MANUFACTURER**

ITEM	DESCRIPTION	UNIT	DATA
1.0	Draft Tube Gate		
	Number of gates	Nos	
	Type of gate		
	Size of gate		
	Clear Width	mm	
	Clear height	mm	
	Design Head	m	
	Max. Operating Head	m	
	Elevation of the Sill	m a.s.l.	
	Guaranteed leakage under any water level	l/sec	
2.0	Rope Drum Hoist		
	Manufacturer		
	Capacity	kN	
	Clear Height	Mm	
	Operating Speed		
	Opening	m/min	
	Closing	m/min	
2.1	Motors		
	Manufacturer		
	Туре		
	Rated power	kW	
	Rated Voltage	V	
	Rated Current	А	
	Starting Current	A	
	Relative duty factor	%	
	Insulation class		
2.2	Hoist Breaks		
	Manufacturer		
	Туре		
	Number of breaks	Nos.	
	Torque	NM	
2.3	Reduction Gear Box		
	Manufacturer		
	Туре		
3.0	Controls & Instrumentation		
3.1	Control Panel		
	Туре		
	Enclosure type		
	Material		
3.2	Limit Switches		

	Manufacturer		
	Quantities	Nos.	
	Type (Proximity/ snap action)		
3.3	Overload Protection Device		
	Type		
3.4	Slack Rope Detection Device		
	Туре		
	Quantity	Nos	
4.0	MATERIALS		
4.1	Surge Shaft Gate		
	Skin Plate		
	Main Girders		
	Bearing Plate		
	Rollers & Pins		
	Gate Seals		
4.2	Embedded Parts		
	Side Guide frames		
	Wheel/ side track plates		
	Sill Beam		
4.3	Rope Drum Hoist		
	Hoist Structure		
	Rope drum		
	Gears		
	Wire rope		
	Power Cables		

# 1.8. FISH PASS GATE AND HOIST

#### **MANUFACTURER**

ITEM	DESCRIPTION	UNIT	DATA
1.0	Fish Pass Gate		
	Number of gates	Nos	
	Type of gate		
	Size of gate		
	Clear Width	mm	
	Clear height	mm	
	Design Head	m	
	Max. Operating Head	m	
	Elevation of the Sill	m a.s.l.	
	Guaranteed leakage under any water level	l/sec	

# 1.9. MISCELLANEOUS EQUIPMENT

#### **MANUFACTURER**

ITEM	DESCRIPTION	UNIT	DATA
1.0	Microprocessor based remote		
	control system		
	Туре		
	Control Power Supply		
	Type of signaling system		
2.0	Water Level Sensors		
	Туре		
	No. of sets	Nos.	
	Power Source		
	Range of sensor	m	
	Accuracy	%	
	Control power supply		
	Frequency of sensing	Min	
2.3	Head loss measuring		
	instrument		
	Туре		
	Range of instrument	m	
	Accuracy	%	
	Alarm system	%	
	Control power supply		
3	Controls		
	Type of control		
	Type of signals		
	Type of cabling		

#### 1.10. PRESSURE SHAFT

#### **MANUFACTURER**

#### **MAIN DATA**

ITEM	DESCRIPTION	UNIT	DATA
	No. of pipe including bend	Nos.	
	Dia of pipe	mm	
	Length of the pipes, transported, welded on place	m	
	Pipe plate thickness	mm	
	Weight of one single pipe	ton	
	Material quality		
	No. of rips		
	Size of the rips (Da x Di x S)	mm	
	Type of welding material		

# 1.11. BIFURCATION & BRANCH PIPES

#### MANUFACTURER

ITEM	DESCRIPTION	UNIT	DATA
1.0	Bifurcation and Branch Pipes		
	Diameter & length of inlet pipe Diameter & length of two outlet		
	pipes		
	Length of the pipes, transported,		
	welded on place		
	Pipe plate thickness		
	No. of sickle	Nos.	
	Size of the sickle rips (Da x Di x S)		
	Material quality		
	Weight of one bifurcation		
	Type of welding material		
2.0	Rust protection work		
2.1	Penstock outside surface	m²	
	Surface preparation		
	Material of Primer coat		
	Material of finer coat		
	Dry film thickness	mm	
	Colour		
2.2	Penstock & steel liner inside	m²	
	surface		
	Surface Preparation		
_	Material of Primer coat		
	Material of finer coat		
	Dry film thickness	mm	
	Colour		

# **Annexure-III**

SCHEDULE OF SUBMISSION OF DESIGN, DRAWINGS, SUPPLY AND ERECTION OF GATES, HOISTS AND VALVES

EXPECTED DATE OF PLACEMENT OF OF	RDERS: By Date Month Yea
SUBMISSION OF DESIGN & DRAWINGS F	FOR APPROVAL
1st Stage Embedded Parts	By
2nd Stage Embedded Parts	Ву
Gates	Ву
Hoists, Hoist Platforms & Trestles	By
Gantry Crane	Ву
APPROVAL OF DESIGN AND DRAWING	S
Approval of design and drawings will be or receipt of complete submission of drawings a subjected to the conditions that the designs a explanatory in all respect, otherwise it shall be the tender document. However, the approximanufacturer of his responsibility for correperformance of equipment.	and designs for the above four group and drawings are complete and se be governed by the relevant clause o wal shall not in any way relieve the
SUPPLY AND ERECTION	
a) Supply	
Supply of 1st Stage Embedded Parts	Ву
Supply of 2nd Stage Embedded Parts	Ву
Supply of Gates	Ву
Supply of Hoists	Ву
Supply of Gantry Crane	Ву
b) Erection	
Erection of 2nd Stage Embedded Parts	Ву
Erection of Gates	Ву
Erection of Hoists	Ву
Erection of Gantry Crane Total Contract Period w.e.f NOTES:	By

1) The erection work shall be in phases as indicated above.

(SIGNATURE OF BIDDER)

# Annexure. - IV

# List of Deviations from Technical Specifications(To be furnished by the Bidders)

Sr. No.	Section and Clause No. 2	Deviation 3	Remarks/Justifications 4

(Signature of Bidder)