

VOLUME - IA


Technical Conditions of Contract (TCC) for “ Site
Establishment services ” in “JSW Dolvi CPP-4

FOR

JSW 1x250 MW STG project

BHARAT HEAVY ELECTRICALS LIMITED

Technical Conditions of Contract (TCC) for Site Establishment Works

 Maharashtra Company		Technical Conditions Of Contract (TCC) PROJECT ENGINEERING & SYSTEMS DIVISION HYDERABAD			Ref No: HY/PE&SD/Projects/TCC/2025-26/site est/01				
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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.		<div>TECHNICAL CONDITIONS OF CONTRACT (TCC)</div> <div>FOR</div> <div>“ SITE ESTABLISHMENT WORKS ” IN “JSW DOLVI CPP-4, 1x250 MW STG SET</div>							
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Volume IA
Part I
Contract specific details

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Chapter I- Project Information

1.0 Project Details			
1	Customer	:	JSW, Dolvi,Maharastra
2	Project Information	:	1X250MW STG
3	Location	:	Dolvi,Maharastra
4	Address Detail	:	JSW ,DOLVI,PEN,MAHARASTRA-402107
5	Nearest Railway Station	:	PEN,8KM approximately
6	Road Approach	:	NH -66 &NH 166A
7	Nearest Air Port	:	CSM International Airport,Mumbai approximately 90 km
11	Ambient Air Temperature (Average)	:	a) Maximum : 39 ⁰ C b) Minimum : 16 ⁰ C
12	Average Relative Humidity	:	71 %
13	Climatic Condition	:	Tropical Climate

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.

Chapter II- Scope of Work

- 1) Various site establishment services like Computer,Printer,vehicle, sanitation, drinking water, internet etc.
- 2) Providing catering services to BHEL employees.
- 3) Providing services of vehicle for BHEL staff movement.
- 4) Providing Material handling and Management services.
- 5) Supply, Installation and O&M of CCTV system.
- 6) Electrical distribution board for providing power connection to E&C contractor & other contractors/vendors.
- 7) Site development, viz. final dressing to leveling, grading (End customer will provide levelled land), storm water drains, development of open storage yard, base/foundation preparation for installation of Porta cabins, barbed wire fencing with gates of site and storage areas, laying of water distribution network, soak pit, installation of water storage tanks, etc. for the site office area allotted to BHEL and its Illumination.
- 8) The work has to be executed as per the approved drawings & bill of quantities for various items of the work as per the direction & instruction of engineer-in-charge.

Detailed scope of works is provided in Part-II “Technical Specification” of TCC

All the construction materials, tools & tackles are in the scope of the contractor

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Chapter III- Facilities in the scope of BHEL/Contractor

S. No.	Description	Scope / to be taken care by		Remarks
		BHEL	Bidder	
3.1	ESTABLISHMENT			
3.1.1	FOR CONSTRUCTION PURPOSE:			
a	Open space for office (as per availability)	Yes		
b	Open space for storage (as per availability)	Yes		
c	Construction of bidder's office, canteen and storage building including supply of materials and other services		Yes	
d	Bidder's all office equipment, office / store / canteen consumables		Yes	
e	Canteen facilities for the bidder's staff, supervisors and engineers etc.		Yes	
f	Firefighting equipment like buckets, extinguishers etc.		Yes	
g	Fencing of storage area, office, canteen etc. of the bidder		Yes	
3.1.2	FOR LIVING PURPOSES OF THE BIDDER			
a	Open space for labor colony (as per availability)		Yes	
b	Labor Colony with internal roads, sanitation, complying with statutory requirements		Yes	
3.2.0	ELECTRICITY			
3.2.1	Electricity For construction purposes		Yes	Electricity shall be provided by BHEL/JSW at one point free of cost. Further distribution shall be done by contractor at its own cost.
3.2.2	Electricity for the office, stores, canteen etc. of the bidder		Yes	
3.2.3	Electricity for living accommodation of the bidder's staff, engineers, supervisors etc.		Yes	

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S. No.	Description	Scope / to be taken care by		Remarks
		BHEL	Bidder	
3.3.0	WATER SUPPLY			
3.3.1	For construction purposes		Yes	Water shall be provided by JSW at one point free of cost. Further distribution shall be done by contractor at its own cost.
3.3.2	<u>Water supply for bidder's office, stores, canteen etc.</u>		Yes	
3.3.3	<u>Water supply for Living Purpose</u>		Yes	
3.4.0	LIGHTING			
a	For construction work (supply of all the necessary materials) 1. At office/storage area 2. At the preassembly area 3. At the construction site /area		Yes	
b	For construction work (execution of the lighting work/ arrangements) 1. At office/storage area 2. At the preassembly area At the construction site /area		Yes	
c	Providing the necessary consumables like bulbs, switches, etc. during the course of project work		Yes	
d	Lighting for the living purposes of the bidder at the colony / quarters		Yes	
3.5.0	COMMUNICATION FACILITIES FOR SITE OPERATIONS OF THE BIDDER			
a	Téléphone, fax, internet, intranet, e-mail etc.		Yes	
3.6.0	COMPRESSED AIR wherever required for the work		Yes	
3.7.0	Demobilization of all the above facilities		Yes	
3.8.0	TRANSPORTATION			
a	For site personnel of the bidder		Yes	
b	For bidder's equipment and consumables (T&P, Consumables etc.)		Yes	

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Sl. No	Description PART II 3.9.0 CONSTRUCTION FACILITIES	Scope / to be taken care by		Remarks
		BHEL	Bidder	
3.9.1	Engineering works for construction:			
a	Providing the construction drawings for all the works covered under this scope	Yes		Drawing schedule shall be finalized at the time of kick off meeting
b	Drawings for construction methods			NA
c	As-built drawings – where ever deviations observed and executed and also based on the decisions taken at site- example – routing of small bore pipes		Yes	In consultation with BHEL
d	Shipping lists etc. for reference and planning the activities		Yes	In consultation with BHEL
e	Preparation of construction (Concreting B/W, etc.) schedules and other input requirements		Yes	In consultation with BHEL
f	Review of performance and revision of site construction schedules in order to achieve the end dates and other commitments	Yes	Yes	In consultation with BHEL
g	Weekly construction schedules based on S. No. e. hard copy to Construction manager, by email to HO.		Yes	In consultation with BHEL
h	Daily construction / work plan based on S. No. g. hard copy to Construction manager, by email to HO.		Yes	In consultation with BHEL
i	Periodic visit of senior official of the bidder to site to review the progress so that works are completed as per schedule. It is suggested this review by the senior official of the bidder should be done once in every two Weeks.		Yes	
j	Arranging the materials required for Work		Yes	
k	Coordination for inspection & checking and getting clearance from customer		Yes	

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Sl. No	Description PART II 3.9.0 CONSTRUCTION FACILITIES	Scope / to be taken care by		Remarks
		BHEL	Bidder	
1	Preparation of formats for completion of activities		Yes	
3.10	Work Permits, gate pass etc. from customer for manpower, machinery and material		Yes	
3.11	Ambulance Services for contractor's site staff as required		Yes	

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Chapter IV- Tools & plants to be deployed by Contractor

LIST OF TOOLS AND PLANT:

The following tools and equipment but not limited to, are required for the efficient execution of the civil works. The contractor shall make them available for construction purposes, including all consumables likely to be used at his own cost at the time of mobilization.

S.No.	Description	Minimum Quantity	Remarks
1	Dewatering Pump	2 nos.	Need based
2	Earth Compactor	2 nos.	Need based
3	Reinforcement steel cutting & Bending machine	2 nos.	Need based
4	Welding Machine	2 nos.	Need based
5	Grinding Machine	4 nos.	Need based
6	Excavator	1 no.	Need based
7	Theodolite with staff	1 no.	Need based
8	Cube mould (15cm x 15cm x 15cm)	6 nos.	Need based
9	Sieve analysis sieve sets for coarse & fine aggregates	1 set	Need based
10	Jar/Beaker for Bulk density test of sand	1 no.	Need based
11	Farana crane of suitable capacity with required Tools and tackles		

BHEL will not provide any tool, plants, facilities or any testing facility/apparatus for the work. It will be contractor's responsibility to arrange all required tools, plants and other testing apparatus, etc. at their own cost. The prices quoted & finalized are inclusive of the charges towards providing such T&P. No extra payment will be entertained because of this.

However, subject to availability, BHEL may provide few T&P to the contractor for expediting and in larger interest of the project. In case any such facility is provided to the contractor, BHEL will make necessary recovery in the running account/final bills towards the hire charges. A departmental charge @ 5% will also be affected such cases. The decision of BHEL on the hire charges will be final and binding on contractor.

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Chapter V- Time Schedule

5.1 TIME SCHEDULE

5.1.1

The entire work as detailed elsewhere in the Tender Specification shall be completed within **Twenty Two (22) Months** from the date of commencement of work at site.

5.1.2

During the total period of contract, the contractor has to carry out the activities in a phased manner as required by BHEL and the program of milestone events.

5.1.3

The work shall be commenced on the mutually agreed date between the bidder and BHEL engineer. The decision of BHEL in this regard shall be final and binding on the contractor. The scope of work under this contract is deemed to be completed only when so certified by the site Engineer.

5.2 COMMENCEMENT OF CONTRACT PERIOD

The date of commencement of contract period shall be the mutually agreed date between the bidder and BHEL engineer to start the work. In case of discrepancy, the decision of BHEL engineer will be final.

5.3 MOBILISATION

5.3.1

The activities shall be started as per directions of Construction manager of BHEL.

5.3.2

The contractor should mobilize manpower in order to complete the work in **Twenty Two (22) Months**.

5.3.3

Requisite Material, men and machinery should be arranged in order to complete the project within stipulated time.

5.3.4

The contractor has to augment his resources in such a manner that following major milestones of the project are achieved on specified schedules:

In order to meet above schedule in general, and any other intermediate targets set, to meet project, contractor shall arrange & augment all necessary resources from time to time on the instructions of BHEL.

5.4 TENTATIVE SCHEDULE

S. No.	Item Description	Tentative Start Date	Tentative Completion Date
1.	Site Levelling & Grading	01.09.2025	30.09.2025
2.	Fencing & Gates	10.09.2025	31.10.2025

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3.	Site Services, office set up, Cooking set up, Janitorial services, transport services, etc. (One vehicle from 01.09.2025)	01.01.2026	30.06.2027
4.	CCTV Supply & Installation	01.11.2025	30.11.2025
5.	Manufacture, Supply & Installation of Porta Cabin	01.09.2025	30.09.2025

5.5 CONTRACT PERIOD

For the purpose of contract, the period shall be **Twenty Two (22) Months**. Completion of the work shall be as per BHEL Bar Charts revised from time to time. In order to expedite the work, the contractor has to deploy manpower as per site requirement without any extra cost to BHEL.

5.6 GUARANTEE PERIOD

The guarantee period of twelve months shall commence from the date of completion of all works as certified by the BHEL site engineer.

5.7 PROTECTION OF WORK

The contractor shall have total responsibility for protecting his works until it is taken over by the Employer. No claim will be entertained by the Employer or the representative of the Employer for any damage or loss to the Contractor's works and the Contractor shall be responsible for complete restoration of the damaged works to original conditions to comply with the specification and drawings. Should any such damage to the Contractor's Works occur because of other party not being under his supervision or control, the Contractor shall make his claim directly with the party concerned.

If disagreement, conflict, or dispute develops between the Contractor and the other party or parties concerned regarding the responsibility for damage to the Contractor's Works the same shall be rectified. The Contractor shall not cause any delay in the repair of such damaged Works because of any delay in the resolution of such disputes. The Contractor shall proceed to repair the Work immediately and no cause thereof will be assigned pending resolution of such disputes.

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Chapter VI- Statutory Regulation

6.1 GST: For All types of works excepting works covered under sl no 6.2

6.2 BUILDING & OTHER CONSTRUCTION WORKERS (REGULATION OF EMPLOYMENT AND CONDITIONS OF SERVICE) ACT, 1996 (BOCW Act) AND RULES OF 1998 READ WITH BUILDING & OTHER CONSTRUCTION WORKERS CESS Act, 1996 & CESS RULES, 1998 and

INTER-STATE MIGRANT WORKMEN ACT, 1979 (IN CASE BIDDER ENGAGE MANPOWER FROM OTHER STATE)

In case any portion of work involves execution through building or construction workers and/or inter-state migrant workers, then compliance to the above titled Acts as applicable shall be ensured by the contractor and contractor shall obtain license and deposit the cess under the Act. In the circumstances, it may be ensured as under:-

It shall be the sole responsibility of the contractor in the capacity of employer to forthwith (within a period of 15 days from the award of work) apply for a license to the Competent Authority under the BOCW Act and/or ISMW Act as applicable and obtain proper certificate thereof by specifying the scope of its work. It shall also be responsibility of the contractor to furnish a copy of such certificate of license / permission to BHEL within a period of one month from the date of award of contract.

It shall be the sole responsibility of the contractor as employer to ensure compliance of all the statutory obligations under these acts and rules including that of payment / deposit of cess as per the applicability under above referred Acts within a period of one month from the receipt of payment.

It shall be the responsibility of the sub-contractor to furnish the receipts / challans towards deposit of the cess together with the number, name and other details of beneficiaries (building/Inter-state Migrant workmen) engaged by the sub-contractor during the preceding month.

It shall be the absolute responsibility of the sub-contractor to make payment of all statutory payments & compensations to its workers including that is provided under the Workmen's Compensation Act, 1923.

Chapter VII- Field quality control plan

1. Work shall be executed as per approved field quality control plan (FQCP). Submitted FQCP shall be reviewed and approved by BHEL.

Chapter VIII: Schedule of Quantities-Catering Services

1. Providing services of Cook cum care taker-1 No (Including food cost of cook)
2. Providing services of Helper-1 Nos (Including food cost of helper)
3. Providing cooking utensils, vessels, crockeries and cutlery and appliances for 10 persons.
4. Providing, service and maintenance of Cooking gas stove with gas connection (Three cylinder) including refilling of cylinders every month (Or as required)
5. Providing, service, maintenance of refrigerator, 220Litre, Single door
6. Providing dining table (3" X 6") with 6 Chairs-1 set
7. Providing, service and maintenance of RO/Aqua guard Water purifier,
8. Providing services of 'cleaning the cooking and serving premises' including supply consumables for cleaning (Broom, harpic, detergent, cleaning clothes, brushes etc.)
9. Cleaning of guest house including Toilets along with required consumables is in the scope of contractor

Note: In case Contractor fails to deploy the resources as per requirement informed by BHEL in writing as per SOQR for the work, BHEL can deploy own/hired/otherwise arranged resources and recover the expenses incurred from the dues payable to contractor by giving notice of not less than three (03) days, except for emergency requirements, where on contractor's failure to provide services on time as per contract, BHEL may proceed to hire services without giving any notice. In all such cases, recoveries shall be actual expenses incurred plus 5% overheads.

Chapter IX- General

1.0 GENERAL

1.1 All the work shall be carried out as per the instructions of BHEL engineer. BHEL engineer's decision regarding the correctness of the work and method of working shall be final and binding on the Bidder.

1.2 The Bidder shall at his cost perform any services, tests etc, although not specified but nevertheless required for the completion of work.

1.3 If any portion of the work is found to be defective in workmanship or not conforming to BHEL requirements, the Contractor shall re-do the work at his cost failing which the work will be got done by BHEL and recovery shall be made on actuals plus 5% overheads.

1.4 The terminal points as decided by BHEL shall be final and binding on the Contractor.

All tools and tackles, fixtures, equipment, materials, manpower, supervisors/ engineers, consumables etc. required for this scope of work shall be provided by the Contractor. All expenditure including taxes and incidentals in this connection will have to be borne by him unless otherwise specified in the relevant clause.

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1.5 The contractor shall make adequate security arrangements including employment of security personnel and ensure protection from theft, fire, pilferage, damage and loss of materials/equipment kept under bidder custody..

1.6 All equipment shall be handled very carefully to prevent any damage or loss. No bare wire ropes, slings etc, shall be used for handling of the equipment without the specific permission of the engineer.

1.7 Contractor shall ensure proper housekeeping and remove all scrap materials periodically from various work area covered in the scope and deposit the same at the place earmarked for this purpose. In case of contractor's failure to do the same, BHEL reserves the right to remove scrap and recovery shall be made on actuals plus 5% overheads.

1.8 Access to site for inspection by BHEL and customer engineers shall be made available by the contractor at all times.

1.9 Contractor shall mobilize sufficient quantity of sleepers for stacking of materials in his custody.

1.10 Site Inspection: The owner/employer / BHEL or his authorized agents may inspect various stages of work during the period of contract awarded to him. The contractor shall make necessary arrangements for such inspection and carryout the rectification pointed out by the owner/employer without any extra cost. No cost whatsoever for such duplication of inspection/work will be entertained.

1.11 Field Quality Assurance Formats: It is the responsibility of the contractor to collect and fill up relevant FQA Log sheets and present the same to BHEL after carrying out the necessary checks as per the log sheets and obtaining the signature of BHEL/Customer in token of their acceptance. Monthly Running Bill Payment to the contractor will be linked with the submission of these log sheets.

1.12 The contractor agrees to indemnify the company against all claims and losses arising as a liability under the Payment of Wages Act, Employees Provident Fund & Miscellaneous Provisions Act, Industrial Disputes Act, Employees State Insurance Act, Contract Labour (Regulation and Abolition) Act, Workmen's Compensation Act, Arbitration Act, Minimum Wages Act, Inter State Migration Act, etc. or criminal law in force so far as they relate to security personnel employed by the contractor for the company.

1.13 Income Tax or any other statutory dues liable to be paid by the contractor shall be recovered from the bills of the contractor for which TDS certificate will be issued by BHEL.

1.14 With regard to the interpretation of the terms and conditions of this contract, the decision of the Head of the Region/BHEL PE&SD shall be final.

1.15 Any dispute arising out of this contract shall be within the jurisdiction of the Court of Hyderabad only.

1.16 Any addition/ deletion on the scope of work and terms and conditions under this contract shall be implemented based on mutual discussions between the "company" and the "contractor".

1.17 Letter of Award No ----- issued by BHEL/PE&SD, Hyderabad (including the enclosures) shall form the integral part of this agreement.

1.18 Contractor shall provide FIRST AID / emergency medical facilities and maintain these facilities throughout the contract period & extension period (if any) as scope of work.

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For any items or class of work not specified herein but required for total completion of work, the same shall be carried out as per BHEL requirement. However, payment of these items/class of work shall be regulated on the basis of rate arrived by the following method:

- 1) Based on unit rate of items in the rate schedule.
- 2) Wherever any item rate for similar type of work or nearby item rate does not exist in the rate schedule, rate will be worked out on the basis of work element or from fundamentals of estimation.

Chapter XI- Manpower Requirement

1 MANPOWER REQUIREMENT FOR MATERIAL HANDLING SHALL AS FOLLOWS:

1.1 The Site in charge of contractor shall be provided with PCs and good communication facilities like telephone, fax, email etc. at the cost and expense of the contractor. Lack of communication facilities shall not be an excuse for extension of completion date.

1.2 All instructions from BHEL/Customer shall be directed to the contractor through the Site in-charge and he shall be responsible for all the contractor's activities at site. The contractor shall name his authorized representative prior to or immediately on commencement of operations at site

1.3 The Site In charge shall be present at site during all normal working hours and his contact address after normal working hours shall be made available to BHEL so that if any emergency arises, the presence of the contractor's site Representative at site can be called for.

1.4 The contractor shall not change the site Representative without the consent of BHEL. Should BHEL require the replacement of the contractor's site Representative for justifiable reasons (including inadequate progress of work) the contractor shall ensure that replacement is made as soon as possible and work is not allowed to suffer delay on this account.

1.5 The contractor shall provide to the satisfaction of BHEL sufficient and qualified staff for the execution of works. If and whenever any of the contractor's staff is found guilty of any misconduct or be incompetent or insufficiently qualified in the performance of his duties the contractor shall remove them from site as directed by Site Engineer.

1.6 The contractor shall ensure that all his supervisor's staff and workmen conduct themselves in a proper manner. They shall all be persons who are familiar with and skilled at the jobs allocated to them. Any misconduct / inefficiency noted on the part of the contractor's personnel shall be brought to the attention of the contractor's site representative who shall immediately take such action as necessary including the removal of such misconducting / inefficient persons, if so required by the Engineer-in-Charge.

1.7 The contractor shall ensure that replacement for such persons removed from site is provided immediately and the work is not allowed to suffer delay on that account

Chapter XII- Documentation

1 DOCUMENTATION

1.1 The following information shall be furnished within one weeks of award of contract for purchaser's approval a) Mobilization Plan b) Detailed organization chart c) Details of T&P available with contractors with document proofs.

1.2 The following information shall be furnished after testing and inspection: d) Revalidation of Test certificates of various T&P's, if certificates are found to be invalid or any discrepancies/abnormalities observed in T&P's during execution

Chapter XIII: Obligations of the Contractors

1.1 The contractor shall fully comply with the following enactments:

- (a) Contract Labour (R & A) Act, 1970 and rules formed therein under Central Rules.
- (b) Minimum Wages Act 1948 (Wage Rates not less than that notified by State Labour Department / Central Labour Dept., / BHEL whichever is higher from time to time).
- (c) Payment of Wages Act 1936
- (d) ESI Act, 1948
- e) EPF Act, 1952
- (f) Employees' Compensation Act, 1923.
- (g) Provisions of Factories Act 1948 & Rules thereof
- (h) The inter-state migrant workmen (regulation of employment and conditions of service) Act, 1979
- (i) Payment of Bonus Act, 1965
- (j) Payment of Gratuity Act, 1972
- k) Fatal accidents act 1985
- l) Industrial disputes act 1947
- m) Maternity benefits act 1961
- n) Personal Injuries (Compensation Insurance act 1963)
- o) Persons with disability act 1995
- p) Protection of Human rights act 1933
- q) Public liability Insurance Act 1991
- r) Right to information act 2005
- s) Official Language act 1963(Implementation)
- t) The sexual harassment of women at Working place (prevention, prohibition and redressal) Act 2013

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1.2 The contractor shall obtain License from the Assistant Labor Commissioner (Central), or appropriate government if he engages twenty or more workmen.

1.3 The Contractor shall produce the following Registers and forms before commencement of work, for verification by the Executing Officer.

- (a) Form XII - Register of contractors
- (b) Form XIII - Register of workmen employed by contractor (Rule 75)
- (c) Form XIV - Employment card issued by contractor (Rule 76)
- (d) Form XVI - Muster Roll (Rule 78(1)(a)(i))
- (e) Form XVII - Register of wages (Rule 78(1)(a)(i))
- (f) Form XVIII - Register of wages-cum Muster Roll (in case of weekly payment)
- (g) Form XIX - Wage Slip (Rule 78(b))
- (h) Form XX - Register of deduction for damages or loss (Rule 78(1)(a)(ii))
- (i) Form XXI - Register of files (Rule 78(1)(a)(ii))
- (j) Form XXII - Register of advances (Rule 78(1)(a)(ii))
- (k) Form XXIII - Register of overtime (Rule 78(1)(a)(iii))
- (l) Form XXIV - Return to be sent by the contractor to licensing officer (Rule 82(1))

1.4 The contractor shall make himself or his representative (supervisor) available at the work spot every day during execution of work, for effective supervision.

1.5 The contractor shall attend to all inspections notified/conducted by the Human Resource department, Labor department, P.F. authorities, Inspector of Factories, ESI inspectors, or any other such authorities.

1.6 Non-compliance of any provisions under the act/rule/instructions/guidelines shall make the contractor liable for penal action including termination of contract.

1.7 Contractor shall furnish in a separate letter his place of residence and postal address. The delivery at the above-named place or posting in a Post Box regularly maintained by the Post and Telegraph Department or sending letters registered for acknowledgement of any notice, letter or other communication to the contractor shall be deemed sufficient service there upon he contractor. Change in address shall come into force at any time by an instrument executed by the contractor and delivered to the BHEL official who has signed the contract.

1.8 The contractor must satisfy himself by personal study thoroughly the scope of proposed work in detail and all conditions affecting the work before entering into the contract. There shall not be at any time, dispute/complaint of any nature regarding scope of work and interpretation of specifications or any misunderstanding with regard to nature or omission of the work to be done nor shall any application for compensation in terms of time and money shall be accepted by BHEL regarding the above.

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1.9 Contractor shall in his absence keep competent agent constantly on the works and any directions or explanations given by the "Contract Executing Officer" or his representative to such agent shall be held to have been given to the contractor himself.

1.10 Contractor on the advice of BHEL officials shall immediately remove any person employed by him, who may in the opinion of the BHEL official, is incompetent or involves himself in misconduct. Such persons shall not be again employed on the works without written permission of the BHEL official.

1.11 The contractor shall give all notices required by the Acts, regulation, bye laws, Legal Acts and pay all fees in connection therewith unless and otherwise arranged and decided in writing with BHEL. He shall also ensure that no attachments are made against materials or work forming part of or for the use of the contractor. In all such cases, contractor shall protect and indemnify BHEL against any claim or liability arising from or based on the violation of any such laws, ordinances, regulations, orders, decrees or attachment either by himself or by his employees.

1.12 It shall be contractor's sole responsibility to protect the public and his employees against accident from any cause and provide required safety equipment and shall indemnify BHEL against any claims for damages for injury to the person or property resulting from any such accidents and shall, where the provisions of the Employees Compensation Act and Public Liability Act as applicable, take steps to properly insure against any claims thereunder.

1.13 In the event of any accident in respect of which compensation may become payable under the Employees Compensation Act, VIII of 1923 whether by the contractor or by BHEL as Principal Employer, it

shall be lawful for BHEL to retain out of monies due and payable to the contractor such sum or sums of money as may, in the opinion of BHEL shall be final in regard to all matter arising in this clause.

1.14 No work shall be done on Sundays or on other declared Holidays of BHEL without the written permission of BHEL officer in charge of the work. The contractor shall comply with the provisions of the Factories Act 1948 if the same are applicable. No contract labour shall be engaged on any National Holidays.

1.15 The contractor shall keep his work place clean and safe to avoid injuries to men and damage to finished products / equipment.

1.16 On the occurrence of an accident, which results in the death of any of the workmen employed by the contractor or which is so serious as to be likely to result in the death of any such workmen, the contractor shall within 24 hours of the happening of such an accident intimate in writing to the BHEL official in charge of the work.

1.17 The contractor shall indemnify BHEL against all losses or damages sustained by BHEL resulting directly or indirectly from his failure to give intimation in the manner aforesaid including the penalties or dues if any and become payable by BHEL, as a consequence of failure, BHEL to give notice under the Employees Compensation Act 1923 or otherwise confirm to the provisions of the said Act in regard to such accident. 1.18 The contractor shall ensure adherence to all statutory requirements applicable to BHEL.

1.19 The contractor shall ensure abidance by all the labour laws especially including Contract labour (R&A) Act 1970, Payment of Wages Act 1936, Employees Compensation Act 1923, Minimum Wages Act 1948, ESI

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Act 1948, Payment of Bonus Act 1965, and Provident Fund Misc. Prov. Act 1952, as amended from time to time.

1.20 The contractor shall comply with provisions of Provident Fund Misc. Prov. Act 1952 through PF code allotted to him / her.

1.21 Notwithstanding the above clause, in case of any financial loss incurred by company on account of contravention of the Provident Fund regulations or any regulations of rule touching the same by the contractor, the contractor shall submit an undertaking to indemnify the company to the extent of the loss incurred by the company.

1.22 The contractor should engage only those laborers whose age is 18 (eighteen) years or more.

1.23 The contractor shall not resort to subcontracting under any circumstances without prior permission of BHEL. If found sub-contracting at a later date, BHEL reserves the right to take whatever action it deems fit, including cancellation of the Contract.

1.24 The contractor shall provide the required safety equipment to the labors engaged by him / her.

1.25 Contractor shall issue "Employment Card" as per statute to all labour and supervisors covered under the job work contract.

1.26 The contractor shall be responsible to settle any grievances of the labour deployed by him / her within two weeks.

Chapter XIV: HSE (Health, Safety, Environment) and PPE (personal Protective Equipment) Guidelines

1. Contractor shall follow all the HSE guidelines as mentioned chapter IX off SCC and JSW (Annexure-I).
2. Contractor shall deploy one (1) number of qualified and experienced safety officer for the entire period of contract.
3. Contractor shall submit the biodata of safety officer to BHEL/Customer (JSW), for approval.
4. In case of any dispute/ contradiction, JSW HSE rules and guidelines shall prevail.

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Technical Specification

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Chapter-I: SCOPE OF WORK

SCOPE OF WORK

1.0 Area development for storage

1.1 BHEL will get approximately 4000 SQM of land for constructing storage area. This will be provided either at proposed CPP-4 site or approximately 2-5 km distance from main Gate of M/s JSW Dolvi plant.

1.2 In addition to this Space will be given approximately 450 SQM near the TG Building. Bidder has to develop & prepare the place for placing approximately 06 nos of Porta cabins (40'X10'X8' EACH).

1.3 Presently the customer is taking up the land development and will provide levelled land, on which the bidder is required to develop the facilities, perimeter fencing, storm drainage, water tank and other enabling facilities. The exact area to be allotted to BHEL may differ to certain extent as the customer has not allotted the exact area as on date. Bidder should take care of this aspect before bidding.

1.4 Work under this tender this tender includes supply of all required materials, labour consumables, transportation, sample testing such as cement, TMT, Structural Steel etc.

1.5 The bidder will be required to do complete Illumination of the site office area and open storage yard.

1.6 The bidder will be required to supply & install Electrical distribution board for providing power connection to E&C contractor & other contractors/vendors.

1.7 The bidder will be required to do Fabrication, assembly, painting of gates & structures etc.

1.8. To take care of certain emergency dispatches certain quantities for handling of such material shall be in the scope of this contract.

1.9 Access road of Water Bound Macadam within the storage area as per DSR specification and SOQR to be made

1.10 Two no's of fully furnished Porta Cabin with outer steel body (along with furniture & AC-each Porta cabin shall be provided with one office table & single table for three persons, one executive chairs with wheel, three chairs with wheel, six visitor chairs with wheel, wall to wall (on longer side) office cabinet, 1.5 Ton AC, two wall fans, suitable lighting, etc. in each porta cabin) is in the scope of this contract for BHEL office. The porta cabins along with its furniture will be retained by BHEL after completion of the project.

1.11 Two no's Toilet Porta Cabin with outer steel body (along with sanitary & Plumbing fixtures for two EWC, three urinals, two wash basins along with all sanitary & plumbing pipelines, fittings & fixtures in each porta cabin) is in the scope of this contract for BHEL office. The Toilet porta cabin will be retained by BHEL after completion of the project.

1.11 Work shall be executed as per the approved drawings & bill of quantities for various items of the work as per direction & instruction of engineer-in-charge. In case of any dispute, decision of BHEL site engineer shall be final and binding on contractor.

2.0 Transport services for BHEL Personnel round the clock:

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Contractor shall provide transport services to BHEL Personnel as specified below:

- 1) 7 seaters AC vehicle shall be deployed and should have standard tools, first aid kit and Stepony. New vehicle or of One year old vehicle only shall be provided
- 2) 5 seaters AC vehicle shall be deployed and should have standard tools, first aid kit and stepony. New vehicle or of One year old vehicle only shall be provided.
- 3) Vehicles are to be deployed immediately after award of the contract as per instructions by BHEL Engineer.
- 4) Maintenance and repair of materials shall be in the scope of bidder.
- 5) One vehicle shall be running up to 150KM per day.
- 6) The vehicle will be maintained clean both inside & outside on a daily basis.
- 7) The contractor shall pay all applicable taxes and duties.
- 8) In case of vehicle breakdown, an alternative vehicle shall be arranged within four hours.
- 9) Operation hour shall be decided by site representative based on requirement.
- 10) The contractor shall provide, valid registration certificate, insurance, pollution of the vehicle and also the driver should be insured. (valid during the tenure of the contract).
- 11) All expenses towards salary of drivers, repair & maintenance, engine oil, damages due to accident, comprehensive insurance, road tax, or any other renewals, etc. shall have to be met by owner of vehicle.
- 12) The drivers so deployed must have valid driving license. Drivers so employed should not be under the influence of liquor or intoxicated during the duty hours.
- 13) Refusal to perform duty by drivers will be treated as non-deployment of the vehicle for that particular day and deduction at the rate of three times as per day rental charges will be recovered.
- 14) In case of misbehavior by the drivers, the contractor has to take immediate action and the decision of BHEL's representative in this regard will be final and binding.
- 15) The drive/contractor representative will meet BHEL's representative regularly to get instruction regarding the deployment of the vehicle.
- 16) Should the vehicle deployed meet with an accident, no claim on account of damage to the vehicle or the persons travelling in such vehicle including the employees of the contractor, drivers, cleaner of the vehicle shall be entertained by the company.
- 17) Should the vehicle deployed by the contractor meet with an accident due to reasons attributable to the contractor or his employees and cause damage to the persons/property of the company, the contractor shall liable to make good such losses in the manner as prescribed by the company.
- 18) The company shall further be entitled to recover the amount so paid by way of compensation under the previously mentioned act or under any other deducting the sum from bill or from any other sum due to him.

2.1 Catering Services to BHEL Employees

- 1) Services in scope of this contract shall include cooking and serving of breakfast, lunch, snacks and dinner to BHEL employees as per directions and instruction given by BHEL site engineer. Place of cooking and serving shall be provided by BHEL.
- 2) Cook cum caretaker and helper should be skilled in preparing all kind Indian food.
- 3) Cleaning of utensils and cooking premises shall be the responsibility of bidder
- 4) All the utensils (Cooking and serving) shall be supplied in new condition. No old items shall be accepted.
- 5) One (1) Gas cylinder should always be on standby (Reserve).
- 6) Refrigerator supplied by the contractor shall be of new condition.

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- 7) Bidder has to ensure quality and hygiene of food.
- 8) All the cooking ration supply shall be in the scope of BHEL.
- 9) Decision of BHEL's site representative shall be final in case of any dispute
- 10) Items shall be supplied in perfect working condition. All the services and materials within the scope of this contract shall have to be supplied within seven days of issue of work order.
- 11) one cook and one helper are to be provided

2.3 Construction Power Distribution Arrangement" Services:

Purpose of this work is to establish (Build, operate, maintain, dismantle after contract completion and removal from site) construction power supply distribution boards, interconnection of distribution boards with customer's compact substation (CSS) through underground cabling, earthing of all equipment and associated civil works as per technical specifications: Brief Scope of work under this tender consists of following:

1. Supply, installation, testing, commissioning, O&M, dismantling after project completion and removal from site of 415V 125A Feeder Pillar as per technical specification
2. Supply, installation, testing, commissioning, O&M, dismantling after project completion and removal from site of 415V 250A Feeder Pillar as per technical specification
3. Supply, installation, testing, commissioning, O&M, dismantling after project completion and removal from site of LT Power Cable & Its Accessories as per technical specification
4. Supply, installation, testing, commissioning, O&M, dismantling after project completion and removal from site of Earthing Material & Its Accessories as per technical specification
5. Civil Works as per technical specification.

2.4 Skilled Computer operators shall be provided.

2.5 DG Specification Technical Spec for DG Set-Silent DG

Diesel Engine:

New Kirloskar /CUMMINS/or any other reputed brands with silent version, cabling to the load to be included. 3 cylinder, inline, 4 stroke cycle, water cooled natural aspirated, developing rated power at 1500 RPM under NTP condition of BS:5514. The engine shall be provided with electrical starting arrangement & shall give the rated electrical output at 0.8 pf, 415V at the alternator terminal.

Alternator :

Single bearing alternator suitable for operation generating on required KVA rating at 1500 RPM, 415 Volts, 0.8 pf(lag) suitable for 50 Hz ,3 phase, 4 wired system, conforming to BS5000/IS 4722. The Alternator is brushless type, screen protected, revolving field, self-excited, self-generated through an AVR. The alternator should have the following feature $\pm 1.0\%$ Voltage regulation (max) in static conditions IP: 23 protections with insulation class H Permissible overload of 10% for one Hr in 12 Hours of operation

2.0 GENERAL

2.1 The drawings enclosed with this tender are intended to give the tenderer a general idea of the type and extent of work involved. The drawings are as such only indicative and not to be considered as the exact construction drawings.

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Further, this is to be noted that the drawings and the documents furnished along with this specification are the sole property of BHEL. It must not be used directly or indirectly in any way detrimental to the interest of the company.

- a) The scope of work will also include such other related works although they may not be specifically mentioned in the above paragraph and all such incidental items not specified but reasonably implied and necessary for completion of the job as a whole all as desired and as directed by the engineer.
- b) The detail scope of work covered above is not a comprehensive list of items of work involved. The detail scope of work may vary considerably depending on the actual construction requirements.

3.0 ALSO INCLUDED IN THE SCOPE

Unless otherwise specified, the work to be provided by the contractor for the items mentioned in the “Schedule of items” shall include but not be limited to the following.

- 3.1 Furnishing all labour, materials, supervision, construction plans, equipment, supplies, transport, to and from the site, fuel, electricity, compressed air, water, transit and storage insurance and all other incidental items and temporary works not shown on specified but reasonably implied or necessary for the proper completion, maintenance and handling over the works, except in accordance with the stipulations laid down in the contract documents and additional stipulations as may be provide by the engineer during the course of works.
- 3.2 Furnishing samples of all materials required by the engineers for testing/inspection and approval for use in the works. The samples may be retained by the engineer for final incorporation in the works.
- 3.3 Furnishing test reports for the products used or intended to be used, if called for the specifications or if so desired by the engineer.
- 3.4 Third party Inspection shall be arranged for T&P or any other equipment as per instruction of engineer in charge.
- 3.5 Giving all notices, paying all fees, taxes etc., in accordance with the general conditions of contract, that are required for all works including temporary works.
- 3.6 Arranging manufacturer’s supervision for items of work done as per manufacturer’s specifications when so specified.
- 3.7 Carrying out topographic survey of the entire and establish levels and coordinates at suitable intervals from existing grid levels and coordinates furnished by the owner established bench marks, setting out the locations and levels of proposed structures, constructions and marking of reference pillars and other identification works etc., The contractor shall provide the owner/BHEL such a assistance, instruments, machines, labour and materials as are normally required for examining, measuring and testing any work and the quality, weight or quantity of any material used.
- 3.8 Providing all incidental items not shown or specified but reasonably implied or necessary for the successful completion of the work in accordance with contract.
- 3.9 Sample testing of reinforcement.

4.0 WORK BY OTHERS

No work under the specification will be provided by any agency other than the contractor unless specifically mentioned elsewhere in the contract.

Chapter-II: TECHNICAL SPECIFICATIONS & DRAWINGS FOR INFORMATION

TECHNICAL SPECIFICATIONS & DRAWINGS FOR INFORMATION.

NOTE: Contractor has to make himself well conversant with the Customer specification and drawings. In case of ambiguity between BHEL and customer specification, customer specification shall prevail.

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Chapter-III: PREAMBLE FOR THE SCHEDULE OF QUANTITIES.

PREAMBLE TO THE SCHEDULE OF QTS. (SOQ)

- 1) Details of the items in this Schedule shall be read in conjunction with the corresponding MECON/JSW specifications, drawings and other documents and shall have precedence over any contrary statement mentioned anywhere in this document.
- 2) The work shall be carried out as per construction drawings, specifications, the description of the items in this schedule and/or Engineer's instructions., Drawings enclosed with these documents are only indicative giving some idea of the type of work involved. The layout, sizes and details of the building, structures and foundations shown in tender drawings may vary at a large extent during actual construction. Final drawings will be issued progressively during the execution of the work.
- 3) Items of work provided in this schedule but not covered in the specifications shall be executed strictly as per instructions of the Engineer.
- 4) Unless specifically mentioned otherwise in the contract, the bidder shall quote his rates for the finished items and shall provide for the complete cost towards fuel, tools, tackle, equipment, constructional plant, temporary works, labour materials, levies, taxes, transport, layout, repairs, rectification, maintenance till handing over, supervision, shops, establishments, services, temporary roads, revenue expenses, contingencies, overheads, profits and all incidental items not specifically mentioned but reasonably implied and necessary to complete the works according to the contract.
- 5) The rate quoted shall be inclusive of cleaning the site of any vegetation's, dressing and leveling etc., required for commencement of site activities. No separate payment will be made towards the same.
- 6) The rate shall also be inclusive of carrying out topography survey of site to establish levels and coordinates at suitable intervals, from existing grid levels and coordinates furnished by the owner, establish bench marks, setting out the location and levels of the proposed structures, constructions and making references, pillars and other identification marks etc. No separate payment will be made towards the same.
- 7) Rates shall be quoted both in figures and in words in clear legible writing. No over writing is allowed. All scoring and cancellation should be counter signed by the bidder. In case of illegibility, the interpretation of the engineer shall be final. All entries shall be in English language.
- 8) Engineers decision shall be final and binding on the contractors regarding clarification of items in this schedule with respect to the other section of the contract.
- 9) In case of any discrepancy between item descriptions, relevant drawing and / or specification, clarification shall be sought at tender stage itself. Otherwise, it shall be assumed that the bidder has quoted for the more stringent requirement.

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HIERARCHY

In case of any conflict/deviations amongst various documents, the order of precedence shall be as follows

- Statutory Regulations
- MECON/ JSW specification
- Items in Schedule of quantities
- IS/BS standards
- BHEL's standard specification (with prior approval of Engineer-in-charge).