

## SCOPE OF WORK

### A. Brief Description of Electrical Infrastructure:

- i. 3 nos. 1000 KVA, 6KV/415 V, Dry type transformer with accessories
- ii. 5-panel HT VCB switchboard of 800 A /6KV
- iii. 4 sets of MV Panel board having ACBs (800A-1600A)/ 415 V along with outgoing switch fuse units, metering arrangement etc.
- iv. All control and power cables connected with above HT/MV panels including all outgoing feeders upto receiving end.
- v. Manual Capacitor banks of capacity 525-700 KVAR.
- vi. Any other equipments/accessories as may be required to install to improve the performance of the substation along with capacity addition as will be required.
- vii. 1 no. 200 KVA Diesel engine Alternator set with AMF Panel etc.
- viii. 1 no. 250 KVA Diesel engine Alternator set with AMF Panel etc.
- ix. 2 nos 500 KVA Diesel engine Alternator set with AMF cum Auto synchronization cum auto load sharing Panel etc.
- x. LOW & Medium Voltage (230 V & 415V) Distribution network and its equipments/fittings/ accessories etc spread over the campus of IACS i/c the changes as may be taken place during the period of contract also.

### B. Man power Deployment:

Daily round the clock deployment of technical staff (3-shifts a day basis) along with General Shift would be made by the Contractor within the scope of deployment of manpower as per Annexure-I attached herewith. However, exact no. & type of manpower would be decided by the Engineer-in-Charge as per requirement and location of the work to be deployed. The total no. of manpower may vary from time to time as per discretion of the Engineer-in-Charge. The following manpower has to be provided in each shift along with General shift.

- i. One no. Shift Supervisor in the category of supervisory grade.
- ii. One no. Electrician in the category of Skilled Employee
- iii. One no. Electrical Helper in the category of unskilled employee
- iv. One no. DG set operator in the category of Skilled Employee.
- v. In addition to the above, one General Supervisor & one Sr. Draftsman would be provided in the General Shift only.

**Shift wise Manpower Deployment will be as follows:**

Shift	Supervisory (Electrical Shift Supervisor)	Skilled employee (Electrician)	Unskilled Employee (Electrical Helper)	Skilled Employee (DG set Operator)	Total Manpower required
Shift-A	1 No.	1 No.	1 No.	1 No.	4 Nos.
Shift-B	1 No.	1 No.	1 No.	1 No.	4 Nos.
Shift-C	1 No.	1 No.	1 No.	1 No.	4 Nos.
Reliever	1 No.	1 No.	1 No.	1 No.	4 Nos.
General Supervisor (General Shift)					1No.
Sr. Draftsman (General Shift)					1No
<b>Grand Total</b>					<b>18 Nos.</b>

In this context, it is to be mentioned that, after performing the duty of relievers etc., they will perform duty in General shift.

## **Qualification & Experience:**

- a) *The Shift Supervisors should be preferably within 55 years of age and should have working experiences of not less than 10 years in the area of Electrical distribution Substation and electrical network maintenances of research laboratory/ office building works etc. They should possess valid Electrical Supervisor's Competency Certificate (SCC) for part No. 1, 2, 3, 4, 5, 7A, 7B, 11 & 12 issued by the competent authority for handling up to 33 KV systems.*
- b) *The Electricians (i.e. Skilled Category) should be preferably within 45 years of age and should possess a valid electrical license (Workmen Permit) for Part i (b) & ii at least with adequate experience (not less than 5 years) in the relevant field.*
- c) *The DG sets operators (i.e. Skilled Category) should be preferably within 45 years of age and should possess adequate experience (not less than 5 years) of operation of DG sets of capacity not less than 500KVA. He should have thorough knowledge about various components of DG sets and its functioning.*
- d) *The Electrical Helpers (Unskilled Category) should have 3 years' experience in electrical work field with sound physique acquainted with all types of electrical tools & tackles preferably within the age of 40 years.*
- e) *The Sr. Draftsman should have minimum 10 years of post-qualification experience in the appropriate field where, the minimum educational qualification should be Diploma in Architecture (Dip.in Arch). The Diploma should be awarded by the State Council for Engineering & Technical Education, Govt. of West Bengal or other State Govt./Govt. Body. The candidate should have adequate knowledge & working experience in the field of AUTO CAD drawing and other software based drawing.*
- f) *The General Supervisor should have minimum 3 years of experience in the relevant field which would include maintenance of Registers, Files, Record keepings, preparation of Duty Chart etc. in connection with the above job. The candidate shall be responsible for maintenance/monitoring of formalities as asked for in the Minimum Wages Act. 1948 and Minimum Wages Rules 1950 on behalf of the principal employer. The candidate should be Graduate in any discipline and should have obtained his/her degree from a Govt. University.*

The General Supervisor will perform General Shift duty only on six days a week basis. He will be responsible for general supervision including maintenance of various registers, preparation of duty chart, preparation of Electricity Bills for IACS staff quarters, checking of attendances, cleanliness of the substation premises, keeping records etc. and other formalities as will be required and other formalities as will be required towards compliances of the provisions of Minimum Wages Act-1948 & Minimum Wages Rules 1950 and other labour rules as applicable.

On the other hand, relievers are required to be engaged for providing weekly day of rest as prescribed by the Minimum Wages Act-1948 & Minimum Wages Rules 1950 and to run the shifts on holidays etc. to ensure the round the clock service. *The Contractor shall provide 1no. Shift Supervisor, 2nos. skilled employee & 1no. Unskilled employee for 3 days a week basis in General Shift only after performing their duty as reliever.*

*Note: For all categories of employees as stated above, the prescribed age limit, qualification and experience etc. may be relaxed as per discretion of the IACS management if suitable candidates are not found. In the above situation, they will be placed in a lower category according to their qualification, age & experience. Further, it is explicitly mentioned that, selection would be made through personal interview.*

*In addition to the above, the contractor may engage their authorised supervisory personnel on their behalf to supervise the job. No extra fees will be paid to the contractor in this regard. Also, it is categorically mention that, the entire risk & responsibility pertaining to this contract including safety & security of men, materials an machine etc. shall rest on the contractor during the currency of contract and extended period (if any).*

### **Safety & Security:**

It is categorically mentioned that the entire risk & responsibility pertaining to this contract i/c safety-security of men, materials & machine etc shall rest on the contractor. The contractor will enter into a formal agreement with IACS in this regard. The contractor shall issue necessary Service Identity card, uniform (two sets in a year which will include shirt & trouser as approved by the Principal Employer i.e. IACS), safety shoe, helmet etc. for their employees. However, Bio-Data along with photocopy of Photo ID proof (Voter's I-card/PAN card or similar type evidence) in respect of the employees to be engaged shall be submitted by them before engaging any employee at IACS. Original documents may be asked for to display before the IACS authority towards verification of the same. The contractor shall abide by the provisions of the Child Labour (Prohibition & Regulation) Act-1986. **No labour below the age of 14 years shall be allowed to be engaged in any circumstances.** Since the nature of work is not conducive for female workers; therefore, no female worker should be deployed. However, any such requirement if arises, it is required to be done with the written permission of the competent authority only.

### **Responsibility:**

- i. Daily opening / closing of doors / windows of the Sub-Station as will be required, daily cleaning, checking and care taking of all the equipments & accessories of the Sub-Station including up keeping of rooms and premises.
- ii. Maintenance of log book/sheet by hourly/half-yearly recording of operating data & observations of the Sub-Station equipments and Supply System /as will be directed by the IACS authority including following up with CESC/Power Supply company officials during interruptions of power/power failure from CESC end for the early restoration. The highly skilled staff should be capable of understanding & handling various relays, relay setting, control wiring, switchgear operation etc as and when required.
- iii. Time to time operation of capacitor Bank (manually) on round the clock basis to achieve the maximum power factor rebate on energy bill of CESC/Power Supplier.
- iv. Day to day's repairing and breakdown-maintenance work of all the equipments as will be required. However, for extra manpower & materials (if required) during breakdown, payment will be made extra on this account.
- v. Carrying out of any preventive/periodical shutdown maintenance work in order to have uninterrupted supply at no extra cost.
- vi. Apart from Sub-Station, any emergency & odd hours electrical maintenance work in the entire campus of IACS if occurs beyond the office hours including holiday / Saturday & Sunday should promptly be taken up. If extra manpower has to be engaged as per requirement for which cost of additional labour and material if found necessary may be charged extra with monthly bill

- vii. Daily routine check of the silent canopy DG sets as per the maintenance schedule of the manufacturer i/c cleaning.
- viii. Round the clock manning for operation/monitoring of the DG sets to supply stand-by power on need basis.
- ix. Routine test run of the DG sets as per instruction of IACS officials
- x. Transportation of fuel, lubricant, coolant etc from Petrol Pump / Departmental store to the site of DG set
- xi. Maintenance of DG set log book/log sheet on regular basis
- xii. Operation of drinking water pumps under the guidance of the civil engineering department of IACS.
- xiii. Monitoring & operation of various electro-mechanical services viz. Package & VRF AC plants, Lifts etc. as per instruction of the Engineer-in-Charge.
- xiv. Any other maintenance schedule as will be prescribed by IACS from time to time
- xv. Persons deployed should be covered with insurance by the Contractor against any accident for which personal injury or loss of life may take place. No compensation will be given by IACS for any reason what so ever.
- xvi. It is to be explicitly undertaken by the Contractor that all statutory and legal requirements in respect of the man power deployment by the Contractor shall be fulfilled by the Contractor themselves and IACS shall not be responsible for any manner directly or indirectly.

#### **TOOLS, TACKELS & SAFETY ARTICLES:**

- i. Standard measuring instruments e.g. Tong Tester, Multi Meter, Megger Insulation Tester, Megger earth tester, phase sequence indicator, line tester etc should be provided by the Agency.
- ii. Standard Tools i.e. Pliers, Chisels, Screwdrivers, Hammers, Hacksaw, Files, Brushes, all types of Wrenches, Cable Crimping m/c. (up to 400 sq. mm), including Neon Tester and Test Lamps, HT line tester, should be provided by the Agency.
- iii. Portable power blower, portable hammer drill machine, cutting & drill machine etc.
- iv. Any other tools and tackles as may be necessary for break-down or periodic maintenance work should be provided by the Contractor at the time of requirement on urgent basis.
- v. All types of safety articles like safety gloves, safety belts, safety shoes, safety apron, helmet etc to be used by the substation operators are required to be provided by the contractor.
- vi. The contractor has to provide a first aid box with all necessary first aid materials for the use of substation personnel.

#### **SPARES & CONSUMABLES:**

Minor Spares & components of equipments e.g. PVC insulating tapes, cable sockets, HRC fuses, tubes & lamps, Copper ballasts, starter, loose copper cables & wires, MCB, hardware, lubricants, cotton waste, cloths or any other items as may be necessary up to the limit of Rs. 3,000/- (Rupees three thousand only) per month/Rs. 36,000/- (Rupees thirty six thousands only) per annum are to be provided by the contractor within their scope of this work which will be reimbursed by IACS against production of Cash memo/Invoice in original as per the requisition duly approved by the Engineer-in-Charge. Necessary documents & records are to be maintained properly by the Contractor in this regard.

#### **Providing Stationary etc:**

Necessary registers, pen, pencil, refills, eraser, calculator, log sheet & log books have to be supplied by the Contractor from time to time to records various events & data during the currency of contract and also in extension period (if any). No extra payment will be made by IACS in this regard.

## STATUTORY OBLIGATIONS:

Person deployed for maintenance / operation work should be covered with insurance by the Contractor against any accident for which personal injury or loss of life may take place. No compensation will be given by the IACS for any reason what so ever.

It is to be explicitly undertaken by the Contractor that all statutory and legal requirements in respect of the manpower deployed by the Contractor shall be fulfilled by the Contractor themselves and IACS shall not be responsible in any manner directly or indirectly.

Any statutory obligation as may be required by the Government including the Central Electricity Authority, Govt. of India / Directorate of Electricity, Govt. of W.B. should be fulfilled by the Contractor on their part.

The contractor shall be responsible for compliance of all statutory labour rules and regulations i/c Minimum Wages Act-1948 & Minimum Wages Rules 1950 as will be amended from time to time.

## EXTRA INVOLVEMENT:

Any extra work or manpower required beyond the scope of this work have to be taken care of by the Contractor on emergency basis if advised by the Engineer-in-Charge of the Sub Station at a negotiable cost not exceeding the market/Govt. rate whichever will be found justified by the IACS.

## PAYMENT OF WAGES:

The wages to the employees of the contractor will be paid as per **Minimum Wages Act-1948 & Minimum Wages Rules 1950** as amended from time to time by the Govt. of India. The contractor shall be liable for payment of wages in time (latest by 7<sup>th</sup> day of the next month). The payment of wages to the contractor's employee should be made through RTGS/NEFT/Account Payee cheque. Necessary document has to be submitted during submission of claim for reimbursement of the same. Also, application of Form-X (Register of Wages) & Form-XI (Pay Slip) as stated in the Minimum Wages Act 1948/ Minimum Wages Rule 1950 has to be made. **A Labour deployment cum attendance report is also required to be submitted with each bill for payment of the same.** IACS authority may verify the same from the contractor's employee also. The contractor shall have working capital for at least three month's payment of wages & other dues to protect the interest of the employees to be engaged by them in unforeseen situation. The prospective tenderers are advised to incorporate the following components during working out of the wages in various categories of employees to be engaged by them. The employees to be engaged by the contractor must be covered with ESI & EPF scheme. The employees who will be governed by the **Minimum Wages Act-1948 & Minimum Wages Rules 1950** shall be entitled for availing the National Holidays as paid holidays apart from their weekly day of rest.

### **Wages:**

The wages of an employee who is governed by the Minimum Wages Act 1948 & Minimum Wages Rules 1950 shall incorporate the following components:

1. **Basic wages, 2. VDA, 3. ESI, 4. EPF, 5. EDLIS 1976, 6. Bonus (if entitled).**  
The minimum wages shall be governed in accordance with the rates to be circulated by the Govt. of India from time to time through its Gazette notification. Payment of bonus will be made as per Payment of Bonus Act 1965 with amendments.

The prevailing rate of Minimum Wages for the central sphere in respect of labourers stationed at Kolkata for Scheduled Employment under the head 'Construction/Maintenance/ Building operation' is as follows after revision of minimum wages w.e.f 01.04.2015.

1. Skilled labour: @ Rs. 424/- per day
2. Unskilled labour: @ Rs. 348/- per day

Maintenance of all types of registers pertaining to payment of labourers wages, attendance registers, display of the list of contract labour & their category including daily rate of wages, Brief description of the Minimum Wages Act 1948 etc are required to be displayed by the Contractor in a conspicuous space as per provision as laid down in the Minimum wages Act-1948/Minimum Wages Rules 1950. **Under this Work Scope, the Employees with Designations 'Electrician', 'Electrical Helper' & 'DG set operator' shall be governed as per Minimum Wages Act 1948/ Minimum Wages Rules 1950.**

### **Salary:**

The Contractor's Employee with designation as (i) Electrical Shift Supervisor, (ii) General Supervisor & (iii) Sr. Draftsman will be paid Consolidated Salary @ Rs. 18,000/- per month + EPF & ESI benefits as per Govt. of India norms. On renewal of contract (if granted), annual increment will be granted @ 5% of the consolidated salary in respect of all the above three category of employees.

### **COMPLIANCE OF MINIMUM WAGES ACT. :**

Maintenance of all types register pertaining to payment of labourers Wages, O.T. register, attendance register, Display of the list of contract labour, rate of daily wages etc. as will be required towards compliance of Minimum Wages Act. 1948 to be maintained by the Agency.

### **REIMBURSEMENT OF WAGES ETC.:**

After completion of disbursement of Wages/Salary, arrear wages, Bonus etc. as per instruction of IACS, the Contractor may submit their claim towards reimbursement of the same in duplicate with necessary supporting documents. However, to give some financial relief to the contractor, IACS may release upto 75% of the disbursed amount against submission of documentary evidences towards disbursement of wages as running account payment (in the event of non-submission of Bank Challan etc. towards payment of EPF, ESI & P. Tax components to the concerned authorities). But on submission of the relevant document of payment, the balance payment will be released to the contractor. All types of payments as will be made to the contractor's employee following the order of IACS shall be reimbursed by IACS.

### **EMPLOYER'S PRIOR PERMISSION NEEDED TO WITHDRAW CONTRACTOR'S EMPLOYEE FROM WORKSITE:**

The Contractor shall not be allowed to withdraw any of their employees (whose name will be approved by the Competent Authority of IACS for deployment at worksite at IACS) without obtaining written permission from the Principal employer (IACS) during the currency of contract. If the contractor intends to withdraw any of their employees (s) from the worksite of IACS, prior permission of the Principal Employer (IACS) is needed in writing. Only after getting the written approval/permission of the Principal Employer, the contractor shall be allowed to withdraw their employee (s). However, the contractor shall be bound to immediately withdraw their employee (s)

on receipt of instruction from the IACS authority on the ground of misbehaviour/ negligence in duty or any other reason/ activity which is harmful for IACS. The rehabilitation/re-employment etc of the withdrawn employee (s) will be the sole responsibility of the contractor. IACS will not be responsible in any way for rehabilitation/re-employment etc. of the said employee (s).

**EPF & ESI CONTRIBUTION:**

EPF & ESI Contribution as per Government of India's order (with amended from time to time) have to be deposited by the contractor to the concerned EPF & ESI authority in appropriate time. Necessary documents in this regard have to be submitted to IACS by the contractor with their monthly bill for reimbursement of the same. Any statutory changes in respect of subsequent revision of rate of EPF, ESI Contribution etc will be considered on production of relevant documents.

**PROFESSION TAX:**

Profession Tax has to be deducted from the Wages/Salary in respect of the Employees of the Contractor and to be deposited with the Concerned Authority in time as per rule.

**SPECIFICATIONS AND OTHER TERMS & CONDITIONS:**

Unless otherwise specified in this tender, the work shall be governed as per CPWD Specifications and CPWD WORKS MANUAL. Also, IE Rules, IS Specifications etc. has to be followed as applicable. The Engineer-in-Charge of the Substation should be consulted before taking any decision in this regard.

**DETERMINATION OF CONTRACT:**

IACS may without prejudice to its other rights or remedy against the contractor in respect of inferior workmanship or any other provisions of this contract or otherwise may issue a notice in writing to absolutely determine the contract for the following case. If the contractor neglects to carry out his obligation under this contract and / or commits faults in complying with the terms & conditions of this contract even after giving written notice.

When the contractor has been made liable for action under the aforesaid cases, the IACS shall have powers:-

- a. To determine or rescind the contract. Upon such rescission, the full security deposit recoverable under the contract shall be liable to be forfeited and shall be absolutely at the disposal of IACS.
- b. After giving notice to the contractor to measure up the work done by him in order to get the balance work done by another contractor. Any expenses which may be incurred in excess of the sum which would work had been executed by him, shall be borne and paid by the original contractor and may be deducted from any of his dues.

**K. TERMINATION:**

The IACS authority shall have the right to terminate the Contract at any time by serving one month's notice or a monthly payment in lieu of that without showing any reason whatsoever.