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VOLUME - IA

Technical Conditions of Contract (TCC) FOR HSE Services

FOR

RAILWAY ELECTRIFICATION PROJECT IN BHANDAI-UDI, BIRLANAGAR-ETAWAH
AND SHIKOHABAD-FARRUKHABAD INCLUDING MAINPURI-ETAWAH, SECTION OF
AGRA, JHANSI AND ALLAHABAD DIVISIONS OF NORTH CENTRAL RAILWAY
UNDER RE PROJECT LUCKNOW, TOTAL RKM 386/440TKM


OF

NORTH CENTRAL RAILWAY

BHARAT HEAVY ELECTRICALS LIMITED



Technical Conditions of Contract (TCC) for HSE Services

 <p>बीएच ईएल BHEL Maharatna Company</p>	Technical Conditions Of Contract (TCC) PROJECT ENGINEERING & SYSTEMS DIVISION HYDERABAD			Ref No: HY/PE&SD/Projects/TC C/2019-20/ HSE/01
				Rev. No. 00
COPYRIGHT AND CONFIDENTIAL The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED, It must not be used directly or indirectly in any way detrimental to the interest of the company.	TECHNICAL CONDITIONS OF CONTRACT (TCC) FOR HSE SERVICES RAILWAY ELECTRIFICATION PROJECT IN BHANDAI-UDI, BIRLANAGAR-ETAWAH AND SHIKOHABAD-FARRUKHABAD INCLUDING MAINPURI-ETAWAH, SECTION OF AGRA, JHANSI AND ALLAHABAD DIVISIONS OF NORTH CENTRAL RAILWAY UNDER RE PROJECT LUCKNOW, TOTAL RKM 386/440TKM			
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**Volume IA
Part I
Contract specific details**

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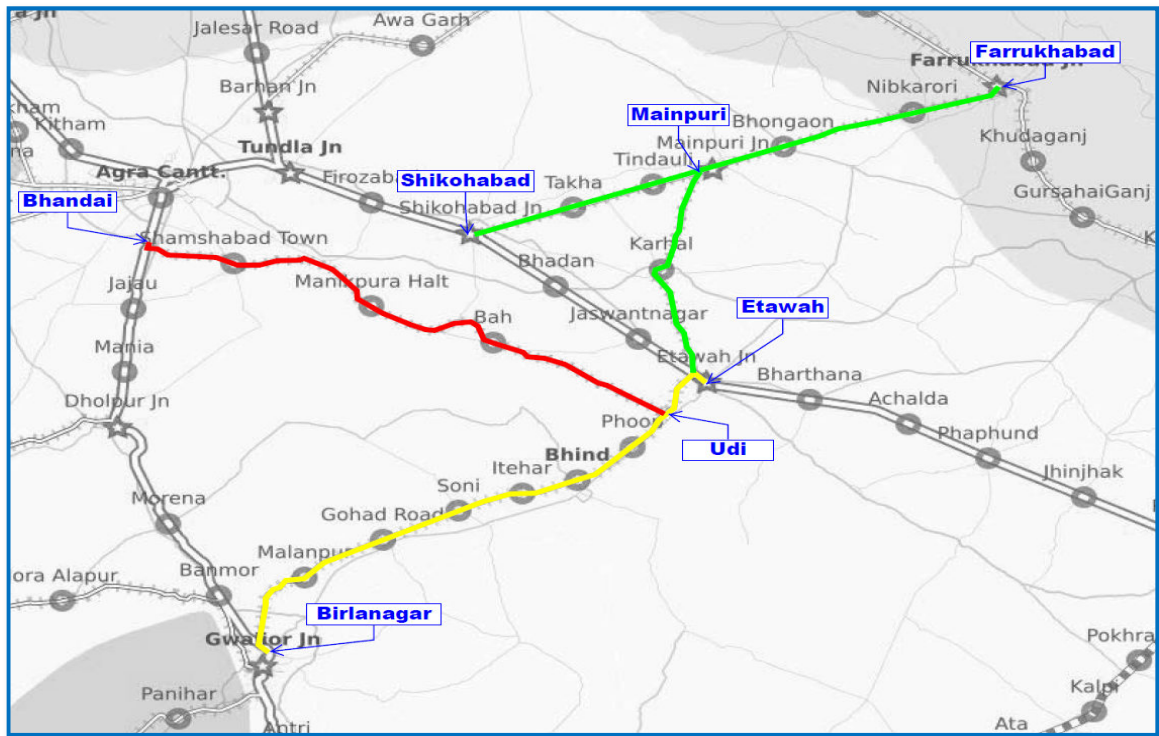
Project Information

1.0 Project Details			
Bharat Heavy Electricals Limited has been awarded the “The Electrification of Railway Lines of the section Birlanagar-Etawah, Bhandai-Udi and Farrukhabad-Shikohabad including Mainpuri-Etawah of North Central Railway 386 RKM/440 TKM” project on EPC basis by Central organization for railway electrification (CORE), Allahabad.			
1	Customer	:	Central organization for railway electrification (CORE), Allahabad.
2	Project Information	:	Electrification of Railway Lines of the section Birlanagar-Etawah, Bhandai-Udi and Farrukhabad-Shikohabad including Mainpuri-Etawah of North Central Railway 386 RKM/440 TKM
3	Location	:	Birlanagar-Etawah, Bhandai-Udi and Farrukhabad-Shikohabad including Mainpuri-Etawah of North Central Railway 386 RKM/440 TKM, Madhya Pradesh and Uttar Pradesh.
4	Nearest Railway Station	:	Agra, Etawah, Birlanagar, Shikohabad and others
5	Road Approach	:	NA
6	Nearest Air Port	:	Lucknow, Kanpur
7	Ambient Air Temperature (Average)	:	a) Maximum : 45 ⁰ C b) Minimum : 2 ⁰ C
8	Average Relative Humidity	:	60% to 80%
9	Climatic Condition	:	Tropical Climate
10	Rainfall & Raining period	:	Approx. 70 cm Annually (Monsoon Rain: June to September and Casual Rain: December to January). Thunderstorms during Monsoon.
11	Wind Pressure	:	155 kgf/sqm As per latest IS 875-1987

Bidder is advised to visit the project site and appraise himself about the local conditions and infrastructure available in the area for fulfilling their commitments under the contract. BHEL will not admit any claims whatsoever on account of Contractor’s non-familiarization of local conditions.

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SECTIONS MAP:



The intent of specification is to outsource the services of qualified HSE Engineers henceforth to be referred to as Outsourced HSE Engineer (OHSEE) from external agency for Railway electrification sites under BHEL PE&SD tentatively for 18 months. However, BHEL PE&SD reserves the right to increase or decrease the number of OHSEEs' for deputation of HSE Engineers at its requirement/ discretion. The scope of HSE services is for the projects of Railway electrification on Birlanagar - Etawah, Bhandai - Udi, Farrukhabad - Shikohabad including Mainpuri - Etawah Sections of North Central Railway. However, The man months indicated are liable to undergo change depending up on requirement.

2.0 Qualification and Experience of Outsourced HSE Engineer (OHSEE)

A person shall be eligible for appointment as a HSE Engineer (OHSEE) only if he:

(i) Possesses a recognized full time degree in any branch of engineering or technology and had a practical experience of working in a building or other construction work in supervisory capacity for a period of not less than 2 years

or

Possesses a recognized full time diploma in any branch of engineering or technology and has had practical experience of building or other construction work in supervisory capacity for a period of not less than 5 years;

(ii) Possesses a full time degree or diploma in industrial safety with at least one paper in construction safety (as elective) and recognized by the State/ Central Government in this behalf; and

(iii) has adequate knowledge of the language spoken by majority of building workers from the construction site in which he is to be appointed.

Notwithstanding the provisions contained in clause (a) any person who, :-

(i) Possesses a recognized full time degree or diploma in engineering or technology and has had experience of not less than 5 years in the department of State Government which deals with the administration of the Factories Act, 1948 and or Dock Workers (Safety, Health and Welfare Act, 1986 and or Building or Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996.

(ii) Possesses a recognized full time degree or diploma in engineering or technology and has had experience of not less than 5 years training education constancy or research in the field of accident prevention in industry or in any part or in any institution or in any establishment dealing with building or other construction work shall also be eligible for appointment as a safety Engineer; Provided that, in case of person who has been working as safety Engineer in industry or port or in any institution or in any establishment dealing with building or other construction work for a period of - not less than 3 years on the date of commencement of these rules, the Chief Inspector may, subject to such conditions that he may specify, relax all or any of the above said qualification. (Chief Inspector's approval/ Certificate to be arranged by the Agency/ Vendor).

3.0 Scope of Work:

The duties of a OHSE Engineer shall be to advise, assist and finally to ensure that the employer achieves the fulfillment of his obligations, statutory or otherwise concerning prevention of personal injuries, Loss to property and maintaining a safe working environment .

Brief scope of work of OHSE Engineers but not limited to -

3.1 Carry out HSE inspection of all offices, stores, vendors' premises, all areas of project and labour/ Employees' colonies, apply Work Methods as per BHEL's HSE Management System manual and other

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documents, Supervise performance of vendors' HSE / Erection & Commissioning / Construction Engineers, advise/ assist/ ensure implementation of laid down regulations among all employees so as to ensure safety of Men, Machine & Material, other tools and tackles etc. Conducting HSE audits for agencies and BHEL departments on monthly basis, issue nonconformity report/s and ensuring its closure/s and finally reporting to BHEL-PE&SD.

3.2 Providing/ associating with vendors for Job specific training, induction training, Daily tool box meetings, pre job briefing, Job Safety Analysis, reviewing major load lift plans, issuing various types of work permits to agencies worker and submitting report for the same.

3.3 Preparation of all HSE related Management Information Reports (MIRs) viz., Monthly HSE report, Monthly Manpower Safety Indices Report, Preparation of Emergency Response Plan, Creation & Updating Site Specific Environmental Aspects and its impact Register, Register of Hazard Identification & Risk Assessment, Register of regulation, Preparation of OCP's etc.

3.4 Ensure conducting joint site/ stores/ offices safety walk-down surveys with HSE engineers, Head of sections and construction managers of customer, vendors, and BHEL followed by joint monthly safety committee review meeting & forwarding minutes of meeting duly signed by all participants to BHEL-PE&SD.

3.5 Creating effective systems for capturing all near miss, Minor/ Major/ Fatal incident / accidents & instantly reporting to head project BHEL-PE&SD by telephone followed by SMS shall be first & foremost duty of OHSEE. Subsequently, OHSEE shall conduct/ assist investigation of all Incidents/ accidents & recommend appropriate HSE measures under intimation to BHEL-PE&SD.

3.6 Creating awareness through safety promotional programs & regularly on implementation of various HSE documents/ advisories viz. permit systems, OCPs(operational control procedures) etc. Design campaigns, competitions & other special emphasis programs to promote HSE in the workplace.

3.7 Audit the procurement plans and status of availability of PPE & HSE devices/ tools & plants. Recommend purchase of required quantities & types of personal protective equipment, Fire Extinguishers etc. conforming to relevant standards.

3.8 Facilitate medical screening of workmen during HSE induction & annually and maintaining records thereof.

3.9 Ensure regular conducting of Mock Drills of Firefighting, First-Aid, Emergency evacuation and rescue, Cardiopulmonary resuscitation (CPR), etc. & debriefing, preparing report & circulating.

3.10 In case of high severity risk, recommend for immediate discontinuance of work until rectification, of such situations warranting immediate action in view of imminent danger to life or property or environment to Site In charge under intimation to BHEL-PE&SD.

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3.11 SITE WISE AND AREA WISE DEPLOYMENT OF OHSEES

Tentative work project-wise requirement for deployment of OHSEEs at various projects shall be as given below: -

Sr. No	Project Site	Area Of Work	No. of OHSEEs Required	Deployment Period
01	Bhandai - Udi : Gr. 240 (Agra Division) : 113 RKM / 123 TKM	Civil Engineer experienced in Civil Works, OHE foundation etc. Elect. Engineer experienced in quality aspects of Transformer, TSS, SP, SSP, S&T, SCADA and OHE etc.	2	18 MONTHS
02	Birlanagar - Etawah : Gr. 239 (Jhansi Division) : 115 RKM / 128 TKM	Civil Engineer experienced in Civil Works, OHE foundation etc. Elect. Engineer experienced in quality aspects of Transformer, TSS, SP, SSP, S&T, SCADA and OHE etc.	2	18 MONTHS
03	Farrukhabad - Shikohabad including Mainpuri - Etawah : Gr. 241 (Allahabad Division) : 158 RKM / 189 TKM	Civil Engineer experienced in Civil Works, OHE foundation etc. Elect. Engineer experienced in quality aspects of Transformer, TSS, SP, SSP, S&T, SCADA and OHE etc.	2	18 MONTHS

3.12 The above deployment plan is tentative and for guidance only and may vary as per actual requirement of OHSEEs at sites.

3.13 Deployment of specific OHSEEs shall be solely at the discretion of BHEL as they may have to be shifted from one project site to another project site during the deployment during the contract period.

3.14 OHSEEs shall be mobilized/ demobilized progressively depending on BHEL project site's requirement which shall be intimated by Construction Manager/ BHEL PE&SD.

3.15 Actual man month deployed at project sites may vary to any extent. The quoted man-month rate shall remain firm throughout the period of Framework Agreement.

4.0 Other Conditions

4.1 Sub-letting of jobs within the agreed scope of work, in any manner is not permitted.

4.2 OHSEEs shall be governed by 'Confidentiality' clause. They shall not, in any manner, misuse the data/ information.

4.3 All Manuals, specifications and other relevant document/ data provided to OHSEEs for undertaking relevant tasks, shall be returned to BHEL after completion of job/ completion/ termination of contract. Such documents shall not be used by the OHSEEs for any purpose other than for the designated task.

4.4 All HSE Plans, data/ findings, inspection and other reports, results, etc. generated and used by the OHSEE shall be the property of BHEL. These cannot be published/ utilized or taken away by the OHSEE, Agency or any employee of the Agency.

4.5 OHSE Engineers shall be fully responsible for the tasks allotted to/ undertaken by them, authenticity of the reports/results etc. They shall prepare documents, witness/ undertake assessments and submit the documents/ reports to BHEL in time without hindrance of work.

4.6 Credentials of OHSEEs shall be verified and approved by BHEL PE&SD and/ or its customer prior to their deployment. Bidder has to submit following documents for approval of FQAEs during bid and after award of contract, if:

- 1) CV/Resume with educational background and experience, in PDF format/hard copy only, attested by Bidder authorize person and also self-attested by OHSEEs himself (MS Word/ .doc / other editable format will not be accepted)
- 2) Self-attested Copy of Experience Certificate, if any
- 3) Copy of Degree/Diploma Certificate (Full time course only)
- 4) The Bidder shall fill the format AA/CQ/A/011A/F-02 for "Particulars of HSE Agency",
- 5) Bio data of all OHSEEs in excel sheet as per enclosed
 - a. FORMAT NO: AA/CQ/A/011A/F-01

During the submission of bid, Bidder should also agree for the following:

1. BHEL can seek the following during approval of OHSEEs, if contract is awarded to the bidder, before deployment
 - a) Verification of original records for qualification and Experience details of OHSEEs as per clause No. 2
 - b) Interview of OHSEEs may be conducted by BHEL, if required.
3. BHEL may conduct physical verification of OHSEEs as per Clause No 2
4. BHEL may seek additional Information to assess the capability and capacity of OHSEEs during the currency of the contract.
5. The OHSEEs should actively participate to get his inspectors qualified and Approved from

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BHEL Customers, if required

4.7 OHSEEs at BHEL PE&SD sites shall work under BHEL Engineers. They shall administratively report to Construction Manager through respective Reporting officer and technically to Project Head at PE&SD, Hyderabad. For any ambiguity, decision shall rest with Project Head at PE&SD Hyderabad.

4.8 Reasonable office space with furniture for proper functioning of the Agency's OHSEE will be provided by BHEL. Accommodation and transportation at sites to OHSEEs shall be on bidder responsibility.

Normally, the role of OHSEEs shall be the entire one section of project site as per clause no 1.1 Project Information.

4.9 Each man day shall consist of 08 (eight hours) working hours excluding lunch break. However, at times work may continue over extended duty hours or on Sundays and holidays and services of OHSEEs may be required. The contractors are required to make suitable provisions in their rates to pay overtime to the OHSEE's as per the relevant laws in such cases, if necessitated. Nothing extra will be paid by BHEL on this account. However, BHEL shall ensure adequate breaks/ rest to OHSEE's during overstay/ Holidays/ Sundays.

OHSEEs shall follow the working hours, weekly off and holidays as per norms & holiday list of BHEL site office where they are deployed.

In case OHSEEs go on long leave exceeding 10 days, the Agency will have to make suitable alternative arrangements for deployment of suitable personnel during absence. The travel expenses of such replacement OHSEE shall be in the scope of agency.

4.10 PPEs for OHSEE shall be arranged by Agency.

4.11 It is expected to post the person and make him available at respective sites immediately on intimation by BHEL. In any case posting should be effected within fifteen days. However, in case where OHSEE is on leave for more than 10 days, his replacement/ substitution is straightaway necessary.

4.12 Agency shall submit monthly report to Project head BHEL PE&SD, indicating cumulative deployment of OHSEEs and other details as may be required by BHEL.

4.13 BHEL reserves the right to regulate strength of deployment of Agency's manpower as per requirements and/ or to short-close/ terminate the contract. In such eventuality, 15 days' notice shall be given by BHEL to the Agency and payment shall be made for the completed months or part thereof on pro-rata basis. No other compensation will be given by BHEL.

4.14 Definitions

One month: 26 working days in a calendar month

Prorata one-man day: 1/26-man month.

4.15 In case the performance of any OHSEE is found to be unsatisfactory, his services shall be discontinued by BHEL and no payment shall be made against deployment of such unacceptable

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Engineers, from the date OHSEE has been notified as unsatisfactory. Replacement of such persons will have to be arranged by the Agency within 15 days.

4.16 In case any OHSEE found to indulge in malpractice/s, their services will be terminated with immediate effect without giving any notice.

4.17 The Agency shall be responsible for medical expenses & life insurance for deployed OHSEEs. It shall be the sole responsibility of Agency to take insurance policies for the OHSEEs against risks of accidents and injury while at work and make compensation as per applicable rules and regulations prevalent in the area. Copy of insurance policy shall be submitted to BHEL before deployment.

4.19 If due to negligence and/ or non-observance of safety and other precautions by OHSEEs, any accident/ injury occurs to any other person(s)/ public, the Agency shall bear compensation and other liabilities as decided by appropriate authority.

5.0 Site Visit

The Bidders are advised to acquaint themselves with the sites for capturing general working conditions at any given site by visiting either/ both of the project Sites mentioned in the tender elsewhere before quoting. However, conditions may vary at new Projects most likely in the States as mentioned in Clause no1 project Information.

6.0 TIME SCHEDULE & MOBILIZATION

6.1 Contract Period

The period of contract is for 18 months from the date of letter of award.

6.2 Mobilization

OHSEEs shall be mobilized within 15 days from the date of receipt of clearance/ intimation from BHEL. Following will be the mode for deployment of OHSEEs at site.

6.2.1 Intimation for deployment of OHSEEs at a particular site shall be sent by Project head/PE&SD,Hyderabad to Contractors depending upon the requirement at site.

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- 6.2.2 On receipt of intimation for OHSEEs deployment, Contractor shall submit credentials of each OHSEEs to respective site In-charge of BHEL as given in intimation letter and copy shall be forwarded to Project head/PE&SD,Hyderabad.
- 6.2.3 The Contractor shall obtain acceptance/ approval from respective Site In-charge of BHEL for credentials of each OHSEEs. Deployment of OHSEEs shall be subject to acceptance/ approval of credentials of OHSEEs by BHEL site in-charge.
- 6.2.4 Contractor shall deploy OHSEEs at site within 15 days of the intimation as at Sr. No. 6.2.1 above after obtaining acceptance/ approval as at Sr. No. 6.2.3.

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FORMAT NO: AA/CQ/A/011A/F-01

Bio data of all persons offered to BHEL for OHSEEs (Hierarchy wise)

SL No.	Name	Date of Birth dd/mm/yy	Age as on 31 March 2019	%tage of Marks (#)	Technical Qualification (Graduation/ Diploma)	Additional Qualification	Date of Joining in Present Company dd/mm/yy	Experience* in inspection in areas as mentioned in clause 2 (please write the specific name of the product)		Specimen Signature (attested)	Details**
								No. of Years*	Field		
1											
2											

Mark sheet of Individual (Only Photocopy, Self-Attested by Individual) to be enclosed
 * If experience is in other companies, please give Details ** (No of Years , Field and Company Name)

All the information provided is true to the best of my Knowledge and any perjured or untrue information may lead to termination of this contract.

Signature of Authorized Person
 Name:
 Date:
 Seal:

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Particulars of HSE services		FORMAT No: AA/CQ/A/011A/F-02
1.3.1	Name of the Company	
1.3.2	Head Office	
	i) Address	Fax No.
	ii) Phone No.	Website:
	iii) Email	
1.3.3	Chief Executive	
	i) Name	
	ii) Designation	
	iii) Office Address	
	iv) Phone No.	Mob. No
	v) Email id:	
	vi) Qualification	
	vii) Profile	
	viii) Experience	
1.3.4	Ownership	Please put √ (tick mark) in appropriate box
		Govt of India Undertaking
		State Govt Undertaking
		Public Limited Company
		Private Limited Company
		Partnership/Individual Firm
		Other (Please specify)
	Please provide documentary proof, such as, Memorandum & Articles of Association, Company Registration certificate, Partnership Deed, as applicable	
1.3.5	i) Total No. of Persons	
	ii) No of Persons engaged in HSE services	
1.3.6	Particulars of Branches: (Add separate sheet if required)	
	i) Location:	
	ii) Name of Branch Manager	
	iii) Address	
	iv) Phone No.	Mob No.
	v) Fax No.	
	vi) Website	
	vii) Email Id:	
	viii) Total No. of Persons	
	ix) No of persons engaged in Inspection	
1.3.7	Date of Incorporation/Registration	
	Total	
1.3.8	Quality Manual (to be enclosed)	
1.3.9	Registration with statutory Bodies	

TCC No: HY/PE&SD/Projects/TCC/2019-20/ HSE/01, Rev.00

Bharat Heavy Electrical Limited, Project Engineering & System Division, RC Puram, Hyd-32.

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	a)	Income TAX PAN No				
	b)	Registration No. (Please enclose relevant letter/certificate)				
1.3.10	a)	ISO: 9001 certified				YES/NO
	b)	If Yes, Year of Certification				
	c)	Certification Body & Certificate No.				
	d)	ISO/IEC certified:				YES/NO
	e)	If Yes, Year of Certification				
	f)	Certification Body & Certificate No.				
1.3.11	Organization: (Please enclose Organization chart)					
1.3.12	List of Clients for which Purchase Order and Completion Certificate/ Evidence of Completion of HSE Contract have been submitted					
	SI No.	Client	Supplier(s)	Item(s)	P.O/ Contract No	Value
						Re ma rk