

(TENDER NO. ISPRL/VSP/PR-08/17-18/ELECT-AMC/ T9 dated 13.02.2018)



SECTION III

SPECIAL CONDITIONS OF CONTRACT (S.C.C)

COVER PAGE

BIDDING DOCUMENT ON ANNUAL MAINTENANCE CONTRACT (AMC) FOR ELECTRICAL JOBS

At

**Indian Strategic Petroleum Reserves Limited
Strategic Crude Oil Storage Facilities
Lova gardens, Behind HSL fabrication Yard
Post Box No.999, Gandhigram Post
VISAKHAPATNAM-530005**



INDEX

NAME OF WORK: ANNUAL MAINTENANCE CONTRACT (AMC) FOR ELECTRICAL JOBS AT INDIAN STRATEGIC PETROLEUM RESERVES LIMITED (ISPRL), VISAKHAPATNAM – 530 005.

TENDER DOC NO.: TENDER NO. ISPRL/VSP/PR-08/17-18/ELECT-AMC/ T9 dated 13.02.2018

INDEX TO SPECIAL CONDITIONS OF CONTRACT

Contents

COVER PAGE	1
INDEX	2
1.0 GENERAL.....	4
2.0 PRE-QUALIFICATION CRITERIA.....	4
2.1 DETAILS OF WORK	5
2.2 Scope of Work	5
2.3 Scope of Supply	5
2.3.0 Time Schedule.....	5
2.4 Water, Power Supply and Land for contractors site office / Labour amenities.	5
2.5 Billing and Terms of Payment	5
2.6 On Account Payments.....	5
2.7 Firm Price	6
2.8 Quality Assurance System	6
2.9 Working Hours.....	6
3.0 DEPOSITS	6
3.1 SECURITY DEPOSIT.....	6
3.2 RETENTION MONEY/PBG:	6
3.2.1 DEFECT LIABILITY PERIOD	7
4.0 PENALTY CLAUSE	7
5.0 WORKS CONTRACT TAX.....	7
6.0 INCOME TAX.....	7
7.0 CONTRACTOR'S OBLIGATIONS/ RESPONSIBILITIES	7
7.1 OBLIGATIONS:	7
7.2 RESPONSIBILITIES:	7
8.0 PAYMENT OF TAXES, DUTIES, CESS & OTHER LEVIES	7



9.0	INSURANCE POLICIES.....	8
10.0	GOVERNING LAWS & JURISDICTION	8
11.0	CONTRACT AGREEMENT	8
12.0	ROUNDING OFF	8
13.0	HEALTH, SAFETY AND ENVIRONMENT (HSE) MANAGEMENT.....	8
14.0	TESTS AND INSPECTION.....	8
15.0	COMPLETION DOCUMENTS	8
16.0	STATUTORY REQUIREMENTS.....	9
17.0	SITE ORGANISATION.....	9
18.0	SITE CLEANING.....	9
19.0	ISPRL	9
20.0	ROYALTY	9
21.0	SCHEDULE OF RATES	9
A)	SCOPE OF WORK.....	10
A.1	The details on scope of work are as under:	10
A.2	Electrical Equipment testing, calibration and repair Job Scope:.....	11
B)	DETAILS OF WORK.....	11
B.1	Carrying the Preventive Maintenance as directed by officer-in-charge, ISPRL:	11
B.2	Carrying the Break-down Maintenance as directed by officer-in-charge, ISPRL:	11
B.3	Carrying the Predictive Maintenance as directed by officer-in-charge, ISPRL:.....	11
B.4	Arranging the manpower on need basis as directed by officer-in-charge, ISPRL:.....	11
B.5	Arranging the Equipment on need basis as directed by officer-in-charge, ISPRL:.....	11



SPECIAL CONDITIONS OF CONTRACT

1.0 GENERAL

- 1.1 Special Conditions of Contract (SCC) shall be read in conjunction with the General Conditions of Contract (GCC). Schedule of Rates, specifications of work, drawings and any other document forming part of this Contract ~~wherever~~ the context so requires.
- 1.2 Notwithstanding the sub-division of the document into these separate sections and volumes, every part of each shall be deemed to be supplementary of every other part and shall be read with and into the Contract so far as it may be practicable to do so.
- 1.3 Where any portion of the GCC is repugnant to or at variance with any provisions of the Special Conditions of Contract, then unless a different intention appears, the provision(s) of the Special Conditions of Contract shall be deemed to override the provision(s) of GCC only to the extent that such repugnancies or variations in the Special Conditions of Contract are not possible of being reconciled with the provisions of GCC.
- 1.4 Wherever it is stated in this Bidding Document that such and such a supply is to be effected or such and such a work is to be carried out, it shall be understood that the same shall be effected / carried out by the Contractor at his own cost, unless a different intention is specifically and expressly stated herein or otherwise explicit from the context. Contract value (also referred to as Contract Price) shall be deemed to have included such cost.
- 1.5 In case of irreconcilable conflict between relevant Indian standards, GCC, Special Conditions of Contract, Specifications, Drawings and Schedule of Rates, the following shall prevail to the extent of such irreconcilable conflict, in order of precedence:
- i) Detailed Letter of Acceptance (along with Statement of Agreed Variations, if any) and its enclosures such as Schedule of Rates, Labour Rates, etc.
 - ii) Letter / Fax of Acceptance
 - iii) Special Conditions of Contract
 - iv) General Conditions of Contract
 - v) Scope of work / Job / Particular Specifications
 - vi) Drawings
 - vii) Technical/Material Specifications
 - viii) Indian Standards

2.0 PRE-QUALIFICATION CRITERIA

- 2.0 (a) The bidder must be a 33kv electrical contractor with A Class/Grade license. A copy showing the same must be submitted.
- 2.0 (b) Financial: Average Annual Financial Turnover during the last 3 years, ending 31st March, 2017 shall be at least Rs.16 Lakhs.
- 2.0 (c) Technical: Tenderers shall have experience of having successfully carried out and completed similar work during the last 7 years ending 31st January 2018, which experience should be any one of the following:
1. Three similar completed works, each costing not less than Rs.21 Lakhs (or)
 2. Two similar completed works, each costing not less than Rs.26 Lakhs (or)
 3. One similar completed work costing not less than Rs.42 Lakhs
- * Similar completed works shall mean



“Tenderer shall have successfully executed Contracts for 33/6.6 KV Electrical Substation Commissioning or Operation and Maintenance of Electrical systems/units in a Refinery Process Units/ Oil Storage Installations/Cavern storage for a minimum continuous span of 12 months during the last 7 years ending 31st January 2018.”

The tender should submit legible proof copies of executed PO's as per the technical terms . Only valid documentary proof vendors will be considered in technical bidding.

2.1 DETAILS OF WORK

2.2 Scope of Work

The Scope of Work shall be as described in [Appendix-I to SCC](#).

2.3 Scope of Supply

The Scope of Supply shall be as described in [Appendix-I to SCC](#).

2.3.0 Time Schedule

2.3.1 The Work shall be executed strictly as per time schedule, i.e., as per the requirement as and when the need arises. The same will be informed by ISPRL and the time frame shall be decided based on mutually agreed basis. The period of completion given includes the time required for mobilization as well as testing, rectifications, if any, retesting, demobilization and completion in all respects to the satisfaction of ISPRL.

2.3.2 A joint programmed /schedule of execution of work will be prepared by the Engineer-in-Charge and Contractor. This programmed will take into account at the time of completion mentioned in 2.3.1 above.

2.3.3 Daily / Monthly / weekly execution programmed will be drawn up by ISPRL as per the requirement if any. The Contractor shall scrupulously adhere to the Targets / Programme by deploying adequate personnel, Equipment, Tools and Tackles and also by timely supply of required materials coming within his scope of supply as per Contract.

2.3.4 Contractor shall give every day category-wise labour and equipment deployment report along with the progress of work done in the proforma prescribed by ISPRL.

2.4 Water, Power Supply and Land for contractors site office / Labour amenities.

Water and power shall be provided by ISPRL from the nearest available source for which the contractor has to make his own arrangements for using these resources. Contractors site office, Labour amenities will be the responsibility of the contractor.

2.5 Billing and Terms of Payment

The Contractor shall submit the Bills / invoice, in quadruplicate, for the work done once in a month. The Contractor shall submit all relevant documents, if specifically asked by ISPRL, for certification of invoice.

ISPRL shall release the payments **within 30 days** from the date of receipt of Bills, if found in order. No advance shall be paid.

2.6 On Account Payments

a. Monthly Running Account Bills

b. Payments will be made against Running Accounts Bill certified by ISPRL within 15 days from the date of receipt of the certified bill by ISPRL.



- c. Running Account bills and the Final Bill shall be submitted by the Contractor together with the duly signed measurement sheet / MIS Reports to ISPRL in quadruplicate for certification.
- d. All running account payments shall be regarded as on account payment (s) to be finally adjusted against the final bill payment.
- e. The final bill shall be submitted by the Contractor within one month of the date of completion of the work fully and completely in all respects.
- f. Payment of final bill shall be made within 30 days from the date of receipt of the certified bill by the Disbursement Section of the owner.
- g. Payment shall be made only through e-Payment mode through any of the designated banks to ensure that timely payments are processed. The agency shall necessarily fill requisite formats and complete all formalities for the same before submission of first bill. Due to non-fulfilment of e-Payment requirements, ISPRL shall not be responsible for any delay in the payments. Owner reserves the right to make payment in any alternate mode also.

2.7 Firm Price

The quoted price shall be FIRM and no escalation in price on any account shall be admissible to the Contractor till the work is completed in all respects. However, if there is any change in minimum wages during the contract period, the same will be considered for payment on the item no.1 and 5 of SOR.

2.8 Quality Assurance System

- 2.8.1 Owner's representative shall reserve the right to inspect / witness, review any or all stages of work at shop / site as deemed necessary for quality assurance.
- 2.8.2 In case CONTRACTOR fails to follow the instructions of ISPRL with respect to above clauses, next payment due to him shall not be released unless until he complies with the instructions to the full satisfaction of ISPRL.

2.9 Working Hours

Depending upon additional specific requirements and upon ISPRL advice, the works may have to be started earlier or beyond normal working hours and on holidays also for which no additional charges (OT) claim shall be entertained. Normal working hours will be 9.00 am to 5.30 pm with half an hour lunch break.

3.0 DEPOSITS

3.1 SECURITY DEPOSIT

This is with reference to GCC at point no.4 under head Deposits, for Security Deposit, the contractor shall within 15 (Fifteen) days of receipt of the notification of acceptance of the tender or letter of intent, shall remit the security deposit of amount equivalent to 10% of the Contract value to ISPRL. The security deposit shall be in the form of Bank Draft/Pay Order/Bank Guarantee from a Scheduled Bank / Nationalized Bank valid upto Three (3) months after defect liability period and the same shall be released after Three months from the date of completion of defect liability period.

Bank Guarantee shall be provided as per the enclosed format. Contractor may note that payment towards running bill shall not be paid unless & until SECURITY DEPOSIT is paid to ISPRL.

Owner reserves the right to deduct any amount from the Security Deposit at the time of expiry of Contract / Termination of Contract.

3.2 RETENTION MONEY/PBG:

This is with reference to GCC at point no.4 under head Deposits, for Retention Money (R.M), 10% of the total value of the Running Account bill shall be deducted and the same shall be released after Defect liability period.



3.2.1 DEFECT LIABILITY PERIOD

The defect liability period will be One year from the date of completion/ any other liability period which will be mutually agreed before start of some specified jobs. Any defects related to construction found if any are to be attended with no addition cost by the contractor after receiving the information from ISPRL. If the problem not attended with the given time frame, the rectification job will be done by ISPRL and the Double the cost will be recovered from the vendor from the available Security deposit.

4.0 PENALTY CLAUSE

Owner shall reserve the right to impose cash penalty on the contractor and deduct such amount from his bills or Security Deposit in case Owner is put to any inconvenience due to non-performance or financial loss of any nature whatsoever, directly or indirectly by any of the contractor's personnel or by the contractor.

5.0 WORKS CONTRACT TAX

Every contractor who works for Owner should obtain an exemption certificate from the Commissioner of Sale Tax (works contract) otherwise Owner shall deduct the amount of TDS in accordance with the provisions of this Act. If at any stage the contractor's establishment gets an exemption certificate, he shall apply for refund to the Sales Tax Commissioner. Owner will furnish only a TDS certificate for the amount deducted and deposited with the Commissioner.

6.0 INCOME TAX

Income tax deduction shall be made from the gross amount billed as per the rules and regulations in force in accordance with income tax act prevailing from time to time.

7.0 CONTRACTOR'S OBLIGATIONS/ RESPONSIBILITIES

7.1 OBLIGATIONS:

The Contractor shall also be bound to discharge obligations as provided under various statutory enactments including the Employees Provident Fund Act, 1952, Employees Pension Scheme, 1995, ESI Act 1948, Contract Labour (Regulation and abolition) Act, 1970, Minimum Wages Act 1948, Payment of Wages Act 1936, Payment of Bonus Act, 1965, Payment of Gratuity Act, 1972, Workmen's compensation Act 1923, Works Contract Act 1999 and other relevant Acts, Rules and Regulations in force and as amended from time to time and are in force in the State where the subject work under this Contract are executed.

7.2 RESPONSIBILITIES:

- 7.2.1 It shall be the responsibility of the CONTRACTOR to obtain the approval for any revision and/or modifications decided by the CONTRACTOR from the OWNER/ Engineer-in-Charge before implementation. Also such revisions and/ or modifications if accepted/ approved by the OWNER/ Engineer-in-Charge shall be carried out at no extra cost to the OWNER.
- 7.2.2 All expenses towards mobilization at site and demobilization including bringing in equipment, work force, materials, dismantling the equipment, clearing the site etc. shall be deemed to be included in the prices quoted and no separate payments on account of such expenses shall be entertained.
- 7.2.3 It shall be responsibility of the CONTRACTOR to provide, operate and maintain all necessary machinery service related equipment, tools and safety gadgets, and lifting tackles, tools and appliances to perform the work in a workman like and efficient manner and complete all the jobs as per time schedules without any extra cost to the OWNER.
- 7.2.4 The CONTRACTOR shall be responsible for procurement and supply in sequence and at the appropriate time of all equipment / materials and consumables and his rates for execution of work will include of supply of all these items.

8.0 PAYMENT OF TAXES, DUTIES, CESS & OTHER LEVIES

The contractor shall be fully and exclusively responsible for the payment (and liable for all consequences in the



event of default) of any and all taxes, duties, octroi, & other levies including service tax now or hereafter imposed, increased or modified from time to time in respect of the above job. The change in service tax if any after the award of contract shall be to ISPRL a/c.

9.0 INSURANCE POLICIES

The Contractor shall at his own cost and initiative take out and maintain at all times until the close out of the Contract, insurance policies as mentioned in General Conditions of Contract and also in respect of workmen engaged by him for providing services under this Contract, in order to keep himself as well OWNER fully indemnified from and against all claims whatsoever including but not limited to those arising out of the provisions contained in Workmen's Compensation Act, 1923. Should the Contractor fail to take out and/or keep afoot insurance as provided for in the foregoing paragraph, OWNER shall be entitled (but without any obligation to do so) to take out and/or keep afoot such insurance at the cost and expense of the Contractor and without prejudice to any other rights or remedies of OWNER in this behalf, to deduct the sum(s) incurred thereof from any amounts due to the Contractor.

10.0 GOVERNING LAWS & JURISDICTION

The terms and provisions of this Contract shall be governed and interpreted in accordance with the laws of India in force and is subjected to and referred to the court of law located at New Delhi which shall have exclusive jurisdiction.

11.0 CONTRACT AGREEMENT

The successful Bidder shall be required to execute a Contract Agreement with ISPRL as per proforma attached in the Bidding. Document on the non-judicial stamp paper of appropriate value (**Minimum Rs. 100/-**) to be purchased from Delhi/Visakhapatnam. The cost of stamp paper shall be borne by successful Bidder.

12.0 ROUNDING OFF

All payments to and recoveries from the Contractor shall be rounded off to the nearest rupee. Wherever the amount to be paid / recovered consists of a fraction of a rupee (paise), the amount shall be rounded off to the next higher rupee if the fraction consists of 50 (fifty) paise or more and if the fraction of a rupee is less than 50 (fifty) paise, the same shall be ignored.

13.0 HEALTH, SAFETY AND ENVIRONMENT (HSE) MANAGEMENT

- 13.1 The Contractor shall adhere to the Health, Safety (HSE) management system as per our HSE management at our site.
- 13.2 The CONTRACTOR shall establish document and maintain an effective Health, Safety and Environment (HSE) management system.
- 13.3 In case CONTRACTOR fails to follow the instructions of Engineer-in-charge with respect to HSE, next payment due to him shall not be released till CONTRACTOR complies with the HSE systems to the full satisfaction of Engineer-in-charge.

14.0 TESTS AND INSPECTION

The work is subject to inspection at all times by the Engineer-in-Charge. The Contractor shall carry out all instructions given during inspection and shall ensure that the work is being carried out according to the specifications of this Bidding Document and the relevant codes of practice.

The Contractor shall provide for purposes of inspection access ladders, lighting equipment for testing, necessary instruments etc., as applicable, at his own cost.

15.0 COMPLETION DOCUMENTS

The following documents shall also be submitted by the Contractor in triplicate as a part of completion documents:

- a) Material test reports for all supply items in the Scope of Contractor.
- b) Other documents as mentioned in Technical Specification.



c) As built drawings, if asked by Engineer- in-Charge

16.0 STATUTORY REQUIREMENTS

The approval from any authority required as per statutory rules and regulations of Central/State Government shall be the contractor's responsibility unless otherwise specified in the Bidding Document. The application on behalf of the Owner for submission to relevant authorities along with copies of required certificates complete in all respects shall be prepared and submitted by the contractor well ahead of time so that the actual construction/commissioning of the work is not delayed for want of the approval /inspection by concerned authorities. The inspection of the works by the authorities shall be arranged by the contractor and necessary coordination and liaison work in this respect shall be the responsibility of the Contractor.

Bidder has to submit the following documents:-

1. Firm registration, PF and ESI registration certificates, Labour, service tax, PAN, GST details.
2. Last three years IT returns and last three years and Service tax returns
3. Turn over certificate from the auditor
4. Bidder should submit the last One year challans and ECR copies of PF and ESI .
5. If the GST number is not available at the time of participation of this tender, an undertaking to be given mentioning that the GST will be submitted with in one month from the date of award of contract.

17.0 SITE ORGANISATION

The Contractor shall submit the details of organization proposed by him at site of work for the implementation of the works under the Contract, together with bio data of the key personnel. The Contractor shall however without prejudice to his overall responsibility to execute and complete the works as per specifications and time schedule progressively deploy adequate qualified and experienced personnel and augment the same as decided by Engineer-in-Charge depending on the exigencies of work to suit the work schedule without any additional cost to Owner.

18.0 SITE CLEANING

The CONTRACTOR shall clean and keep clean the work site from time to time to the satisfaction of the Engineer- in-Charge for easy access to work site and to ensure safe passage, movement and working. The Contractor shall also clean the work site to the satisfaction of Engineer-in-Charge before handing over. No extra payment shall be paid on this account. The rates quoted in SOR are deemed to be inclusive of all the costs towards all the above activities as well.

19.0 ISPRL

Where ever ISPRL is stipulated, it shall be construed as ISPRL's authorized representative for this work.

20.0 ROYALTY

The quoted rates/price shall be inclusive of all royalties, if any, which the Contractor may have to pay to the statutory bodies/Govt.

21.0 SCHEDULE OF RATES

The Schedule or Rates (SOR) shall be read in conjunction with Special Conditions of Contract, General Conditions of Contract, Technical Specifications, Drawings and any other Document forming a part of this Contract. The quantities shown against the various items are only approximate and subject to any variations as per the stipulation made in General Conditions of Contract.

The Owner reserves the right to interpolate or extrapolate the rates for any new item of work not covered in Schedule of Rates from the similar items already available in Schedule of Rates. All the works item wise, shall be measured upon completion and paid for the contracted rates. In case any activity though specifically not covered in Schedule of Rates, description but the same is covered under Scope of Work / Specification / Drawings etc., no extra claim on this account shall be entertained, since SOR is to be read in conjunction with other documents forming part of the Contract. All items of work in the Schedule of Rates shall be carried out as per the Specification, drawings and instructions of the Engineer-in-Charge and the Rates are inclusive of all materials, consumables, Labour, supervision, tools and tackles, as well as preparatory, incidental, intermediate / auxiliary / ancillary or enabling works.



APPENDIX-I

A) SCOPE OF WORK

The scope of work covered in this tender shall be as specified below.

It is, however, explicitly understood and confirmed by the Contractor that the scope as described in the Bidding Document is not limiting, in so far as the responsibilities of the Contractor shall include, inter-alia, carrying out any and all works and providing any and all facilities those are required in completing the work in all respects and satisfying all performance and guarantee requirements stated or implied from the contents of the Bidding Document.

The quantities shown in the SOR in Section IV of price bid are tentative.

A.1 The details on scope of work are as under:

1. One Qualified person in general shift is required to co-ordinate the works on day to basis for the entire contract period on all working days from the selected bidder. He will be the single point coordinator for all the interactions with ISPRL for job execution.
2. All necessary tools, tackles and testing equipment's (such as megger, multimeter, BDV kit, oil filtration machine, relay test kit, earth rods and safety insulated gloves etc) under agency scope.
3. As per the safety concern all certified PPE and tools and tackles should be supplied by agency.
4. The service/maintenance/calibration of equipment shall be strictly in line with the OEM manuals.
5. Vendor need to refer the OEM vendor manual and adhere to the procedures given before carrying any job.
6. Vendor should provide maintenance support directly or through authorized service center or OEM & their authorized franchisees alone.
7. The necessary Consumables and spares will be arranged by ISPRL, however the bidder has to give the required consumables/spares list well in advance considering the lead time before start of any job which involves purchase/procurement. Failure of this intimation by bidder leads to bear the cost and time on account of any such delays.
8. Any special tools required for concern job, the agency to be taken care for those special tools.
9. As per job requirement Hydra, Crane, additional manpower to be supplied in proper time is under agency scope. Payments will be made by ISPRL on actual bill basis for those items which are not covered in the rate contract for which the contractor has to take prior written permission before proceeding for such jobs.
10. If any material requires for carrying repair/maintenance job, if that material is not available with ISPRL, then agency should supply the material on payable basis for which a prior approval has to be obtained in written from ISPRL.
11. If any material/equipment found damaged due to poor workmanship, then agency is responsible for such damage and respective cost as decided by In-charge of ISPRL will be recovered from the agency.
12. If any deviation in safety or wrong approach in job performance, then agency is responsible for respective manpower and equipment. The decision of the ISPRL Mechanical dept. In charge shall be final in deciding whether the defect is due to poor workmanship or not.
13. Agency shall deploy a dedicated supervisor for all necessary co-ordination with their crew members, Operations, other Maintenance section, Job in charge and safety dept. to following work permit systems and smooth completion of assigned jobs.
14. In all jobs and payments final decision on certification on completion of job will to be taken by the ISPRL job in-charge only.
15. For Emergency jobs with duration of 24 hours, agency should supply the required manpower to continue works uninterrupted and need to arrange/mobilize necessary equipment and manpower. The actual Supplied equipment and manpower rates will be paid by ISPRL on designated skill basis as per the contract.
16. Non-sparking tools to be used for concern jobs as advised by the job engineer.



A.2 Electrical Equipment testing, calibration and repair Job Scope:

1. Skilled and Experienced Supervisors/ technicians are required for the completion of assigned jobs.
2. For calibration/testing, the qualified bidder need to hire the OEM/OEM authorized agency/agency having the necessary approvals to carry this nature of job.
3. Necessary calibration/testing certificate to be obtained from that authorized agency which has carried the job.
4. Agency should provide standard job procedures as per the OEM manuals to each job and work permit system to be followed before starting the work.
5. Most of Electrical equipment maintenance jobs are critical in nature, hence agency is required to discuss about expected time for completion of job in concurrence with ISPRL job engineer, and ensure to complete it with in the committed time frame.
6. In Emergency Job to be carried out on round the clock basis up to commissioning of equipment.
7. All Required electrical equipment Spare parts, lubricants, consumables under ISPRL scope. However, if any of them are not available at ISPRL stores, then Agency need to procure spares after obtaining the necessary approvals from ISPRL, payment will be done on actual basis by ISPRL at later stage on production of Proofs.
8. If any machining works arises for completion of job, it should be taken up by Agency, Payment will be done on actual basis by ISPRL at later stage on production of Proofs.
9. Proper and Certified calibration test kits and tools required to use at site while carrying the jobs.
10. After Job completion testing/checking / history sheet/service report need to be generated and produced to ISPRL job engineer.
11. Agency should provide equipment performance guaranty certificate based on nature of the job.
12. If any major repairs or damages to the equipment occurs, then agency is liability to repair or replace the same with prior intimation to job engineer/ manager.
13. Agency having privilege to discuss with concern ISPRL officials to change the decision for the benefit of the ISPRL.

B) DETAILS OF WORK

B.1 Carrying the Preventive Maintenance as directed by officer-in-charge, ISPRL:

There are various Electrical equipment and machinery are installed for which there is a need to carry the necessary Preventive Maintenance. The list of jobs with scope is specified in the Annexure - A.

B.2 Carrying the Break-down Maintenance as directed by officer-in-charge, ISPRL:

Any break-down maintenance occurred to any of the equipment, there is a need to attend the same. The information regarding this job will be intimated by ISPRL. The expenses for this nature of job shall be reimbursed to bidder, however prior approval for the expected cost is to be obtained from ISPRL before start of such job in writing.

B.3 Carrying the Predictive Maintenance as directed by officer-in-charge, ISPRL:

There are various mechanical equipment and machinery are installed for which there is a need to carry the necessary Predictive Maintenance. The list of jobs with scope is specified in the Annexure - A.

B.4 Arranging the manpower on need basis as directed by officer-in-charge, ISPRL:

Sometimes there may be a need to arrange Supervisor, Helper to attend the jobs as per the ISPRL requirement.

B.5 Arranging the Equipment on need basis as directed by officer-in-charge, ISPRL:

There may be a need arises for arranging the special equipment Hydra. This qualified bidder has to arrange these equipment on rental basis.



Annexure – A :

Order line Number	Item Description	Scope of Work
1.000	PM Checks of 33kV SF6 outdoor CB, isolator with earth switch, VT, PT, insulator and lightning arrestor.	<p>Checking the yard at periodic intervals and attend to any unusual observations, defects, sparks, loose contacts, loose bolts and nuts.</p> <ul style="list-style-type: none"> • Checking of operating mechanism. • Checking of fastener tightness. • Checking of shock absorbers for leakage or struck up. • Checking of various tension springs and bending springs for their proper place • 5.Closing and tripping spring assembly and split pin/ Circlip on them • Checking of Operation Box Assembly for proper open/close operation. • Checking of setting. Proper engagement of lever on shaft. • Spring cut off micro switches. • Lubrication of charging device and operating gear. • Cleaning of lightning arrestor porcelain insulators. • Cleaning of support insulators and checking of insulator cracks • Operation of earthing switch • Checking and alignment of earthing plates. • Checking of contact resistance. • Checking surrounding area kept in clean condition always. • Any other checks as per the OEM recommendations/Statutory requirement/Industry practices to be followed
2.000	PM Checks of Transformers rating above 2MVA up to and including 12.5 MVA	<ul style="list-style-type: none"> • Visual Inspection of Transformer tank and other body parts for any rust. • Checking for oil leakage, if any, and take immediate action to stop leakage • Oil tank to be topped up, if required. • Condition assessment of silica gel in breather and replacement of silica gel. • Visual inspection of Radiators and Transformer main tanks from outside. • Checking of Electrical ON/OFF Operation of Cooling fans.
3.000	PM Checks of Transformers rating up to and including 2MVA	<ul style="list-style-type: none"> • Checking of cable boxes, gasket joints, gauges etc. • Checking of OTI, WTI and Oil level. • Checking and recommendation for repair of gaskets, oil seals, breather and pressure relief diaphragm. • Any other checks as per the OEM recommendations/Statutory requirement/Industry practices to be followed
4.000	PM checks of Neutral Grounding Resistor Panels rating up to and including 2MVA.	<ul style="list-style-type: none"> • Check the resistive element for continuity. An ohmmeter reading made between the neutral and the ground side of the resistor should be within 10% of the nameplate value. If the resistance of the element is more than 15% off from the nameplate value, the resistors should be replaced. • Check all internal connections for tightness. • Check wiring for signs of damage from heat or overloads. • Carefully check for cracked insulators or bushings. A Meggar or Hi-Pot test is the most reliable method of ensuring that the porcelain insulation is still providing the necessary electrical isolation. • Any other checks as per the OEM recommendations/Statutory requirement/Industry practices to be followed



5.000	PM checks of Transformer bus duct of all rating and up to including	<ul style="list-style-type: none"> • Checking Sealing of bus duct entries through walls (for vapor, dust, water tightness) Vermin & dust proof ness and earth connections of bus ducts • Bus duct supports. • Joints and flexible connection of bus duct • Any other checks as per the OEM recommendations/Statutory requirement/Industry practices to be followed
6.000	Painting of transformers rating 2MVA above and including 12.5 MVA	<ul style="list-style-type: none"> • All exterior exposed surfaces of ferrous metalwork for the transformers shall be cleaned to base metal by sandblasting or steel grit blasting or by any other means. • After cleaning, the surfaces shall be given one coat of priming paint followed by two coats of semi-gloss enamel. • The exterior surfaces of aluminum metal shall be cleaned by using clean rags and a solvent (xylol). • After cleaning, apply metal conditioner followed by one coat of zinc dust-zinc oxide primer and two coats of semi-gloss enamel. All paint shall be applied in a workmanlike manner. • Surfaces to be painted shall be thoroughly clean and dry before application of the paint. • Approval of ISPRL is to be taken for brand of paint before using
7.000	Painting of transformers rating up to and including 2MVA	
8.000	Painting of Cable Shafts & ducts at Pipe rack area and switch yard structural etc.	
9.000	Oil filtration of Transformers rating above 2MVA and including 12.5MVA	
10.000	Oil filtration of transformers rating up to and including 2 MVA	<ul style="list-style-type: none"> • Minimum Three circulations of oil are to be conducted before BDV test • Value should not be less than 50kV for one minute on 25MM gap • Two Samples of each of the oil should be tested before and after filtering and reports to be furnished. • Necessary arrangements should be made to protect rain while filtering. • Any other checks as per the OEM recommendations/Statutory requirement/Industry practices to be followed
11.000	Testing of Oil Samples (Before & After) for rating above 2MVA and up to and including 12.5MVA	
12.000	Testing & Calibration of OTI & WTI transformers rating above 2MVA and including up to 12.5MVA	
13.000	Testing & Calibration of OTI & WTI	<ul style="list-style-type: none"> • Only periodical inspections to verify precision, functions and electrical connections. • The calibration test must be done with oil or hot air only. When the instrument is equipped with polycarbonate lens, cleaning must be done with care in order to avoid scraps on the surface. Use water and soap only. • Any other checks as per the OEM recommendations/Statutory requirement/Industry practices to be followed



	transformers rating up to 2MVA	
14.000	Checking of 6.6kV, 1750KVAR Capacitor Banks	<ul style="list-style-type: none"> • Check for physical damage, leaks, bulges, or discoloration. Replace as required. • Clean capacitor case, insulation bushings, and any connectors that are dirty or corroded. • Check each capacitor for capacitive reactance by applying 120 volts to each phase and measuring corresponding current. Verify with specification. • Verify internal discharge resistors are working properly. Replace cells as required. • Check for cracks, chips, and signs of arc tracking. Replace as required. • Check all mounting hardware, tighten as required. • Clean contact area of fuses and fuse holders. • Check all capacitor fuses, control fuses, and PT fuses for blown fuses. Replace as required. • Any other checks as per the OEM recommendations/Statutory requirement/Industry practices to be followed
15.000	PM checking and servicing of 33kV HV Breakers	<ul style="list-style-type: none"> • Examination of auxiliary switches, indicating devices and interlocks to ensure that they are in good order physically. • Check fixed and moving contacts. • Physical checking of Epoxy Housing
16.000	PM Check per section including line PT'S and bus PT'S	<ul style="list-style-type: none"> • Check close & trip coil • Checking of control circuit & tighten the connections if any Dismantling, cleaning and assembling of front cover, push button, locking device. • Dismantling, cleaning of arc chute cover and terminal shield. • Dismantling, cleaning, checking and assembling of arc chute. • Dismantling, cleaning / greasing and assembling of electrical spring charging motor (In Electrical only) • Dismantling, cleaning, checking / testing and assembling of tripping coil / closing Coil (In Electrical only)
17.000	PM checking and servicing of 6.6kV HV Breakers	<ul style="list-style-type: none"> • Dismantling, cleaning & tightening of Protection relay. • Checking of main contact wear by physical inspection. • Cleaning and greasing of Breaker Main Mechanism by Schneider recommended fully synthetic imported multipurpose grease to increase the reliability in terms of mechanical as well as electrical properties and their endurance. • Inspection of Main spring / tripping spring / locking spring. • Dismantling / cleaning & greasing of spring charging handle. • Inspection / cleaning of breaker rear terminals & greasing them. • Inspection / cleaning of the changeover contacts of the OF Switch. • Dismantling, cleaning, greasing and assembling of clusters (applicable for draw-out circuit breaker only) • Checking and cleaning / greasing (as required) of hand pullout system, racking mechanism of Chassis and function position indicators (in draw-out type only) • Checking and tightening of control unit connection block and chassis rear terminals. • Cleaning & checking of tightness of wires on WAGO terminal. • Checking healthiness of Protection relay type Micro-logic mounted on breaker. • Any other checks as per the OEM recommendations/Statutory requirement/Industry practices to be followed
18.000	PM checking per section of MV including line PT'S and Bus PT'S	
19.000	PM checking and servicing of 415V MV Breakers	



20.000	Hiring charges of Electrical. Supervisor for Inspection	<ul style="list-style-type: none"> • Plan and schedule, estimate time and materials, supervise subordinates, maintain records, files and prepare the records. • Plan and supervise the work of electricians and vendors jobs • Co-ordinate jobs between Agency and Shift In-charge of sub-station. • Elect Engineering Graduate with 1 years Experience /5 years Experience in similar operations with Diploma in Electrical Engg is the essential • This is a need base job
21.000	Hiring charges of Helpers	<ul style="list-style-type: none"> • To carry the jobs as per the electrical maintenance jobs as directed by the electrical shift in-charge. • ITI passed personnel are preferable. Need to take approval from ISPRL before inducting into the plant . • This is a need base job
22.000	Manning the sub-station with One qualified person per shift to oversee substation 24x7 (Three persons + one relieving results to 4 persons per month)	<ul style="list-style-type: none"> • Maintain records on electrical jobs and assign to appropriate personnel. • Examine electrical services for proper working procedures. • Perform related work as required. • Report to shift In-charge in sub-station for carrying the jobs as directed • Keep records of electrical operations • Electrical Engg /Diploma in Elect with 3 years exp/ITI in Elect with 6 yes experience is required. Need to take approval from ISPRL before inducting into the plant
23.000	Checking of Remote on-load Tap Changer control panels	<ul style="list-style-type: none"> • Physical and working condition of the meters. • Ensure Heat extraction fans functionality. • Ensure TAP position and its healthiness. • Relays, contactors etc. healthiness check. • Any other checks as per the OEM recommendations/Statutory requirement/Industry practices to be followed
24.000	Checking of Dry Type Lighting Transformers rating up to 100KVA	<ul style="list-style-type: none"> • Visual Inspection of the Place • Inspection of air inlets and outlets • Check all the terminal connections for any occurred over heating. • Check the thermal protective assembly for proper operation. • Check the grounding is properly connected to the correct terminal. • Any other checks as per the OEM recommendations/Statutory requirement/Industry practices to be followed
25.000	Testing & Calibration Micom series Numerical relays	<ul style="list-style-type: none"> • Check the auxiliary Supply and control voltage. • Testing of relays as per OEM vendor recommendations. • Testing verification of individual feeder • Simulation test for tripping of individual feeder.
26.000	Testing & checking of electromechanical relays	<ul style="list-style-type: none"> • Submission for test reports • Any other checks as per the OEM recommendations/Statutory requirement/Industry practices to be followed



27.000	Testing and checking of Battery Chargers 110V DC, 220V DC & 48V DC including battery	<ul style="list-style-type: none"> • Battery Bank not exposed to direct sunlight. • Healthiness of Battery charger Float and Boost charging operations. • Proper ventilation and provision of acid proof flooring in the battery room • Check battery banks for healthy cell voltage, specific gravity of cells and electrolyte level. • Cell voltage, proper cell connections to maintain correct polarity. • Corrosion problems especially to terminals, if any. • Damages of battery container /terminal, if any • Check for spillage of electrolyte and ensure Battery Room is dry • Tightness of wiring connections • Healthiness of protection and annunciation circuit of Battery Charger • Checks/ testing as recommended by OEM • Any other checks as per the OEM recommendations/Statutory requirement/Industry practices to be followed
28.000	PM checking of Cathodic Protection System for Mounded bullet and 42"pipe line (Charges per service engineer including to and fro charges & boarding charges)	<ul style="list-style-type: none"> • Performance of transformer-rectifier unit (TRU) and earthing connections • Pipe/structure to soil potential measurements for impressed current / sacrificial anode systems • Anode current and all connections to anode / structures conformity to design requirements • Any other inspection recommended by the Manufacturer or system designer • Any other checks as per the OEM recommendations/Statutory requirement/Industry practices to be followed
29.000	Checking and testing of Earth pits and earthing material etc.	<ul style="list-style-type: none"> • Neutral earthing of the electrical system • Body earthing of the electrical equipment • Individual as well as grid resistance checking • LPG mounding bullet earthing. • Process equipment in the plant area (such as heat exchanger, vessels, column, piping etc.) whether grounded. • Nomenclature of earth pits. • Charcoal and salt pouring If required • Painting of resistance values on the earth pits after testing including test date and next due date • Any other checks as per the OEM recommendations/Statutory requirement/Industry practices to be followed
30.000	Checking and testing of 6.6 kv MV motors at plant area including and Up to 230kw	<ul style="list-style-type: none"> • Checks for bad connections, poor grounding and shorts to ground. • Checking of motor load overloading/underloading • Ensure supply wiring and terminal box properly sized and installed. • Provide adequate ventilation. • Checking of Insulation resistance and winding resistance.
31.000	Checking and testing of 6.6kv MV motors at plant area including and Up to 520kw	



32.000	Checking and testing of 6.6kv MV motors at plant area including and Up to 900kw	
33.000	Checking and testing of 415volts LT motors rating up to 5 hp	
34.000	Checking and testing of 415volts LT motors rating above 5HP and including up to 37KW	
35.000	Checking of Lighting, emergency, critical lighting and PP Panels.	<ul style="list-style-type: none"> • Switch current control measurements • Replacement of the defected switch materials like fuses, contactors, relays etc. • Switchboard cleaning. • Connection terminal controls. • Insulation checks and fixing the failures • Any other checks as per the OEM recommendations/Statutory requirement/Industry practices to be followed
36.000	Checking of field local control stations (LCP)	
37.000	checking of FLP Bulk material JB's, fixtures, Receptacle etc.	<ul style="list-style-type: none"> • Ensure no fuses blown and no lamps fused • Circuit loading and balancing of loads between phases • Provision of safety features such as: a. Separation sheets b. Fuse base screening • Door switches & padlocks • Continuity and completeness of wiring connections • Any other checks as per the OEM recommendations/Statutory requirement/Industry practices to be followed
38.000	Checking of WP Bulk material lighting fixtures	
39.000	Checking of street and area Lighting poles.	
40.000	Hiring Charges of Hydra	On need base for carrying the works related to Hydra operation