

SPECIAL TERMS & CONDITIONS AND SCOPE OF WORKS

1. General:

Comprehensive Annual maintenance Contract (CAMC) is for 05 (Five) years for the entire system (both working and standby) as detailed in the schedule including repair and replacement of defective card/module/ sub-system/ system/ components/ parts either in hardware or in software or in any other form for smooth functioning of 29 Nos. of Integrated Power Supply System (Location enclosed), of Kharagpur Division 'as & where is' basis.

- i) The contractor should check the entire system along with all the equipments/ components and parts i.e. Integrated Power Supply System (M/S Statcon Energias make) including software and/ or hardware etc. as shown in schedule before quoting the AMC rates . However, any equipments other than the 'STATCON ENERGIAA' make IPS/Mini-IPS/ Special IPS affecting the performance of IPS/Mini-IPS/ Special IPS, should immediately be intimated to the Railway's representative for proper remedial action. Otherwise, the contractor will be held responsible for non-functioning of the IPS/Mini-IPS/ Special IPS under AMC. The contractor should engage competent and authorized Engineer well equipped with required tools & Plants as well as spares as per requirement to carry out preventive maintenance as well as to set right defective parts/ equipments as per requirement.
- ii) The price and rates in respect of the AMC & repairing cost are inclusive of all taxes, charges, GST and other levies etc. It shall include repair and replacement of defective cards/module/part or any other component and shall include all incidental expenses like travel, stay etc. Rly will not provide any material, any parts required for the maintenance /repairing/restoration of IPS/Mini-IPS.
- iii) All rates are including GST. At present it is 18% on AMC work.
- iv) The rates so quoted shall be valid till completion of the AMC period.
- v) The Railway reserves the right to enter into the AMC or otherwise. The contractor is bound to accept the AMC for five years at the accepted rate for which the Railway Administration and contractor shall execute an Agreement for Annual Maintenance Contract based on the Terms & Conditions governing AMC as mentioned hereby. In case of non-compliance with the maintenance obligations for a period of 05 (Five) years, the Performance Guarantee shall be forfeited by the Railway Administration as per GCC. Besides the above, other necessary actions as per provision of **General Conditions of Contract – April' 2022 with latest amendments** prevailing in South Eastern Railway shall also be taken against the defaulting contractor.
- vi) **Adequate number** of fully trained and qualified service engineer(s) should be posted at least at PKU, JER and BLS exclusively for the AMC period to look after all the IPS/Mini-IPS/ Special IPS under CAMC to reduce movement /travel/transportation period so that, failure can be attended in time as stipulated in penalty clause. The deputed qualified Engineer shall have adequate stock of spare and all necessary test and measuring equipment and tools so as to attend to the breakdown repairing/ restoration in minimum time. The engineer should be readily available round the clock (i.e.24 hours) with mobile or fixed landline number which shall be communicated to Railway. The message of failure or breakdown to be communicated by the Railway to the staff of firm through Telephone/ SMS/ E-mail etc. Details of service engineer employed (Like number of service engineer etc.) for this work along with location to be furnished by the tenderer at the time of quoting offer.
- vii) During the period of the maintenance contract no third party will allowed to undertake any repairing/servicing on the system.
- viii) Railway will supply AC power for repair and maintenance of IPS.

- ix) Payment for AMC will be made on completion of every quarter (i.e. 3 months) on the basis of performance certificate of the firm issued by Sr. DSTE (Co)/KGP or his authorized representative.
- x) AMC can be terminated at any time by the Railway without showing any reason and the payment up to the date of termination will be released to the contractor by the Railway.
- xi) **Period of contract.** The Annual Maintenance Contract will be for a period of 05 (Five) years from the date of issue of Letter of Acceptance.
- xii) New AMC of each IPS will commence only after expiry of Warranty/AMC Period.
- xiii) AMC will be discontinued in case the IPS is replaced by a new one.

2. Scope of maintenance:

- i) Comprehensive Maintenance and upkeep of all hardware, software & peripheral equipments as listed in the Schedule required for full functional of the Integrated Power Supply System (M/S Statcon Energiaa make) installed at above mentioned stations of Kharagpur Division of S. E. Railway. The Scope includes Testing, checking, maintenance and Replacement of (i) SMR Panel, SMPS Modules, Changeover Devices & their Fuses, Diodes, Regulators, Connections, Wiring & other discrete components, (ii) AC distribution Panel, Invertors, Transformers, CVTs, Changeover Devices, connecting fuses, regulators, Diodes, wiring and other components. (iii) DC distribution Panel, DC-DC convertors, Connecting Filters, Regulators, Diodes, MOVs, and other components, (iv) ASM Indication Panel, it's Buzzers, Push Buttons and Indications, (v) All Indicators, Buttons, Switches, Sockets, Buzzers, Resistances, Capacitors, Diodes, Fuses of various ratings connected to SMR/AC/DC Panels, (vi) Earthing and Bonding connection, Surge protection devices (Class B & C connected to the IPS. However, replacement of batteries will be done by Railway as per codal life.
- ii) Attending and rectification to every failures.
- iii) Periodical preventive maintenance (Monthly) with attendance in a register kept in the office of the SSE/Signal/ In-charges.
- iv) Repair/ Replacement of defective card/ module/ sub-system/system /parts either in hardware or in software or in any form with provision of spares / cards. Since, the AMC is comprehensive, Rly will not provide any material/ labour etc. to set right the system for rectification of any defects. The repaired module shall have same performance and safety features in respect of hardware and software as the module /card originally supplied at the time of commissioning of the system.
- v) Modification to software and Hardware, up-gradation to latest version of software if required within the scope of the system operation.
- vi) Maintenance of VRLA Battery/LMLA battery shall not be covered under the AMC contract.
- vii) Maintenance and replacement of Class B/C/D SPD, when faulty, is covered under AMC contract.

3. Schedule of Activity for execution of AMC:

- i) The service engineer must attend once in a month each station for checking all equipment and parameters of IPS i.e. load of battery, proper working of buzzer, SMR equipment and other system related with IPS for proper working. He should also check earth connectivity and power supply i.e. 230V input. He should also check the ripple voltage and take necessary measurement to control ripple voltage within specific limit as per requirement of end equipment. If there is any defect in earth connectivity and power supply, Railway will repair. The details regarding checking should be recorded in the maintenance register which is kept in each station by the firm. All modules including spare modules provided in system should be checked for proper functioning. The normal day maintenance visit by the service engineer is to be informed to Railway representative so that necessary Rly. representative is present with keys. The register is to be jointly signed by Service engineer and Rly. representative.

- ii) The service engineer must supervise the operation after restoration of the failure for passing of at least one train in each direction.
- iii) The performance of the equipment of each station should be checked during inspection by the firm once in a month to ensure the proper functioning of the system. The inspection should be carried out in presence of Sr. DSTE (Co)/KGP or his authorized representative and observations reports are to be prepared as prescribed in checklist.
- iv) All checks, servicing and maintenance of IPS system carried out by the tenderer should be entered against each machine/equipment in the Maintenance Register. Signature of the Railway's representative/supervisor during the check should be obtained by the contractor concerned. An AMC Register in approved format shall be supplied by the tenderer at his own cost. The AMC Register shall contain Annexures as per Format No. AMC/IPS/2015 as instructed by CSE/GRC's letter no. S&T/S/382/Pt.II/3196, Dtd. 09.06.15.
- v) During the period of AMC, firm shall arrange for immediate replacement/supply in order to set right at his own cost the defects of any cards/modules, equipment /sub-system or associated equipment either in hardware including peripheral equipment or in software or any other form which becomes unworkable due to any cause whatsoever including defective design or defective material/component, lighting damages, power supply problems etc.
- vi) Supply of spare/alternative module, during the maintenance contract has to be ensured by the contractor for full functioning of the system round the clock when the machine or part of it is taken out for any repairing /overhauling over and above any duplication already provided.
- vii) The firm will attend breakdown free of charge and carry out all repairs of the unit, replacement of defective parts of system/sub-system thereof. No additional payment will be made for attending to maintenance/failure requirements of any other visit to installation over and above what is included AMC. This includes attending to all sorts of trouble shooting & replacements of modules of the system including other defective parts, in case of partial or total breakdown.
- viii) During the visit in connection with any breakdown requiring repairing, the Engineer of the firm will check all the relevant system components listed in the system list and shall thoroughly check working of complete system as per technical specifications.
- ix) The firm shall repair all defective cards/modules of various sub-systems of the AMC within the total AMC charges quoted irrespective of reasons for the defect (component failure power supply fluctuation, lighting damages, defective design/workmanship etc.
- x) After rectification of the breakdown by the firm, authorized representative of Sr. DSTE (Co)/KGP will inspect and ratify the rectification of the same.
- xi) The firm will provide manpower to assist in removing/ re-fixing of any components of IPS during the maintenance and service of the equipment. The Railway staff will be available for inspecting the firm's maintenance and service work of equipment only.
- xii) During AMC period all the materials required for satisfactory functioning of the system including incorporation of amendment in the system as per RDSO directions are to be supplied and implemented by the firm at its own cost.

- xiii) Care should be taken to avoid damage to the existing gears during work. Any damage to Railway property shall be made good by the contractor at its own cost.
- xiv) Damage of IPS system/module in event of thundering/ lightening is covered under scope of AMC.
- xv) IPS/Mini-IPS system/modules shall be thoroughly cleaned by AMC staff during each visit.
- xvi) The firm shall also attend all the defects existing as of now.
- xvii) **The contractor should submit his list of service personnel and identity cards of the service personnel countersigned by DSTE or any other officer so nominated by Sr. DSTE (Co)/KGP along with AADHAAR Card details to enable them to have free access to the Railway premises. The intimation shall be given well in advance for countersignature of identity card when a new service personnel is to be deployed. The validity of the identity card shall be limited to the contract under execution.**
- xviii) All sorts of safety precautions should be taken before starting the work. The Railway will not be responsible for any accident caused to its AMC executing Service Engineer/Technician/ labour during the execution of maintenance work.
- xix) An indemnity Bond of an equivalent amount as per accepted rate as per letter of Acceptance/ Contract Agreement of the Tender or market rate (Whichever is higher) has to be produced in proper format by the contractor concerned when the machine/ equipment or system component is taken out of the user' s premises without availing any alternative arrangement to Railways.
- xx) All modifications and expansion required for addition/deletion/up-gradation within the scope of the system operation & as deemed fit by the Railway Administration as and when intimated shall be attended by the firm's Engineer within 3 days & carried out promptly. Necessary hardware, components etc. for such addition/ deletion/ up-gradation shall be arranged by the tenderer at his own cost. Additional modules such as SMR, Inverter, DC-DC Converter, Transformer etc. if required, shall be supplied by Railway.
- xxi) All repairing/replacement under this AMC shall be carried out free of cost irrespective of reason whatsoever.

4. Down Time

- i) Down time is defined as duration for which system as a whole or any part is not available for the purpose it is installed and leads to disruption of train traffic due to failure of IPS system.
- ii) The down time will be reckoned from the time the contractor's representative has been informed by means of Fax, Telegram, telephone or any other method at the address as specified by contractor within geographical jurisdiction of South Eastern Railway. The contractor' s Engineer/ Supervisor-in-charge shall be available on telephone (DOT) Cell phone) round the clock for passing on the information by Railways in case of failure of the IPS system.
- iii) A register will be maintained by Railway's Engineer-in-charge mentioning the date & time of failure, intimation of failure to the contractor, date & time of attending to the failure rectification, date & time of rectification & date of attending preventive maintenance

5. Penalty:

- i. Payment of IPS system will be made to the firm only when cumulative downtime of that IPS is less than 12 hours in that month.
- ii. In case down time for any single failure being more than 3 hours , but, upto 6 hours in a month, 2% of monthly maintenance charges will be deducted for every one hour down time in excess of 3 hrs.
- iii. In case down time for any single failure being more than 6 hours , the deduction will be 5% of monthly maintenance charges every one hour down time in excess of 6 hrs upto 12 hrs
- iv. No payment for an IPS for a month shall be made to the firm if cumulative downtime of that IPS is more than 12 hours in that month.
- v. Down time is the duration of defects in IPS which results in failure of any signalling gears powered by the IPS
- vi. In case of defects in any component/Module of IPS for which no signalling gear is affected it is to be rectified/replaced within 24 Hrs. Beyond 24 Hrs, 1% of monthly maintenance charge will be deducted per hour in excess of 24 Hrs.
- vii. 15% of Monthly maintenance charge will be deducted for per day delay of mandatory visit by Service Engineer after the month / periodical scheduled date of visit.

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