

# **ASSAM POWER GENERATION CORPORATION LIMITED**

**OFFICE OF THE CHIEF GENERAL MANAGER (HYDRO & CIVIL)**

**BIJULEE BHAWAN, 2<sup>nd</sup> FLOOR, PALTANBAZAR**

**GUWAHATI-781 001**



## **TENDER DOCUMENT FOR**

- NIT NO.** :- **Tender Notice No. 12 of 2020-21 of CGM (Hydro & Civil)**
- NAME OF WORK** :- **Annual Operation And Maintenance Contract For Hydraulic Gates And Hydraulic Hoisting System On Concrete Dam of 2x50 MW Karbi Langpi Hydro Electric Project Including Operation & Maintenance of Dewatering Pump Installed At Foundation Gallery of Dam.**
- NAME OF THE FIRM  
OR CONTRACTOR** :-

**DECEMBER' 2020**

**PRICE Rs. 2000/-  
(Non-Refundable)**

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## TENDER NOTICE



### **ASSAM POWER GENERATION CORPORATION LIMITED**

Registered Office: Bijulee Bhawan, 2<sup>nd</sup> floor, Paltanbazar, Guwahati-781 001, Assam.

CIN: U40101AS2003SGC007239

E mail: [cgmb2010@yahoo.in](mailto:cgmb2010@yahoo.in) Tele-Fax: 0361-2739522.

**Ratnajit Biswanath**

Chief General Manager (Hydro & Civil)

**Tender No.12 of 2020-21 of CGM (H & C)**

**Dated: 08.12.2020**

#### Tender Notice No. 12 of 2020-21

<b>Invitee</b>	The Chief General Manager(Hydro & Civil) 2nd Floor Bijulee Bhawan, Paltanbazar,Guwahati, Assam, PIN-781001
<b>Name of work</b>	Annual Operation and Maintenance Contract for Hydraulic Gates and Hydraulic Hoisting System on Concrete Dam of 2x50 MW Karbi Langpi Hydro Electric Project including Operation & Maintenance of Dewatering Pump installed at Foundation Gallery of Dam.
<b>Duration of work</b>	<b>12 (Twelve) months, w.e.f 01/01/2021</b>
<b>Eligibility of the bidder</b>	<p>Reputed Firms/Contractors with proven record of experience in similar works of operation and maintenance of hydraulic gates, hydraulic hoisting system, heavy duty pumps, motors and it's accessories and hydro-mechanical works with an <b>Average Annual turnover not less than Rs. 50.00 Lakhs (Rupees fifty lakhs only) In the last three financial years i.e. 2016-17, 2017-18 and 2018-19</b> are eligible for bid. <b>(Documents to be submitted.)</b></p> <p>Each tender shall be accompanied by a statement declaring that he is a bona-fide engineering contractor and has in possession of adequate equipment and man power including experienced technical personnel to handle jobs of this nature and magnitude <b>(Documents to be submitted).</b></p> <p>The bidder should submit a list and description of similar or comparable works previously executed by him/them indicating the individual volume and contract price along with the name and address of the respective owner/authority.</p> <p>List of manpower with qualification and experience is to be submitted also with tender. <b>(Documents to be submitted)</b></p> <p>It is mandatory for all bidders to submit PAN, GST, Labour license, EPF and ESIC certificates as may be applicable, failing which the bidder will be liable to be disqualified. <b>(Documents to be submitted)</b></p>
<b>Tender fee (Non-refundable)</b>	<b>Rs. 2000/- (Rupees two thousand) only in the shape of Demand Draft duly pledged in favour of the Deputy General Manager (F&amp;A), APGCL, Guwahati-781001</b>
<b>Earnest Money Deposit (EMD)</b>	<b>2% (two percent) of quoted value for the whole year in the form of Demand Draft from a Nationalized/Schedule Bank pledged in favour of the Deputy General Manager (F&amp;A), APGCL.</b>
<b>Start date of Tender submission</b>	<b>09.12.2020</b>
<b>Last date and time of bid submission</b>	<b>12.00 p.m. on 18.12.2020</b>
<b>Tender Opening</b>	<b>1.00 p.m. on 18.12.2020</b>

The bid documents may be obtained from office of the Chief General Manager (Hydro & Civil), APGCL on written request to the CGM (Hydro & Civil), APGCL during office hours on all working days with effect from **09.12.2020 to 17.12.2020** on payment of **Rs.2000.00 (Rupees two thousand only)** in the shape of Demand Draft from Nationalized/Schedule Bank, which is not refundable, **pledged in favour of DGM (F&A), APGCL**. The bid documents may also be downloaded from the **website [www.apgcl.org](http://www.apgcl.org)**. The cost of bids is to be deposited separately with the downloaded tenders along with Earnest Money.

The bids will be received up to **12.00 p.m. of 18.12.2020** and will be opened at **1.00 p.m.** on the same day in presence of tenderers or their authorised representatives. The CGM (Hydro & Civil) is not bound to accept the lowest rate and reserves the right to accept or reject any or all tenders without assigning any reason thereof.

**Note:** Any addendum/corrigendum/extension etc in respect of this tender shall be issued on APGCL's website: [www.apgcl.org](http://www.apgcl.org)

Yours faithfully,


  
Chief General Manager (Hydro & Civil)  
APGCL

Memo no: APGCL/CGM (H)/82/630/Part-XV/12

Date: 08/12/2020

C.c. to: -

- 1) The Managing Director, APGCL, Bijulee Bhawan, Paltanbazar, Guwahati-781 001, for favour of kind information.
  - 2) The Chief General Manager (Gen), APGCL, Bijulee Bhawan, Paltanbazar, Guwahati-781 001, for information.
  - 3) The Chief General Manager (F&A), APGCL, Bijulee Bhawan, Paltanbazar, Guwahati-781 001, for information
  - 4) The General Manager, KLHEP, Lengery, Dist.-Karbi Anglong, for information and wide circulation.
  - 5) The Deputy General Manager (F & A), APGCL, Bijulee Bhawan, Paltanbazar, Guwahati-781 001, for information.
  - 6) The Deputy General Manager (Civil), KLHEP, Lengery, Dist.-Karbi Anglong, for information and wide circulation.
- ✓) Relevant File.

  
Chief General Manager (Hydro & Civil),  
APGCL

## TERMINOLOGY

- 1) APGCL wherever used in this document shall mean Assam Power Generation Corporation Limited incorporated vide The Companies Act 1956 in exercise of Powers conferred under the Act including subsequent amendments, if any. APGCL is a successor company of ASEB.
- 2) CGM (H & C) or owner or purchaser or project authority wherever used in this document shall mean the officer holding the post of the Chief General Manager (Hydro & Civil), APGCL, Guwahati (Assam), who or his authorized representative will exercise authority on behalf of the Department in respect of the Tender and the works specified herein.
- 3) Engineer-in-Charge/or engineer shall mean the Officer holding the charge of the Departmental post of General Manager/ Deputy General Manger/Assistant General Manager (Civil) pertaining to supervision of works specified in this document
- 4) The term 'Contractor' wherever used in this document shall mean the individual/firm or company who shall have entered into a contract agreement with the owner or the project authority, undertaking on his behalf to carry out the works in full or in part as may be specified in contract documents, and shall include in the case of an individual/ his heirs, administrators and permitted assignees, in case of a firm, the partners of the said firm, their respective heirs, executors, administrators and permitted assignees, and in case of a Company its successors and permitted assignees.
- 5) Contract documents shall mean and comprising of the following documents and shall be the basis of agreement between the owner and the contractor for carrying out the works in accordance with the terms and conditions, specifications, drawings and directions contained in the said documents
  - a) Bid documents duly filled in respect of rates, process & signed, the tender forms properly filled in, signed and dated by the contractor & duly submitted
  - b) Contractor's original bid proposal and subsequent correspondences relating to clarifications and negotiations, if any, prior to award of the contract.
  - c) Equipment specifications and drawings, so far as applicable
  - d) Approved agreement forms duly signed, dated and sealed by the contractor and the owner as specified in the said forms
- 6) 'Equipments' and 'Plants' shall mean and include all sorts of machineries and accessories, apparatus, instruments, components manufactured articles and parts etc. to be supplied or provided by the contractor under the terms of the contract , unless otherwise specified
- 7) The 'Works' shall unless be repugnant to such description shall be construed and taken to mean the works contracted, or by virtue of the contract agreement, to be executed whether temporary or permanent and whether original, altered, substituted or additional
- 8) The expression 'Specifications' wherever used in this document shall mean all the pertinent terms and stipulations furnished herein in respect of the work or part thereof and/or indicated in the drawings appended hereto and to be issued for construction and shall have reference also to other relevant terms and stipulations not furnished herein, but as far as applicable.
- 9) AMC means Annual Operation and Maintenance Contract.

## SALIENT FEATURES

### LOCATION OF THE DAM

**Location:** The 2 x 50 MW Karbi Langpi Hydro Electric Project is located in the West Karbi Anglong District of Assam. The office of the General Manager and other departmental offices are located within the project area at Lengery. The project site is approachable from Guwahati via the following motorable roads:

- a) Guwahati – Jagiroad – Amsoi T.E. – Amtereng – Dam site (at Hatidubi) (Approx 135 Km.)
- b) Guwahati – Raha – Kamrup – Baithalangso – Lengery – Amtereng – Dam site (at Hatidubi)
- c) Guwahati – Nagaon – Kathiatoli – Baithalangso – Lengery – Amtereng – Dam site (at Hatidubi)
- d) Guwahati – Jagiroad – Amsoi – Bhoksang – Raja Gaon – Baithalangso – Amtereng – Dam site (at Hatidubi)

### HYDRAULIC GATES OF KLHEP:

Type of Gate	:	Spillway Crest Radial Gate (Hood Type)
Size of Gate	:	12 m x 16.75 m
Number of Gate	:	7 nos.
Clear Opening	:	12 m.
Type of Hoist	:	Hydraulic Hoist (Cylinder type).
Hoist capacity	:	200 MT (100 T each cylinder)
Stroke	:	10M
Operation	:	Local Control System
Arrangement	:	Local Control panel/ Manual operation
Stop-log gate	:	1 no
Size	:	12 m x 12 m

### TECHNICAL DATA

#### Gates

Crest level of spillway	:	EL 300.00 m
Sill level of gates	:	EL 299.65
C.L of trunnion	:	EL 306.00
Top of gate	:	313.80

FRL : 313.50  
Radius to inside of skin plate: 16.500 m  
Design head : 16.750 m

**POWER PACK**

Closing time : 15 minutes  
Operating time : 15 minutes  
Working pressure : 16 Bar  
Test pressure : 200 Bar  
Fluid media : Mineral oil HLP 31  
Vertical lift of gate : 16.75M

**PUMPS & MOTORS**

Pump Chamber Elevation : 271.25 M  
Bottom Level of Pump Chamber : 268.25 M  
Pump Details :  
Quantity - 2 nos. of 80HP of each  
KSB Make  
Maximum Discharge Capacity - 3000 litre / min

## **INSTRUCTION FOR BIDDERS AND SPECIAL CONDITION**

1. Bid Invitation For “Annual Operation And Maintenance Contract For Hydraulic Gates And Hydraulic Hoisting System on Concrete Dam of 2x50 MW Karbi Langpi Hydro Electric Project Including Operation & Maintenance of Dewatering Pump Installed At Foundation Gallery of Dam”.

**Vide Tender Notice No. 12 of 2020-21 of Chief General Manager (Hydro & Civil)**

2. **DUE DATE AND CLOSING TIME OF BID DOCUMENT:**

The bid will be received up to 12.00 p.m. on 18.12.2020. The opening time of the bids will be at 1.00 p.m. on the same day and the venue will be the office of the Chief General Manager (Hydro & Civil), APGCL. Bidders or their authorized representatives will make it convenient to attend the bid opening on time.

3. **BID-GUARANTEE OR EARNEST MONEY DEPOSIT:**

- i) Every bid or tender shall be accompanied by a deposit of Earnest Money (E.M.) equivalent to **2% of his/their total quoted price for entire period of contract i.e. for 1(one) year**, in the form of Demand Draft from a Nationalized/Schedule Bank pledged in favour of the Deputy General Manager (F&A), APGCL. A tender is liable to outright rejection in absence of the requisite E.M. deposit.
- ii) The Earnest Money will be returned to the unsuccessful bidders soon after the award of the contract on written request. The E.M. will be retained towards the contract security deposit in case of selected bidder in whose favour the contract shall be awarded. The department will not entertain any claim for release of the E.M. during the pendency of selection of contractors for awarding the contract. The department will not pay any interest on the E.M. deposit.
- iii) The E.M. is liable to be forfeited in the absolute discretion of the CGM (H & C), APGCL if the selected bidder revokes or alter or causes to withdraw his offer/tender before the expiry of its validity or fails after the contract is awarded to him to execute the ‘Contract Agreement’ with the department or to commence the work within the period envisaged in the terms and conditions or as might be notified in the work order.

4. **SECURITY DEPOSIT OR PERFORMANCE GUARANTEE:**

The security to be taken for due performance of the contract in terms of the ‘contract agreement’ will be a deduction of 10% from every monthly payment or every R.A. bill, until the sum of these deduction and E.M. together becomes equal to 10(ten) percent of the total value of the contract. Such security deposit shall be forfeited or by the department towards any loss, damage etc. that may be sustained by the department as a result of breach of any terms, conditions of the contract by the contractor.

In the event of contractor’s Security Deposit (S.D.) being appropriated towards loss, damage etc. the contractor shall forthwith recoup the amount to restore the S.D. to the full current value within 30 days from the date of intimation.

Subject to the provisions mentioned above and the provisions of guarantee period, the S.D. will be returned to the contractor on the due and satisfactory performance of the contract and after all claims of the department shall have been settled. The department will not pay any interest on the amount of S.D.



**5. BIDDER'S QUALIFICATIONS:**

i) Reputed Firms/Contractors with proven record of experience in similar works of operation and maintenance of hydraulic gates, hydraulic hoisting system, heavy duty pumps, motors and its accessories and hydro-mechanical works or has in possession of adequate equipment and man power including experienced technical personnel to handle jobs of this nature and magnitude are eligible for bid. (Documents to be submitted).

ii) Contractors should be financially sound to invest the amount and should submit necessary evidence on this account. Average Annual turnover should not be less than Rs. 50.00 Lakhs (Rupees fifty lakhs only) per annum for the last three financial years, i.e 2016-17, 2017-18 and 2018-19.

iii) The contractors must have a valid GST Registration No., should submit copy of GST Certificate, and attested copy of PAN Card and Labour Licence.

iv) Each tender shall be accompanied by a statement declaring that he is a bona-fide engineering contractor and has in possession of adequate equipment and man power including experienced technical personnel to handle jobs of this nature and magnitude (Documents to be submitted).

v) List of manpower with qualification and experience is to be submitted also with tender. (Documents to be submitted)

vi) It should be ensured that the contractors shall have Provident Fund Code No. It will be ascertained that all the workers engaged by the contractor directly should be registered for Employees' Provident (EPF) and due contribution have been credited into their account.

vii) The bidder must have an Employee State Insurance Corporation (ESIC) Registration along with EPF Registration.

viii) Contractors must provide details (as per Declaration Proforma at ANNEXURE-A) if involved in any criminal case and /or any case related to Foreigner's Tribunal and any case filed or pending against APGCL in any Court of Law.

**6. SUBMISSION OF BID OR TENDER:**

i) Firms submitting tender should enclose a certified copy of the Firm's constitution and a certified copy of Power-of-Attorney authorizing a person to operate the tender and contract and should furnish full address of the partners and the persons holding Power of Attorney on behalf of the firm.

ii) Bidders are to quote their rates in the prescribed format attached in this bid document.

iii) The rates are to be quoted both in figures and words.

iv) The rates quoted by the bidders will be inclusive of all taxes, royalties and other statutory levies as applicable.

v) Bidders should note that unusually low rates not feasible for execution may not be

technically accepted.

- vi) The quoted rates will be firm for entire period of operation and maintenance. No price escalation on any component will be admissible.
- vii) Every page of the tender document to be duly signed by the bidder.

Before filling the rate, the bidders should visit the dam site and carefully study the nature of the operation and maintenance work to be taken up which should be supported by a certificate issued from the Assistant General Manager, Civil Maintenance Division, KLHEP. Any offer or tender for this job shall not be accepted after the expiry of the 'Closing Time' specified in Cl.2 herein before.

**7. GST AND INCOME TAX CERTIFICATE:**

Every bid or tender shall be accompanied by GST Registration Certificate and Income Tax clearance certificates as may be applicable, failing which the bidder will be liable to be disqualified.

**8. TAXES AND DUTIES:**

The offered rates and / or prices for this AMC work shall include all taxes, duties, forest royalties, monopolies etc. as may be applicable on material and labour during the tenure of the contract. There will be no reimbursement for any increase or levy of new taxes, duties etc. on materials utilized for this work or equipment furnished / supplied for completing the work or for machineries, equipment, tools and tackle, fuel and lubricants etc. used in connection with the performance of the work, unless otherwise specified or qualified by the bidder in his bid. If, however, any tax or duty is levied by the Govt. or statutory body on the finished work (after complete installation and / or delivery), such tax or duty will be to the account of the APGCL.

**9. RATE TO BE QUOTED:**

i) Contractor shall quote their monthly rate in Rupees in the prescribed format as Price Bid. The offer price should be inclusive of all taxes as may be applicable. The rate or price shall be firm for the entire period of contract.

ii) Contractor/Firm may require to furnish the breakup of rate quoted by him/firm if asked for.

**10. BIDDER SHOULD EXAMINE & UNDERSTAND:**

All prospective bidders are required to thoroughly study and carefully examine all the terms and conditions, instructions, drawing & specifications pertaining to the work and visit the field of work to fully satisfy and acquaint themselves about the nature and location of work, the configuration of the ground. The spring level, the surface conditions, quality and quantity of materials required and their availability the type of equipments and facilities needed preliminary to and during the execution of the work and local conditions which may affect the

work or cost thereof. The unit price or rate misquoted due to superficial or partial grasp of the conditions and circumstances shall be at the bidder's risk.

**11. BIDDER'S SPECIAL TERMS & CONDITIONS:**

In case a bidder attaches special terms or conditions in his bid beyond the stipulations of this document, which may mean financial liabilities to the APGCL towards overall value of the contract, the bidder must specify the terms perspicuously mentioning the ceiling for the purpose of payment as well as the final valuation of the proposal. In the case of ambiguous special terms or conditions, the interpretation of the APGCL shall be binding.

**12. AWARD OF CONTRACT:**

The contract will be awarded to that responsible bidder whose bid, confirming to the schedule conditions of contract and specifications will be most advantageous to the Department, price and other factors considered. An award mailed (or otherwise furnished) to the successful bidder within the time for acceptance specified in the bid will result in a binding contract without further action by either party. The CGM (H & C), APGCL does not bind itself to accept the lowest bid or any bid. As the interest of the Department may require, the right is reserved to reject any or all bids and to waive any minor informality or irregularity in bids received without assigning any reason thereof. Bid which are incomplete or which contain undesirable conditions are liable to rejection.

APGCL will try to make timely payment of bills, but on unavoidable circumstances cannot guarantee timely payment of bills, for which no interest on the payable amount will be entertained.

**13. CONTRACT AGREEMENT:**

The 'Contract agreement' (or Tender Agreement) for the work will be drawn up with the selected bidder/bidders within 7 (Seven) days of issue of the work order and the contract documents will comprise as described herein before.

The conditions of the F-2 form shall form part and parcel of the agreement. However wherever there is any contradiction or variation between the conditions of the F-2 form, the terms and conditions specified elsewhere in this document, the later will be treated as superseding the former. Terms and conditions shall be as per F-2 Form of agreement and has to follow accordingly. In the Form-F-2 all the designations appearing as Executive Engineer/Sub divisional Officer shall be read as Chief General Manager (Hydro & Civil), Assam Power Generation Corporation Limited [herein after called as C.G.M (H & C), APGCL].

In a case where the selected bidder fails to commence the work as shall be notified in the work order or fails to execute the tender agreement with the CGM (H & C), APGCL as stipulated herein before; the CGM (H & C), APGCL reserves the right to claim loss, damage etc. and take appropriate action under the terms of this document or law including forfeiture of E.M.

**14. INSPECTION:**

All works and all supplies (this term includes without limitation raw materials, parts, components, intermediate assemblies and end products) under the contract shall be subject to inspection and test by the CGM (Hydro & Civil), APGCL or his authorized person to the extent practicable at all times and places including the period of construction or manufacture and in any event prior to final acceptance.

In case any work or part thereof or/and any supply is found defective in material or workmanship or otherwise not in conformity with the specifications or drawings or requirements of the contract, the CGM (Hydro & Civil), APGCL shall have the right either to reject them or to require their correction, as directed by the department.

The inspection and test by the CGM (Hydro & Civil), APGCL or his authorized person of any work or any supplies does not relieve the contractor from any responsibility regarding defects or other failures to meet the contract requirements which may be discovered prior to final acceptance. Except as otherwise provided in this contract final acceptance shall be conclusive except as regards latent defects, fraud or such gross mistakes as amount to fraud.

The contractor shall provide and maintain an inspection system acceptable to the CGM (Hydro & Civil), APGCL covering the works and/or supplies hereunder. Records of all inspection works by the contractor shall be kept complete and available to the CGM (Hydro & Civil), APGCL during the performance of this contract

**15. DEFAULT:**

The contractor shall not be liable for any excess cost of any failure to perform the contract arises out of causes beyond the control and without the fault or negligence of the contractor (such as FORCE MAJEURE) PROVIDED THAT the contractor shall notify the authority in writing of the cause of any such delay, within fifteen (15) days from the beginning thereof or within such further period as the authority shall grant for the giving of such notice.

**16. TOOLS & PLANTS:**

The APGCL does not ordinarily furnish any tools & tackle, plants and equipments or such facilities for carrying out the work by the contractor (excluding hypothecation). The contractor shall arrange and maintain the equipments required for implementation of work all throughout the period of the contract.

**17. MATERIALS & LABOUR:**

All materials (this includes without limitation raw materials, parts, components etc.) and laborers required for carrying out the work shall be arranged and furnished by the contractor/firm all throughout the tenure of the contract and strictly conform to relevant IS Code ( latest revision).

The intending tenderers should inspect the prospective sources of collection of raw materials and fully satisfy him about the quality of materials, availability of materials, lead, and mode of transportation. The Department shall not consider, after acceptance of the contract, to pay any extra charge for lead or any other reasons, in case the contractor found later on, to have misjudged, the quality/quantity of availability of such materials from the source of collection. APGCL shall not issue any construction materials such as cement, reinforcement bar, or any other materials.

In connection with the performance of work throughout the tenure of the contract, the engagement of labour and payment therefore by the contractor shall conform to the statute, the pertinent law or act of the Central & State Govts, as well as rules, regulations and orders of the local authorities or statutory bodies, as may be in force from time to time. The materials procured for the work by the contractor shall be placed at site properly for inspection of Engineer-in charge before utilization. Any defecting materials should be replaced immediately for which no extra charge will be payable to contractor

#### 18. CHANGES IN QUANTITY AND ITEM:

The authority may at any time, by a written order make changes within the general scope of the contract, in any one or more of the following

- i) Quantity of any item
- ii) Alteration or omission of any item
- iii) Addition of any item

If any such change causes an increase or decrease in the cost of the contract, an equitable adjustment shall be made in the contract price and the contract shall be modified in writing accordingly. **The rate/cost of such item/items will be analyzed by the department as per reasonable market price but in any case of dispute for rate/cost of item/items, the decision of CGM (H&C) will be final and conclusive.**

#### 19. FACILITIES:

i) APGCL shall provide power for operation & maintenance works at a single point. The power consumed in operation and maintenance work as well as domestic connection for workers and staff shall be chargeable as per norms of the Central Assam Power Distribution Company Limited.

ii) The department shall provide necessary accommodation, if available, for supervisory staff, workers posted by the contractor at the work site. However the rent of the accommodation provided required to be paid by the contractor/ or rent will be recovered from contractor's bill.

iii) The contractor shall provide Medical / hygienic facilities to the personnel/ sub contractors engaged by them.

#### 20. INSURANCE:

The contractor shall arrange for any pay/ cost of personnel accident insurance, medical treatment in respect of their employees assigned to the project site for all time & shall govern by Law of Land.

#### 21. ARBITRATION:

In the event of any dispute or differences at any time arising between the parties relating to work or any other clauses or any content of the right and liabilities of the parties or other matters specified therein or with reference to anything arising out of the such dispute or

differences shall be endeavored to be resolved by mutual negotiation. If, however, such negotiation is infructuous, the dispute should be finally settled through Arbitration and Conciliation Act 1996 and the amendments thereof by three arbitrators appointed in accordance with the said Act. The arbitrators shall give reasoned and speaking award. The decision of the arbitrator shall be final & binding upon the parties and the expense of the arbitration shall be paid as may be determined by the arbitrator in accordance with provisions of Arbitration and Conciliation Act 1996 and the amendments thereof. The arbitration proceedings shall be held in Guwahati.

**22. EXPIRATION OF CONTRACT:**

Unless terminated this contract shall expire when pursuant to the provisions hereof, the services have been completed and payment have been completed.

**23. SUSPENSION:**

APGCL may, by written notice of suspension to the contractor, suspend all payments to the contractor if the contractor fails to perform any of their obligation under this contract including carrying out of the services, provided that such notice of suspension (i) shall specify the nature of the failure and (ii) shall request the contractor for remedy of such failure within a period not exceeding 15 (fifteen) days.

**24. TERMINATION:**

APGCL may, by not less than 30 (thirty) days written notice may terminate the contract, if the contractor :-

(i) fails to remedy a failure in the performance of his obligations,

(ii) becomes insolvent or bankrupt,

(iii) submit to APGCL statement which has a material effect on the rights, obligations or interest of APGCL and which the contractor known to be false,

(iv) as result of force majeure, if the whole work cannot be performed for a continuous period of 90 (ninety) days.

APGCL shall make payment upon termination to contractor the services performed by the contractor to the entire satisfaction of APGCL prior to date of termination.

## TERMS AND CONDITIONS OF ANNUAL MAINTENANCE CONTRACT

- 1) The Term of this AMC shall be for 1 (one) year.
- 2) **This AMC includes all requirements that may be envisaged during the contract period of 1 (one) year. The CGM (H&C) reserves the right to extend the contract period by maximum another 1 (one) year at the same rate quoted by the successful bidder if the overall performance is found satisfactory.**
- 3) The overall performance will be reviewed after expiry of 9(nine) months, i.e. on 30/09/2021 and if not found satisfactory, the undersigned reserves the right to cancel/terminate this work order with immediate effect.
- 4) The scope and responsibility has been defined hereunder with respect to activities and the work involved.
- 5) Spillway radial gates, spillway stop log gate, intake fixed wheel gate and the hydraulic hoisting system all these gates including hoisting system form the integral parts of hydraulic gate structures or hydro mechanical installation of the project. This AMC shall cover operation and maintenance of hydraulic gate structures or the hydro mechanical installation of KLHEP.

The hydro mechanical installation shall be operated by the contractor under this AMC. The operating personnel shall have to be available for operating the installation round the clock.

- 6) The operation personnel i.e. engineer, supervisor, welders, electrician, skilled, semi skilled, unskilled workers, shall be deployed, and their wages and salary shall be paid by the contractor as per Govt. approved rate. The contractor shall deploy experienced and trained personnel who are completely familiar with their respective assignments. The contractor shall be completely responsible for all actions and satisfactory performance of all components of gates and lifting arrangement.
- 7) The installation shall be inspected involving daily, weekly, monthly, bi-monthly, quarterly, half yearly and yearly as indicated in Table-1. Appropriate records shall be maintained accordingly and made available to the Engineer-in charge. Based on daily and periodical inspections / checks of the equipments, the contractor shall have to assess the maintenance and repair requirement, well in time before any possible risk to safety of the equipments and carry out the required maintenance as well as repairing works to the full satisfaction of the department. Frequency of inspection / checks of various components and action to be taken for proper maintenance is given in Table-I.
- 8) All equipment, tools and tackles required for operation and maintenance work of the installation must be available with the contractor. The common equipments to be deployed by the contractor are - portable drill machine, tool post grinder, straight grinder (portable), angle grinder (portable), chain pulley block, welding transformer, hand cutting torch with gas leads, measuring and testing gauges and equipment, multimeter and any other equipments that may be required for the job.. The common tools and tackles to be possessed by the contractor are - welding cable, welding holder, head screen, black & white glasses, oxygen gas regulator, D.A gas regulator, wrenches (standard fixed, standard ring type, standard box type, torque, adjustable, pipe), grease gun, crow bars, hammer chisel punches, hydraulic jack, straight edge, cutting piler, insulating cutting & nose piler, screw driver and steel taps etc.

All scaffolding, ladders, industrial grade ropes, etc required for completion of work shall be supplied by the contractor at his own expense.

- 9) Cost and responsibility towards all consumables such as Gas, Electrodes, Grinding wheel, Drill Bits grease, gear oil, hydraulic oil, fasteners, paint etc. shall be rest on the contractor under this contract. Quality of all such consumables shall be approved by the department before use.
- 10) Contractor shall have to arrange all required spares and shall be kept available in the project site. However the cost of such spares will be reimbursed by the department subject to production of satisfactory documents after completion of the work where the particular spare shall be used. A list of spares is given below:-
  - A) Radial Crest Gates: Bottom & side rubber seals, guide roller asslys, grease nipples for trunnion asslys, end connection bracket asslys with pins.
  - B) Hydraulic Hoist: Pumps & motor asslys, filter element, solenoid coil for DC valve, seals kits for flexible hoses, HRC fuse base.
- 11) Rubber seals, if damaged due to deposition of silt/ debris or uneven lift or any other reasons, are required to be replaced as and when necessary. Regular inspection and maintenance schedule shall be carried out by the contractor.
- 12) The maintenance of repairing job to be done for the equipment shall be decided on the basis of periodical inspection of various components at the interval shown in Table-1. A periodical report on maintenance to be done shall be submitted every month to the project authority for deciding the repairs to be done. However any routine maintenance that needs to be done for smooth and proper operation of the equipment, as found necessary during periodical check/ inspection, shall be carried out by the agency and report of such maintenance carried out during the month shall be submitted to the project authority.
- 13) Any modification, replacement of parts or rectification of major defects shall also be carried out by the agency. The extra labour cost for such works and the cost of the parts replaced to be reimbursed by the department only after production of purchase vouchers and satisfactory completion of the works.
- 14) Based on daily, weekly, bi-monthly, monthly, quarterly, half yearly or yearly inspection, the routine maintenance found necessary such as cleaning, tightening of bolts, repairing of welding, supplementing POL/Grease(supplied by the contractor), repairing of pitting, rectifying defects in electrical connections, fuses etc. shall be carried out as and when such defects requiring routine maintenance are observed. These shall be carried out and monthly report to the routine maintenance done will be submitted by the agency. All consumable including POL/Grease and spares needed for routine maintenance shall be supplied in required quantity by the contractor.
- 15) Whenever it is observed, as a result of inspection / check, that any part of the equipment is damaged to the extent that it needs to be replaced to ensure smooth operation and avoid deterioration or further damage to the equipment then a report to this effect explaining the necessity and importance will be submitted by the contractor to the project authority. The Contractor shall execute such work on receipt of approval from the department. The department shall pay extra labour cost and reimburse the cost of all replaced parts required for such works.



- 16) APGCL shall provide power for operation & maintenance works at a single point. The power consumed in operation and maintenance work as well as domestic connection for workers and staff shall be chargeable as per norms of the Central Assam Electricity Distribution Company Limited.
- 17) The department may provide necessary accommodation, if available, for supervisory staff, workers posted by the contractor at the work site. However the rent for the accommodation provided will be paid by the contractor/ or rent will be recovered from contractor's bill.
- 18) Dewatering in Dam Gallery at Karbi Langpi Hydro Electric Project:

The Operation and maintenance work of 2 nos. 80 HP Dewatering pump including all accessories installed at Foundation Gallery of Dam. Pumps should be kept in running condition and to be operated as and when required during 24 hours.

**TABLE-1**  
**For the Month :**

Sl no.	<b>DAILY INSPECTION / CHECKS OF VARIOUS COMPONENTS &amp; ACTION TO BE TAKEN FOR PROPER MAINTENANCE.</b>	
		<b>Daily</b>
<b>A</b>	<b>Radial crest Gates- 7 nos. (embedded parts)</b>	nil
<b>B</b>	<b>Gate Structures</b>	
	1	Regular inspection of the gate along with the hoist to be carried out daily to ensure that there is no unusual development/ observation
<b>C</b>	<b>Hydraulic Hoist- 7 sets</b>	
	1	Checking of oil level of power packs and pouring of makeup oil as and when required
	2	Checking, adjusting & repairing of relief & flow valves  <b>Daily during rainy season</b>
	3	Checking, adjustment & repairing of pressure switch, flow switch, solenoid valves etc.  <b>Daily during rainy season</b>
<b>D</b>	<b>Stop log gate - embedded parts</b>	nil
<b>E</b>	<b>Dewatering pump</b>	Operation and maintenance of two nos. of Dewatering pump, 80 HP capacity including maintenance of electrical & plumbing system installed in foundation Gallery of Dam.  <b>24 Hours round the clock</b>

Sl no.	<b>WEEKLY INSPECTION / CHECKS OF VARIOUS COMPONENTS &amp; ACTION TO BE TAKEN FOR PROPER MAINTENANCE.</b>	
		<b>Weekly</b>
<b>A</b>	<b>Radial crest Gates- 7 nos. (embedded parts)</b>	All dirt, debris, grit, foreign material etc to be removed from trunnion assemblies as well as trunnion chair and lubricate trunnion bearing and the sliding surface on trunnion chair with specified lubricant/ grade to ensure smooth sliding movement of trunnion
<b>B</b>	<b>Gate Structures</b>	nil
<b>C</b>	<b>Hydraulic Hoist- 7 sets</b>	
	<b>1</b>	Checking, cleaning etc. of all filters, silica gel etc. & their replacement as and when required
	<b>2</b>	Checking of the main pilot pressure of the system for their desired level and its adjustments required repairing.
	<b>3</b>	Checking & maintaining hydraulic accumulator charging pressure
	<b>4</b>	Complete trouble shooting of the entire system as and when necessary to maintain the same such that the system can be put to operation at any point of time as per requirement
<b>D</b>	<b>Stop log gate - embedded parts</b>	nil

Sl no.	<b>QUARTERLY INSPECTION / CHECKS OF VARIOUS COMPONENTS &amp; ACTION TO BE TAKEN FOR PROPER MAINTENANCE.</b>	
		<b>Quarterly</b>
<b>A</b>	<b>Radial crest Gates- 7 nos. (embedded parts)</b>	
	<b>1</b>	Checking of seal beams, seal seats, guide track and all other exposed embedded parts with respect to their alignment distortion if any due to continuous use, pitting and unnecessary cracks due to wear and carrying out requisite repair / rectification by welding, grinding etc.
	<b>2</b>	All cracks & defective weld joints to be ascertained and rectified
<b>B</b>	<b>Gate Structures</b>	
		The guide roller pins are to be lubricated
<b>C</b>	<b>Hydraulic Hoist- 7 sets</b>	
		Hydraulic oil to be filtered from Power Pack of Radial gates by using ELC (Electrostatic Liquid Cleaner) machine.
<b>D</b>	<b>Stop log gate - embedded parts</b>	
	<b>1</b>	Inspection, checking of sill beams, side seals, guide track and other exposed embedded parts with respect to their alignment cracks, distortion, pitting uneven surface die to wear and tear and ascertain defects. Carrying out requisite repair/ rectification by welding, grinding etc. as per requirement

Sl no.	<b>MONTHLY INSPECTION / CHECKS OF VARIOUS COMPONENTS &amp; ACTION TO BE TAKEN FOR PROPER MAINTENANCE.</b>	
		<b>Monthly</b>
<b>A</b>	<b>Radial crest Gates- 7 nos. (embedded parts)</b>	nil
<b>B</b>	<b>Gate Structures</b>	
	<b>1</b>	Check all welding for soundness and rectify defects.
	<b>2</b>	Check welding between arms and horizontal girders as well as arms & trunnion with the help of magnifying glass for cracks/defects and rectify the defects
	<b>3</b>	Cleaning of all drain holes including those in end arms, horizontal girders and trunnion
	<b>4</b>	Check all nuts& bolts provided and tighten them and replace the defective nuts and bolts
	<b>5</b>	Nuts and bolts for rubber seals connection to be tighten and damaged nuts and bolts to be replaced
	<b>6</b>	The excessive or widespread leakages if any shall be reported to the engineer in charge. If the seals are required to be replaced, the same shall be carried out by the contractor. The cost of rubber seal shall be reimbursed by the department on production of purchase document after satisfactory completion of work.
<b>C</b>	<b>Hydraulic Hoist- 7 sets</b>	
	<b>1</b>	Checking, repairing & replacement whenever necessary, oil seals, O rings, ferules, argon welding etc. of hydraulic pipe lines
	<b>2</b>	Checking, adjustment & repairing of measuring system
	<b>3</b>	Checking, repairing and replacement whenever necessary of all valves, valve seals, occupying of pipe lines etc.
	<b>4</b>	Checking and ensuring adequate hydraulic oil of standard make by making up short fall if any
	<b>5</b>	Necessary maintenance record is to be prepared as a result of periodical inspection and submitted for deciding actions in respect of necessary repair/ replacement of parts
<b>D</b>	<b>Stop log gate - embedded parts</b>	
	<b>1</b>	All cracks & defective weld joints of EP to be ascertained & rectify by respective welding

Sl no.	<b><u>BI-MONTHLY</u> INSPECTION / CHECKS OF VARIOUS COMPONENTS &amp; ACTION TO BE TAKEN FOR PROPER MAINTENANCE.</b>	
		<b>Bi - Monthly</b>
<b>A</b>	<b>Radial crest Gates- 7 nos. (embedded parts)</b>	
	<b>1</b>	Removing debris and other foreign materials deposited on embedded parts and cleaning the same.
	<b>2</b>	All nuts bolts to be tighten and defective nuts bolts to be replaced
	<b>3</b>	All nuts bolts connecting trunnion assembly & trunnion chair and trunnion & Yoke girder trunnion pin lock plate to be checked and tightened and replace the same if found defective.
<b>B</b>	<b>Gate Structures</b>	
	<b>1</b>	Joints of side & bottom rubber seals to be checked for their proper alignment and fixing and to be rectified/ adjusted if there is leakage through joints.
<b>C</b>	<b>Hydraulic Hoist- 7 sets</b>	
	<b>1</b>	Checking, adjusting & repairing of relief & flow valves
	<b>2</b>	Checking, adjustment & repairing of pressure switch, flow switch, solenoid valves etc.
	<b>3</b>	Checking, repairing and making goods of all electrical wiring and connection of local panels
	<b>4</b>	Checking, repairing and making goods and replacement of all electrical conductors, timer, limit switches, fuses etc. including setting of limit switches
<b>D</b>	<b>Stop log gate - embedded parts</b>	nil

Sl no.	<b><u>HALF YEARLY</u> INSPECTION / CHECKS OF VARIOUS COMPONENTS &amp; ACTION TO BE TAKEN FOR PROPER MAINTENANCE.</b>	
		<b>Half yearly</b>
A	Radial crest Gates- 7 nos. (embedded parts)	
B	Gate Structures	
	1	Check upstream face of skin plate for pitting, scaling and corrosion, scaling formation are to be removed. Pitting shall be filled with weld& ground. Corroded surface shall be cleaned and painted.
C	Hydraulic Hoist- 7 sets	nil
D	Stop log gate - embedded parts	nil

Sl no.	INSPECTION / CHECKS OF VARIOUS COMPONENTS & ACTION TO BE TAKEN FOR PROPER MAINTENANCE <u>AS PER REQUIREMENT.</u>	
		As Per Requirement
A	Radial crest Gates- 7 nos. (embedded parts)	nil
B	Gate Structures	nil
C	Hydraulic Hoist- 7 sets	
	1	Broadly the maintenance of the equipment cleaning and shall include inspection, checking and ascertaining the deficiencies in the equipment for its smooth & trouble free operation. The deficiencies notice shall be rectified by restoring to cleaning adjustment, repairs, replacement of troubled / damaged parts as per the requirement.
D	Stop log gate - embedded parts	
	1	Removal debris and other foreign materials deposited on the EP and cleaning the same



## SAFETY ENGINEERING & SAFETY CODE

### SAFETY ENGINEERING:

Accident prevention shall be an essential part of the programme of the contractor for all operations involved in performance of the contract under this invitation in order to reduce cost of construction measured in terms of:

- a. Human life sacrifice
- b. Temporary and permanent injuries to workers
- c. Loss of materials resulting from accidents
- d. Loss of damage to equipment.
- e. The cost of work man's compensation insurance.
- f. Loss of time due to accident.

Suitable safety programme should be developed to cope with the particular hazard for each operation. (Operation & maintenance).

### GENERAL SAFETY PROGRAMME:

The following program when vigorously promoted by the works- management may be effective in reducing the accident rate during operation and maintenance of hydraulic gate structures under this AMC.

- a) Secure full support from top management of concerned divisions or sections
- b) Publicize safety programme
- c) Develop a safety programme for each job.
- d) Maintain adequate first aid facilities
- e) Make safety practices effective.
- f) All safety ropes, harness, boots, gloves/insulated gloves for electrical works, helmets required for the work have to be supplied by the contractor at his own expense.

### SAFETY CODE:

An effective measure of reducing the accident rate during various operations and maintenance works may consist in implementation of respective provisions of the following safety codes accompanied by vigorous promotion and publicity of safety programme.

- a) IS: 818 (C.P. for safety health requirements in electric & gas welding & cutting operations).
- b) IS: 3696(S.C for scaffolding & ladders)
- c) IS: 7205 (S.C for erection of structural steel work)

### SAFETY EQUIPMENTS:

All necessary personnel safety equipment as considered adequate by the Engineer-in- Charge should be kept available for use of the persons employed on the site and maintain in a condition suitable for immediate use. The contractor should take adequate steps to ensure proper use of equipment by those concerned

Those engaged in welding works shall be provided with welder's protective eye-shield. Suitable protective foot ware, protective head gears, suitable face masks etc. are to be provided to workers engaged for operation and maintenance works. The contractor shall not employ men below the age of 18 for any work.

### COMPENSATION:

No extra charge or additional compensation will be admissible to the contractor by the department for any work done to comply with the provisions of Safety Engineering and Safety Code. The bid price of the contractor for AMC shall include these incidental cost.

## CONTRACTOR'S CAMP

### CAMP SITES:

The contractor shall provide, maintain under competent direction such camp facilities convenient to the site works that are necessary under this contract for housing, feeding and accommodation of his employees. The location, construction, operation and maintenance of such camps shall be subject to the approval of the Assistant General Manager/ Engineer in charge of the site.

### USE OF LAND FOR CONSTRUCTION PURPOSES:

Such land as may be available at work- site will be allowed to be used by the contractor for construction of his camps free of charge. However, development clearances of the land will have to be done by the contractor at his own cost. The contractor will be responsible to clear and clean the site after completion of his works and handover the land to the Engineer-in-Charge. The contractor will be liable to pay compensation for any damages done to the land or neighboring area.

### SANITATION IN CAMP SITE:

The temporary sanitation in the campsite should be properly maintained and hygienic so that pollution can be controlled and after completion of the work, site must be cleared properly.

**DECLARATION PROFORMA**

(Every Tenderer must fill up the following proforma)

**I/We** ..... **authorized representative of M/S (Address)**.....  
.....,have gone through the terms and conditions of the tender of the Tender Notice No.12 of 2020-21 of CGM (H & C), APGCL issued by the Chief General Manager (Hydro & Civil), APGCL, Bijulee Bhawan, Paltanbazar, Guwahati-1 and further bounded myself / the said M/S.....to abide by the said terms and conditions.

**Place:**

**(Signature)**

**Date:**

**Full name**.....

**Address**.....

**TECHNICAL BID:**

**1. TECHNICAL BID PART-1**

<b>BIDDER'S CREDENTIALS</b>						
Credential of Bidder's personnel to be involved for the AMC work.						
Name of personnel with address	Basic Qualification	Designation	Area of specialty	Years of experience	Nos. of successful association with similar work with name of the project.	Years of service in the orgn./ firm
<p>Note: 1) Bidder should furnish supporting documents. Otherwise information given in the tender shall not be considered for evaluation.</p> <p>2) Scoring shall be on the basis of qualification in similar work, year of experience, Numbers of successful Association with similar work with name of the project. Years of service in the organization/firm etc.</p>						

Place: -

Date: -

Signature of bidder

Full name:

Address:

**2. TECHNICAL BID PART-2**

Tools & Machineries in possession of bidder			
Sl. No.	Name of Tools & Machineries	Number	Supporting document

Place: -

Date: -

Signature of bidder

Full name:

Address:

**3. TECHNICAL BID PART- 3**

<b>BIDDER'S CREDENTIALS</b>		
<b>Particulars</b>	<b>Validity period</b>	<b>Supporting documents</b>
1. Financial status (Average Annual Turnover for the F.Y. 2016-17, 2017-18 & 2018-19)  2. PAN  3. GST Registration certificate  4. Registration certificate of firm  5. Labour Licence  6. Provident Fund Code No.(EPF)  7. Employee State Insurance Corporation (ESIC) Registration.  8. List of similar works previously executed  9. List of manpower with qualification and experience  10. Others		
Note: 1) Bidder should furnish supporting documents. Otherwise information given in the tender shall not be considered for evaluation.		

Place: -

Date: -

Signature of bidder  
 Full name:  
 Address:

**(Price Bid)**

To,

The Chief General Manager (Hydro & Civil)  
APGCL, Bijulee Bhawan  
Paltanbazar, Guwahati-781 001

**Sub:** Submission of rate for Annual Operation and Maintenance Contract for Hydraulic Gates and Hydraulic Hoisting System on Concrete Dam of 2x50 MW Karbi Langpi Hydro Electric Project Including Operation & Maintenance of Dewatering Pump Installed at Foundation Gallery of Dam.

**Ref:** Your Tender Notice No. 10 of 2020-21 of CGM (H & C), APGCL.

Madam,

Item No. (1)	Item Description (2)	Unit (3)	Qty (4)	Unit Price in Rs. (5)	Taxes in Rs. (6)	Others charges if any in Rs. (Put Zero if not applicable) (7)	Total Price including all Taxes in Rs. (8=5+6+7)	Remarks (Breakups of Taxes OR any other details can be given)
1	Annual Operation And Maintenance Contract For Hydraulic Gates And Hydraulic Hoisting System On Concrete Dam of 2x50 MW Karbi Langpi Hydro Electric Project Including Operation & Maintenance Of Dewatering Pump Installed At Foundation Gallery of Dam.	Per Month	1(one) job					

Enclo:

Yours faithfully,

1. Demand Draft No.:

2. Date of issue:

3. Name of Bank:

Signature of contractor

Full Name:

Address:

Mobile No.

Date:

**DECLARATION PROFORMA (ANNEXURE-A)**

(Every Tenderer must fill up the following proforma)

Information on litigation history in which bidder is involved

Employer (APDCL/APGCL/AEGCL)	Cause of Dispute	Amount involved	Remarks showing present status

Full name:  
Date:

Signature of bidder