

#### **BIDDOCUMENT**

#### Nameofthework:

# "Rental Supply of Scaffolding materials, Installation & Dismantling of Scaffolding during COH of U#2, FY:2024-25"

CoverPage	01Page
CopyofNIT	02Pages
InstructiontoBidders	01Page
GeneralConditionsofContract	121Pages
Safety, Health & Environment (SHE) Rules & Regulations for Contractors	36Pages
RulesandRegulationsofthee-ReverseAuction (if applicable). PI refer NIT for details	04Pages
Scope, Technical Specification & Special Conditions of Contract	04Pages
BOQ&BlankPriceBidFormat	1 Page

#### **SAFE&CLEANPOWERISOURCOMMITMENT**

#### **ODISHAPOWERGENERATIONCORPORATIONLIMITED**

IbThermalPowerStation,Banaharpali,Jharsuguda—768234(ODISHA)

 $\textbf{Email:} \underline{satya.tarai@opgc.co.in,sanjit.mohanty@opgc.co.in,bkmishra@opgc.co.in}$ 



#### ODISHAPOWERGENERATIONCORPORATIONLIMITED IbThermalPowerStation,Banaharpali

Nameofthework: "Rental Supply of Scaffolding materials, Installation & Dismantling of Scaffolding during COH of U#2, FY:2024-25" BidDocument&InstructiontoBidders

#### **BidDocument**

The Biddocuments consist of the following documents:

- 1) CopyofNIT
- 2) InstructiontoBidders
- 3) GeneralConditionsofcontract
- 4) TechnicalSpecification&SpecialConditionsofContract
- 5) Safety, Health & Environment (SHE) Rules & Regulations for Contractors
- 6) IntegrityPact (if applicable)
- 7) RulesandRegulationsofthee-ReverseAuction
- 8) BOQ&BlankPricebid

The bids complete in all respect must be submitted in two parts namely **Techno-commercial part** and **Pricepart**. The envelopes containing the respective parts must be sealed and super scribed with tender enquirynumber, Name of the work and then ame of the part. Both the envelopes should be keptinathirde nvelope and sealed and superscribed with tender enquirynumber and Name of the work.

#### NB:Thebiddocumentsarenottransferable.

#### Techno-CommercialBid:

The bidder must submit the following along with the techno-commercial bid:

- 1) EMD as per NIT in a closed envelope. The EMD amount will not be disclosed to the bidders during opening of Techno-Commercial Bid.
- 2) Photo copies of GST Registration Certificate, Provident Fund Registration Certificate and MSME (Micro/small/medium)/NSIC/SSI status of your firm and ESI Registration Certificate
- 3) Signed & Stamped Bid Documents (all pages) as a token of acceptance.
- 4) Filled in and signed formats as specified in Annexure of GCC.
- 5) Signed & Stamped Rules and Regulations of the e-Reverse Auction.
- 6) Credentials in support of qualifying requirements.
- 7) Commercial terms and conditions and deviation statement.
- 8) Un-priced Bid showing quoted/not quoted.
- 9) ESI Registration Certificate



#### **ODISHA POWER GENERATION CORPORATION LIMITED**

(A Government of Odisha undertaking)
AT-IB THERMAL POWER STATION, PO: BANAHARPALI, DIST: JHARSUGUDA, ODISHA-768234
Phone no: (Land Line No. 06645-289232/221/355/356/245)

#### **NOTICE INVITING TENDER**

OPGC invites sealed bids from bona fide and financially sound Registered Agencies /Firms /Companies forexecution of the following Works for its Thermal Power Plant at Banharpali.

	Works Tenders: NIT No. ITPS/CC-22/2023-24/19, Date: 12/01/2024						
S/ N	Name of the work	Tender cost	EMD (Rs.)	Contract Period	Bid Sale/ Issue date	Date of receipt & submission /Opening of Bid	
1	Supply of drinking water to periphery villages during Summer-2024	Rs.1000/- including GST	42,000/-	As per Bid Document	15.01.24 to 06.02.24	Up to 15:00 Hrs on 07.02.24/ 15:30 Hrs onwards on 07.02.24	
2	Mushroom Cultivation training to women of periphery villages		31,000/-	As per Bid Document	23.01.24 to 07.02.24	Up to 15:00 Hrs on 08.02.24/ 15:30 Hrs onwards on 08.02.24	
3	C&I Manpower supply during COH of U#2	Rs.1000/- including GST	42,000/-	As per Bid Document	17.01.24 to 06.02.24	Up to 15:00 Hrs on 07.02.24/ 15:30 Hrs onwards on 07.02.24	
4	Supply, Installation & Commissioning of CCTV Camera at CHP#2	Rs.1000/- including GST	90,000/-	As per Bid Document	20.01.24 to 09.02.24	Up to 15:00 Hrs on 10.02.24/ 15:30 Hrs onwards on 10.02.24	
5	Thermal Insulation of Boiler, Turbine, Mills & Fans, U#2 during AOH, FY:2024-25	Rs.2000/- including GST	1,08,000/-	As per Bid Document	16.01.24 to 30.01.24	Up to 15:00 Hrs on 31.01.24/ 15:30 Hrs onwards on 31.01.24	
6	Thermal Insulation of HP& IP Turbine of TG#02 during AOH, FY:2024-25		27,000/-	As per Bid Document	16.01.24 to 30.01.24	Up to 15:00 Hrs on 31.01.24/ 15:30 Hrs onwards on 31.01.24	
7	Supply, Installation of Insulation & Cladding Sheet in ESP Hopper, AHP, U#3&4	Rs.1000/- including GST	83,000/-	As per Bid Document	16.01.24 to 30.01.24	Up to 15:00 Hrs on 31.01.24/ 15:30 Hrs onwards on 31.01.24	
8	Rental Supply of Scaffolding materials, Installation & Dismantling of Scaffolding during COH of U#2, FY:2024-25		37,000/-	As per Bid Document	16.01.24 to 30.01.24	Up to 15:00 Hrs on 31.01.24/ 15:30 Hrs onwards on 31.01.24	
9	AOH of Mech. Equipment of Turbine Aux.& Balance of Plant, U#2, FY:2024-25	Rs.1000/- including GST	72,000/-	As per Bid Document	16.01.24 to 30.01.24	Up to 15:00 Hrs on 31.01.24/ 15:30 Hrs onwards on 31.01.24	

10	AMC for Cleaning &	Rs.3000/-	10,46,000/-	As per Bid	18.01.24 to	Up to 15:00 Hrs on
	Housekeeping of Main Plant &	including		Document	02.02.24	03.02.24/
	CHP Area, OPGC-I for 2024-26	GST				15:30 Hrs onwards on
						03.02.24
11	AMC for Horticulture	Rs.2000/-	2,90,000/-	As per Bid	18.01.24 to	Up to 15:00 Hrs on
	Maintenance in ITPS Colony for	including		Document	02.02.24	03.02.24/
	FY:2024-25	GST				15:30 Hrs onwards on
						03.02.24

E-Reverse Auction (e-RA) shall be conducted for the works at Sl. No. 4, 5, 7, 9, 10 & 11. The Transaction Fees for e-Reverse Auction shall be deposited to the account of MSTC Limited directly.

The non-refundable **Transaction Fees towards e-Reverse Auction** as mentioned above shall be deposited by all Techno-Commercially qualified bidders directly to the account of MSTC before E-RA launch schedule. The date of conduct of E-RA shall be intimated in later stage to Techno Commercially qualified bidders via e-mail. Before participation in e-Reverse Auction, the bidder has to register in MSTC e-Procurement Portal well in advance and submit the E-RA fee amounting to the value intimated by M/s. MSTC Limited.

Cost of bid document (non-refundable) shall be paid by Demand Draft in favour of OPGC Ltd. drawn on State Bank of India (Code-9510) / Union Bank of India (Code-UBIN0806625) / Central Bank of India (Code-283899) payable at ITPS, Banharpali or ICICI Bank (Code-ICIC0003679) payable at Telenpali. Cost of bid document shall have to be submitted along with the bid and the DD towards the tender cost (separate from EMD) should be prepared on or before the last date of submission/receipt of tender, otherwise the bid shall be liable for rejection. Small scale industries/National Small-Scale Industries Corporation/ MSME firms are exempted from payment of Cost of bid document only if they are entitled for exemption of the offered service. Tenderers seeking exemption shall claim in advance along with the photocopy of Valid Registration Certificates at least two days before the due submission date. However, OPGC reserves the right to accept/ reject the exemption request if the same is found unauthenticated or not relevant to the offered item. In case of any discrepancy found between tender document submitted by the agency and the master copy in our office, the latter should prevail. No claim on this account shall be entertained. Complete and signed sealed bids in hard copy form only shall be received at Contract Cell, ITPS. Bids shall be opened at Contract Cell, ITPS in the presence of the bidders or their authorized representatives, if present at the time of opening. If the last date of issue / receipt / opening happens to be a HOLIDAY, the tender will be issued/received / opened at the respective time on the next working day. The photocopies of all the supporting documents required for participating in the tender mentioned in NIT/Tender paper shall be submitted along with the bid; otherwise, the bid is liable for rejection. Bids without EMD will be rejected outright.

NB: Bidders having the requisite qualifying requirements as specified in the bid document shall only be considered for tender evaluation.

Bids received after stipulated date & time shall not be entertained. OPGC shall not take any liability on account of any postal/courier delay. OPGC reserves the right to accept / reject any or all tenders, seek additional clarifications, split up the scope among eligible bidders or cancel the tender altogether without assigning any reasons thereof.

<u>Important:</u>The detailed NIT along with Terms and Conditions are available for download at OPGC website at <u>www.opgc.co.in</u>. Addenda/Corrigenda/ Extensions, if any, will be notified on the OPGC website only and will not be published in any other media. Interested companies or entities may visit OPGC website for the tender timeline and other details.

**GM-CONTRACT** 

#### **SAFE & CLEAN POWER IS OUR COMMITMENT**

OPGC encourages all existing or new vendors/suppliers to register with us as empaneled vendors.

Please visit our website <a href="https://www.opgc.co.in">www.opgc.co.in</a> for details.

#### **InstructionToBidders:**

- 1) The bids complete in all respect must be submitted in a sealed envelope superscribed with Tender Enquiry No. , Name of the work, Date of submission and opening of the Tender.
- 2) Thebiddocumentsarenottransferable.
- 3) Thebiddermustsubmitthefollowingalongwithhisbid:
- (a) Bid Security/EMD of amount as mentioned in NIT in shape of Demand Draft drawn in favour of OPGC Ltd. payable at State Bank of India (code-9510) / Union Bank of India (Code-UBIN0806625) / Central Bank of India (code-Belpah)/ ICICI Bank (Code-ICIC0003679) payable at Telenpali without which the offer will be outrightly rejected. EMD will be returned to the unsuccessful bidders within fifteen days after award of the work. No interest shall be payable on EMD.
- (b) Documentsinsupportofhisfulfillingthequalifyingrequirements.
- (c) Original price bid duly filled in. Breakup must be submitted separately. The offered price shall be clearlywritten in English (clearly hand written or typed) both in words and figures and shall be free from
  - anyaberrations, deletions, corrections and overwriting. In case of anyillegibility of the offersubmitted by bid derthein terpretation by OPGCs hall be final and binding on the bidder.
- 4) AllthepagesofBidDocumentsignedbythedulyauthorizedrepresentative&stampedoneachpageasatoken ofacceptance.
- 5) Bidders are advised to submit the tender based strictly on the terms and conditions, special conditionsandspecificationscontainedinthebiddocumentsandnotstipulateanydeviationsinnormalcase. The pricequoted should be valid for 180 (One Hundred Eighty) days from the date of opening of tender i.e. Part-1(Techno-CommercialBid)
- 6) OPGCreservestherighttoevaluatethequotationonsuchdeviationshavingfinancialimplicationsbyaddingt hecostdeterminedbyOPGC.
- 7) Whereveritismentionedinthespecificationthatthebiddershallperformcertainworkorprovidecertainfaci lities, it is understood that he shall do so a this cost.
- BeforesubmissionofBid,thebiddersarerequestedtocarryoutdetailsurveyandmakethemselvesfullyconv ersant with the site conditions, safety and health aspects etc. so that no ambiguity arises in theserespects subsequent to submission of the Bids. No relaxation or request for revision of quoted/acceptedratesshallbeentertainedsubsequenttotheopeningofbids.
- 9) The bidder has to quote considering the minimum wage applicable for different categories as per OdishaGovt.notification.Anypricebidreceivedlessthantheminimumwageofdifferentcategoryshallbelia bleforrejectionevenafteropeningofpricebid.
- 10) IssuanceofBidDocumentstoanybiddershallnotconstruethatsuchbidderisconsideredtobequalifiedfora wardofthework.
- 11) Small scale industries/National Small Scale Industries Corporation/ MSME firms are exempted from payment of Earnest Money Deposit only if they are entitled for exemption of the offered service. Tenderers seeking exemption shall claim in advance along with the photocopy of Valid Registration Certificates at least two days before the due submission date. However, OPGC reserves the right to accept/ reject the exemption request if the same is found unauthenticated or not relevant to the offered item.
- 12) OtherInstructionstobefollowedduringsubmissionofBid:
- a) Biddersareadvisedtosubmitthetenderbasedstrictlyonthetermsandconditionsandspecificationscontain edinthetenderdocumentsandnotstipulateanydeviationsinnormalcase.

- b) OPGCreservestherighttoevaluatethequotationonsuchdeviationshavingfinancialimplicationsbyaddingt hecostdeterminedbyOPGC.
- c) Whereveritismentionedinthespecificationthatthecontractorshallperformcertainworkorprovidecertain nfacilities, it is understood that the contractors hall do so a this cost.
- d) BeforequotingtheratestheBiddershouldgothroughthespecifications,scopeofworketc.andgethimselfful lyconversantwiththem.Thebidshouldincludecostofmobilizationandcosttoadheretoallsafety norms as described in the tender. No relaxation or request for revision of quoted/accepted ratesshallbeentertainedsubsequenttotheopeningofbidonaccountofmobilizationorSafetycosts.
- e) The details of items in the price schedule shall be read in conjunction with the corresponding technicalspecifications. Items of work provided in the price schedule but not covered in the technical specificationsshallbeexecutedstrictlyasperinstructionsofEngineerincharge.
- f) The Bidders shall quoterates strictly as perthe price bid format.
- g) BiddershallalsoindicatethecostofPPEs(in%)includedinthePriceBid.
- h) OPGCreservestherightstosplitthescope&quantitytomorethanoneagencyamongthebidders.
- i) OPGCreservestherightstocancelthetenderwithoutassigninganyreasonsthereof.
- j) Bidders are advised to submit the tender based strictly on the terms and conditions and specificationscontainedinthetenderdocumentsandnotstipulateanydeviationsinnormalcase.
- k) OPGC reserves the right to evaluate the quotation on such deviations having financial implications byaddingthecostdeterminedbyOPGC.
- Wherever it is mentioned in the specification that the contractor shall perform certain work or providecertainfacilities, it is understood that the contractor shall do so at his cost.
- m) Before quoting the rates the Bidder should go through the specifications, scope of work etc. and gethimselffullyconversantwiththem. The bidshould **include cost of mobilization and cost to adhere to allsa fety norms** as described in the tender. No relaxation or request for revision of quoted/accepted rates shall be entertained subsequent to the opening of bid on account of mobilization or Safety costs.
- n) The details of items in the price schedule shall be read in conjunction with the corresponding technicalspecifications. Items of work provided in the price schedule but not covered in the technical specificationsshallbeexecutedstrictlyasperinstructionsofEngineerincharge.
- o) The Bidders shall quote rates inclusive of the complete cost towards consumables, tools and tackles, equipments, labour, levies, taxes and duties if any, all safety PPE's as per OPGC norms to all workmen, rectification, maintenance till handing over, supervision overheads, profits and all incidental char gesnotspecifically mentioned but reasonably implied and necessary to complete the work according to contract.
- p) BiddershallalsoindicatethecostofPPEs(in%)includedinthePriceBid.
- q) OPGCreservestherightstosplitthescope&quantitytomorethanoneagencyamongthebidders.
- r) OPGCreservestherightstocancelthetenderwithoutassigninganyreasonsthereof.
- s) OPGC reserves the rights of accepting the whole or any part of the tender and bidder shall be bound toperformthesameattheirquotedrates.

#### **Disclaimer:**

Thesedocuments are published in our website only for the purpose of bidders interested to participate in the Tender. OPGC shall not be held responsible in any manner in the event of any unauthorized usages of these documents other than the intended purpose.

OPGC reserves the rights of accepting the whole or any part of the tender and bidders hall be bound to perform the contraction of the contractio

 $mthe\ same at their quoted rates.$ 

### PRE-QUALIFICATIONCRITERIA

# NameofWork:-Rental Supply of Scaffolding materials, Installation & Dismantling of Scaffolding during COH of U#2, FY:2024-25

The bidders must also meet the following Qualifying Requirements with respect to the above.

1. Must have successfully completed similar nature of job (Minimum 2000 Sq.m total area and height of min.20m in single order) during last three years ending the last day of the month previous to the one in which tenders are invited.

AND

Safety Requirement - bidder loss time hours must have been 200 Hr. in last 3 years. (Contractor's Self Certification).

AND

3. a) Bidder has at least a single contract of value not less than Rs.15 Lakhs for similar jobs

OR

b) Bidder has two contracts of value not less than 10 lakhs each for similar jobs.

AND

4. Bidder should not have disqualified for similar job in reputed Government organization undertakings /Public Sector or Major Privet Sector within last two years.

AND

5. Minimum Average Annual Turnover of the Bidder shall not be less than Rs. 20 Lakhs in last 3(Three) Years.

AND

6. One agency cannot be awarded more than 2 contracts in the forthcoming U#2 AOH in year 2024.

Note:Tenders submitted without the above techno-commercial requirements shall be liable for rejection.

The bidders who are found qualified in the Techno-commercial bid will be invited for opening of the price bids. Bidder has to submit relevant Work Orders or completion certificates in support to the above-mentioned qualifying criteria.

#### Documents to be submitted in support of QR

- 1) Relevant PO copy and Client's completion certificate
- 2) Audited balance sheet including Profit & Loss statement for the previous three completed financial years reckoned from the date of application. In case the documents are not ready/ available, then certified copy by a registered practicing Chartered accountant may be submitted.
- 3) PF & GST registration certificate.
- 4) HSE Policy and past safety record-Fatal and LTIFR for previous three years.
- 5) Any other documents in addition to the above which the applicant wants to submit.

#### Note:

 $\bullet \quad The agency must fill up the check list for the above qualifying Criteria requirement in the technical properties of the contract of the$ 

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<sup>\*</sup>Similar Job: Supply, Erection/Installation and dismantling of Scaffolding.

lbidmarkingpagenumberonthedocumentsinthetechnicalbid.

- TendersubmittedwithouttheaboveTechno-Commercialrequirementsshallbeliableforrejection.
- The bidders who are found qualified in above will be invited for the opening of the price bids.
- Forallqualificationcriteriaallsupportingdocumentstobeprovided.
- Tenders submitted without the above techno-commercial requirements shall be liable for rejection.

Owner reserves the right to obtain necessary documents and to assess the qualification of the Bidder, subsequent to submission of bid, as deemed necessary by Owner to establish bidder's qualification.

#### **PriceBid**

- 1) Original price bid duly filled in, signed & stamped on each page shall be submitted. Anybreakup(ifrequired)mustbesubmittedseparately. The rates of fered by the bidder shall be clearly written in English (clearly handwritten or typed) both in words and figures and shall be fre efrom anyaber rations, deletions, corrections and overwriting. In case of anyillegibility of the offer submitted by bidder the interpretation by OPGC shall be final and binding on the bidder.
- $2) \ \ In sertion, postscript, addition and alterations hall not be accepted after submission of the bid.$
- 3) Thequotedpriceshallbeall-inclusivebasisexceptGST(Taxes,duties,othergovernmentlevies except GST etc.) and shall remain firm during entire tenure of the contract and shallnotberevisedunderanycircumstancesforwhatsoeverreasonexceptasgivenin(4)below .GST applicability and rate of GST should be shown separately and shall be paid againstdocumentaryevidence.

4)

- 1. Anyincrease/decreaseintheGST,Cessandothertaxesthereonwillbereimbursed /adjustedasperactualagainstdocumentaryevidence.
- 2. Additional amount due to imposition of new tax by Govt. relevant to this work will bereimbursedbyOPGCasperactualagainstdocumentaryevidence.
- 3. AnychangeinIncomeTaxwillbebornebytheContractor.
- 4. Quotedrate(validonthedateofopeningoftender)shallbetreatedasbasepriceand all-inclusivebasisexceptGST.
- 5. Anyadditionalpaymentduetochangeintaxstructurewillbeadmissibleifthechangeis effective during the scheduled completion period. No such extra payment shall bemade beyond the stipulated completion date if the delay is due to the fault of thecontractor.Noclaimshallbeadmissibleaftercompletionofwork.
- 6. Nodeviationshallbeallowedinthepricebid.

5)InthePricePart,thebiddermustalsosubmitaCDcontainingthesoftcopyofpricebid(withdetai leditemwisequotedprices)inExcelformat(non-pdf)alongwiththesigned&stampedhardcopyofpricebid.Thepricesquotedinthehardcopy ofpricebidshallbetakenasfinal&binding.

#### **EVALUATION OF BIDS**

#### 1.0 Opening of Bids

The Techno-Commercial bid shall be opened at a predetermined time, venue & date in presence of the Bidder(s) or their authorized representative(s) who may like to be present. Partner, Director or permanent employee of the firm duly authorized only can be the authorized representative. Price bid shall be opened at a future date under intimation to all technically qualified Bidders and in presence of them or their authorized representatives who shall participate.

#### 2.0 Preliminary Examination of Proposals

OPGC will examine the Proposals to determine whether they are complete, whether required EMD have been furnished, whether the documents have been properly signed, and whether the Proposals are generally in order. If a Proposal is not substantially responsive, it shall be liable for rejection by OPGC. OPGC's determination of Proposal's responsiveness will be based on the contents of the Proposal itself and any written clarifications, if sought for by OPGC and submitted by the Bidder.

#### 3.0 Evaluation & Comparison of Bids

#### 1.1.1 3.1 Basis for Technical Evaluation

OPGC will carry out a detailed evaluation of the bids previously determined to be substantially responsive, in order to ascertain whether the technical aspects are in accordance with the requirements set forth in the Bid Document. OPGC will examine and compare the technical aspects of the bids on the basis of the information supplied by the bidders

#### 3.2 Basis for Price Evaluation:

- OPGC will examine the Price Proposals to determine whether any arithmetical errors have been made, whether the documents have been signed, and whether the Proposals are generally in order. Arithmetical errors will be rectified on the following basis.
- a) If there is a discrepancy between the unit price and the total price, which is obtained by multiplying the unit price and quantity, or between subtotals and the total price, the unit or subtotal price shall prevail, and the total price shall be corrected.
- b) If there is a discrepancy between words and figures, the amount in words will prevail. If a Bidder does not accept the correction of errors, its Proposal will be rejected and its bid security may be forfeited.
- 3.3 The evaluation shall be based on the evaluated cost of completing the contract in compliance with all commercial, contractual and technical obligations under this Bid including taxes, duties & levies etc. The rates of taxes, duties and levies as applicable on seven (7) days prior to the date of Techno-commercial bid opening shall be considered for the purpose of evaluation.

#### 4.0 Techno - Commercial evaluation:

1.1.2 The evaluation committee, appointed by OPGC as a whole, evaluates the proposals on the basis of their responsiveness to the Mandatory Requirement criteria as stipulated in section "Instructions to the Bidder" of this Bid Document. Proposal shall be rejected at this stage if it does not respond to mandatory requirements criteria. Only those bidders, who meet all the mandatory requirements, shall be considered for price bid opening.

#### 5.0 Price Loading:

All the bidders should quote as per tender terms and conditions without any deviation. OPGC reserves the right to reject the bid in case of any deviation taken by the bidder or ask to withdraw such deviation or appropriately load the component on the quoted price.

#### 6.0 Award Criteria

OPGC will award the contract to the successful bidder whose bid has been determined to be substantially responsive and to be economically advantageous, which will be established by lowest evaluated Price basis (L1) amongst the qualified bidders in Techno-Commercial evaluation.

#### 7.0 Negotiation & Award

The selected bidder will be notified in writing by OPGC inviting him for further negotiations. Negotiations will be held only at ITPS, Banaharpali. On finalization of negotiation, to the mutual satisfaction of both the parties, OPGC shall award the Work order to the selected bidder.

#### THE VENDOR SHALL SIGN ON EACH PAGE OF THE SPECIAL CONDITIONS AND RETURN THE DOCUMENT ALONG WITH THE

#### OFFER AS A TOKEN OF ACCEPTANCE TO ALL TERMS AND CONDITIONS WRITTEN HEREIN.

#### **GENERALCONDITIONSOFCONTRACT**



# $\label{eq:constraint} ODISHAPOWERGENERATIONCORPORATIONLIMITED \textbf{7}^{\text{TH.}}\\ FLOOR, ZONE-A, FORTUNETOWERS,$

CHANDRASEKHARPUR,BHUBANESWAR-751023 (ODISHA)

ODISHAPOWERGENERATIONCORPORATIONLIMITED 7TH.

FLOOR, ZONE – A, FORTUNE TOWERS, CHANDRASEKHARPUR, BHUBANESWAR-7510

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#### **INSTRUCTIONTOBIDDERS**

**VOLUME-I** 

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# ODISHAPOWERGENERATIONCORPORATIONLTDIB THERMAL POWER STATIONBANHARPALI-768234,DIST.JHARSUGUD A

#### TENDER FOR

Nameofthework: "Rental Supply of Scaffolding materials, Installation & Dismantling of Scaffolding during COH of U#2, FY:2024-25"

- 1. Tobesubmittedby15:00Hrsofdt.31/01/2024toContractCell,ITPS,Jharsuguda.
- **2.** Techno-commercial bids to be opened in presence of Bidders or their duly authorized representatives who may like to be present at 15:30 Hrsonwards ond t.31/01/2024 in the office of Contract Cell, ITPS.

IssuedtoM/s
Signature of officer is suing the documents Sd/-
Designation: GM-Contracts, ITPS.
Date:

# ODISHAPOWERGENERATIONCORPORATIONLTDIBT HERMALPOWERSTATION, BANHARPALI

#### **NOTICEINVITINGTENDER**

- 1. TendersareinvitedonbehalfoftheOPGCLtd.forthework"Rental Supply of Scaffolding materials, Installation & Dismantling of Scaffolding during COH of U#2, FY:2024-25"
- 2. The Tender & rates shall be in the prescribed form provided by OPGC.
- 3. The works are required to be completed as per SCC, in accordance with phasing, if any,indicated in the Tenderdocuments.
- 4. NormallyBiddershavingcorrespondingclassoflicense,PFCode,ESIRegistration,GSTRegistration,ITPAN,expertisefortheworkrequiredtobeexecutedandfinancialcapacitywillbeconsidered.
- 5. The person who floats the NIT shall be the Accepting Authority herein after referred to as suchforthepurposeofthisTender.
- 6. ABiddershallproduceIncomeTaxPAN,GSTcertificatesandPF&ESIRegistrationnumber.
- 7. Tender documents consisting of plans, drawings, specifications, Schedule(s) of Quantities /Price Schedule of various classes of work to be done, the Conditions of Contract and othernecessary documents will be sold (soft copy only) on payment of Rupees As specified in NITin shape of Demand Draft in favour of Odisha Power Generation Corporation Ltd. drawn onStateBankofIndia(Code-9510)/UnionBankofIndia(Code-UBIN0806625)/CentralBankofIndia (Code-283899)/ ICICI Bank (Code-ICIC0003679) on or after 16/01/2024up to 30/01/2024.Costoftenderpaperisnotrefundable.
- 8. Bidders are advised to inspect and examine the site and its surroundings and satisfy themselvesbefore submitting their Tenders as to the nature of the ground and sub-soil (so far as ispracticable and related to particular work), the form and nature of the site, nature of work,capacityofconcernedplant,presentconditionoftheplant,labourforceproblemrelatingtop
  - resent Contract labour, custom & system of the local folk, means of access to the site, accommodation they may require and ingeneral shall themselves obtain all necessary information astorisks, contingencies and other circumstances which may influence or a feet their Tender. A Biddershall be deemed to have full knowledge of the site whether he inspects it or not and no extra charges consequent on any misunder standing or otherwise shall be allowed.
- 9. SubmissionofaTenderbyaBidderimpliesthathehasreadthisnoticealongwiththenoticeinviting tender advertised in the newspaper and all other tender documents and has madehimselfawareofthescopeandspecificationsoftheworktobedoneandoflocalconditions and dotherfactorsbearingontheexecutionoftheworks.
- 10. A Bidder should quote his rates in figures as well as in words. The amount for each item shouldbe worked out and the requisite totals given. Special care shall be taken to write rates in figuresas well as in words, and the amounts in figures only in such a way that interpolation is notpossible. The total amount shall be written both in figures and in words. In case of figures, thewords 'Rs.' should be written before the figure of rupees and the words 'Paise' after the decimalfigures, e.g. Rs.2.15 P. In case of words, the words 'Rupees' should precede and the words'Paise' should be written at the end. Unless the rate is in whole rupees and followed by theword'Only'itshouldinvariably be upto two places of decimal.
- 11. In the case of item rate Tenders, only rates quoted shall be considered. Any Tender containing percentage below/above the schedule of rate quoted is liable to be rejected. In case of lumpsum tenders, only quoted amount shall be considered.

- 12. Any Bidder for the works shall not be witness in the Bid of any other Bidder for the same works. Failure to observe this conditions hall render the Tender of the Bidder tendering as well as of the sewitnessing the Tender liable for rejection.
- 13. Tendershallbereceived upto 15:00 Hrsofdt. 31/01/2024 and shall be opened at 15:30 Hrsonwards on the same day in the presence of those Biddersor their duly authorized representatives who may like to be present.
- 14. The Tender shall be accompanied by Earnest Money worth Rupees As specified in NITThe Earnest MoneyofferedshallbeinshapeofDemandDraft/PayOrderinfavour ofOdishaPowerGenerationCorporation Ltd drawn on State Bank of India (Code-9510) / Union Bank of India (Code-UBIN0806625) /CentralBankofIndia(Code-283899)/ICICIBank(Code-ICIC0003679) or Bank guarantee issued by any Nationalized /scheduled Bankintheenclosedproforma.
- 14.1 The Tender shall be accompanied with letter of undertaking on non-judicial stamp paper of appropriate value in the prescribed format.
- 14.2 The Earnest Money shall be made payable without any condition/demure to the Owner ondemand. The Earnest Money shall be valid for a period of three (03) months from the date of opening of the price bid
- 14.3 In consideration of the Owner opening and considering the Tender for purpose of award of Contract, the Biddershall keep his Tender valid for a period of **one hundredeighty(180) days** from the date of opening of the Tender, during which period the Bidder agrees not to vary, alter or revoke his Tender either in whole or in part. If the Bidder however, fails to keep his Tender valid for one hundred eighty (180) days or varies its terms and conditions during the said period then the Owner shall be entitled to forfeit the Earnest Money amount without any notice or proof of damages etc. The Biddershall submithis Tender as required in the Tender documents along with letter of undertaking in the proformaen closed here with.
- 14.4 The Earnest Money of all unsuccessful Bidders will be returned within thirty (30) days after theawardoftheContract.
- 14.5 Any Tender not accompanied with **both Earnest Money and letter of undertaking or any ofthe two** in accordance with aforesaid provisions shall be rejected by the Owner as non-responsiveBid.
- 14.6 NointerestwillbepayablebytheOwneronthesaidamountcoveredunderEarnestMoney/otherse curitydeposits.
- 15 On finalization of Tender, Earnest Money of successful Bidder will be treated as part of the initialsecurity at the option of the said Contractor or shall be returned to the successful bidder at his option.
- 16 A Bidder shall submit the Tender which satisfies each and every condition laid down in this noticeandothertenderdocuments, failing which the Tender will be liable to be rejected.
- 17 TheOdishaPowerGenerationCorporationLtd.donotbindthemselvestoacceptthelowestoranyTe nderortogiveanyreasonsfortheirdecision.TheOwnerreservestherighttoallowthePublicSectorU ndertakingspricepreferencefacilitiesasadmissibleunderexistingGovt.policy.The prospective Bidders may apprise themselves of the relevant Govt. notification in this regardbefore submission of their bid. The Odisha Power Generation Corporation Ltd. reserves the rightofacceptingthewholeoranypartoftheTenderorsplitthetotalscopeofworkamongeligibleBid dersandBidder(s)shallbeboundtoperformthesameathis/theirquotedrates.
- 18 GSToranyothertaxonmaterialsinrespectofthisContractshallbepayablebytheContractorandthe Ownerwillnotentertainanyclaimwhatsoeverinthisrespect.

For and on behalf of Odisha Power Generation Corporation Ltd. Signature... **Sd/**-Designation: **GM-Contracts, ITPS.**Date:

# PROFORMAOFLETTEROFUNDERTAKINGTOBESUBMITTEDBYTHEBIDDERALONGWITHTHISTENDER. (Tobeexecutedonnon-judicialstamppaperofrequisitevalue)

Ref:	Date:
То	
OdishaPowerGenerationCorporationLtd.,IBTh ermalPowerStation, Banharpali.	
(Hereinafterreferredtoasthe Owner)	
I/Wehavereadandexaminedthefollowingdocumentsrelatingto(Name	eofth
eworks)	

- (a) NoticeinvitingTender
- (b) FormatforLetterofundertaking
- (c) GeneralConditionsofContractincludingContractorsLabourRegulations,ModelRulesforLabourWelfar e,SafetyCode,scheduleA&BAnnexureItoXVII.
- (d) SpecialConditionsofContractincludingScopeofWork
- (e) PriceSchedule/BillofQuantities
- (f) TechnicalSpecifications.
- (g) Drawings.

I/Weherebytenderforexecutionoftheworksreferredtointheaforesaiddocumentsupontheter msandconditionscontainedorreferredtothereinandinaccordanceinallrespectswiththespecification s, designs, drawings and other relevant details contained in Schedule of Quantities /Price schedule attached with the tender documents and the period (s) of completion as stipulated inSchedule'A'ofGeneralConditionsofContract.

In consideration of I/We being invited to Tender, I/We agree to keep the Tender open foracceptance for 180 days from the due date of opening of bid thereof and not to make anymodificationsinitsterms and conditions which are not acceptable to the Owner.

AsumofRs.......isherebyforwardedinshapeofDemanddraftdrawnonState BankofIndia(Code-9510)/UnionBankofIndia(Code-UBIN0806625)/CentralBankofIndia(Code-28389 9)orBankguaranteeissuedbyanyNationalized/ScheduledBankintheenclosedproformaasEarnestMon eyinthemannerprescribedinclause15ofNITenclosedherewith.IfI/WefailtokeeptheTenderopenasaf oresaidormakeanymodificationsinthetermsandconditionsoftheTender,whicharenotacceptabletot heOwner,I/WeagreethattheOwnershall,withoutprejudicetoanyother remedy, be at liberty to forfeit the said earnest money absolutely. Should this Tender beaccepted, I/We hereby agree to abide by and fulfill all the terms, conditions and provisions of theaforesaiddocuments.

If, after the Tender is accepted, I/We fail to commence the execution of the works as provided in the conditions, I/We agree that the Owner shall without prejudice to any other right or

remedy beatlibertytoforfeitthesaidearnestmoneyabsolutely.					
SignatureofBido	der				
DulyauthorizedtosigntheTenderonbehalfoft he(inblockcapitals)					
	dPostalAd				
	dressTelegraphic				
	AddressTelephoneNo				
	FaxNo				
	E-mailaddress				
Witness					
Date					

Address.....

#### INSTRUCTIONTOBIDDER(S):

#### 1.1 Sitevisit&collectionofinformation:

The Bidders are advised to visit the site, collect information regarding communication, transportation, banking facility, availability of skilled / unskilled labours, their customs, religious or otherwise culture, political environment, climatic conditions, education & medicalfacilitiesetc.totheirsatisfactionandacquaintwiththenature&conditionofworkpriorto workingoutthepriceoftheTender.

- 1.2 BiddersareadvisedtosubmitTendersbasedstrictlyonterms&conditionsandspecificationconta ined in the tender documents and not stipulate any deviations. Should it howeverbecomeunavoidable,deviationsshouldbestipulatedintheprescribedproformaonlyin theformat in annexure VII of G.C.C. Owner reserves the right to evaluate the Tenders containingdeviationsbyloadingoroffloadingthecostofsuchdeviations.
- 1.3 Addenda/Corrigendaissuedtothistendermustbesigned&submittedwithtenderonduedate or on extended date if any. The Bidder should write clearly the revised quantities on theScheduleoforiginalTenderDocumentsandshouldpricetheworkbasedonrevisedquantities / conditions. All those who were issued tender documents prior to issue of addenda /corrigenda shall be provided with another set of fresh blank price schedule / schedule of itemsfreeofcost.TheBiddersshallsubmittheirtenderinthefreshschedule.ButhoweveriftheBid der has already submitted his tender prior to issue of such addenda / corrigenda, they shallresubmit a fresh offer marked on the envelope as "Amended Offer". The original offersubmittedbysuchpartyshallbedestroyedinpresenceoftheBidderonthedateofopening.

#### 1.4 PreparationofBid:

TheBidder(s)shallsubmitthebidintwoparts,namely-1) Part-I : TechnocommercialBid

2) Part-II : PriceBid

#### PART-I:TECHNO-COMMERCIALBID

A complete set of original Tender documents as specified in clause 3.1 of G.C.C. issued to theBidderexceptblankpricebid/billofquantitydulyfilledinasprescribedindifferentclausesof the Tender documents with signature & stamp in all pages as token of unconditionalacceptanceshallconstituteTechno-commercialBid.

The Biddershall enclose the following documents in this Bid.

- a) Crossed Demand Draft for requisite amount only drawn in favour of Odisha Power GenerationCorporation Ltd or Bank guarantee issued by any Nationalized Bank/scheduled Bank in theenclosedproformainthemannerprescribedinclause-15ofNITenclosedherewithtowardsth eEarnestMoneywithoutwhichtheTendershallbeliableforsummarilyrejection.
- b) Details of work of similar nature and magnitude executed by the Bidder during last three years(WorksexecutedinnameofBidder)inAnnexure-IofG.C.C.
- c) DetailsofpresentcommitmentsoftheBidderinAnnexure-IIofG.C.C.

- d) DetailsofequipmentsinAnnexure-IIIofG.C.C.
- e) OrganizationchartshowingnumberofqualifiedEngineersandSupervisorypersonnelintherollo fthefirminAnnexure-IVofG.C.C.
- f) DulyfilledininformationaboutBidderasperAnnexure-VofG.C.C.
- g) ListofenclosuresasperAnnexure-VIofG.C.C.
- h) Exception&deviationstatementinAnnexure-VIIofG.C.C.
- i) DetailsofproposedorganizationinAnnexure-VIIIofG.C.C.
- j) DocumentsshowingannualturnoverinAnnexure-IXofG.C.C.
- $k) \qquad \text{PhotocopyofSalesTaxRegistrationCertificate,} \\ validGSTCertificate and IncomeTaxPAN. \\$
- l) Photocopy of P.F. Registration Certificate, ESI Registration Certificate and GST registrationCertificateofappropriatecategoryissuedbycompetentauthority.
- m) PhotocopycopyoftheRegistrationofFirm/Company.
- n) Present & permanent Address for correspondence along with Telephone No,/Fax No./E-mailaddressetc.
- o) Anyothertechnicalinformation, Bidderwishest of urnish.
- p) LetterofundertakinginjudicialstamppaperofworthRs.5.00intheformatenclosed.
- q) Documentsinsupportofauthenticationofthepersonwhosignedthetender.Onlyproprietor,pa rtner,directorsorpermanentemployeewithduepowerofattorneyisrecognizedforsuchsignatu re.

Note:If required additional sheet may be used to furnish all above information but in theformatprovidedinGeneralConditionsofContract.

The techno-commercial bid with all its enclosures as mentioned in clause 1.4 should be put inan envelope, sealed & superscribed as "TECHNO-COMMERCIAL BID". This envelope mustcontainNameofthework,NITNo.,DuedateofopeningandName&AddressoftheBidderon bottomlefthandcornerofthecover.

#### **PART-II:PRICEBID**

Pricebidshallinclude-

- a) Originalpricebid/scheduleofquantitydulyfilledin,signed&stampedoneachpageastoke nofunconditionalacceptanceshallconstitutethePriceBid.TheBiddershalltake utmost care in filling the tender documents corresponding to instruction toBidderandrelevantinformationelsewhereinTenderdocument.
- $b) \ \ Price Bidshall be completed in all respects with all their attachments/enclosures, if any.$

c) ThepricebidshallbepreparedinthemannerprescribedinvariousclausesofTenderdocu ment and put in a separatesealedenvelopesuper scribedas"PRICEBID". This envelopemustcontainNameofwork,NITNo.atthetopandName&AddressoftheBiddero nlefthandbottomcornerofthecover.

#### 1.5 COMPLETEBID:

Both the Techno-commercial & Price Bid in separate sealed cover shall be put in a thirdenvelope, sealed & superscribed with Name of the Work, NITNo., Duedate of opening. The full name, postal address, telegraphic address and telex/telephone/fax/E-Mail of the Biddershall be ewritten on the bottom left corner of the envelope.

#### 1.6 SUBMISSIONOFBID:

Completed Bid shall be submitted to the Owner within due date and during office hours only. The Tenders shall be put into a box, marked as Tender Box or handed over to Contract Cellagainstreceiptofthesame.

#### 1.7 OPENINGOFTENDER:

The techno-commercial bid shall be opened at a predetermined time, venue & date inpresence of the Bidder(s) or their authorized representative who may like to be present.Partner,directororpermanentemployeeofthefirmdulyauthorizedcanonlybeauthorizedrepresentative.

Price bid shall be opened at a future date under intimation to all technically qualified Biddersandinpresence of the mortheir authorized representatives who shall participate.

#### 1.8 CAUTIONTOBIDDER:

Thepersonwhoshallcometopurchasetenderdocuments, submitthe Tenderorparticipate in the opening of the Tender must abide by the safety rule of OPGC right from the plant gate. Some of the checkpoints are, the vehicle must have valid in surance & tax paid road permit, valid driving license of the driver / Owner as the case may be. Persons with full shoes shall be allowed to enter the plant & our plant gates hall provide other items such as hard hat, safety glass & visitor pass. Not more than 2(two) persons for one Tender shall be allowed to participate in Tender opening.

#### 1.9 ALLPAGESTOBEINITIALED:

All the pages of Tender documents shall be initialed. But first & last pages of all volumes of documents shall be signed with date by the Bidders or their authorized representatives.

#### **1.10** RATESTOBEINFIGURES&WORDS:

The Bidder shall quote both in figures and in words for the rates and amount tendered by himin the Schedule of quantities / Price schedule forming part of the Tender document, in such away that interpolation is not possible. The amount of each item shall be worked out andentered and requisite total given for all items. The tendered amount for the work shall beenteredintheTenderanddulysignedbytheBidder.

If any ambiguities are observed in the rates & amount given in words & figures the following procedures hall be followed:

- a) Whenthereis difference between the rates in figures and words, rate which corresponds to the amount worked out by the Bidder, shall be taken as correct.
- b) WhentheratequotedbytheBidderinfiguresandwordstallybuttheamountisincorrect,th

- erate quoted by the Biddershall betaken as correct but not the amount.
- c) Whenitisnotpossibletoascertainthecorrectratebyeitherofabovemethods,theratequ otedinwordsshallbetakenascorrect.
- 1.10.1TheBiddershallquoteinEnglishlanguageonly.

#### 1.11 CORRECTIONS&ERASES:

No erases or over writings are permissible. All corrections and alterations in the entries oftenderpapersshallbesignedbytheBidderwithdate.

#### 1.12 DETAILS&SIGNATUREOFBIDDER:

- 1.12.1 The Tender shall contain the name, residence and place of business of person or personsmaking the Tender and shall be signed by the Bidder with his usual signature. Partnershipfirms shall furnish the full names of the partners in the Tender. It should be signed in thepartnershipsnamebyallthepartnersorbydulyauthorizedrepresentativefollowedbythena meanddesignationofthepersonsigning. Tenderbya Corporationshall be signed by an authorized representative and a power of attorney / authorization on its behalf shallaccompanythe Tender. Acopyof constitution of the firm with names of all partners shall befurnished. In case of cooperative society, the authorized representative of the society will signthe Tender. Similar principle shall be followed in case of any Trust and Hindu Undivided Family business.
- 1.12.2 WhentheBiddersignsaTenderinalanguageotherthanEnglish,thetotalamounttenderedor only rate quoted in maintenance Contract in addition be written in the same language.Thesignatureshouldbeattested,atleastbyonewitness.

#### 1.13 ABNORMALRATES:

The Contractor is expected to quote the rate for each item after careful analysis of costinvolved for the satisfactory performance and completion of item work considering all specifications and conditions of Contract. This will avoid loss of profit or gain in case of curtailment or change in specification for any other item. In case the rates quoted by the Bidder's for any item are unusually high or unusually low it will be sufficient cause for the rejection of the Tender unless the Owner is convinced about the reasonableness of the analysis for ratefurnished by the Bidder (ondemand) after scrutiny.

#### 1.14 THESCHEDULE:

- 1.14.1 The work shall be executed strictly as per the Time Schedule, indicated in the tenderdocuments.
- 1.14.2 Monthly/weeklyworkprogrammewillbedrawnupbytheContractorbeforecommencementof work&submittedtoEngineer-in-chargeforapproval.Theprogramme&progress will be reviewed from time to time and if required, the programme may be re-scheduledbyEngineer-in-charge.TheContractorshallalsoberesponsibletoprovidematerial s within his scope in time to achieve the programme. In all matters concerning theextent of programme set out weekly and monthly, the decision of the Engineer-in-charge willbefinalandbindingontheContractor.

#### 1.15 RECORDKEEPING:

Relevant records are to be maintained by the Contractor in day-to-day / monthly basis &furnished to Engineer-in-charge or his representative for scrutiny, Management InformationSystemandpaymentetc.

EndofVolume-I:Totalpages15

## $\underline{\textbf{ODISHAPOWERGENERATIONCORPORATIONLIMITED}}7^{\text{TH.}}$

FLOOR, ZONE – A, FORTUNE TOWERS,CHANDRASEKHARPUR,BHUBANESWAR-7510 23

#### GENERALCONDITIONSOFCONTRACT

**VOLUME-II** 

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#### SECTION-I

#### 1.0 GENERAL

Odisha Power Generation Corporation Limited is a Govt. of Odisha undertaking and IbThermal Power Station, Banharpali is one of its units. The Ib Thermal plant is situated close toHirakudreservoirandatadistanceof40KmsfromJharsugudaRailwayJunctionand18Kmsfrom BelpaharRailwayStationinthestateofOdishabothonS.E.Railways.ITPSisatpresentoperating 2x210 MW & 2x660 MW coal based power plant. The management is lookingforward to engage a bonafide, resourceful, potential and experienced Contractor of goodfinancialcapacityforthejobsspecifiedinSpecialConditionsofContractinVolume-III.

- 1.1 One set of Tender document shall be issued to each Bidder. Bidders shall be required tosubmit the Tender duly signed and stamped in all pages of the document along with theiroffers. All Tenders shall be prepared and submitted by typing or printing with indelible black in k on white paper in consecutively numbered pages and in solid binding along with duly filled-in formats given in the Annexure. One additional booklet (Volume-IV) containing the bill of quantities / price bid as issued to be submitted by the Bidder in two copies in the price bid part.
- 1.2 Thetenderdocumentisnottransferable. Transferoftenderdocuments is suedtoone Bidder to another is not permissible. Similarly, transfer of Tender submitted by one Bidder to another party is not permissible. The alteration of Tender once submitted shall not be entertained exceptincase of issue of Addenda/Corrigenda.
- 1.3 Tendershallbesubmittedunderacoveringletterindicatingclearlythesummaryoftenderchapte rswithannexure/schedulesofthecompleteTender.
- 1.4 Insertion, postscript, addition and alterations hall not be accepted unless confirmed by the Bidder 's signature.
- 1.5 Allthecopies of Tendershall be complete in all respects with all their attachments/enclosures.
- 1.6 The Bidder shall satisfy the Owner that the firm represented possesses the necessary experience and that he has a this disposal suitable modern facilities and specialized employees to ensure that his work is of best quality and workmanship is according to the latest provente chnology and engineering practices. The Biddershall satisfy the Owner that he is financially in a position to fulfill Contractual obligations, offered to be undertaken by him.
- 1.7 Bidder's complete offer (all the parts) shall be prepared and submitted in double sealedenvelope with Name of the work, NIT No. & date and Due date super scribed prominently ontheoutsideoftheenvelope:
  - The full name, postal address, telegraphic address and telex/ telephone/ fax/ E-mail addressoftheBiddershallbewrittenonthebottomleftcornerofthesealedenvelopes.

#### 1.8 SCOPEOFWORKANDPARTICULARSTOBEFURNISHEDINTHETENDER:

- i) The work shall be carried out on item rate basis / job rate basis for which schedule ofquantities/blankpriceschedulehavebeenissuedfordifferentitemsofworkasdefinedinthesc opeofwork,technicalspecificationinSpecialConditionsofContract.
- ii) The Tender not covering the total scope of work and services as detailed out in tenderdocumentsisliableforrejection.
- 1.8.1 The Bidder shall carefully check the enclosed Technical Specifications and shall satisfy himselfas to the suitability of the work as given in the Technical Specifications and shall take full responsibility for the completion of work as perdefined scope.

#### 1.9 PRICEQUOTATION:

- 1.9.1 TheBiddershallquotehispriceagainsteachitemofthescheduleasindicatedinScheduleofQuantit ies / Blank price schedule enclosed with technical specification, both in figures and inwordsclearly.
- 1.9.2 Rates shall be quoted both in figures & in words in clear legible letters. No overwriting isallowed. All scoring and cancellation should be countersigned by the Bidder. In case ofillegibility, theinterpretation of Ownershall befinal.
- 1.9.3 Bidder shall quote rates against the items in the schedule of items for the work / pricescheduleasfullydescribedandcontainedtherein.Nomodificationstotheworkcontentinth eitemswillbeallowed.
- 1.9.4 The offered unit rates shall remain **FIRM** for variation in completed value of the Contractincludingthecostofadditional/altered/newitemsofworktoanyextent.
- 1.9.5 Any request from the Bidder in respect of additions, alterations, modifications, correctionsetc.ofeithertermsandconditionsorratesofhisTenderafteropeningofTendersmayl eadtorejectionofhisTender.

#### **1.10** RECEIPTOFTENDER:

TendershallbereceivedattheofficeofconcernedEngineer-in-charge/Contractcellasperadvert isement. The Bidder has the option of sending the Tender by Registered Post orsubmittingtheTenderinperson,soastoreachtheEngineer-in-charge/Contractcellasthecase maybeonorbeforethedateandtimesetoutforthesameintheInvitationtoTender.TendersubmittedbyFAX/TELEX/TELEGRAM/E-mailshallnotbeaccepted.

#### **1.11** TENDEROPENING:

The Tender will be opened in the manner and at the time, date and places et for opening of Tenders as described in the Notice Inviting Tender/Special Conditions of Contract.

#### 1.12 LANGUAGETOBEUSEDINFILLINGOFBIDDOCUMENTS:

The Tendershall be submitted in English language only.

#### **1.13** EARNESTMONEY:

BiddersshallsubmitEarnestMoneyofvalueasspecifiedinSpecialConditionsofContract/NIT and in the manner prescribed in clause-15 of Notice Inviting Tender. Earnest Money shallbereturnedtotheunsuccessfulBiddersattheexpiryofthevalidityperiodunlessotherwisee xtendedoronfinalizationoftheContract.EarnestMoneyofthesuccessfulBiddershallbereturne d after he furnishes the initial Security Deposit and Contract is signed. No interest shallbe paid on Earnest Money. E.M.D. shall not be accepted in any other form than as mentionedaboveandtheTendershallbesummarilyrejectedwithoutE.M.D.TheE.M.D.shallbe

returned in form of A/c payee cheques / D.D.Bank charges shall be to the accounts of Contractorif D.D. is required.

#### 1.13.1 ForfeitureofE.M.D.&rejectionofBid,if-

- a) TheTenderisrevokedduringitsvalidityperiod.
- $b) \quad The prices are increased unilaterally after the Tender opening and during validity of offer.$
- c) TheOwneracceptstheBidder'sbidproposalandtheBidderrefusetoenterintoContractafterthe Contractisawardedtohim.
- d) TheBidderfailstosubmitinitialSecurityDepositwithintheperiodspecifiedinSpecialConditi onsofContract.

#### 1.14 NOCLAIMORCOMPENSATIONFORSUBMISSIONOFTENDER:

The Bidder whose Tender is not accepted shall not be entitled to claim any costs, charges and expenses incidental to or incurred by him through or in connection with his submission of Tender or its consideration on the Owner, even though Owner may modify / withdraw the Invitation to Tender or does not accept the Tender.

#### 1.15 INCOMETAXPAN&SALESTAXCLEARANCECERTIFICATEANDP.F.CODE:

Bidder shall furnish the Income Tax PAN and valid Sales Tax clearance certificate issued by the concerned authority & P.F. Codewith the Technical Bid of the Tender.

#### 1.16 NOTICEONBEHALFOFOWNER:

All notices of technical / commercial nature shall be issued by the Engineer-in-charge fromtimetotimeafterLOlisreleasedtillclosureofContract.

#### 1.17 SITEINFORMATION&LOCALCONDITIONS:

#### 1.17.1 Siteinformation

Informationregardingtheworksite, plantcapacities, location, approachtosite and metrological condition, work culture etc. as prevailing at the site can be obtained by the Bidders by site visit & interaction with Engineer-in-charge or others.

#### 1.17.2 LocalConditions

ItissuggestedthattheBiddermustvisitthesiteandshallsatisfyandacquainthimselfofthesite condition and shall appraise himself of the procedure for engagement of labour and shallcollectanyotherinformationwhichmayberequiredbeforesubmittingtheTender.

# 1.17.3 Claims and objections due to ignorance of site conditions will not be considered aftersubmissionofTender.

The Bidder shall be deemed to have visited and carefully examined the site and surroundings, to have satisfied himself about the nature and details of all existing infrastructures a ndalsoas to the nature and conditions of the plant and equipment installed, means of transport

and communications, whether by land, water or air and astopossible interruptions the reto and in gress & exit from the site, to have made independent enquiries, examined and satisfied himselfast othesites for disposal of surplus materials and debris, the available accommodation, and all other similar matters which may affect the work.

- i) The Biddershall be deemed to have acquainted himself of Government taxes, laws, statut e, regulations, levies and other charges relating to his work at site.
- ii) Any neglect or omission or failure on the part of the Bidder in obtaining necessary andreliableinformationasstatedaboveoronanyothermatteraffectingtheBiddershall

not relieve him from any risks or liabilities or the entire responsibility for completion of the work in accordance with the Tender Documents.

#### 1.18 OTHER CONDITIONS:

The Bidder is required to carefully examine the General Conditions of Contract, SpecialConditions of Contract, the Technical Specification, drawings and other details relating towork and given in the tender documents and fully acquaint himself as to all conditions andmatters which may in any way affect the work or the cost thereof. The Bidder shall be deemedtohaveonhisownandindependentlyobtainedallinformationforthepurposeofpreparingthe Tender and his Tender as accepted shall be deemed to have taken into account allcontingenciesasmayariseduetosuchinformationorlackofthesame.

- 1.18.1 TheBiddershallbedeemedtohaveexhaustivelyexaminedthetenderdocumentsincludingtheG eneralConditionsoftheContract,SpecialConditionsofContract,TechnicalSpecificationstohav eobtainedallinformationandclarificationsonallmatterswhatsoeverthatmightaffectthecarryi ngouttheworkandtohavesatisfiedhimselfastotheadequacyof his Tender. He is deemed to have known the scope, nature and magnitude of the work andtherequirementsofmaterialsandlabourinvolvedetc.andastoallworkhehastocompletein accordance with the Contract whatever be the defects, omissions or errors that may befoundintheTenderDocuments.
- 1.18.2 In case of conflict between the conditions given in the Special Conditions of Contract /Technical Specification and the General Conditions of the Contract, the conditions given inthetechnicalspecificationshallprevailovertheGeneral&SpecialconditionsoftheContract.

#### 1.19 SAFETYMEASURE:

The Contractor has to abide by the Owner's safety rules in vogue at the time of Tendering andenforcement of any additional rules from time to time during the Contract period and it's extension if any.

#### 1.20 STATUTORYPROVISION:

AllstatutoryprovisionslikeContractLabourActs,EmployeesProvidentFundActs,Paymentof Wage Act, Bonus Act, Minimum Wages Act, Workman Compensation Act, Sales Tax/IncomeTaxActsatthetimeofsubmissionofContractandanynewActsapplicabletosuchCont ract

/ Contract labour during the Contract period shall be liability of the Contractor.

#### 1.21 EXECUTIONOFCONTRACTS:

1.21.1 After LOI / Work Order is accepted by the Contractor, Contract will be executed by andbetweenOwnerandtheContractorwithin30daysasperprescribedproformaprovidedbyOP GC. The agreement shall be executed on non-judicial stamp paper of appropriate valuepurchasedintheStateofOdisha.

EndofSection-I

#### **SECTION-II**

#### 2.0 DEFINITIONSANDINTERPRETATIONS

The following words and expressions (as hereinafter defined) shall have the meanings herebyassignedtothemexceptwherethecontextotherwiserequires.

- 2.1 "AcceptingAuthority" shall mean the authority mentioned in Schedule'A'.
- 2.2 The 'Alteration / Variation of Order' means an order given in writing by the Engineer-in-chargetoeffectadditionstoordeletionsfromoralterationintheWorks.
- 2.3 'Approved' shall mean approved in writing including subsequent written confirmation of previous verbal approval and 'Approval' means approved in writing including as a foresaid.
- 2.4 'Bidder' means a person or group of persons or a company who offer rates under certainconditionswithanintentionofperformanceagainstanyinvitationtoTenderifacceptedb ythepersoninvitingTender.
- 2.5 The 'Completion Certificate' shall mean the certificate to be issued by the Engineer-in-chargecertifying that the work is completed in all respect commensurate to the provisions of Contract & to the complete to the com
- 2.6 'Constructionalplant'shallmeanallequipments,materials,appliancesorthingsofwhatsoever nature required for execution, completion or maintenance of the works (ashereinafter defined) but does not include materials or other things intended to form orformingpartofthepermanentwork.
- 2.7 The 'Contract's hall mean enforceable agreement between the Owner and the Contractor for execution of the works including the reincollectively all documents such as:
  - i) GeneralConditionsofContract
  - ii) SpecialConditionsofContractincludingScopeofWork,PriceSchedule/BillofQuantities, TechnicalSpecification&ApprovedWorkSchedule.
  - iii) AgreedStatementofDeviation
  - iv) FieldQualityAssurancePlan
  - v) Drawingsifprovided
  - vi) LOI/WorkOrder
  - vii) AllrelevantcorrespondencehavingbearingonTenderbetweenBidder&Ownerbeforea cceptanceofTender.

Alltheabovedocuments are complementary to each other.

2.8 The 'Contractor' shall mean the successful Bidder whose Tender has been accepted by OwnerandLOlacceptedbythesuccessfulBidderandincludeshis/their/itslegalrepresentative(s ),successor(s)andpermittedassignee(s).

'Contractor' is a person/firm/company in relation to any establishment who undertakes toproduceagivenresultfortheestablishmentotherthanameresupplyofgoodsorarticlesofman ufacturertosuchestablishmentthroughContractlabourorwhosupplyContractlabourforanywo rkoftheestablishmentandincludesasubcontractororagentasthecasemaybe.

- 2.9 All functions pertaining to the operation of Contract means all acts, such as planning, scheduling, testing, measuring, certification of bill, closing of Contract etc., directing, issue of spares & consumable sand controlling the activities of Contractornecessary for execution of the Contract and coordinating between the functioning agency & Owner or his functionary represent ative.
- 2.10 'Day'meansadayof24hoursfrommidnightirrespectiveofthenumberofhoursworkedinthatday .However,forthepurposeofworkinvolvingshiftworking"Day"meansadayof24hoursfrom6a. m.to6a.m.next.
- 2.11 'Drawings' shall include maps, plans and tracings or prints thereof with any modificationapprovedinwritingbytheEngineer-in-chargeandsuchotherdrawingsasmayfrom timetotime,befurnishedorapprovedinwritingbytheEngineer-in-charge.
- 2.12 The Engineer-in-charge or Officer-In-charge's hall mean the engineer/personast hecase may be nominated by the Owner from time to time and shall include those who are expressly authorized by the Owner to act for and on his behalf for all functions per taining to operation of the Contract.
- 2.13 'Excepted Risks' are risks due to riots (otherwise than among Contractors employees) and civilcommotion (in so far as both these are uninsurable), war (whether declared or not), invasion,act of foreign enemies, hostilities, civil war, rebellion, revolution, insurrection, military orusurped power any acts of government, damage from aircraft, acts of god such as earthquake, lightening and unprecedented floods and other causes over which the Contractor hasnot control and accepted as such by the accepting authority or causes solely due to use oroccupationbytheOwnerofthepartofworksinrespectofwhichacertificateofcompletionhasb eenissued.
- 2.14 The 'Final Certificate' in relation to the work shall mean the certificate regarding thesatisfactorycomplianceofthevariousprovisionsoftheContracttobeissuedbytheOwneror his representative after the period of risk-liability is over. Risk liability period shall bespecifiedinSpecialConditionsofContract.
- 2.15 'Headings'inthisContractdocumentaregivensolelytofacilitatereferenceandarenotpartofthe Contractdocumentsandarenottobetakenintoaccountintheinterpretationoftheprovisionsoft heContract.
- 2.16 'Language for Drawings & Instruction': All the drawings, titles, notes, instructions, dimensionsetc.shallbeinEnglishlanguageonly.
- 2.17 'Letter of Intent (LOI)' shall mean an intimation by a letter to Bidder that their Tender hasbeen accepted in accordance with the provisions contained in the letter and hence to takepreparatory steps and compliance of formalities to commence the work from the date desiredbyOwner.
- 2.18 The 'Managing Director' shall mean the Managing Director of Odisha Power GenerationCorporationLtdorhissuccessorsinofficeasdesignatedbytheOwner.

- 2.19 'Market Rate' shall be the rate as decided by Engineer-in-charge on the basis of the cost ofmaterials and labour at the site where the work is to be executed, plus the percentagementioned in schedule-A to cover all overheads and profit (No percentage shall be added formaterialsissuedbytheOwner).
- 2.20 'MetricSystem':Alltechnicaldocumentsregardingthemeasurementofworksaregiveninthe metric system and all work under the Contract should be carried out according to themetric system only. All documents concerning the work shall also be maintained in the metricsystem.
- 2.21 'Noticeinwritingorwrittennotice'shallmeananoticeinwriting,typedorprintedmatterssent(un lessdeliveredpersonallyorotherwiseprovedtohavebeenreceived)byregisteredposttothelast knownprivateorbusinessaddressorregisteredofficeoftheaddresseeandshall be deemed to have been received in the ordinary course of post, it would have beendelivered.
- 2.22 The 'Owner' shall mean the Odisha Power Generation Corporation Limited (OPGCL), acompany incorporated under the Companies Act, 1956 having its registered office at 7<sup>th</sup> Floor,Module A, Fortune Towers, Chandrasekharpur, Bhubaneswar-751023 or any other places ifmodified subsequently and shall include its Managing Director or other AdministrativeOfficers authorised to deal with these presents and are concerned on his behalf and arepostedinanyoftheofficesofOPGCLandshallalsoincludeOwner'ssuccessorsandassignees.
- 2.23 'PayingOfficer'shallmeanHeadoffinance/Manager(Finance).
- 2.24 The'PeriodofDefectLiability'inrelationtoaworkmeansthespecifiedperiodfromthedateof issue of completion certificate up to the date of issue of final certificate, which theContractorstandsresponsibleforrectifyingalldefectsthatmaydevelopintheworks.
- 2.25 'Plans'shallmeanallmaps,drawings,sketchesandlayoutasincorporatedintheContractinordert odefinebroadlythescopeandspecificationsofthework&worksandallreproductionsthereof.
- 2.26 'Schedule(s)' referred to in these conditions shall mean the relevant statement of detailsannexed to the tender papers issued by the Owner and the amendments thereto issued fromtimetotime.
- 2.27 'Singular & Plural': Unless otherwise stated specifically, the singular shall include the pluraland vice-versa wherever the context so requires. The 'Tender' shall mean the offer(s)submittedbytheBidder(s)&subsequentagreedconditions/clarificationsforacceptanc ebythe Owner. Words implying persons shall include relevant corporate companies or registeredassociations or body of individuals or firms of partnership, cooperative society as the casemaybe.
- 2.28 Site/Workplace'shallmeanthelandsandotherspacesabove&belowthegroundlevelonwhicht heworksaretobecarriedout,anyotherlandsorplacesprovidedbytheOwnerforthepurposeofth eContract.

- 2.29 'Specification' shall mean all directions, various technical details, standards, quality provisions and requirements attached to the Contract, which pertain to the method and manner of performing the work (s) to the quantities and qualities of the work (s) and the material sto befurn is hed under the Contract for the work (s) as may be amplified or modified by the Owner or the Engin eer-in-charged uring the performance of Contract in order to meet the unforeseen conditions in the best interests of the work (s). It shall also include the latest edition including all addenda / corrigenda or relevant BIS Specifications and other relevant codes.
- 2.30 The 'Sub-contractor' shall mean any person or firm or company (other than the Contractor) to whom whole or any part of the work has been entrusted by the Contractor, with the written consent of the Owner or his representatives and the legal representatives, successors and permitted assignee of such person, firm or company.
- 2.31 'Temporary Works' shall mean all temporary works of every kind required for execution, completion or maintenance of the Contracted works.
- 2.32 The "Tender" shall mean the offer submitted by the Bidder and subsequent conditionsacceptedbytheOwner.
- 2.33 'Urgent Work' shall mean any urgent measures which in the opinion of Engineer-in-chargebecomenecessaryduringtheprogressoftheworktoobviateanyriskofaccid entorfailureordisruptionofgenerationwhichbecomenecessaryforsecurity.
- 2.34 'Value of Contract' shall mean the sum accepted or the sum calculated in accordance with the theorices accepted in Tender and/or the Contract rates as payable to the Contractor for the entire execution and full completion of the work.

The 'Contractsum's hallmean:

- $a) \quad In case of lump sum Contracts, the sum for which the Tender is accepted.$
- b) In case of percentage rate Contracts, the estimated value of the works as mentioned intheTenderadjustedbytheContractor'spercentage.
- c) In case of item rate Contract, the value of works arrived at after multiplication of thequantities shown in the schedule of quantities by the item rates quoted by the Bidder forthevariousitems.
- 2.35 'Week' means a period of seven consecutive days without regard to the number of hoursworkedinanydayinthatweek.
- 2.36 'Workingday'meansanyday, which is not declared to be holiday or restday by the Owner.
- 2.37 The'Works'shallmeanandincludeallworkstobeexecutedinaccordancewiththeContractor part thereof as the case may be and shall include all extras, additions, altered or substitutedworksasrequiredforthepurposeoftheContractorasmayberequiredtobeexecuted bytheOwner/Engineer-in-chargeatanagreedpriceifnotavailableinscope.
- 2.38 NATUREOFCONTRACT: The Contract may be for
  - a) Construction/Fabrication/Erectionofplant&equipment.
  - b) Civilconstruction.
  - c) Operation(anysystem).

- d) Maintenance (Civil/Electrical/Mechanical/Miscellaneous works, such as upkeepment ofplant, Plantationetc.)
- e) Composite/Turnkeypackage.

# 2.39 EarnestMoney:

The Bidder is required to submit `Earnest Money' with Bids as guarantee (Bidguarantee) to a bide by the terms & conditions of Tender document and comply with the work if offered.

## 2.40 ScheduleofRate:

Schedule of Rates means the latest rate published by Works Department/P.H. Department./Irrigation Department., Govt. of Odishaas the case may be.

## 2.41 ScheduleofQuantities:

Schedule of Quantities is details of item wise quantity issued by the Owner in the Price Bidandtherate&amountofferedbytheBidderthereinanditssubsequentagreementbybothpar ties.Thisisapplicableforconstruction&civilmaintenancejobonly.

## 2.42 PriceSchedule:

Price schedule is a document in which description of operation / maintenance, probablefrequencyduringastipulatedperiodandblankunitrateareprovidedbytheOwner.Bidd ershall fill up the blanks and submit it as Price Bid, which is subsequently agreed by both thepartiesdirectlyorafternegotiation.

- 2.43 "SiteIn-charge" is an employee of Contractor who is categorically authorized to manage the site for day-to-day activities on his behalf.
- 2.44 "Labour" means workers employed by a Contractor directly or indirectly through a sub-contractor or by an agent to do any skilled, semi-skilled, unskilled, manual, technical or clericalworkrelatingtothesubjectofContractforhireorreward.
- 2.45 "Minimumwage" meanswagesasdefined under the Minimum Wages Act-1948 and amended from time to time.
- 2.46 Disputeregardinginterpretation and definition: Incase of any disputeregarding interpretation and definition, the decision of OPGCs hall be final.

EndofSection-II

#### **SECTION-III**

## 3.0 GENERALINFORMATIONTOBIDDER(S):

#### 3.1 ISSUEOFTENDERPAPER:

Ownershallissueonesetofpricedtenderdocumentswhichconsistsof:

- i) InstructionstoBidderincludingNIT&Proformaofletterofundertaking
- ii) GeneralConditionsofContract
- iii) SpecialConditionsofContractincludingTechnicalSpecificationandScopeofWork
- iv) BlankPriceBid/BillofQuantities
- v) Drawings
- 3.2 The Technical Bids shall be opened as per the stipulation in NIT. Information provided anddocuments submitted by the Bidders in Techno-commercial bid shall be processed, examined, verified and evaluated for ascertaining the suitability of Bidders to qualify for opening of Pricebid. The price bids shall be opened with prior intimation to all technically qualified

Biddersonlyandinpresenceofthemortheirauthorizedrepresentatives. Onlyproprietor, partne r, director or permanent employee with necessary power of attorney shall be accepted asauthorized representative.

## 3.3 WITNESS:

Witness and sureties should normally be persons of status and property. Their names, occupation and address shall be stated below their signature.

## 3.4 VALIDITY:

Offers submitted by Bidders shall remain valid for a period of 180 days from the scheduleddateofopeningoftheTender.IncaseofBidderrevokingorcancelinghisTenderorvaryi ngany term(s) in regards thereof the Earnest Money paid by him shall be forfeited and bidcancelled.

# 3.5 ADDENDA/CORRIGENDA:

- 3.5.1 Addenda / Corrigenda to the tender document may be issued reasonably prior to the date of submission of the Tenders to clarify documents or to reflect modification in the design or Contract terms. If such issues made, subsequent to sale of Tender paper, time extension shall be given and submission of Bidshall be dealt within accordance with Clause 1.3 of Instructions to Bidder(s).
- 3.5.2 Theaddenda/corrigendawillbeissued/mailedtoeachpersonororganizationtowhichaset of tender documents has been issued. Each recipient shall acknowledge the receipt of thesame and attach one copy of the addenda/corrigenda issued, which shall form part of TenderDocuments.Incaseofpaperpublicationofsuchaddenda/corrigenda,copyofthesamema ybetreatedaspartoforiginaltenderdocuments.

## **3.5.3** REVISEDPRICEBID:

In case of any deviation proposed by any of the Bidders and accepted by the Owner duringevaluation of Technical Bid, the same shall be intimated to all technically qualified Bidderswith provision of submission of fresh Price Bid taking into consideration the accepteddeviation.

# **3.6** RIGHTOFOWNERTOACCEPTORREJECTTENDER:

- 3.6.1 The right to accept the Tender rests with the Owner. The Owner further does not bind himselfto accept the lowest Tender and reserves the authority to reject any or all the Tendersreceived without assigning any reason whatsoever. The whole work may be split up betweentwo or more Contractors or accepted in part (not entirely) if considered expedient. The ratesshall be the lowest/negotiated for such eventualities. Tenders in which any of the particularsand prescribed information is missing or incomplete in any respect and/or the prescribedconditionsarenotfulfilledareliabletoberejected. The decision of the Owner in respect to fthe above shall be final and binding on the Bidders.
- 3.6.2 Canvassing in connection with Tenders is strictly prohibited. The submitted Tenders of theBidders who resort to canvassing are liable for rejection. Tenders containing uncalled remarksoranyadditionalconditionsareliabletoberejected.

## 3.7 BIDDER'SRESPONSIBILITY:

The intending Bidders shall be deemed to have visited the site and familiarized themselvesthoroughly with the site conditions before submitting the Tender. Non-familiarity with thesiteconditions will not be considered are a sone ither for extra claims or for not carrying out the works in strict conformity with the drawings and specifications. The correctness of the details given in the Tender Documents as guideline information to help the bidder but to make up the Tender is not guaranteed.

## 3.8 NOTETOPRICESCHEDULE/SCHEDULEOFQUANTITY:

- 3.8.1 The Bidder shall be deemed to have studied the specifications and details of work to be donewithintimescheduleandtobeacquaintedhimselfoftheconditionsprevailingatsite.
- 3.8.2 RatesmustbefilledintheoriginalTenderdocument.AnyexceptionstakenbytheBiddertothesch eduleofquantity/pricescheduleshallbebroughtoutinthetermsandconditionsofoffer.
- 3.8.3 The schedule of quantity / price schedule should be read in conjunction with all the othersections and documents of the Tender.
- 3.9 EQUIPMENTSTOTHECONTRACTORONCHARGEABLEBASIS:

Owners hall not provide any equipment to the Contractor on charge able basis or otherwise.

## **3.10** ISSUEOFPRIMEMATERIALS:

- 3.10.1 Rateshallbeofferedincludingthecostoflabour&primematerialslikesteel,cementetc.incaseofc onstructionandcivilrepairmaintenancework.
- 3.10.2 In case of mechanical & electrical maintenance, Owner shall provide steel materials otherthan reinforcement steel. Spares, lubricants, special consumables forming part of the job,fasteners,packingincludingmillinternalsetc.shallbeprovidedbytheOwnerandshallnotbei ncludedinpriceofBidder.OtherconsumableshallbeprovidedbyContractor.

The Contractors hall arrange and stock in full or in part of prime materials as per direction of Engine er-in-charge within 7 days of commencement of work and obtain a certificate from Engineer-in-charge to this effect. The payment against the prime materials shall be made progressively oncertification of utilization from Engineer-in-charge.

## **3.11** ARRANGEMENTBEYONDCONTRACT:

Itmaybesometimessorequiredtoprovidematerials&servicesbytheContractorbeyondtheSco

peofContract.Insuchsituation,thepricemustbefinalizedbeforeactualevent.

#### **3.12** FOREIGNEXCHANGEVARIATION:

IncaseimporteditemsareinvolvedintheContract, the price fluctuation corresponds to the fluctuation in the price of foreign exchange. Hence, amount of foreign exchange involved, the exchange rate for the currency on the date of offer and rate of duty should be specifically mentioned by the Contractor.

#### 3.13 PRICEESCALATION:

In case of price escalation provision, base date, indices on the base date and documents /publications shall be referred on the due date and actual date of completion of work withoutanyambiguity.

## **3.14** PURCHASESFROMSUBCONTRACTOR/SUBVENDOR:

The Owner shall not directly or otherwise be involved with any subcontractor or sub-vendor.Nosalestaxform'C'/formIVorRoadPermittoanyoftheContractor/subcontractor/s ub-vendorshallbeissuedunderanycircumstances.

## 3.15 INCOMETAX/WORKSCONTRACTTAX/SALESTAX/GST/ANYOTHERTAX&DUTIES:

Income Tax / Works Contract Tax / Sales Tax / Service Tax / any other taxes & duties ifapplicableattheprevailingrateshallbepaidbyContractorandshallbedeductedfromtheirRunn ingbillsifapplicable.

## **3.16** EXCISE:

Certain items of work such as manufacturing of steel vessels and pipes etc attract excise duty. The Contractor shall register himself with excise department shall deal with directly and Ownershall taken oliability on account of excised utyto be paid by the Contractor.

- 3.17 The price to be quoted by the Bidders shall be kept firm up to completion of work. Noescalationshallbeallowed.
- 3.18 The person signing the Tender should have requisite authorization of the firm submitting the Tender. This is applicable only to the Joint Stock Company & the authorized person shall be adirector / partner / regular employee of the said firm. In case of unregistered firm, the Owner, Managing partners, or authorized partner to this effects hall sign the Tender.

## **3.19** OVERRUNCHARGES:

DelayincompletionofworkbeyondthecontroloftheContractorsuchasnon-availabilityoffront, drawings, specifications, materials or force majeure etc, Contractor has to increase theadditionalfacilitytocompletetheworkintime.Nooverrunchargeshallbeconsidered.But,ho wevertheEngineer-in-chargeshallexaminetheperiodofdelayandpossibilityofadherencetosch edulebyprovidingreasonableadditionalmanpower/facilityandifsatisfiedthat completion of work shall not be possible by providing reasonable additional manpower,time extension shall be allowed to the Contractor & no penalty shall be levied on this account.Nooverrunchargeshallbepaid.

# **3.20** FACILITIESTOCONTRACTOR(S):

3.20.1 Water Supply: (a) Water for drinking and sanitation purpose shall be provided to the Contractor for the site work, free of cost. (b) Unfiltered water for construction / maintenanceworks shall be supplied from the nearest source free of cost. But the Contractor

shall arrangetotransportwaterfromthenearestsourceallowedtohimforallpurpose.

3.20.2 **PowerSupply**: Powersupply will be provided to the Contractor for the site work and office at a cost to be decided by the Owner. The power will be supplied from the near est point to the site and Contractor shall arrange to tap the power to his site at his own cost.

## 3.20.3 LandforContractor'sFieldOffice,Godown&Workshop

- The Owner at his discretion and convenience may provide the land for construction of Contractor's temporary field office, godowns and site store required for the execution of the Contract near to the site but out of plant gate free of cost. The Contract or shall at his cost construct all these temporary building structures and provide water supply, sanitary & power supply arrangement as approved by the Engineer-in-charge, with due regard to Owner's Safety Rule.
- On completion of the work undertaken by the Contractor, they shall remove alltemporaryworkserectedbythemandhavethesiteclearedasdirectedbyEngineer-in-charge. If the Contractorfails to comply with these requirements, the Engineer-in-charge has the right to remove any structure, such surplus, rubbish materials and dispose off the same as deemed fit and get the site cleared and the Contractors hall fort hwith pay the amount of all expenses so incurred and shall have no claim in respect of any such surplus materials disposed as a foresaid. The land provided shall be sole lyon temporary basis, which is terminable at any time without notice or without assigning any reasons. In the event of any such termination or the termination of the Contract / completion thereof, the Contractor shall for thwith vacate the premises. The Owner reserves the right to ask the Contractor for demolition at any time during the currency of the Contract to vacate the land by giving seven days notice on security/safety reasons or Owner's interest.

# c) Medicalfacility:

Owner shall extend free medical consultancy / services as available at ITPS hospital totheContractorpersonnelduringtheirassignmentbutnomedicineshallbeprovided.

## d) **Accommodation**:

Owner may provide accommodation subject to availability to the company executivesonchargeablebasis, which has to be determined by the Owner from time to time. In such an event, rent for 6 months shall be retained from 1st Running bill of the Contractor as security & rent from second month shall be recovered from subsequent running bills. The amount hold as security shall be returned to the Contractor

on handing over the vacate possession of accommodation with security amount.

# 3.21 LIABILITYOFCONTRACTORINCASEOFSTRIKEOFTHEIRLABOURS:

3.21.1 IncaseContractor'slabourgoonstrikewithadvancenoticeasperrule,itisresponsibilityoftheCon tractortomobilizesuchmanpowerfromtheirothersitesorotherwiseandcontinuethe work so that execution of Contract is not affected.In such an event, the failure to performshallleadtheOwnertogettheworkdonebyanyotheragency,butatthecost&riskoftheC ontractor. Further, the Contract shall be terminated with seven (7) days notice in O&MContract and the Contractor may be debarred from participating in any future Bid in OPGCLtd. In case of construction work, non-adherence to schedule shall lead to cancellation ofContract or imposition of penalty at the discretion of the Engineer-in-charge. If the labours goon strike without prior notice, the situation shall be treated as force majeure providednonperformance is for a reasonable period only. If the situation is beyond reasonable control of the Contractor but has taken appropriate steps as a man of common prudence would havetaken in his own case, Owner may consider in case to case basis to either

terminate theContract or otherwise get the work done by other means but at the cost & risk of theContractor.Onlyeventsofsuchillegalstrike,whichmaketheperformanceimpossibleatthe time of occurrence and for a considerable time period for mobilization, shall be considered asforcemajeure.

- 3.21.2 TheoperationshallcontinueroundtheclockfortheentireContractperiodwithoutinterruption unless otherwise notified by Engineer-in-charge. Hence, staff for attendingmaintenancejobshallbekeptreadybytheContractoronallSundaysandotherNational &festivalholidaysattheirowncost.Incaseofconstructionwork,theworkshallbeexecutedasper thedirectionofEngineer-in-charge.
- 3.21.3 For satisfactory performance of Contract & to meet the odd hour work and emergencyrequirement etc and to meet the schedule of construction work, the requisite number ofmanpowerhastobearrangedbytheContractorattheirowncost.

## 3.22 SPARES&CONSUMABLES:

The items of materials, spares, consumables, tools & plants to be provided by Owner if any either oncost or free of charges shall be specified in Special Conditions Contracts.

## 3.23 OTHERCONDITIONS:

- 3.23.1 Special Conditions of Contract shall be read in conjunction with the General Conditions of Contract, technical specifications, schedule, and drawings and any other documents forming part of this Contract documents.
- 3.23.2 Where any clause of the Special Conditions of Contract contradicts with any provisions of theGeneral Conditions of Contract, the provisions of Special Conditions of Contract shall bedeemedtooverridetheprovisionsofGeneralConditionsofContract.
- 3.23.3 Incase of contradiction among Bureau of Indian Standard Specifications, General Conditions of Contract, Special Conditions of Contract, Notice Inviting Tender, Technical Specifications, Drawings, Schedule of quantity & time, the following shall prevail in order of preference.
  - DetailedworkorderformingpartofContract
  - ii) ScheduleofQuantities
  - iii) TechnicalSpecifications.
  - iv) NoticeInvitingTender
  - v) SpecialConditionsofContract
  - vi) Drawings
  - vii) GeneralConditionsofContract
  - viii) BureauofIndianStandard
- 3.24 Whereveritismentioned in the specification that the Contractors hall perform certain work or provide certain facilities, it is understood that the Contractors hall do so a this cost.

## 3.25 DURATIONOFCONTRACT:

TheperiodofContractshallbespecifiedintheSpecialConditionsofContract.TheContractperiod shallreckonfromthedateofissueofLOI.OPGCLreservestherighttowithdrawanyitem(s)ofwork sfromthescopebyservinga7daysnoticetotheContractorwithoutgivinganyreasonforthesame andtakeupthejobdepartmentallyorotherwiseifperformanceofContractor is found to be unsatisfactory. Value for the items of work thus withdrawn shall notbepayablebytheOwner.TheContractorshallnotclaimanycompensationonthisaccount.

- 3.25.1 The period of Contract may be extended with mutual consent if the delay is beyond thecontrolofContractoratthediscretionoftheEngineer-in-charge.
- 3.25.2 IncaseOwnerdesirestoextendtheperiodofanyOperation/MaintenanceContractbyanadditio nal duration of 2/3 months, the Contractor has to accept the proposal of Owner atoriginal rate and terms & conditions.

# 3.26 MATERIALSHANDLING:

ContractorshalldrawallthematerialsfromWarehousebeingdulyauthorizedbyEngineer-in-charge. Requisite loading, transportation & unloading of all such materials shall be theresponsibility of Contractor. Only in case of heavy materials, Owner shall provide means ofloading/unloadingatthecosttobespecifiedintheSpecialConditionsofContract.

**EndofSection-III** 

#### **SECTION-IV**

## 4.0 GENERALOBLIGATIONS/GENERALCONDITIONS:

## 4.1 INTERPRETATIONOF CONTRACT DOCUMENTS:

- 4.1.1 CompletedocumentsformingtheContractaretobetakenasmutuallyexplanatory. Shouldthere be any discrepancy, inconsistency, error or omission in the Contract or any of them, thematter may be referred to the Engineer-in-charge who shall give his decisions and issueinstructions to the Contractor directing in what manner the work is to be carried out. Thedecision of the Engineer-in-charge shall be final and conclusive and the Contractor shall carryoutworkinaccordancewiththisdecision.
- 4.1.2 Bothdetailsofdrawings&specificationsconstituteintegralpartofthescopeofwork.
- 4.1.3 Notwithstanding any of the items of works mentioned in Technical Specification / Scope ofwork,theContractorhastodoallsuchworksnecessaryforcompletionoftheworktomeetthee ndobjectivewithdueregardtosoundengineeringpracticeasdirectedbyEngineer-in-charge.

## **4.2** SpecialConditionsofContract:

- 4.2.1 Special conditions of Contract shall be read in conjunction with the General Conditions of Contract, Specifications of work, drawing and other documents for ming part of this Contract wherever the contexts or equires.
- 4.2.2 Notwithstandingthesub-divisionsofthedocumentsintotheseparatesectionsandvolumeseach part shall be deemed to be supplementary & complementary to every other part andshallbereadwiththeContractAgreementsofarasitmaybepracticable.AlldocumentsofCont ract&Tenderhavenexuswitheachother.
- 4.3 If there are conflicting provisions made in any one of the documents forming part of the Contract, the Owner shall be the deciding authority with regard to the correctness of the document.
- 4.4 Any error or omission in any part of Contract documents shall not vitiate the Contract orrelease the Contractor from execution of the whole or any part of the works comprisedtherein according to drawings & specification or from any of his obligations under the Contract.
- 4.5 Thematerials, design and work manships hall satisfy the relevant Bureau of Indian Standard, the jobspecifications contained herein and codes referred to. Where the jobspecifications stipulate the erequirement in addition to those contained in the standard codes and specification, the sead ditional requirements shall also be satisfied.

# 4.6 BIDDERTOOBTAINHISOWN INFORMATIONONSITECONDITION&CONDITIONOFWORK:

4.6.1 TheBiddershallbedeemedtohaveexaminedthetenderdocuments,tohaveobtainedhisown information in all matters, whatsoever that might influence carrying out the works at thescheduledratesandsatisfiedhimselftothesufficiencyofhisTender.Heisdeemedtoknowthe scope, nature as to what works he has to complete in accordance with the Contractdocument whatever be the defect, omission or errors that may be found in the ContractDocument. The Contractor shall be deemed to have visited site and surrounding areas, tohave satisfied himself to the nature of all existing structures, and also as to the nature andthe conditions of available facilities like railways, roadways, bridges, culverts, means oftransportandcommunicationsbyland, waterorair

and possible interruptions thereto the

accesstoandfromsiteandtohavemadeenquiries, examined&satisfiedhimselfofthesitefor obtaining sand, stones, bricks and other materials, the sites for disposal of surplus, materials, the available accommodation like depots, buildings as may be necessary forexecuting and completing the work to have made local, independent enquiries as to the sub-soil, water, landvariations thereof, storms, prevailing winds and climatic conditions and allot her similar matters affecting the works. He is deemed to have acquainted himself with his liability for payment of Government taxes, custom duties and other charges. He is deemed to have acquainted himself with the local labour attitude, work culture, customs & systems etc.

- 4.6.2 Any neglect or failure on the part of the Bidder in obtaining necessary and reliable informationor issues stated at 4.6.1 or any other matters affecting the Contract shall not relieve him fromany risks or liabilities or the entire responsibility for completion of the works at the scheduledratesandtimeinstrictaccordancewiththeContractdocuments.
- 4.6.3 Any change in technological requirement shall be binding on the Contractor and no extraclaimonthisaccountshallbeentertained.
- 4.6.4 No verbal agreement or inference from conversation with any officer or employee of theOwner either before, during or after execution of the Contract agreement shall in any wayaffectormodifythetermsorobligationshereincontained.

#### 4.7 MUTUALLIABILITIESAMONGCONTRACTS:

The Contractor who are executing more than one Contract under OPGC, any penalty orrecoveries of one Contract shall be made from other Contract & viceversa.

#### 4.8 CONTRACTREVIEW MEETING:

Engineer-in-charge shall arrange Contract Review Meeting in regular intervals in case theperformance subject to any difficulty and take decision in connexion with amendment oftime, quantity, priceetc.

## 4.9 **SECURITY DEPOSIT:**

- 4.9.1 Asumof10%oftheacceptedvalueoftheTenderoractualvalueoftheworktobeexecutedwhichev er is higher for Contracts not exceeding Rs.1 crore, 7.5% for the value of Contractsabove Rs.1 crore up to Rs.5 crore and 5% for the value of Contracts over Rs.5 crore shall haveto be deposited by the Contractor as security deposit with the Owner & retained by the Owneruntiltheexpiryofdefectliabilityperiod.
- 4.9.2 This may be deposited initially at 2.0% of the value of the Contract (referred as initial securitydeposit) within 10 days of receipt by him of LOI and the balance will be recovered ininstallmentsthroughthededuction@10%ofthegrossvalueoftheeachrunningbillfortheContr act up to Rs.1 crore, 7.5% for Contract between Rs.1 crore to Rs.5 crore and 5% forContract over Rs.5 crore, till total security deposit is collected. No further deduction from thebillswillbemadeonthisaccountsubjecttoclause.4.9.7hereafter.
- 4.9.3 AlternativelytheContractormayathisoptionhavetodepositthefullamountasmentionedin clause 4.9.2 above towards security within 10 days of issue of LOI. This amount will have tobesuitablyenhancedtothetuneofcorresponding
- 4.9.4 ContractorshallfurnishtheinitialortotalsecurityamountbyDemandDraftinthemannerspecifie dinClause-1.13uptoContractvalueofRs.25.00laconly.BeyondContractvalueofRs.25.00lacthe initialortotalsecuritydepositshallbeacceptedinformofBankGuaranteein the prescribed format from any nationalized or scheduled bank. InallthecasesiftotalsecurityisnotdepositedeitherinformofDemandDraftorBank Guaranteethesecurityasmentioned in Clause 4.9.2 shall be recovered from the running bill of

- 4.9.5 The earnest money deposited with the Tender shall be adjusted towards initial securitydepositattheoptionoftheBidder.
- 4.9.6 If the Contractor/subcontractor or their employees damage, break, deface or destroy theproperty belonging to the Owner or others during the execution of the Contract, the sameshall be made good by the Contractor at his own expense and in default thereof the Engineer-in-charge may cause the same to be made good by other agencies and recover expenses fromtheContractorforwhichthecertificateoftheEngineer-in-chargeshallbefinal.
- 4.9.7 All compensation or other sums of money payable by the Contractor to the Owner orrecoveries to be made under terms of this Contract may be deducted from their securitydeposit or from any sums which may be due or may become due to the Contractor by
  - theOwneronanyaccountwhatsoever.Intheeventofhissecuritybeingreducedbyreasonsofany such deduction or sale, the Contractor shall within ten days thereafter make good by bankdrafts,anysumorsumswhichmayhavefallenshortofSecuritydepositamountoranypartth ereof. No interest shall be payable by the Owner for sum deposited/retained as securitydeposit.
- 4.9.8 The security deposit will be refunded after the expiry of the period of defect liability asstipulated in the Contract and on submission of final certificate.

## 4.9.9 The variation in security deposit:

Any agency stands L1 in any Bid while they are executing any other Contract with Owner, these curity deposit of such L1 Contracts hall be enhanced to 20%. After successful completion of 1<sup>st</sup> mile stone / initial three months as the case may be, 10% of the security may be refunded to the Contractor.

# **4.10** FORFEITUREOFSECURITYDEPOSIT:

WheneveranyclaimagainsttheContractorforthepaymentofasumofmoneyarisesoutofor under the Contract, the Owner shall be entitled to recover such sum by appropriating inpart or whole the security deposit of the Contractor and to sell any Government securitydepositoftheContractorformingwholeorpartofsuchsecuritydeposit.Intheeventofth esecurity being insufficient or if no security has been taken from the Contractor, then thebalance or the total sum recoverable as the case may be, shall be deducted from any sumthen due or which at any time thereafter may become due to the Contractor under particularContract or any other contract with Owner. The Contractor shall pay to the Owner on demandany balance remaining due. In case any dues can not be recovered out of Contract(s), theamountmayberecoveredasdebtliability.

In the event of any breach by the Contractor or any loss or damage caused to the OwnerwhichintheopinionoftheOwnerhasarisen,thedecisionoftheEngineer-in-chargeshallbe finalandbindingontheContractororintheeventoftheterminationoftheContractforanysuch breach, the security deposit is liable to be forfeited. The decision of forfeiture by theOwnershallbefinalandbindingontheContractor.

#### 4.11 AMENDMENTOFQUANTITY, VALUE & PERIODOFCOMPLETION:

In case of lump sum Contract, no deviation shall be allowed. But in case of lump sum ContractbasedonBillofQuantitiesanditemrateContractifanydeviationinquantityoromissiono fitems are discovered in course of performance of Contract, the cumulative effect of whichvaries the Contract sum up to 5%, the error shall be rectified/amended and the

value sovarying shall be added with or deducted from the Contract sum @ original contract cost asthe case may be. Deviation shall be allowed subject to recommendation of Technical

Servicesdepartment, if the varying value shall exceed 5% of Contract value only. In case of annual maintenance Contraction respect of mechanical maintenance, electrical maintenance, plant cleaning or any other operational activities time extension for completion of any item does not arise. But the period of service may be extended beyond Contract period at the discretion of management if situations ode mands. In addition to this, the Engineer-in-chargerese rves the power-

- a) to make alteration in, omission from, additions to or substitutions for the originalspecifications, drawings, designs and instructions that may appear to him to benecessaryoradvisableduringtheprogressofthework;
- b) to omit a part of the works in case of non-availability of a portion of the site or for anyother reasons. The Contractor shall be bound to carry out the work in accordance with any instructions given by the Engineer-in-charge to the extent the omission

doesnotchangethevalueofContractbymorethan10%.Consequentalterations,omissio ns, addition or substitution shall form part of the Contract as if originallyprovided therein and the Contractor may be directed to do in the manner abovespecified as part of the works. The Contractor shall carry out the work on the sameconditions in all respect including rate on which he agreed to do the main work. But ifsuch alteration, omission, addition or substitution radically change the original natureof the Contract shall be ordered by the Engineer-in-charge as a deviation and in theevent of deviation being ordered which in the opinion of Contractor changes theoriginalnatureoftheContract,freshrateshallbeworkedoutbyEngineer-in-chargewithmutualconsent.

Rateforsuchadditional, alteredorsubstituted workshall bedetermined by the Engineer-in-charge as follows:-

- i) If the rate for additional, altered or substituted items of work is specified in theschedule of quantities / price schedule, the Contractor shall carry out theadditional, altered or substituted items at the same rate. In case of compositeTenders where two or more schedules of quantities may form part of theContract, the applicable rate shall be taken from the schedule of quantity ofthat particular part in which the deviation is involved, failing that at the
  - lowest applicable rate for the same item of work in the other schedules of quantities.
- ii) If the rate for altered, additional or substituted item of work is not specified inthe schedule of quantities / price schedule, the rate for that item shall bederivedfromtherateforthenearestsimilaritemspecifiedtherein.Incaseofco mposite Tenders where two or more schedules of quantities form part ofthe Contract, the rate shall be derived from the nearest similar item in thescheduleofquantitiesoftheparticularpartofworksinwhichthedeviationisin volved failing that from the lowest of the nearest similar item in otherscheduleofquantities.
- iii) If the rate of any additional, altered or substituted item of work cannot Page **47** of **201**

bedetermined in the manner specified in sub-para (i) & (ii) above, then such itemof work shall be carried out at the rate entered in the Schedule of Ratesmentioned in schedule A plus/minus the percentage by which the tenderedamountoftheworksactuallyawardedishigherorlowerthantheestima tedamountofworksactuallyawarded.

iv) If the rate for any altered, additional or substituted item of work cannot bedeterminedinthemannerspecifiedinsubparas(i)to(iii)ofClause4.11,dueto non-availability of rate in Schedule A, then the rate for such item of workshall be determined by the Engineer-in-charge on the basis of the purchasepriceassupportedbythevouchersplusmutuallyagreedlabourrate.Inc asetheEngineer-in-chargeconsidersthepurchasepriceunreasonable,theprice shall be determined on the basis of market rate(s) prevailing during thefortnightfollowingthedateoforder.

#### 4.12 SUSPENSIONOFWORKS:

The Contractor shall, on receipt of the order in writing of the Engineer-in-charge, suspend theprogressoftheworksoranypartthereofforsuchtimeandinsuchmanner,astheEngineer-in-chargemayconsidernecessaryforanyofthefollowingreasons:

- i) OnaccountofanydefaultonpartoftheContractor;or
- ii) ForproperexecutionoftheworksorpartthereofforreasonsotherthanthedefaultoftheC ontractor;

InanyoftheabovecasestheContractorshallproperlyprotectandsecuretheworksto the extent necessary and carry out the instructions given on that behalf by theEngineer-in-chargeduringsuchsuspensionperiod.

## 4.12.1 compensation:

Compensationforsuspensionofworkunder(ii)ofClause4.12shallbedealtwithonrequestof Contractor by the Contract Review Meeting depending on the period of suspension &conditionofsuspensionetc.

# 4.12.2 Timeextensionforsuspensionofwork:

Time extension for suspension of work under Clause 4.12 (ii) shall be dealt in accordance withClauseNo.4.13

## 4.13 TIMEEXTENSIONFORDELAYINCOMPLETIONOFWORK:

The time allowed for execution of total works as specified in the Schedule-"A" with due regardof achieving the corresponding milestone mutually agreed upon or the extended time

inaccordancewith theseconditions shall be the essence of the Contract. The execution of the works shall commence from the  $15^{\rm th}$  day after the date on which the Owner issues written or derstocommence the work.

AssoonaspossibleaftertheContractisfinalizedtheEngineer-in-chargeandtheContractorshall agree upon a Time and Progress Chart/PERT chart / L2 network before agreement issigned. The chart shall be prepared in direct relation to the time stated in the Contractdocuments for completion of items of the works. It shall indicate & forecast the dates ofcommencement and completion of various sections of the work corresponding to variousmilestones.

The target date of achieving various milestones and activities between two consecutivemilestonesshallbeagreeduponmutuallyandreviewedinregularintervalsbyEngine er-in-charge. During review, the date of achievement of milestone may be adjusted if required butnot the date of completion of work as per schedule. However, no time extension shall

be permitted be you dthetime of completion as per Contract.

# 4.13.1Timeextensiononaccountofquantityamendment/deviation:

If the work is delayed due to increase in scope / quantity the time for completion of mile stoneof the total works shall, in the event of any deviation/amendment resulting in additional quantity over the Contract quantity being ordered, be extended as under.

- a) intheproportionwhichtheadditionalcostofthealtered,additional,substitutedworksbe arstotheoriginalContractsum,plus
- b) 25%ofthetimecalculatedin(a)aboveorsuchfurtheradditionaltimeasmaybeconsidere dreasonablebytheEngineer-in-charge.

Alternatively, variation in completion time of milestone may be worked out mutually in Contract Review Meeting depending on the prevailing conditions and need of the hour.

# 4.13.2TimeextensionforsuspensionofworkwithoutfaultofContractor:

In case of suspension of work for no fault of Contractor time extensions hall be allowed to the Contractor as deemed proper by Contract Review Meeting on request of the Contractor.

## 4.13.3TimeExtensionfordelayonaccountof:-

- a) forcemajeure;
- b) abnormallybadweather,or
- c) delayonthepartofotherContractorsengagedbyOwnerinexecutingworknotformingpa rtofthisContractbuthavingbearingonthisContract;
- d) non-availabilityofstorestobeprovidedbytheOwnerundertheContract;
- e) anyotherrelatedcausebeyondthecontrolofContractor-

-provided the Contractorshall immediately given otice thereof inwriting to the Engineer-in-charge but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-charge to proceed with the works. The case may be examined in the Contract Review Meeting and decision the reon shall be final.

- 4.13.4 RequestforextensionoftimeshallbemadebytheContractorinwritingwithin24hoursofthe happening of the event causing delay for consideration of Owner. The Contractor mayalsoindicatetheperiodofextensiondesiredwithsupportingreasons.
- 4.13.5 In any such case the authority mentioned in Schedule-A may give a fair and reasonable extension of time for completion of the work on the recommendation of Contract

Review Meeting. Such extensions hall be communicated to the Contractor by the Engineer-in-charge in writing, within 15 days of the date of receipt of such request by the Engineer-in-charge.

# 4.14 MATERIALS:

- a) The Contractor shall at his own expenses provide all materials required for the works otherthanthose, which are to be supplied by the Owner.
  - i. All materials to be provided by the Contractor shall be in conformity with thespecifications laid down in the Contract and the Contractor shall if required by theEngineer-in-charge, furnish proof to the satisfaction of the Engineer-in-charge to thateffect.
  - ii. IfrequiredtheContractorshallathisownexpenseandbefore15daysofuseofthematerial submit to the Engineer-in-charge the samples of materials proposed to beused in the works. The Engineer-in-charge shall within seven days of receipt of samplesor within such further period as he may require and intimate to the Contractor

 $inwriting, whether \, samples are approved \,\, by \,\, himornot. If samples are not approved,$ 

- the Contractors hall for thwith submit fresh samples to the Engineer-in-charge for his approval complying with the specifications laid down in the Contract.
- iii. The Engineer-in-charge shall have full powers for removal of any or all of the materialsbrought to site by the Contractor which are not in accordance with the Contractspecificationsordonotconformincharacterorqualityofsamplesapprovedbyhi m.In case of default on the part of the Contractor in removing rejected materials, the Engineer-in-charge shall be at liberty to have them removed by other means. The Engineer-in-charge shall have full powers to procure other proper materials to be substituted for rejected materials and in the event of the Contractor's refusal tocomply, hemay cause the same to be supplied by other means. All costs, which may be incurred for such removal and/or substitution, shall be borne by the Contractor.
- iv)The Contractor shall indemnify the Owner, its representatives or employees of theOwneragainstanyaction,claimorproceedingrelatingtoinfringementoruseofanypa tentordesignoranyallegedpatentordesignrightsandshallpayanyroyaltiesorother charges which may be payable in respect of any article or materials or part the reofin cluded in the scope of Contractor. In the event of any claim being made or active the contractor of thion being brought against the Owner, its representatives or employees of the Owner in respect of any such matters as a foresaid, the Contractor shall immediately be a such as a foresaid of the Contractor of thnotified thereof, provided that such indemnity is not applicable when  $such infringement has taken place in complying with the specific directions is sued by the {\tt O}$ wner;buttheContractorshallpayanyroyaltiesorotherchargespayableinrespectof any such use, the amount so paid being reimbursed to the Contractor only if theuse was theresult of any drawings and/or specifications Contractagreementissigned.

Further, if any such action is instituted by any agency after closure of Contractor any struct ure or utility is eroded or damaged within 2 to 3 years of performance on account of related work of the Contractor, the Contractor shall be liable for such cost and expenses for which Contractor shall provide corporate warranty for further 2 years beyond defect liability period.

- v. Subject as hereinafter provided in Condition 7.1 all charges on account of octroi, entrytax,salestax,royaltyandotherdutiesonmaterialsobtainedfortheworksfromanys ource(excludingmaterialssuppliedbytheOwner)shallbebornebytheContractor.
- vi. The Engineer-in-charge shall be entitled to have tests carried out as specified in theContract for any materials supplied by the Contactor other than those for which, asstated above, satisfactory proof has already been furnished, at the cost of theContractor and the Contractor shall provide at his expense all facilities which theEngineer-in-charge may require for the purpose. If no tests are specified in theContract, and such tests are required by the Engineer-in-charge, the Contractor shall provide all facilities required for the purpose and the charges for these tests shall be borne by the Contractor only if the tests disclose that the said materials are not in accordance with the provision of the Contract. The cost of materials consumed in tests hall be borne by the Contractor in all cases except when other wise provided.
- vii. InadditiontheContractorshallperform/submitathisowncostsuchtests/samplesformi ngoutofthesamematerials&insameprocess,suchasconcretecube,weldedtest piece etc. as may be required by the Engineer-in-charge made out of the materialsissued by the Owner or Contractor, except for the costs of materials used in suchtests/samples.
- b) MaterialtobeprovidedbytheOwner:

Material stobe provided by the Owner are shown in Schedule' B'which also stipulates place of issue and rate (s) to be charged, free issue, allowable % of loss in respect thereof.

- i. IfafterissueofLOItheContractordesirestheOwnertoprovideanyothermaterials,suchm aterialsmaybeprovidedbytheOwner,ifavailable,atratestobefixedbytheEngineer-in-ch arge. The Owner reserves the right not to issue any such materials. Thenon-issue of such materials will not entitle the Contractor for any compensationwhatsoevereitherintimeorincost.
- ii. (1)
  TheOwnermayissuealIthematerialsasperContracttotheContractoratitswarehouse, site stores, or nearest railhead. In case the materials are issued at thenearestrailheadthecostoftransportationonlyfromsuchrailheadtothesitewillbebo rnebytheOwnersubjecttothereasonablenessofsuchtransportationcostbeingcertified bytheEngineer-in-charge.Allothercostssuchasloading,unloading,transportation to Contractor's go-down, storage etc till the materials are utilized inthe works and return of surplus & scrap, if any to the Owner shall be to the account oftheContractor.
  - (2) For the materials listed in Schedule B, which the Owner has agreed to supplyto the Contractor, he shall give a reasonable notice in writinghis requirements to the Engineer-in-charge in accordance with the agreed phased programme. Such materials shall be supplied for the purposes of the Contract only and the value of materials so supplied at the rates specified in the aforesaid schedule shall be set of for deducted, as and when materials are consumed in items of work for which payment is being made to the Contractor from any sums there or which may thereafter become due

totheContractorundertheContract.AtthetimeofsubmissionofbillstheContractorshall properly account for the materials issued to him to the satisfaction of theEngineer-in-charge,certifythatbalanceofmaterialssuppliedisavailableatsite.Thev alueofthestores/materialsasmaybesuppliedbytotheContractorbytheOwnershallbed ebitedtotheContractor'saccountattheratesasshowninSchedule-Bandiftheyarenoten teredintheSchedule,theyshallbedebitedatcostpricewhichforthepurposeoftheContractshallincludecostoftransportation&allotherexpenseswhatsoever such as normal storage, supervision charges which shall have beenincurredinobtainingthesameattheOwner'sstores.

- iii. The Contractors hall be arthecost of loading and transportation to site, unloading, storing under coveras required, as sembling and joining these veral parts to gether as nece sary and in corporating or fixing materials in the works including all preparatory work of what ever description as may be required.
- iv. Surplus of all materials issued to the Contractor by the Owner for use, inclusion orfixingintheworks(includingpreparatorywork)shall,oncompletionoronforeclosures oftheworks, bereturned by the Contractorathis expense, at the place of after allowance for actual consumption, reasonable andtearand/orwaste.Thereasonablewastagepercentageshallhoweverbementionedi n Schedule-B against each items. If the Contractor is required to deliver such material sata place other than the place of issue, he shall do so and the transportation charged a constant of the place of the placeesfrom the site to such place, less the transportation charges which would have beenincurred by the Contractor had such materials been delivered at the place of issue, shall be borne by the Owner.
- ReturnofsurplusMaterials/scraps:
   Percentage of wastage acceptable to the Owner in respect of cement, structural
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steel, reinforcement steel and other such materials is furnished in Schedule-B.

Cutpiecesofreinforcementrodsoflength3.0 meters and above shall be accepted by the Owner and credited at the issuerates. Other pieces below 3 mtrlengths hall be returnable east crapto Owner if issued.

- vi. Surplus materials returned by the Contractor shall be credited to him by the Engineer-in-charge at rates not exceeding those at which these were originally issued to himafter taking into consideration any deterioration or damage which may have been caused to the said materials whilst in the custody of the Contractor.
- vii. If on completion of works the Contractor fails to return surplus materials out of thoseprovided by the Owner, then in addition to any other liability which the Contractorwould incur, the Engineer-in-charge may, by a written notice to the Contractor, require him to pay within a fortnight of receipt of the notice, for such unreturned surplus materials at the rates specified in Special Conditions of Contract.
- viii. Emptycementbags: Therateofcementisinclusiveofcostofbag.

#### c) General:

Materials required for the works, whether brought by the Contractor or provided by theOwner,shallbestoredbytheContractoronlyatplacesapprovedbytheEngineer-in-charge.St orageandsafecustodyofmaterialsshallbetheresponsibilityoftheContractor.

- i. Owner'sofficialsconcernedwiththeContractshallbeentitledatanytimetoinspectand examine any materials intended to be used in works either on the site or at factoryor workshop or other place(s) where such materials are assembled, fabricated,manufacturedoratanyplace(s)wherethesearelyingorfromwhichtheseare beingobtained and the Contractor shall give such facilities as may be required for suchinspectionandexamination.
- ii) All materials brought to the site shall become and remain the absolute property of theOwner and shall not be removed from the site/shifted to any place inside the plantwithout the prior written permission of the Engineer-in-charge. But whenever theworksarefinallycompletedorterminatedandadvanceifanyinrespectofanysuchmat erialisfullyrecovered,theContractorshallathisownexpenseforthwithremovefrom the site all surplus material originally brought by him and upon such removal,thesameshallrevestinandbecomethepropertyoftheContractor.
- iii) All plant, tools & other materials brought by the Contractor to the site must be declared at the time of bringing the same to the site & security gate pass obtained before entering the plant as records and reference.
- iv) It shall be the duty of the Contractor to inspect the materials issued to him at the timeoftakingdelivery&satisfyhimselfthattheyareingoodconditionafterthematerialsh avebeendeliveredbytheOwner,itshallbetheresponsibilityoftheContractortokeep them in good condition and if the materials are damaged or lost, at any time,they shall be repaired and/or replaced by him at his own cost according to thedirectionoftheEngineer-in-charge.
- v) AccountofthematerialsissuedbytheOwnershallbemaintainedbytheContractorindicat ing the daily receipt, consumption and balance in hand in a manner prescribedby the Engineer-in-charge. All connected papers, requisitions, issues, returns etc. shallbealwaysavailableforinspectionintheContractor'sofficeatsite.
- vi) Materials & equipments supplied by the Owner shall not be utilized for any other purpose(s) then is sued for.

#### 4.15 LABOUR:

- 4.15.1 The Contractor shall employ labour in sufficient numbers to maintain the required rate ofprogress / attend the repair-maintenance on it's occurrence and of quality to ensureworkmanshipofthedegreespecifiedintheContractandtothesatisfactionoftheEngineer -in-charge. The Contractor shall not employ in connection with the works any person who hasnotcompletedhis/hereighteenyearsofage.
- 4.15.2 The Contractors hall in respect of labour employed by him or his subcontractors comply with or causet obecomplied with the Contractors Labour Regulations as perclause 8.5 in regard to all matters provided therein.
- 4.15.3 Employees State Insurance (ESI) Act is applicable to all locations of OPGC. The Contractor shallbe liable to pay his contribution and the employees contribution to the State InsuranceScheme in respect of all labour employed by him for the execution of the Contract, inaccordance with the provision of "The Employees State Insurance Act, 1948" as
  - amendedfromtimetotime.Incase,theContractorfailstosubmitfulldetailsofhisaccountoflabo uremployed and the contribution payable, the Engineer-in-charge shall recover from therunning bills of Contractor an amount of contribution as assessed by him. The amount sorecovered shall be adjusted against the actual contribution payable for Employees StateInsurance.
- 4.15.4 The Engineer-in-charge shall on a report having been made by an Inspecting Officer as defined in the Contractor Labour Regulations have been the power to deduct from the money due to the Contractor any sum required or estimated to be required for making good the loss suffered by a worker or worker by reason of non-fulfillment of the Conditions of the Contractfor the benefit of workers, non-payment of wages or of deductions made from his or their wages which are not justified by the terms of the Contract or non-observance of the said Contractors Labour Regulations.
- 4.15.5 In the event of the Contractor committing a default or breach any of the provisions of theaforesaid Contractors Labour Regulations as amended from time to time or furnishing anyinformation or submitting or filling any Form/Register/Slip under the provisions of theseRegulations which is materially incorrect, then on the report of the Inspecting Officers
  - asdefinedintheContractorsLabourRegulationstheContractorshallwithoutprejudicetoanyoth er liability pay to the Owner a sum not exceeding Rs.500.00 as liquidated damages foreverydefault,breachorfurnishing,making,submitting,fillingmateriallyincorrectstatementas may be fixed by the Engineer-in-charge and in the event of the Contractor's defaultcontinuinginthisrespecttheliquidateddamagesmaybeenhancedtoRs.500.00perdayfo reach day of default subject to a maximum of ten percent of the contract value. The Engineer-in-charge shall deduct such amount from bills or security deposit of the Contractor and creditthe same to the Welfare Fund constituted under Contract Labour (R&A) Act 1970. ThedecisionoftheEngineer-in-chargeinthisrespectshallbefinalandbinding.
- 4.15.6 **Model Rules for Labour Welfare**: The Contractor shall at his own expense comply with orcausetobecompliedwithModelRulesforLabourWelfareasmentionedat(Cl.8.4)orrulesfram ed by Government from time to time for the protection of health and for making sanitaryarrangements for workers employed directly or indirectly on the works. In case the Contractorfails to make arrangements as aforesaid, the Engineer-in-charge shall be entitled to do so andrecoverthecostthereoffromtheContractor.
- 4.15.7 **Safety code:** The Contractor shall at his own expense arrange for the safety provisions as perSec-IXorasrequiredbytheEngineer-in-charge,inrespectofalllabourdirectlyorindirectlyem

ployed for performance of the works and shall provide all facilities in connection the rewith. In case the Contractor fails to make arrangements and provide necessary facilities

as a foresaid, the Engineer-in-charge shall be entitled to do so and recover 150% of the cost of materials from the Contractor.

- (i)Failure to comply with Model Rules for labour welfare, Safety Code or the provisions relating to report on accidents and to grant of maternity benefits to female workers shall make the Contractor liable to pay to the Owner as liquidated damages an amount not exceeding Rs.500.00 for each default or materially incorrect statement. The decision of the Engineer-in-charge in such matters based on report from the Inspecting Officer as defined in the Contractors Labour Regulations at Clause 8.5 shall be final and binding and deductions for recovery of such liquidated damages may be made from any amount payable to the Contractor.
- 4.16 TheContractorshallnotbepermittedtoenterin(otherthanforinspectionpurpose)ortakeposses sion of the site until instructed to do so by the Engineer-in-charge in writing. TheportionofthesitetobeoccupiedbytheContractorshallbedefinedand/ormarkedonthesite plan, failing which these shall be indicated by the Engineer-in-charge at site and theContractor shall on no account be allowed to extend his operations beyond these areas. Inrespect of any land allotted to the Contractor for purposes of or in connection with theContract, the Contractor shall be a licensee subject to the following and such other terms and conditions as may be imposed by licenser:-
  - (i) that he shall pay a nominal license fee of Rs.1 per year or part of a year for use andoccupation, in respecto feach and every separate are a sofland all otted to him.
  - (ii) that such use or occupation shall not confer any right of tenancy of the land to the Contractor,
  - (iii) thattheContractorshallbeliabletovacatethelandondemandbytheEngineer-in-charge,
  - (iv) thattheContractorshallhavenorighttoanyconstructionoverthislandwithoutthewritte npermissionoftheEngineer-in-charge.Incaseheisallowedtoconstructanystructure he shall have to demolish and clear the same before handing over thecompletedworkunlessagreedtothecontrary.
- 4.16.1 The Contractor shall provide, if required on the site, all temporary access thereto and shallalter, adapt and maintain the same as required from time to time and shall take up and clearthem away as and when no longer required and as and when ordered by the Engineer-in-chargeandmakegoodalldamagesdonetothesite.

#### 4.17 SETTINGOUTTHEWORKS:

The Engineer-in-charge in case of construction work shall supply dimensioned drawings, levelsand other information necessary to enable the Contractor to set out the works and the Contractorshall set out the works and beresponsible for the accuracy of the same. He shall rectify at his own cost and to the satisfaction of the Engineer-in-charge any error found at any stage, which may arise through inaccurate setting out unless such error is based on incorrect data furnished in writing by the Engineer-in-charge. The Contractor shall protect and preserve all benchmarks used in setting out the works till end of the Defects Liability Period unless

the Engineer-in-charge direct their earlier removal. But in case of maintenance, the Engineer-in-charges hall direct the Contractor to attend certain job provided that all spares & consumables with in the scope of Owner are available to the Contractor.

## 4.18 SITEDRAINAGE:

Allwater, which may accumulate on the site during the progress of the works or intrenches and excavations, from other than the Excepted Risks, shall be removed from the site to the satisfaction of the Engineer-in-charge and at the Contractor's expense.

## 4.19 NUISANCE:

The Contractors hall notation yit imedo, cause or permitany nuisance on site or do anything which shall cause unnecessary disturbance or inconvenience to Owners, tenants or occupiers of other properties near the site and to the public in general.

# 4.20 MATERIALSOBTAINEDFROMEXCAVATION/SCRAP/REJECTS:

Materials of any kind obtained from excavation on the sites hall remain the property of the Owner and shall be disposed of as the Engineer-in-charge may direct.

# **4.21** TREASURE,TROVE,FOSSILSetc:

All fossils, coins, articles of value or antiquity and structures and other things of geological orarchaeological interest discovered on the site shall be the absolute property of the Ownerand the Contractor shall take reasonable precautions to prevent his workmen or any otherperson from removing or damaging any such article or thing shall immediately upon discoverythereof and before removal acquaint the Engineer-in-charge with such discovery and

carry out the Engineer-in-charge's directions as to the disposal of the same at the expense of the Owner

#### **4.22** PROTECTIONOFTREES:

Trees designated by the Engineer-in-charge shall be protected from damage during the courseof the works and earth level within 1 meter of each such tree shall not be charged. Wherenecessarysuchtreesshallbeprotectedbyprovidingtemporaryfencing.

4.23 TheContractorshallprovideandmaintainathisownexpensealllights, guards, fencing and watch & ward as and when necessary or required by the Engineer-in-charge for the protection of the works or for the safety and convenience of those employed on the works or the public.

#### 4.24 CONTRACTOR'SSUPERVISION:

The Contractor shall either himself supervise the execution of the works or shall appoint acompetent person duly authorizing him to supervise the work on his behalf, if the Contractorhashimselfnotsufficientknowledgeandexperiencetobecapableorreceivinginstruc tionsorcannotgivehisfullattentiontotheworks. Suchemployeehaving power of attorneys hall be considered to have the same force as the Contractor himself. If the Contractor fails to appoint asuitable personacceptable to the Engineer-in-charge, the Engineer-in-charge shall have full powers to suspend the execution of the works until such date as a suitable person is appointed and the Contractor shall be held responsible for the delays occaused to the works.

## 4.25 INSPECTIONANDAPPROVAL:

All works embracing more than one process / stage shall be subject to examination and approval at each stage thereof and the Contractor shall give due notice to the Engineer-in-charge or his authorized representative when each stage is ready. In default of due notice the Engineer-in-charges hall be entitled to appraise the quality and extent thereof.

4.25.1 No work shall be covered up or put out of view without the approval of the Engineer-in-chargeorhisauthorizedrepresentativeandtheContractorshallaffordfullopportuni

ty for examination and measurement of anywork which is about to be covered upon put out of the context of the

view and for examination of foundations before permanent work is placed thereon. The Contractor shall give due notice to the Engineer-in-charge or his authorized representative whenever any such work is ready for examination and the Engineer-in-charge or his authorized representative shall without unreasonable delay, unless he considers it unnecessary and advises the Contractor accordingly, attend for the purpose of examination and measuring such work or of examining such foundations. In the event of the failure of the Contractor to give such notice he shall, if required by the Engineer-in-charge, uncover such work at the Contractor's expense.

4.25.2 The Engineer-in-charge or his representative shall have powers at any time to inspect and and any part of the works and the Contractor shall give such facilities as may be requiredforsuchinspectionand examination.

#### **4.26** DUTIES&POWERS OFENGR-IN-CHARGE'S REPRESENTATIVE:

- 4.26.1 The duties of the representative of the Engineer-in-charge are to watch and supervise theworks and to test and examine any materials to be used or workmanship employed inconnectionwiththeworks. Heshallhavenoauthority to order anywork involving any extrapay ment by the Owner or to make any variation in the works.
- 4.26.2 TheEngineer-in-chargemayfromtimetotimeinwritingdelegatetohisrepresentativeanyof the powers and authorities vested in the Engineer-in-charge and shall furnish to theContractor a copy of all such written delegation of powers and authorities. Any writteninstructionorwrittenapprovalgivenbytherepresentativeoftheEngineer-in-chargetot heContractor within the terms of such delegation shall bind the Contractor and the Owner asthoughithasbeengivenbytheEngineer-in-charge.
- 4.26.3 Any work or material approved by the representative of Engineer-in-charge shall not bedisapprovedbyEngineer-in-chargeandcannotorderthepullingdown,removalorbreakingup thereofatContractor'scost.
- 4.26.4 If the Contractor shall be dissatisfied with any decision of the representative of the Engineer-in-chargeheshallbeentitledtoreferthemattertotheEngineer-in-chargewhoshallthe reuponconfirm,reverseorvarysuchdecision.Noclaimoflossesallegedtohavebeencausedby any discrepancies out of instructions, doubts or misunderstanding shall in any event beadmissible.

# 4.26.5 OwnernotboundbypersonalconsentofanyofficerotherthanEngineer-in-charge.

The Contractor shall not be entitled to any increase on the scheduled rates or any other rightsorclaimswhatsoeverbyreasonofanyconsent, explanation, statementorallegedunderstanding, promise or guarantees given or to have been given to him by any person other than Engineer-in-charge in writing.

## 4.27 REMOVALOFWORKMEN:

The Contractor shall employ in and about the Execution of the works only such persons as areskilledandexperiencedintheirseveraltradesandtheEngineer-in-chargeshallbeatlibertytoo bjecttoandrequiretheContractortoremovefromtheworksanypersonemployedbytheContractorinorabouttheexecutionoftheworkswhointheopinionoftheEngineer-in-chargemisconduct shimselforisincompetentornegligentintheproperperformanceofhisduties and such person shall not be again employed in the work without permission of theEngineer-in-charge.

## 4.28 UNCOVERINGANDMAKINGGOOD:

The Contractor shall uncover any part of the works and/or make opening sin or through the same a sthe Engineer-in-charge may from time to time direct for his verification and shall a support of the contract of the contra

reinstateandmakegoodsuchparttothesatisfactionoftheEngineer-in-charge.Ifanysuchpartha sbeencovereduporputoutofviewafterbeingapprovedbytheEngineer-in-chargeand is subsequently found on uncovering to be executed in accordance with the Contract, theexpensesofuncoveringand/ormakingopeninginorthrough,reinstatingandmakinggoodth esameshallbebornebytheOwner.InanyothercaseallsuchexpensesshallbebornebytheContractor.

#### 4.29 WORKDURINGNIGHTSUNDAYSANDHOLIDAYS:

SubjecttoanyprovisionstothecontrarycontainedintheContract,noneofthepermanentworkse xceptemergencymaintenancework&operationshallbecarriedoutduringnightoronSundaysor onauthorizedholidayswithoutthepermissioninwritingoftheEngineer-in-charge. But in case of maintenance Contract, the Contractor shall be required to work anytimeanydayasrequiredbyEngineer-in-charge.

#### 4.30 TIMEOFPERFORMANCE:

The work covered by this Contracts hall be commenced on due date/within 15 days of issue of Letter of Intentas applicable. The Contract or should be a rinmind that time is the essence of the Contract of Letter of Intentas applicable. The Contract of th

#### 4.31 FORCEMAJEURE:

- 4.31.1 Anydelaysinorfailureofperformanceofeitherpartiestheretoshallnotconstitutedefaulthereun der or give rise to any claims for damages if any, to the extent such delays in or failureof performance caused by occurrences such as acts of God or the public enemy, expropriationorconfiscationoffacilitiesbyGovernmentAuthority,compliancewithanyorderor requestofanyGovernmentauthorities,actofwar,rebellion,civilcommotion,sabotage,fire,floo d,earthquake,explosion,implosion,riots,publicstrifeprovidedalwaysthatsuchoccurrencesres ultinimpossibilityofperformanceoftheContract.
- 4.31.2 Only events of force majeure, which impede the execution of the Contract at the time ofoccurrence, shall be taken into cognizance.

# **4.32** FAILUREOFCONTRACTORTOCOMPLYWITHTHEPROVISIONSOFTHECONTRACT:

- 4.32.1 If the Contractor refuses or fails to execute the work or any part thereof with suchdiligence or fails to perform any of his obligations under the Contract or in any mannercommits a breach of any of the provisions of the Contract it shall be open to the Owner atitsoptionbyserving7daysnoticetotheContractorto:
  - a) Determine the Contract: in which event the Contract shall stand terminated and shallceasetobeinforceandeffectonandfromthedateappointedbytheOwneronthatbe half,whereupontheContractorshallstopforthwithanyoftheContractworkthenin progress, except such work as the Owner may in writing require to be done tosafeguardanypropertyorwork,orinstallationfromdamagesandtheOwnerforitspart, may take over the work remaining unfinished by the Contractor and completethe same through fresh Contractor or by other means, at the risk and cost of theContractor, and any of his sureties if any, shall be liable for any excess cost at the ratesspecifiedinthescheduleofquantitiesandrates.
  - b) Without determining the Contract: to take over the work of the Contractor or any partthereofandcompletethesamethroughafreshContractororbyothermeansattheris k and cost of the Contractor. The Contractor and any of his sureties are liable forany excess cost over and above the cost at the rates specified in the schedule ofquantities/rates,incurredbysuchworkshaving beentaken overandcompleted by

- the Owner. Be sides the Contractor shall also be liable for any compensation accruing due to any loss in curred by the Owner.
- $\ \ \, \text{Inother cases, the decision of the Owner is binding on the Contractor.}$

## 4.32.2 Intheeventsofclause4.32.1(a)

- a) The whole or part of the security deposit furnished by the Contractor is liable to beforfeitedwithoutprejudicetotherightoftheOwnertorecoverfromtheContractorthe excesscostreferredtointhesub-clauseaforesaid,theOwnershallalsohavetheright of taking possession and utilizing in completing the works or any part thereof,such of materials, equipments and T&P available at work site belonging to theContractor as may be necessary and the Contractor shall not be entitled for anycompensationforuseordamagetosuchmaterials,equipments,tools&plants.
- b) The amount that may have become due to the Contractor on account of the workalready executed by him shall not be payable to him until after the expiry of six (6)calendar months reckoned from the date of termination of Contract or from takingover of the work or part thereof by the Owner as the case may be, during which periodtheresponsibilitiesforfaultymaterialsorworkmanshipinrespectofsuchworkshal lundertheContract,restexclusivelywiththeContractor.Thisamountshallbesubjecttodedu ctionofanyamountsduefromtheContractortotheOwnerunderthetermsoftheContract tauthorizedorrequiredtobereservedofretainedbytheOwner.
- 4.32.3 Before termination of the Contract as per clause 4.32.1(a)or(b) if in the judgment of theOwner,thedefaultordefaultscommittedbytheContractoris/arecurableandcanbecuredby theContractorifanopportunitygiventohim,thentheOwnermayissuenoticeinwritingcallingth eContractortocurethedefaultwithinsuchtimespecifiedinthenotice.
- 4.32.4 The Owner shall also have the right to proceed or take action as per 4.32.1(a) (b), in the eventthattheContractorbecomesbankrupt,insolvent,compoundswithhiscreditors,assignsth eContract in favour of his creditors or any other persons, or being a company or a corporationgoesintoliquidationprovidedthatinthesaideventsitshallnotbenecessaryfortheO wnertogiveanypriornoticetotheContractor.
- 4.32.5 Termination of the Contract as provided for in sub-clause 4.32.1(a)&(b) shall not prejudice oraffecttherightsoftheOwner,whichmayhaveaccrueduptothedateofsuchtermination.
- 4.33 CONTRACTORREMAINSLIABLETOPAYCOMPENSATIONIFACTIONNOTTAKENASPERCLAUSE4.32
- 4.33.1 a) Non-exercise of power conferred on the Owner by Clause 4.32 when due, shall not imply awaiver of any of the conditions and shall be exercisable in the event of any further case ofdefaultbythecontractorforwhichheisdeclaredliabletopaycompensation. The liability of Contractor for past & future compensation shall remain unaffected. The Owner may takepossession of all or any T&P, materials and stores at the work site belonging to Contractor onpayment at Contract rate/market rate as the case may be or rate worked out by Engineer-in-charge. Otherwise, Engineer-in-chargemayser venotice to remove such T&P, materials and stores from the site within a stipulated time. In the event the Contractor fails to comply, the Engineer-in-chargemay remove the matthecost & risk of the Contractor.

  b) Inother cases, the decision of the Owner is binding on the Contractor.
- 4.33.2 IntheeventofClause4.32,Clause4.33shallbeapplicablewithoutanyprejudice.Butincaseofsuchcan cellationtheOwnershallnotholdtheestateofthedeceasedContractorand/orthesurvivingpart nersoftheContractor'sfirmliableforanydamagesfornon-completionofContract.

#### 4.34 NOCOMPENSATIONFORALTERATIONINORRESTRICTIONOFWORK:

At any time from the commencement of the work if the Owner decides forwhatsoeverreason, not to carry out the whole work or part thereof as specified in the Tender, then Ownershall give notice in writing of the fact to the Contractor, who shall have no claim to anypayment or compensation on whatsoever account (profit or advantage which he might havederived by executing the work in full) neither shall have any claim for compensation by reasonof any alterations having been made from the original specification,

drawings,

designs and instructions which may involve any curtail ment of the work as originally contemplated.

## 4.35 CHANGEOFCONSTITUTION:

WhentheContractorisapartnershipfirmthepriorapprovalinwritingfromtheOwnershallbe obtained before any changes are made in the constitution of the firm. Where theContractor is an individual or a Hindu Undivided family business concern, such approval asaforesaid shall, likewise be obtained before such Contractor enters into any partnership

firm,wherethereconstitutedfirmwouldhavetherighttocarryouttheworkherebyundertakenb y the Contractor. In either case if prior approval is not obtained, the Contract shall bedeemed to have been allotted in contravention of clause 4.41 hereinafter and the action and consequences hallens ure as provided in that clause.

## **4.36** TERMINATIONOFCONTRACTFORDEATH:

If the Contractor is an individual or a proprietary concern and the individual or the proprietordies or if the Contractor is a partnership concern and one of the partners dies then, unless theOwner is satisfied that the legal representative of the individual or the proprietary concern orthe surviving partners of partnership firm are capable of carrying out and completingContract,theOwnerisentitledtocanceltheContractfortheincompletepartwithout beingin anyway liable for any compensation payment to the establishment of the deceasedContractor and/or to the surviving partners of the Contractors firm on account of thecancellation of Contract. The decision of the Owner in such assessment shall be final andbindingontheparties.IntheeventsofsatisfactionoftheEngineer-in-chargethatsubcontract or, if any shall provide competent and efficient supervision over the workentrustedtothem,mayallowthesurvivingpartnertocompletetheworkcontractedincaseo f partnership firm at the discretion of the Owner. In the event of such cancellation, theOwnershallnotholdtheestateofthedeceasedContractorand/orthesurvivingpartnersofth eContractor'sfirmliablefordamagefornotcompletingtheContract.

## 4.37 TERMINATIONOFCONTRACTFORCONTINUOUSUNSATISFACTORYPERFORMANCE:

The Contract may be terminated at any time by giving 15 days notice in case performance of the Contract may be terminated at any time by giving 15 days notice in case performance of the Contract may be terminated at any time by giving 15 days notice in case performance of the Contract may be terminated at any time by giving 15 days notice in case performance of the Contract may be th tractor is found to be continuously unsatisfactory. In case of termination of Contract either on expiration of the continuous of the contract of the contracryofContractperiodorduringtheperiodofContractduetocontinuouspoorperformance, labour unrest, indiscipline Owner shall have etc., no liability for providingemployment/compensationtothelaboursengagedbyContractorunderanycircumst ance.EMD/SecurityretainedfromtheContractorsofarandpayableifanyonanyotheraccountss hall be forfeited. Balance work shall be carried out at the cost & risk of the defaultingContractor.

## 4.38 MEMBERSOFTHEOWNERNOTINDIVIDUALLYLIABLE:

No official or employee of the Owner including Engineer-in-charge shall in any way

bepersonally bound or liable for the acts or obligations of the Owner under the Contract oranswerableforanydefaultoromissionintheobservanceorperformanceoftheacts,matterorthing swhicharehereincontained.

# 4.39 CONTRACTOR'SOFFICE/STORE/WORKSHOPATSITE:

The Contractor shall provide and maintain an office outside the plant gate for his Sitelncharge, staff and such office shall be opened at all reasonable hours to receive instructions, notices or other communications. The Contractor at all times hall maintain as it einstruction book and compliance of these shall be communicated to the Engineer-in-charge from time to time and the whole documents to be preserved and handed over after completion of works.

#### **4.40** CONTRACTOR'SSUBORDINATESTAFFANDTHEIRCONDUCT:

- 4.40.1 The Contractor on award of the work shall identify, authorize and depute a qualifiedemployeeoftheContratorhavingsufficientexperienceincarryingoutworkofsimilarnature to whom the equipments, materials if any shall be issued and instruction for works given. TheContractor shall also provide to the satisfaction of the Engineer-in-charge sufficient andqualified staff to supervise the execution of the work, competent site-in-charge, foremen andleading hands including those specially qualified by previous experience to supervise thetypesofworkscomprisedintheContractinsuchmanneraswillensurethebestqualityandexp editious working. At any time in the opinion of the Engineer-in-charge any additional,qualifiedexperiencedstaffforsupervisionisconsiderednecessary,theywillbeprovid edbytheContractorwithoutadditionalfinancialburdentoOwner.TheContractorshallensureto the satisfaction of the Engineer-in-charge competent and efficient supervision over the workentrusted to them including their Sub-Contactors if any (deployed with prior permission
  - of the Owner) and comply all statutory provisions of Contract Labour (R&A) Acts 1970.
- 4.40.2 IfanyoftheContractor'ssite-in-charge, assistants, foremenorany employee in the opinion of Engineer-in-charge be guilty of any misconduct or be incompetent or insufficiently qualified or negligent in the performance of their duties or that in the opinion of the Owner's Engineer-in-charge undesirable for administrative or any other ground, the continuance of such person(s) in Contractor establishment, then at the directions of Engineer-in-charge the Contractors hall at once remove such person(s) from the establishment of the Contractor at the eOwner's premises without any financial burdent o Owner.
- 4.40.3 The Contractor shall be responsible for the proper behavior of all the staff, foremen, workmenand others, shall exercise proper degree of control over them and in particular withoutprejudicetothesaidgeneralitytheContractorshallbeboundtoprohibit/preventanyoft heemployeesfromtrespassingoractinginanywaydetrimentalorprejudicialtotheinterestofthe communityorthepropertiesorOwner'slandorpropertiesintheneighborhood.Intheevent of such trespassing, the Contractor shall be responsible for all consequent claims oractions for damages or injury or any other grounds whatsoever. The decision of the Engineer-in-chargeuponanymatterarisingunderthisclauseshallbefinal.
- 4.40.4 AllContractorspersonnelenteringintotheOwnerspremisesshallbeproperlyidentifiedbybadg es of a type acceptable to the Owner which must be worn at all times on Ownerspremises.
- 4.40.5 Attention is drawn to the Contract Labour (R&A) Act 1970 whereby no master-servantrelationship is created between the Owner and the Contractor's labour and no claim foremployment / compensation of any such labour from the Owner shall be tenable orentertained.

## 4.41 SUBLETTINGOFWORK:

In normal cases, sub-contracting is not permitted. But however Engineer-in-charge maypermitthesameincaseheissatisfiedthatsubcontractingisrequired. No power of attorney holder other than are gular employee, partner or director of the firms hall be considered for Site In-charge of Contractor. No Contractor with the power of attorney of some other Contractor shall be entertained to execute anywork. The Contractor is advised not to enter into Contract before obtaining the consent of Engineer-in-charge to that effect.

4.41.1 No part of the Contract nor share or interest therein shall in any manner or degree betransferred, assigned or sublet by the Contractor directly or indirectly to any person, firm or corporation what so ever except as provided for in the succeeding sub-clauses without the prior consenting of the Owner.

## 4.41.2 Contractorsliabilitynotreducedbysubcontract:

NotwithstandinganysubcontractwithsuchapprovalasaforesaidandnotwithstandingthattheE ngineer-in-chargeshallhavereceivedcopiesofanysubcontracts,theContractorsshallbeandsha llremainsolelyresponsibleforthequalityandtimelyexecutionoftheworksandperformance of all the conditions of the Contract in all respects as if such subcontract orsublettinghadnottakenplace,andasifsuchworkhadbeendonedirectlybytheContractor.

## 4.41.3 Noremedyforactiontakenunderclause4.41:

For action taken by the Owner under the clause shall not relieve the Contractor of any of his liabilities under the Contractor giver is eto any right or compensation, extension of time or otherwise.

#### 4.42 **POWEROFINTERFERENCE:**

- 4.42.1 If the Contractor shall not commence the work in the manner described in the ContractdocumentsorifheatanytimeintheopinionoftheEngineer-in-charge
  - i) FailstocarryouttheworksinconformitywiththeContractdocumentsor
  - ii) FailstocarryouttheworksinaccordancewiththeContractschedule
  - iii) Substantiallysuspendworkortheworksforaperiodofsevendayswithoutapprovalofthe Engineer-in-charge,
  - iv) FailstocarryoutandexecutetheworkstothesatisfactionoftheEngineer-in-charge.
  - v) Fails to supply sufficient or suitable constructional plant, temporary works, labour,materialsorotherthingsorTools&Plants,minimuminfrastructurefacilities.
  - vi) Commit, suffer or permit any other breach of any of the provisions of the Contract onhis part to be performed or observed or persist in any of the above mentionedbreachesoftheContractforsevendays,afternoticeinwritingshallhavebeen giventotheContractorbytheEngineer-in-chargerequiringsuchbreachtoberemedied,or
  - arrangement for composition with his creditors orgo into liquidation, the Ownershall have the power to enter into the works and take over the possession of thematerials, temporary work, constructional plant, stock and complete the works byother Contractors, firm or corporation as the Owner in his absolute discretion maythink proper to employ and to use or authorize the use of any materials, temporaryworks,constructionalplant,andstockasaforesaid,withoutmakingpaymentt otheContractor for the said materials, other than such as may be certified in writing by theEngineer-in-charge to be reasonable & not being liable for any loss or damage thereto.TheOwnershallbyreasonofhistakingpossessionoftheworkoroftheworksbein gcompleted by other Contractor (due account being taken of any such extra work orworkswhichmaybeomitted)thentheexcessamountifanyshallbedeductedfromany money which may be due for work done by the Contractor under the Contract andnotpaidfor.Anyfurtherdeficiencyshallforthwithbemadegoodbysellinsuch

manner and for such price as hemay think fit allorany of the constructional plant, materials etc. available at site.

# 4.43 CONTRACTOR'S RESPONSIBILITY FOR COMPLIANCE OF STATUTORY NORMS & OTHER RULES APPLICABLE TO SUCH

The Contractor shall conform in all respect to the provisions of statutory regulations, ordinances, bylaws of any local or duly constituted authorities or public bodies, which may beapplicable from time to time to the works or any temporary works. The Contractor shall keepthe Owner indemnified against all penalties and liabilities of every kind, arising out of non-adherence to such statutes, ordinances, laws, rules, regulations etc.

All costs

expenses borne by the Owner inway of penalty, as sociated litigation setc. on account of Contractor's default shall be recovered from the Contractor from his dues or from the dues of any other contract with Owner or as debt liability.

#### 4.44 OTHERAGENCIESATSITE:

The Contractor shall have to execute the work in such place and condition where otherAgencieswillalsobeengagedforotherworkssuchassitegrading,filling&leveling,electrical& mechanical engineering works, operation & maintenance activities of running plant etc. Noclaim shall be entertained due to work being executed in the above circumstances. TheContractorshalldotheirworkinatime&mannertakingallsafetyprecautionssoastoavoidinte rference with other activities but their activities should not lag behind. Engineer-in-charge'sdecisioninthisrespectisfinal.

## 4.45 CORRESPONDENCES/NOTICES:

## 4.45.1 PowerofAttorney:

Owner/ Engineer-in-charge shall ordinarily correspond with the Contractor at the addressfurnishedbytheContractor.AnynoticetobesenttotheContractorbyOwnershallbesent byregisteredposttotheaddressoftheContractor.TheContractorshallsubmitduepowerof attorney in favour of their site-in-charge at site for the purpose of receipt of all letters,notices, drafts, cheques, job instruction and execution of job etc. from Owner and tocorrespond&transactwithOwneronbehalfofContractor&pertainingtothisContractonly.

### 4.45.2 AddressforCorrespondence:

The Contractor shall give full & correct address of his Registered Office with Telephone (s),Fax (s) and E-mail numbers etc. if any to the Owner for correspondence. In case of any changeofaddressduringcurrencyoftheContract,theContractorshallforthwithintimatethesam etotheOwnerfailingwhichsuchactshallbetreatedasafraudulentmotiveofContractor.

## 4.45.3 NoticetotheContractor:

Any notice may be served on the Contractor or his site-in-charge at the job site or byregisteredmaildirectlytotheaddressfurnishedbytheContractororboth.Proofofissueofsuchn oticeshallbeconclusiveontheContractorhavingbeendulyinformedofthecontentstherein.

## 4.45.4 NoticetotheOwner:

AnynoticetobegiventotheOwnerunderthetermsofContractshallbeservedbysendingthe same by Registered mail to or delivering the same at the respective site office of lbThermalPowerStation,addressedtotheEngineer-in-charge.

# 4.45.5 Noticestolocalbodies:

i) Contractor shall comply with and give all notices required under any Governmentauthority, instrument, rule or ordermade under any Actof Parliament, State

lawsorany regulation or bye-laws of any local authority relating to the works. He shall beforemakinganyvariationfromtheContractdrawingnecessitatedbysuchcompliancegive totheEngineer-in-chargeawrittennoticegivingreasonsfortheproposedvariationando btaintheEngineer-in-charge'sinstructionsthereon.

ii) The Contractor shall pay and indemnify the Owner against any liability in respect of any fees or charges payable under any Act of Parliament, Statelaws or any Government instrument, rule or order and any regulations or by elaws of any local authority in respect of the works.

#### 4.45.6 Instructions&Notices:

- i) Subject as otherwise provided in this Contract, all notices to be givenand all otheractionstobetakenonbehalfoftheOwnermaybegivenortakenbytheEngineer-in-c harge/Officer-in-chargeorhisauthorizedrepresentative.
- ii) All instructions, notices and communications etc., under the Contract shall be given inwritingandifsentbyregisteredposttothelastknownplaceofabodeorbusinessofthe Contractor shall be deemed to have been served on the date when in the ordinarycourseofpostthesewouldhavebeendeliveredtohim.
- iii) The Contractor or his site-in-charge shall be in attendance at the site (s) during allworkinghoursandshallsuperintendtheexecutionoftheworkswithsuchadditionalass istance in each trade, as the Engineer-in-charge may consider necessary. In no casesite-in-charge shall remain absent from site without prior permission of the Engineer-in-charge.OrdersgiventotheContractor'ssite-in-chargeshallbeconsideredto havethesameforceasiftheyhadbeengiventotheContractorhimself.
- iv) TheEngineer-in-chargeshallcommunicateorconfirmtheinstructionstotheContractor in respect of the execution of work in a field work Site Order BookmaintainedintheofficeoftheEngineer-in-chargeandtheContractororhisauthoriz ed representative shall confirm receipt of such instructions by signing therelevant entries in this Book. If required by the Contractor, he shall be furnished a copyofsuchinstruction(s).

#### **4.46** RIGHTSOFOWNERONVARIOUSINTERESTS:

- i) TheOwnerreservestherighttodistributetheworkbetweenmorethanoneContractor. The Contractor shall cooperate and afford the other Contractors allreasonable opportunity for access to the works for the carriage and storage ofmaterialsandexecutionoftheirworks.
- ii) Wherever the work being done by any department of the Owner or by the Contractorengaged by the Owner as per the condition of work covered by this Contract,
  - therespective rights and various interests involved shall be determined by the Engineer-in-charge to secure the completion of the various portions of the work in general harmony.

#### 4.47 **NEGOTIATIONOFRATES:**

IncaseOwnerfindsthelowestpricetobeathighersideinconsiderationofmarketpriceofvarious inputs including labour component, may call the lowest Bidders for negotiation ofpricebasedonanalysisoftheirrateetc.

# 4.48 ISSUEOF LOI:

- The Letter of Intents hall be released by the Owner or the Engineer-in-charge with the rates and oth erterms & conditions finally arrived at negotiation. The Contractors hall commence performance of the Contract on the basis of this LOI/Work order.
- 4.49 Firmworkordershallbereleased/Contractagreementexecutedwithin30daysofissueofLetter of Intent. Letter of Intent / Work Order shall be accepted by the Contractor byendorsement and return the duplicate copy of work order endorsed as unconditionalacceptance of rates & terms and conditions of work order to the Owner and form part ofContract.

**EndofSection-IV** 

#### **SECTION-V**

## 5.0 SCOPE&PERFORMANCEOFWORK

#### 5.1 SCOPEOFWORK:

Scope of particular work in detail is available in Special Conditions of Contract for information of Bidders.

#### **5.2** USEOFCONTRACTDOCUMENTS:

The Contractor shall be provided drawings free of charge with tender documents / during theprogressofwork. Heshallkeeponecopy of Contract documents with drawing son the site in good order and the same shall at all reasonable times be available for inspection and use by the Engineer-in-charge/his representatives/other inspecting of ficers.

- 5.2.1 NoneofthesedocumentsshallbeusedbytheContractorforanypurposeotherthanthatofthisContract.
- 5.2.2 The Contractor shall take necessary steps to ensure that all persons employed on any work inconnection with this Contract have noticed that the Indian Official Secret Act 1923 (XIX of1923) applied to them and shall continue to apply even after the execution of such worksundertheContract.

#### **5.3** WORKSTOBECARRIEDOUT:

TheworkstobecarriedoutundertheContractshallexceptasotherwiseprovidedintheseconditio ns include all labours, materials, tools, plant, equipment and transport which may berequired in preparation of and for full & entire execution for completion of works. The description given in the schedule of quantity shall unless otherwise stated, be held to includewaste of materials, carriage and cartage, carrying in, return of empties, hoisting, setting, fitting and fixing in position and all other labour necessary in and for the full and entire execution and completion as aforesaid in accordance with good practice and recognized principles of engineering.

## 5.4 SCHEDULEOFWORK:

After receipt of LOI the schedule of work shall be drawn by the Contractor taking into account and dovetailing the technicality of work, sequence of work, material availability, materials

ontransit,materialsonorder,weathercondition,nature&urgencyofworks,theirpermutation& combination for an integrated approach for timely completion of the works at ultimatecost. The Engineer-in-charge after scrutinizing the schedule submitted by the Contractor shallapprovebeforeactualworkcommences.

# **5.5** EXECUTIONOFWORKS:

All the works shall be executed in strict conformity with the provisions of the Contractdocuments, specifications and instructions by the Engineer-in-charge whether mention edinthe Contract or not. The Contractor shall be responsible for ensuring that works are executed in the most substantial and proper workman like manner using the quality materials and labour during the progress of and up to completion of job in strict accordance with the specifications and to the entire satisfaction of the Engineer-in-charge.

# 5.6 COORDINATIONANDINSPECTIONOFWORKS:

The coordination and inspection of the day-to-day work under the Contract shall be theresponsibilityoftheEngineer-in-chargeorhisauthorizedrepresentatives.Afieldworkorderb ook shall be maintained by the Contractor in which written instruction for specific job beentered.TheseshallbesignedbytheContractororhisauthorizedrepresentativebywayofack nowledgmentwithin12hours.

## 5.7 GENERALCONDITIONOFWORK:

The working time of the work is 48 hours per week per man in general. In case of overtimework is permitted in case of need, the Owner will not compensate for the same. Shift workingat2to3shiftsperdaywillbecomenecessaryandtheContractorshalltakethisaspectintoc onsideration while formulating his rates for Tender. No extra claim will be entertained bytheOwneronthisaccount.

#### **5.8** REPORTINGOFWORKSTATUS:

The Contractors hall submitted the Engineer-in-charge reports a tregular intervals regarding the progress of work as desired from time to time.

# 5.9 DRAWING/SEQUENCETOBEPROVIDEDBYOWNER:

Intheprogressofwork,detailedworkingdrawingsonthebasisofwhichactualexecutionofthe work has to proceed, shall be furnished in stages. The Contractor shall be deemed to havegone through the drawings issued to him thoroughly and carefully, in conjunction with allother connected drawings and discrepancies if any shall be brought to the notice of the Engineer-in-charge, before actually carrying out the works. Wherever drawing is not possible, sequence of operation or work instructions shall be given by the Engineer-in-charge as in case of maintenanceworksetc.

## **5.10** LIABILITIESFOR DEFECTS, IMPERFECTIONS etc. AND RECTIFICATION THEREOF:

IfitshallappeartotheEngineer-in-chargethatanyworkhasbeenexecutedwithunsound,imperfe ct or unskilled workmanship, or with materials of any inferior description, or that any materials or articles provided by the Contractor for the execution of work are unso undo rof quite the contractor for the execution of work are unso undo rof quite the contractor for the execution of work are undo rof quite the contractor for the execution of work are undo rof quite the contractor for the execution of work are undo rof quite the contractor for the execution of work are undo rof quite the contractor for the execution of work are undo rof quite the contractor for the execution of work are undo rof quite the contractor for the execution of work are undo rof quite the contractor for the execution of work are undo rof quite the contractor for the execution of work are undo rof quite the contractor for the execution of the contractor for the contractor for the execution of the executa lity in ferior to that Contracted for, or otherwise notin accordance with the Contract, the ContractorshallondemandinwritingfromtheEngineer-in-chargeorhisauthorizedrepresentative specifying the work, materials or articles complained of, notwithstanding thatthe same may have been inadvertently passed, certified and paid for, forthwith rectify orremove and reconstruct that work SO specified and provide other suitable materials or articles at his own charge and cost, and in the event of failure to do so within approximate the contraction of the contraeriod to be specified by the Engineer-in-charge in his demand aforesaid the Engineer-in-charge may on expiry of notice period rectify or removes, and re-execute the work or removeand replace with others, the materials or articles complained or as the case may be at the riskand expense in all respects of the Contractor. The decision of Engineer-in-charge as to anyquestionarisingunderthisclauseshallbefinalandconclusive.

# **5.11** TWELVEMONTHSPERIODOFDEFECTLIABILITYFROMTHEDATEOFACTUALCOMPLETIONOFWORKRECORDEDINCOMP LETIONCERTIFICATE:

Fromthecommencementtocompletionofthework,theContractorshalltakefullresponsibility for the care of all works including all temporary works and in case any damage,loss or injury shall happen to the work or to any part thereof or to any temporary works fromanycausewhatsoever,shallathisowncostrepairandmakegoodthesamesothaton

completion the work shall be in good order and in conformity in every respects with therequirements of the Contract and the Engineer-in-charge's instruction.

Thedefectliabilityperiodshallbe12monthsfromthedateofcompletion.Oncompletionofsuch period and on final certification of satisfactory performance report of the Contractedwork from Engineer-in-charge, the security deposit shall be released. The period of 12 monthsshall be counted from the date of completion of last repair of defect in case of any defectappears after completion of work / from the date of completion as mentioned in completioncertificate.

#### **5.12** TRAININGOFAPPRENTICES:

TheContractorshallduringthecurrencyoftheContractwhencalleduponbytheEngineer-in-char geengageandalsoensureengagementbysubcontractorandotheremployedbytheContractor in connection with the works, such number of Apprentices in the categoriesmentioned in Schedule A and for such periods as may be required by the Engineer-in-charge. The Contractor shall train them as required under the Apprentices Act, 1961 and shall beresponsibleforallobligationsoftheemployerundertheAct, excluding the liability to make pay mentto Apprentices as required under the Act.

## 5.13 Contractor'sliability&insurance:

From commencement to completion of the works, the Contractor shall take full responsibilityofthesitefortakingcareandprecautionstopreventlossordamageandtominimizel ossordamagetothemaximumextentpossibleandshallbeliableforanydamageorlossthatmayh appen to the works or any part thereof and all Owner's T & P from any cause whatsoever(save and except the Excepted Risks) and shall at his own cost repair and make good the sameso that at completion of the works, all Owner's T & P shall be in good order and condition andin conformity in every respect with the requirements of BI standard and to the satisfaction

oftheEngineer-in-chargeandto thesatisfactionofEngineer-in-chargewhereBISisnotavailable.

- 5.13.1 IntheeventofanylossordamagetotheworksoranypartthereofortoanyT&Portoanymaterial or articles at the site from any of the Excepted Risks the following provisions shallapply:
  - a) The Contractor shall, as may be directed in writing by the Engineer-in-charge, removefrom the site any debris and so much of the works as shall have been damaged, takingtotheOwner'sstoresuchT&P,articlesand/ormaterialsasmaybedirected:
  - b) The Contractor shall, as may be directed in writing by the Engineer-in-charge, proceedwith the erection and completion of the works under and in accordance with the provisions and conditions of the Contract.
- 5.13.2 CompensationonaccountoflossduetodamageforExceptedperils:

The value of re-execution of work, which is lost or damaged in Excepted Risks, shall beascertained in the same rate under the Contract and added to the contract sum as deviation. Provided the Contractor was alert and has taken sufficient precaution as a man of

general prudence should have taken to prevent the loss ordamage to minimize the amount of such loss in his own case.

- 5.13.3 Where Owner's buildings or a part thereof is rented to the Contractor he shall insure theentirebuildingifthebuildingoranypartthereofisusedbyhimforthepurposeofstoringorusing materials of combustible nature, as to which the decision of the Engineer-in-charge shallbefinalandbinding.
- 5.13.4 The Contractor shall indemnify and keep indemnified the Owner against all losses and

- claimsforinjuriesordamagetoanypersonsoranypropertywhatsoeverwhichmayariseoutofor in consequence of the construction and maintenance works and against all claims, demands,proceedings, damages, costs, charges and expenses whatsoever in respect of or in relationthereto.
- 5.13.5 Beforecommencingexecutionofthework,theContractorshall,withoutinanywaylimitinghis obligations and responsibilities under this condition, insure against any damage, loss orinjury which may occur to any property. (excluding that of the Owner but including theOwner'sbuildingrentedbytheContractorwhollyorinapartandanypartofwhichisusedby him for storing combustible materials), or to any person (including any employee of theOwner)byorarisingoutofcarryingoutoftheContract.
- 5.13.6 The Contractor shall at all times indemnify the Owner against all claims, damages orcompensation under the provisions of Payment of Wages Act, 1936. Minimum Wages Act,1948; Employer's Liability Act, 1938; the Workmen's Compensation Act, 1923; IndustrialDisputesAct,1947andtheMaternityBenefitAct,1961oranyModificationsthereofora nyotherlawrelatingtheretoandrulesmadehereunderfromtimetotimeorasaconsequenceofa nyaccidentorinjurytoanyworkmanorotherpersonsinorabouttheworks,whetherintheemploy mentoftheContractorornot,saveandexceptwheresuchaccidentorinjuryhasresulted form any act of the Owner, his agents or servants, and also against all costs, chargesand expenses of any suit, action or proceedings arising out of such accident or injury andagainst all sum or sums which may with the consent of the Contractor be paid to compromiseor compound any claim. Without limiting his obligations and liabilities as above provided, theContractor shall insure against all claims, damages or compensation payable under theWorkmen's Compensation Act, 1923 or any modification thereof or any other law relatingthereto.
- 5.13.7 TheContractorshallensurethatsimilarinsurancepoliciesaretakenoutbyhissubcontractors (if any) and shall be responsible for any claims or losses to the Owner resulting from theirfailuretoobtainadequateinsuranceprotectioninconnectionthereof. The Contractorshall produce or cause to be produced by his subcontractors (if any) as the case may be, therelevant policy or policies and premium receipts as and when required by the Engineer-in-charge.
- 5.13.8 If the Contractor and/or his subcontractors (if any) shall fail to effect and keep in force theinsurancereferredtoaboveoranyotherinsurancewhichhe/theymayberequiredtoeffectun der the terms of the Contract then and in any such case the Owner may, without beingbound to, effect and keep in force any such insurance and pay such premium or premiumsas may be necessary for the purpose and from time to time deduct the amount so paid by theOwner from any moneys due or which may become due to the Contractor or recover thesameasadebtduefromtheContractor.

Theaboveconditions are applicable for value of work below one crore rupees. But in case of contract involving considerable risk or damage and of value more than one crore, the Contractor has to obtain blanket in surance policy for all his works, T&P and man power and assigning a vour of the Owner.

## 5.14 Retentionofcost&expenses

a) In the event the contractor is involved with violation of any act(s) relating to safety, environment, labour and work mencompensation, taxes & duties etc. and consequentleg alaction & penalty during execution of contract the issue is open in relevant Govt. Deptt., estimated value of cost and expenses towards the same shall be retained from the final bill till disposal of the case.

b) If any contractor avoids to attend workmen's compensation commissioner court onsummon, he shall not be entertained for award of any future contract in OPGC. The cost

& expenses of compensation towards the death or permanent disable ments hall be deducted from the corresponding Contractor any other Contract executed by the same Contractor in OPGC or lastly as debt liability.

**EndofSection-V** 

#### **SECTION-VI**

#### 6.0 CERTIFICATEANDPAYMENT:

## 6.1 SCHEDULEOFQUANTITY/PRICESCHEDULEANDPAYMENT:

#### 6.1.1 Contractor's remuneration:

ThepricetobepaidbytheOwnertotheContractorforthewholeoftheworkdoneandforthe performance of all the obligations undertaken by the Contractor under the Contract shallbe ascertained by the application of the respective rates in schedule of quantity / priceschedule (the inclusive nature of which is more particularly defined by way of application butnotoflimitationofitemofactivities,materials&expensesspecifiedinclauseNo.6.1.2)andpay ment to be made accordingly to the work actually executed and approved by the Engineer-in-charge. The sum so ascertained shall (exception only as and to the extent expresslyprovidedherein)constitutetheremunerationoftheContractorundertheContractan dnofurther or other payment whatsoever shall be or become due or payable to the ContractorundertheContract.

## 6.1.2 Activities&expensestobeincludedinrates:

The prices/rates agreed both by the Contractor and Owner and subsequently incorporated in the Contract shall remain firm till the issue of Final Certificate and shall not be subject to escalation. The said schedule of quantity / price schedule shall be deemed to include and cover all costs, expenses and liabilities of every description and all risks of every kind to

betakeninexecution,completionandhandingovertheworktotheOwnerbytheContractor.The Contractorshallbedeemedtohaveknownthenature,scope,magnitudeandtheextentof the works and materials required though the Contract Document may not fully andprecisely furnish them. He shall make such provision in the rates accepted as he may considernecessary to cover those of such items of work and materials as may be reasonable andnecessary to complete the work. The opinion of the Engineer-in-charge as to the items ofworkwhicharenecessaryandreasonableforcompletionofworkshallbefinalandbindingonContractoralthoughthesamemaynotbeshownonordescribedspecificallyinContractdocument.

#### **6.1.3** Ratestocovertaxesandduties:

No exemption or reduction of custom duties, excise duties, sales tax, works Contract tax, entry tax or any port duties, royalty, transport charges, stamp duties of Central or StateGovernment or Local Body or Municipal Taxes or duties, taxes or charges, income taxwhatsoever will be granted or obtained and all expenses of which shall be deemed to be included in and covered by the accepted rates. The Contractor shall also obtain and payfor all permits or other privileges necessary to complete the work.

#### 6.1.4 Acceptedratescannotbealtered

Forworkunderitemratebasis,noalterationwillbeallowedintheratesbyreasonsofworksoranyparto fthembeingmodified,altered,extended,diminishedoromitted.Theacceptedratesisoffullyincl usiverateswhichhavebeenagreedbytheContractorandtheOwnerandcannot be altered under any circumstances. However, if the quantity of such modification,alteration, extension, reduction or omission is substantial and exceeds 5% in the Contractprice, the variation in rate may be examined and amended by Engineer-in-charge onrecommendationofContractReviewMeeting(referClauseNo.4.11)

6.1.5 The rates to cover for working in operating plant: Contractor's rates shall be deemed toinclude the factors such as work shall be carried out in operating plant and shall take sufficientcareinmovingtheplants, equipments and materials from one place to another, so that the eydo not cause any damage to any person or to the property of the Owner or to third

partyincludingoverheadandundergroundcables/pipelines.Intheeventofsuchdamageincluding eventuallossofgenerationandoperationoftheplantorservicesinanyplantorestablishmentase stimatedbytheOwnerorascertainedbythethirdpartyshallbebornebythe Contractor. The aforesaid risk shall be covered by insurance as per Clause 5.13.5 This shallbeapplicablewhenContractvalueismorethanonecrore.

#### 6.2 PROCEDUREFORMEASUREMENTOFWORKEITHERINPROGRESSORFINAL:

#### 6.2.1 Methodsofmeasurement:

Themeasurementshallbetakeninaccordancewiththeproceduresetinthespecifications. No local or general method of measurement shall be adopted. In case the method ofmeasurement is not specified in the specifications, the procedure of Bureau of IndianStandardshallprevail.

#### 6.2.2 Measurementofworkinprogress:

All measurements shall be in metric system. All the works in progress will be jointly measuredby the representatives of Owner and the Contractor progressively in construction & civilmaintenance work. In case of mechanical /electrical / C&I maintenance &upkeepment worketc. the item of work performed by the Contractor shall be recorded daily

preferablyimmediatelyoncompletioninthemannerstipulatedinconditionsofContract.Suchm easurementswillberecordedintheprescribedmeasurementbookbytherepresentativeofOwn erandsignedbybothpartiesastokenofacceptancebybotheitheroncompletionofcertainitemor inanintervalofdaysorhoursasthecasemay be.

#### **6.2.3** Finalmeasurement:

On completion of work final measurement shall be taken in the similar fashion as statedearlier and sum total of part measurement shall be compared. Final measurement shall beconsideredforfinalpayment.

6.2.4 Beforetakingmeasurementsofanyconstructionwork,theEngineer-in-chargeorhisauthorized representative for the purpose shall give a notice with reasonable time to theContractor. In case of operation or maintenance work the Contractor or his authorizedrepresentative shall obtain the signature of Engineer-in-charge or his representative insupport of completion of any item of work to the satisfaction of Engineer-in-charge. All thesedetails shall be recorded in measurement book in prescribed format to be provided byEngineer-in-charge/printedstandardMeasurementBookavailableinthemarket.

If the Contractor fails to attend or to send an authorized representative for measurementafter such a notice or failure of Engineer-in-charge on Contractor's request in case ofmaintenanceworkasthecasemaybeorfailstocountersignortorecordtheobjectionwithinaweekf romthedateofmeasurement,theninanysuchevent,themeasurementtakenbytheEngineer-in-charge/hisrepresentativeshall betakentobecorrectmeasurementofwork.

- 6.2.5 The Contractor shall, without extra charge, provide assistance in every measurement inrespectoflabourandotherthingsnecessaryformeasurements.
- 6.2.6 If the Contractor objects to any of the measurements recorded in the measurement book, themattershallbereferred to the subsequent Contract Review Meeting. The decision taken in the Contract Review Meeting shall be final & binding.

## 6.2.7 Billing:

The Contractor shall submit bill in approved proforma in accordance with the Contract termsandtheagreedbillingschedulesinduplicatetotheEngineer-in-charge/Officer-in-chargeas the case may be giving abstract and detailed measurement for the various items

executedduring a pre-determined period / month, as the case may be. In case of maintenance/upkeepment contract, monthly bill shall be preferred during 1<sup>st</sup> week of the succeedingmonth.Incaseofconstructionworkthebillshallbefurnishedafterachievingmilestoneor as

provided in the Contract. The Engineer-in-charge shall take or cause to be taken the requisitemeasurements for the purpose of having the same verified and the claim as far as admissible, adjusted, if possible, before the expiry of 21 days from the presentation of the bill. This isapplicable for running bills only.

## 6.3 PAYMENTOFCONTRACTOR'SBILL:

Payment due to the Contractor shall be made by the Owner, by Crossed Account PayeechequeforwardingthesametoregisteredofficeorthenotifiedofficeoftheContractor. The cheque shall also be handed over to the Contractor or their Site-in-charge if authorized for the purpose against due receipt. In no case will Owner be responsible if the cheque is mislaidor misappropriated by unauthorized person / persons. Demand draft may also be issued afterdeductionofbankcommissionchargesifrequested by the Contractor.

# AllpaymentshallbemadeinIndiancurrencyonly. **6.3.1 Paymentofrunningbill:**

Interimbills shall be submitted by the Contractoratin tervals mentioned in Schedule A on or before the date fixed by the Engineer-in-charge for the work executed. The Engineer-in-charge/Officer-in-charge shall the narrange to have the bill verified by comparing with the measuremental ready taken.

- 6.3.2 On certification of Engineer-in-charge, payment to which the Contractor is consideredentitledbywayofinterimpaymentshallbemadeforalltheworkexecuted,afterdedu ctingthere from the amounts already paid, the security deposit and such other amounts as may be deductible or recoverable interms of the Contract.
- 6.3.3 Payment of the Contractor's interim bills shall be made by the Owner within 21 days from thedateofacceptanceofthebillbyEngineer-in-charge.
- 6.3.4 Any interim certificate given relating to work done may be modified or corrected by anysubsequent interim certificate or by the final certificate. No certificate of the Engineer-in-charge supporting an interim payment shall itself be conclusive evidence that any work towhichitrelatesis/areinaccordancewiththeContract.

#### **6.4** RECEIPTOFPAYMENT:

Receipt of payment made on account of work when executed by a firm, must be signed bythe Contractor in case of proprietary firm and otherwise a person holding due power ofattorney in this respect on behalf of the Contractor, except when the Contractors are described in their Tenderasalimited company in which case there ceipts must be signed in the name of the company by one of its principal officers or by some other persons having authority to give effectual receipt for the company.

## **6.5** COMPLETIONCERTIFICATE:

## 6.5.1 EligibilitycriteriaforissueofCompletionCertificate:-

No certificate of completion shall be issued nor shall the work be considered to be completedtill the Contractor shall have removed from the premises on which the work has beenexecuted, all such scaffolding, sheds and surplus materials except such as are required forrectification of defects, rubbish and all huts and sanitary arrangements required for hisworkmen on the site in connection with the execution of the work, as shall have been erectedby the Contractor or the workmen and cleaned all dirt from the parts of building

(s)

in

or

uponoraboutwhichtheworkhasbeenexecutedorofwhichhemayhavehadpossessionforthepu rpose of the execution thereof and cleaned floors, gutters and drains, eased doors andsashes, oiled locks and fastenings, labeled keys clearly and handed them over to the Engineer-in-chargeandmadethewholepremisesfitforimmediateoccupationorusetothesatisf actionoftheEngineer-in-charge.IftheContractorshallfailto complywithanyofthe

requirementsofthisconditionsasaforesaidonorbeforethescheduleddateofcompletionof the works, the Engineer-in-charge may at the expense of the Contractor fulfill suchrequirements and dispose of the scaffoldings, surplus materials and rubbish, etc. as he thinksfit and the Contractor shall have no claim in respect of any such scaffolding or surplusmaterials except for any sum actually realized by the sale thereof less the cost of fulfilling therequirements and any other amount that may be due from the Contractor. If the expenses offulfilling such requirements are more than the amount realized on such disposal as aforesaid, the Contractorshall for thwith ondemand paysuch excess.

## 6.5.2 ApplicationforCompletionCertificate.

AssoonastheworkiscompletedandtheContractorfulfillshisobligationsinallrespect,heshall be eligible to apply for Completion Certificate. The Owner or his representative shallnormally issue to the Contractor the Completion Certificate within 30 days after receiving anapplication from the Contractor after verifying from the completion documents and satisfyinghimselfthattheworkhasbeencompletedinaccordanceandassetoutintheconstructio nand erection drawings and the Contract Documents. In case of operation or maintenanceContract,satisfactoryperformanceduringContractperiodshallbebasisforissueof CompletionCertificate.

## **6.5.3** IssueofCompletionCertificate:

On receipt of request from the Contractor Engineer-in-charge shall in spect whole of the work and shall is sue accertificate of completion indicating:-

- a) Dateofcompletionofwork
- b) ValueoftheContract/valueofworkexecuted
- c) Qualityofperformance
- d) Levelofsafetymaintainedduringthework.
- 6.5.4 If at any time before completion of the entire work, items or groups of items for whichseparateperiodsofcompletionhavebeenspecified, have been completed the Engineer-in -charge can take possession of any such parts being hereinafter in this condition referred to as 'the relevant part') not with standing anything expressed or implied elsewhere in this Contract:
  - (a) Within thirty days of the date of completion of such items or groups of items or ofpossessionoftherelevantparttheEngineer-in-chargeshallissueCompletionCertificateforth e 'relevant part' provided the Contractor fulfils his obligations under clause 6.5.1 for the 'relevantpart'.
  - (b) The Defects Liability Period in respect of such items and the 'relevant part' shall be deemed to have commenced from the certified date of completion of such items or the 'relevant part'asthecasemaybe.
  - (c) The Contractor may reduce the value insured under Clause 5.13 by the full value of thecompleteditemsor'relevantpart'asestimated by the Engineer-in-charge for this purpose. This estimates hall be applicable for this particular purpose only.
  - (d) InsuchcaseCompensation/LiquidatedDamagefordelayshallbecalculatedinaccordancewi thClause6.9ontotalvalueofthework,lessthevalueof'relevantpart'takingintoconsiderationth eduedateofcompletionasperContractandsubsequenttimeextension,ifany.

## 6.6 FINALPAYMENT:

Duringprogressofworkincaseofconstructionworkandperiodfixedforpaymentincaseofprovisi Page **79** of **201**  onofservicessuchasoperationandmaintenance,runningbillsshallbepreferredbythe Contractor as per the terms of Contract and shall be paid on the basis of measurementcertificationofEngineer-in-charge/Officer-in-chargefromtimetotimeorinfixedi ntervals.Butfinalbillshallbepaidonreceiptof-

- i) Finalbill(n'th&finalbillmustbewrittenoverthebill)
- ii) Measurementbookwithallitssupportingdocuments
- iii) CompletionCertificateofEngineer-in-charge
- iv) Storeclearance
- v) Evidenceinsupportofclearanceoflabourdues.
- vi) EvidenceinsupportofpaymentofPFdues
- vii) NoclaimcertificatebytheContractor
- viii) Totalamountofdues,less
  - a) Paymentalreadymadethroughrunningbills
  - b) Advancesifany
  - c) Penaltyifany
  - d) Liquidateddamage
  - e) Amountstowardsthecostoftools&plantsnotreturnedtowarehouse
  - f) Valueofthesurplusofmaterialissuednotreturnedtostore.
  - g) AnyestimatedamountonaccountofdefaultofContractorinstatutoryorenviron mentalmatterordisputeopeninCourtofLaw.
  - h) ClearancefromPersonnel&Administrationdepartmentrelatingtorentforacco mmodation,water&electricitybillsetc.

#### **6.7** TERMSOFPAYMENT:

- (a) Therunning bill corresponding to the terms of Contractra is ed by the Contractor shall be paid to him oncertification of Engineer-in-charge.
- (b) The bill for any permissible period shall be submitted within 7 days of expiry of the saidperiod and payment shall be released within 21 days of submission of the bill provided the same is receipted by Engineer-in-charge.
- (c) AllstatutorydeductionsleviedbytheGovt.orotherstatutoryauthoritiesattherateprevailing atthetimeofpaymentofbillshallbedeductedfromtherunningbills.
- (d) The Engineer-in-charge reserves the right to effect deductions towards penalty \& other recoveries if any, under the terms \& conditions of Contract.
- (e) FinalbillshallbesettledaftersubmissionofthesamewithallrelateddocumentsasperClause6 .6withintheperiodspecifiedinClause6.8

## 6.8 TIMELIMITFORPAYMENTOFFINALBILL:

6.8.1 The final bill shall be submitted by the Contractor within three months of physical completion of the work. No further claims can be made by the Contractor after submission of the final billand all claims shall be deemed to have either been included in the final bill or waived and extinguished. Payment of those items of the bill in respect of which there is no dispute and ofitems in dispute for quantities and rates as approved by Engineer-in-charge, shall be madewithin the period specified herein this clause, the period being reckoned from the date of receipt of the bill by the Engineer-in-charge. If the decision of Engineer-in-charge is not agreed by the Contractor, the dispute either in quantity or rate or both shall be referred to Contract Review Meeting and the decision made there of shall be final & binding on both parties.

The time limit for release of final payment corresponding to the Contract value are Page **80** of **201** 

furnishedbelow:-

(a)Contractvaluenotexceeding Fourmonths fromthedateof Rs.5lakhs acceptanceof

acceptanceof Finalbillbythe Engr-in-charge

(b)Contractvalueexceeding Sixmonth

---do----Rs.5lakhs

Provided the Contractor has furnished all required documents in accordance to clause 6.6. The period of release of fund shall be counted from the date of compliance of last documents or formalities.

For above purpose, original Contract value or the actual value of the work whichever is highershallbetakenintoconsideration.

#### 6.9 LIQUIDATEDDAMAGESFORDELAY:

If the Contractor fails to maintain the required progress in terms of a chieving milest one fixed in the time of the contractor of the ce&progress schedule ortocomplete the work as the case may be under Contract & clear the site on the contract which is a site of the contract which is a siteorbeforetheduedateorextendeddateofcompletiontheyshallwithoutprejudice to any other right shall liable or remedy be for liquidated damage stipulatedbeloworsuchsmallamountasmaybefixedbytheEngineer-in-chargeontheContractvalue oftheworkoractualvalueoftheworkwhicheverishigherforeveryweekduringwhichtheprogres s remains below the specified time of completion subject to the total amount ofcompensation for delay to be paid under this condition shall not exceed the under notedpercentage of the Contract value or of the Contract value of the item or group of items ofworkforwhichaseparateperiodofcompletionisgiven:

This will also be applicable to items or group of items for which separate period of completionhasbeenspecified.

Rates&upperlimitofLiquidatedDamage:

	<u>Completionperiod</u>	%ofContract/Work valueper	Maximum %
		week	ofContract/
			workvalue
a.	DueCompletionperiod(asoriginally	@1%	10%
	stipulated)notexceeding6months		
b.	Due Completion period (as	@0.5%	7.5%
	originallystipulated)exceeding6monthsbutn		
	ot		
	exceeding2years		
c.	DueCompletionperiod(asoriginally	@0.25%	5%
	stipulated)exceeding2years		

6.9.1 The amount of liquidated damage (LD) may be adjusted or set-off against any sum payable tothe Contractor under this or any other Contract with the Owner. In case at the time of theamount of LD comes to the notice of the Owner the Contractor does not have any amountpending with the Owner, the Contractor shall be served with a notice and in turn theContractor has to deposit the said amount in shape of D/D with the Owner in the

fashionmentionedearlier.

**EndofSection-VI** 

#### **SECTION-VII**

#### 7.0 STATUTORYOBLIGATION&INSURANCE

#### **7.1** TAXES

- 7.1.1 TheContractorshalldefrayalltaxessuchastoll,localtaxes,exciseduty,royalty,incometax,sales tax, GST, work contract tax and other payments and compensation, if any in connectionwiththeprocurementandhandlingofmaterials,fabricationandexecutionofworkso ranymethodorprocessconnectedwiththeworks.Salestax,Entrytax,Excisedutyandanyotherta x on materials required for the work & works shall be payable by the Contractor and theOwner will not entertain any claim whatsoever in this respect. The final rate is inclusive ofworkcontracttax&othertaxesapplicableincludingGSTtothisworkormaterialsthereto.
- 7.1.2 Notwithstanding anything contained elsewhere in the Contract, the Owner shall deduct atsource from the payments due to the Contractor, the taxes as required under Odisha SalesTaxActorasamendedfromtimetotimeorunderanyotherstatute. It is for the Contractor to deal with the Sales Tax authorities directly in respect of any claim or refund relating to the above deductions and the Owner shall not be liable or responsible for any claims or payments or reimbursements in this regard. Income tax as applicable shall be deducted form all running bills.

#### 7.2 INSURANCE:

The Contractor shall obtain insurance coverage to the construction work & related materials against loss underforce majeure and assign the policy to the Owner where risk involvem entis expected. The Contractor shall also at his own expenses carry and maintain group insurance with accidental benefit from reputed in surance companies to the satisfaction of the Owner as follows:

## 7.2.1 EmployeesStateInsuranceAct:

AtpresentthisareaisincludedinthescopeofESIscheme.TheContractorhastoacceptfulland exclusive liability for compliance with all obligations imposed by the Employees StateInsurance Act, 1948, and the Contractor further has to defend, indemnify and hold Ownerharmless from any liability or penalty which may be imposed by the Central, State or LocalAuthority by the reason of any asserted violation by Contractor or subcontractor of

the Employees State Insurance Act, 1948 and also from all claims, suits or proceeding that may be brought against the Owner arising under growing out of or by reasons of the work providedforbythisContractwhetherbroughtbyemployeesoftheContractor,bythirdpartiesorb yCentralorStateGovernmentAuthorityoranypoliticalsub-divisionthereof.TheContractoragre estofillinwiththeEmployeesStateInsuranceCorporation,theDeclarationFormsandall be required in respect of the Contractor's or employees, whose aggregate remuneration is Rs. 6500.00 permonthor less or a same nded from time of the control of the contrometotime and who are employed in the work provided for or those covered by ESI from time to time under the agreement. The Contractor shall deduct and secure the agreement of thesubcontractor to deduct the employees' contribution as per the first schedule of theemployee's State Insurance Act from wages and affix the employee's contribution cards atwages payments intervals. The Contractor shall remit and secure the agreement of thesubcontractor to remit to the State Bank of India, employee's State Insurance Corporation Account, and the employee's contribution as required by the Act. The Contractor agree of the contractor ofeestomaintain all cards and records as required under the Act in respect of employee's and payments and Contractors hall secure the agreement of the subcontractor to maintain such respectively.ecords. Any expenses incurred for the contribution, making contributions or maintainingrecordsshallbetotheContractororsubcontractor'saccount.

TheOwnershallretainsuchsumasmaybenecessaryfromthetotalContractvalueuntiltheContractor shall furnish satisfactory proof that all contributions as required by the employeesState Insurance Act, 1948, have been paid. This will be pending on the contactor when theemployee'sStateInsuranceActisextendedtotheplaceofwork.

#### 7.2.2 WorkmenCompensationandEmployer'sLiabilityInsurance:

Insurance shall be effected for all the Contractor's employees engaged in the performance of this Contract. If any of the work is sublet, the Contractor shall require the subcontractor toprovideworkmen's compensation and employee's liability insurance for the latter's employee sifsuchemployees are not covered under the Contractor insurance.

#### 7.2.3 AnyotherinsurancerequiredunderLaworbyOwner:

Contractor shall also carry and maintain any and all other insurances, which he may berequired under any law from time to time. He shall also carry and maintain any otherinsurance, which may be required by the Owner.

## 7.2.4 AccidentorInjurytoworkmen:

TheOwnershallnotbeliablefororinrespectofanydamagesorcompensationpayablebylaw in respect or in consequence of an accident or injury to any workmen or other persons in the Employment of the Contractor or any subcontractor save and except any accident or injury resulting from any willful act or default of the Owner, his agents or servants and theContractor shallindemnify and keep indemnified the Owner against all such damages and compensation (save and except as a foresaid) and against all claims, demands, proceedings, costs, charges and expenses, what so ever in respector in relation thereto.

#### 7.2.5 TransitInsurance:

The Contractor shall obtain adequate Transit insurance coverage at his own cost in respect ofallitemstobetransportedbytheContractortothesiteofwork.

## 7.3 EMPLOYEESPROVIDENTFUND:

TheContractorhastoobtainP.F.codenumbersfromtheP.F.Commissionerandphotocopyof such coverage certificate shall be submitted to Engineer-in-charge prior to commencementofwork. The Contractorhast of urnish certified chall an copy showing the amount deposited against this particular work if the Contractor executes works at different places in India and deposit the total amount in one chall an only. In addition to this, Contractor shall furnish an undertaking with a list of deployed Contract labour for whom such amount is deposited. Contractor shall comply all P.F. formalities for all the work men engaged for this work and keep OPG Cindemnified.

**EndofSection-VII** 

#### 8.0 LABOURLAWS

#### 8.1 LABOURLAWS:

Contractor shall comply with all laws, ordinances, regulations and notification / instruction of Govt.concerning the health, wages, welfare, safety and employment and non-employment of his workers and shall exclusively bear the consequences of failure to comply the rewith.

The following points are to be observed strictly by the Contractor.

- i) Nolabourbelowtheageof18(eighteen)yearsshallbeemployedonthework.
- ii) TheContractorshallnotpaylessthanthenotifiedwagesbytheappropriategovernment towards minimum wages from time to time and must comply withMinimumWagesAct.Thepaymenthastobemadetothelaboursinthepresenceofau thorizedrepresentativeoftheOwner/Engineer-in-charge.
- iii) TheContractorshallathisexpensecomplywithalllabour lawsandkeeptheOwnerindemnifiedinrespectthereof.
- iv) The Contractor shall pay equal wages for men & women in accordance with EqualRemunerationAct1976.
- v) The Contractor under the Contract Labour (Regulation and Abolition) Act, shall have avalidLabourlicensefromappropriatelicensingauthoritypriortostarting/within15days ofcommencementoftheworkundertheContract.Validityofthelicenseshallbemaintain edtillexpiryofContractperiod&itsextension,ifany.
- vi) The Contractor shall employ labour in sufficient numbers to maintain the schedule ofwork and of quality to ensure workmanship of the degree specified in the ContractandtothesatisfactionoftheEngineer-in-charge.
- vii) TheContractorshallfurnishtotheEngineer-in-chargeattheintervalofevery15daysastatem entoftheworkmenemployedontheworksandalsofurnishinformationinForm-VIII, Part I & II under rule 73 of Odisha Contract Labour (R&A) Rule, 1975 or rulesmadethereunder.
- vii)The Contractor shall comply with the provisions of the Factories Act 1948, Payment ofWages Act 1936, Minimum Wages Act 1948, Employees Liability Act 1938, Workmen'sCompensationAct1923,theMaternityBenefitAct1961,EmployeesProvide ntFund(and Miscellaneous Provision) Act 1952 & Contract Labour (Regulation & Abolition)Act 1970 or any modifications thereof or any other laws relating thereto and rulesmade there-under from time to time. Owner shall not be held responsible for anyinjurysustainedbyContractor'sworkmenwhileonduty.

In the event of any employment injury the Contractor has to pay necessary compensation pertaining to treatment & other associated benefits to the injure demployee. In the event of fatal injury, death compensation to the legal heir of

saidemployeeshallbepaidbytheContractor.IncaseoffailurebytheContractortopaythe compensation as decided by the competent authority under the Workmen'sCompensation Act, the Engineer-in-charge shall deduct the necessary amount

fromanyoutstandingbilloftheContractororsecurityanddepositthesamewithcompete nt authority. In case before decision by the competent authority, if theContract is being closed, estimated amount towards such compensation shall beretained from Contractor till finalization. For this purpose, the amount if falls shortunder the

particular Contract shall be realized from any other Contract which the Contractorise xecuting. The Contractor has to make all statutory records and register

required in support of compliance of above provisions. Relevant statutory return shallbe submitted with appropriate authority as required under the above Acts & ruleswith a copy to P&A department of Owner. All the records shall be kept within the workpremises and must be made available on demand by Owner/Concerned statutoryauthorityforscrutiny.

- ix) The Contractor shall indemnify the Owner against any payments to be made underand for the observance of the provisions of the aforesaid Acts without prejudice to hisrightstoclaimindemnityfromhissubcontractor, if any.
- x) The Contractor has to make payment to their staff and labours by 7<sup>th</sup> day of succeedingmonth irrespective of release of Contractor's payment by Owner. In case of anydefault in the matter of payment to the labour, the following penalty apart from legalliabilityshallbeimposedandrecoveredfromContractor'srunningbills.
- (a) 0.1%ofContractvaluewillbedeductedforeachdayofdelayofwagesdisbursementafter7 thdayoflastwageperiodsubjecttomaximum1%ofContractvalue.
- (b) Repetition of three such cases may attract immediate termination of Contract withoutanyfurtherreferencetoContractoraspertermsofContract.
- (xi) Owners hall not take responsibility of Contractor's labour seither during execution of Contractor or not contract or not contract or not contract or not contract.
- xii)However, in the event of default of any Contractor in payment to their labours formorethanonemonthfromthedateofpaymentandiftheserviceisessentialfortheOw nerandtheContractcannotimmediatelybeterminated,theEngineer-in-chargeshallma kethepaymenttotheworkmenandrecoverthesameamountfromanydueof the Contractor. Under such circumstances the Contract shall be liable for immediateterminationasdeemedfitbytheOwner.
- (xiii) The Contractor shall ensure that all the employees engaged by the Contractorincluding his subcontractor, if any, obtain health certificate from any competentmedical practitioner under the provisions of Factories Act without any financialimplicationtoOwner.
- (xiv) Every worker who has worked under the Contractor shall be allowed leave with wages, national & festival holidays, weekly off and extra wages or overtime as per law. The Contractor should provide employment card, wage slip and should maintain suchother records in respect of engagement of workers as required by Contract Labour (R&A) Act 1970 and rules made there under. This provision must be ensured by the Contractor.

## **8.2** CONTRACTORTOINDEMNIFYTHEOWNER:

8.2.1 The Contractor shall indemnify the Owner and every officer and employee of the Ownerincludingthe

Engineer-in-chargeandhisstaffagainstallactions, proceedings, claims, demands costs expenses whatsoever arising out of or in connection with the mattersreferred to in Clause 8.1 and elsewhere which may be made against the Owner for or inrespect of or arising out of any act / omission by the Contractor in the performance of hisobligations under the Contract. The Owner shall not be liable for or in respect of any demandor compensation payable by law in respect or in consequence of any accident or injury to anyworkmen or other person in the employment of the Contractor or his subcontractor andContractor shall indemnify and keep indemnified the Owner against all such damage, compensation and against all claims, damages, proceedings, charges costs, and expenses what so ever thereofor in relation thereto.

#### 8.2.2 PaymentofClaimsandDamages:

Should the Owner have to pay anymoney in respect of such claims or demands as a foresaid the amounts opaid and the cost incurred by the Owner shall be charged to and paid by the Contractor and the Contractor shall not be at liberty to dispute or question the right of the Owner to make such payments not with standing the same may have been made without his consentor authority or in law or otherwise to the contrary.

8.2.3 The Contractor shall intimate to the Workman Compensation Commissioner in Form EE-Iwithin prescribed period the employment accident with relevant information with copy to theOwner. The Contractor shall take all legal steps for compliance of the provisions of WorkmanCompensationActrelatingtoaccidentfailingwhichOwnerundercircumstanceshalltak eupthe case for which all costs and expenses shall be recovered from the Contractor and the saidContractshallbeliabletobeterminated&theContractorliabletobedebarredfromfuturepar ticipationinbid.Incasetheamountcannotberecoveredfromdues/security/duesofothercontra ctswithOwner,thesameshallberecoveredasdebtliability.

## 8.3 HEALTHANDSANITARYARRANGEMENTSFORWORKERS:

InrespectofalllaboursdirectlyorindirectlyemployedintheworksfortheperformanceofContract, the Contractor shall comply with or cause to be complied with all the rules and regulations of the local sanitary and other authorities or as framed by the Owner from time to time for the protection of health and sanitary arrangements for all workers.

#### \*8.4 MODELRULESFORLABOURWELFARE

#### 8.4.1 FirstAid:

- a) Ateveryworkplacewherethenumberofworkmenengagedexceeds50,thereshallbe maintained in a readily accessible place first aid box containing the followingequipments:
  - (i) 12smallsterilizeddressings
  - (ii) 6mediumsizesterilizeddressings
  - (iii) 6largesizesterilizeddressings
  - (iv) 6largesizesterilizedburndressings
  - (v) 6(15gms.)packetsterilizedcottonwool
  - (vi) 1(60ml.)bottlecontainingatwopercentalcoholicsolutionofiodine
  - (vii) 1(60ml.)bottlecontainingsal-volatilehavingthedoseandmodeofadministr ationindicatedonthelabel.
  - (viii) 1roleofadhesiveplaster
  - (ix) Asnake-bitelancet
  - (x) 1(30gms)bottleofpotassiumpermanganatecrystals
  - (xi) 1pairscissors
  - (xii) 1copyofthefirstaidleafletissuedbytheDirectorGeneral,FactoryAdviceService andLabourInstitute,GovernmentofIndia
  - (xiii) Abottlecontaining100tablets(eachof5grains)ofaspirin
  - (xiv) Ointmentforburns
  - (xv) Abottleofasuitablesurgicalanti-septicsolution.
- b) At every workplace where the number of workmen engaged does not exceed 50, thereshallbemaintainedinareadilyaccessibleplacefirstaidboxcontainingthefollowing equipments:

- (i) 6smallsterilizeddressings
- (ii) 3mediumsizesterilizeddressings
- (iii) 3largesizesterilizeddressings
- (iv) 1(30ml.)bottlecontainingatwopercentalcoholicsolutionofiodine
- (v) 3largesterilizedburndressings
- (vi) 1(30ml.)bottlecontainingsal-volatilehavingthedoseandmodeofadministr ationindicatedonthelabel.
- (vii) 1snake-bitelancet
- (viii) 1(30gms.)bottleofpotassiumpermanganatecrystals
- (ix) 1pairscissors
- (x) 1copyofthefirstaidleafletissuedbytheDirectorGeneralFactoryAdviseServic eandLabourInstitute,GovernmentofIndia
- (xi) Abottlecontaining100tablets(eachof5grains)ofaspirin
- (xii) Ointmentforburns
- (xiii) Abottleofsuitablesurgicalanti-septicsolution.

The appliances shall be kept in good order and they shall be placed under the charge of aresponsiblepersonwhoshallbereadilyavailableduringworkinghours. Suitable transport/con veyance facility shall be kept readily available to take in jured person (s) who suddenly falls eriously ill and shifting of urgent cases to nearest hospital. If required, initial first aid may be provided in Owner's hospital in emergency, but subsequent treatment is Contractor's responsibility in any other hospital.

- 8.4.2 AccommodationforLabour:TheContractorshallduringtheprogressoftheworksprovide,erect and maintain necessary temporary living accommodation and ancillary facilities forlabourathisownexpenseanduptothestandardsasapprovedbytheEngineer-in-Chargeataplace outsidetheOwner'spremises.
- 8.4.3 *Drinking Water:* In every workplace, there shall be provided and maintained at suitablelocations, easily accessible to labour, a sufficient supply of coldwater fit for drinking.

Where drinking water is obtained from public water supply, each work place shall be providedwithstoragewheredrinkingwatershallbestored.

Everywatersupplystorageshallbeatadistanceofnotlessthan15metersfromanylatrine,drainor othersourceofpollution. Wherewaterhastobedrawnfromanexistingwell, which is within such proximity of latrine, drain or any other source of pollution, the well shall beproperly chlorinated before water is drawn from it for drinking. All such wells shall be entirely closed in and be provided with a trapdoor, which shall be dust and water proof.

A reliable pump shall be fitted to each covered well, the trap door shall be kept locked andopenedonlyforcleaningorinspectionwhichshallbedoneatleastonceamonth.

Washing and Bathing Places: A dequate washing and bathing places shall be provided separately formen and women. Such places shall be kepting lean and drained condition.

Standard number of Latrines and urinals: The reshall be provided within the precincts of every work placel elatrines and urinals in an accessible place and in the following scales: -

- a) Where females are employed, the reshall be at least one latrine/urinal for every 25 female for example and the reshall be at least one latrine and the reshall be
- b) Wheremales are employed, the reshall be at least one latrine/urinal for every 25 males.

Provided that where the no. of male semployed exceeds 100, it shall be sufficient if there is one latring the provided that where the noise of the provided that the provided that

In calculating the no. of latrines required, any odd no. of workers less than 25 or 50, as thecasemaybe, shall be reckoned as 25 or 50.

Other specifications shall comply to the Odisha Factories Rules-1950.

Latrines and urinals: Except in workplaces provided with water flushed latrines connected with a water-borne sewage system, all latrines shall be provided with receptacles on dry earthsystem which shall be cleaned at least four times daily and at least twice during working hoursand kept in a strictly hygienic condition. Receptacles shall be tarred inside and outside at leastonceavear.

If women are employed, separate latrine and urinals, partitioned from those for men andlabeled with bold letters in both Oriya & Hindi, such as "For Men" or "Women" shall beprovided. A poster showing the figure of a man and of a woman shall also be exhibited at theentrance to latrines for each sex. There shall be adequate supply of water close to latrinesandurinals.

- 8.4.4 Construction of latrines: Inside walls shall be constructed of masonry or other non-absorbentmaterial and shall be cement-washed inside and outside at least once a year. The dates ofcement washing shall be noted in a register maintained for the purpose and kept available forinspection. Latrineshall have at least that chedroof.
- 8.4.5 DisposalofExcreta:Unlessotherwisearrangedforbythelocalsanitaryauthority,arrangement for proper disposal of excreta by incineration at the workplace shall be made bytheContractor.Alternativelyexcretamaybedisposedoffbyputtingalayerofnightsoilsatthe bottom of pucca tank prepared for the purpose and covering it with a 15 cm layer of wasteor refuse and then covering it with a layer of earth for a fortnight (when it will turn intomanure).

The Contractor shall, at his own expense, carry out all instructions issued to him by the Engineer-in-Charge to effect proper disposal of soil and other conservancy work in respect of Contractor's workmen or employees on the site. The Contractor shall be responsible for payment of any charges, which may be levied by municipal authority for execution of suchwork on his behalf.

- 8.4.6 Provisionofsheltersduringrest:Ateveryworkplacethereshallbeprovidedfreeofcostfoursuitabl esheds,twoformealsandtwoothersforrest,separatelyforuseofmenandwomenLabour.Heigh t of each shelter shall not be less than 12' from floor-level to lowest part ofroofs. Sheds shall be kept clean and the space provided shall be on the basis of at least 12sq.ft.perhead.
- 8.4.7 *Crèches*:Ataplaceatwhich30ormorewomenworkersareordinarilyemployed,thereshallbepro videdatleastoneroomforuseofchildrenundertheageof6yearsbelongingtosuchwomen.

  Rooms shall not be constructed to a standard lower than that of waterproof roof,smooth & impervious floor and wall with heat resistant materials / wooden planks. Roomsshall be provided with suitable and sufficient openings for light and ventilation. There shall beadequate provision of sweepers to keep the places clean. There shall be two Dhais inattendance. Sanitary utensils shall be provided to the satisfaction of local medical, health andmunicipal authorities. Use of huts shall be restricted to children, their attendants andmothersofchildren.

Where the number of women workers is more than 30 or more, the Contractors hall provide at least one hut and one Dhaitolook after children of women workers.

Sizeofcreche(s)shallvaryaccordingtothewomenworkersemployed.

- Creche (s) shall be properly maintained and necessary equipment like toys etc.
- provided. Allother provisions shall comply to Odisha Factories Rules-1950.
- 8.4.8 *Canteen*:A cooked food canteen on a moderate scale shall be provided for the benefit ofworkerswherever100ormoreContractor Labourareordinarily employedandworkcontinuesfor6monthsormore.
- 8.4.9 Planning, setting and erection of the above mentioned structures shall be approved by the Engineer-in-Charge, and the whole of such temporary accommodation shall at all times during the progress of the works be kept tidy and in a clean and hygienic condition to the satisfaction of the Engineer-in-Charge at the Contractor's expense. The Contractor shall conform generally to sanitary requirements of local medical, health and municipal authorities and at all timesadopt such precautions as may be necessary to prevents oil, water & air pollution of the site.

Oncompletion of the works the whole of such temporary structures shall be cleaned away, all rubb is hburnt, excreta or other disposal pits or trenches filled in an deffectively sealed of fand the whole of site left clean and tidy to the entire satisfaction of the Engineer-in-Charge at the Contractor's expenses.

- 8.4.10 Anti-malaria precautions: The Contractor shall at his own expense conform to all anti-malariainstructions given to him by the Engineer-in-Charge, including filling up any borrow pits whichmayhavebeendugbyhim.
- 8.4.11 *Enforcement:* The Inspecting Officer mentioned in the Contractors Labour Regulations atClause8.5.1(d)oranyotherofficernominatedinhisbehalfby theEngineer-in-ChargeshallreporttotheOwnerallcasesoffailureonthepartoftheContractoror hissubcontractorstocomplywiththeprovisionoftheseruleseitherwhollyorinpartandtheEngin eer-in-Chargeshallimposesuchfinesandotherpenaltiesasareprescribedintheconditions.
- 8.4.12 Interpretations etc: On any question as to the application, interpretation of effect of theserules, the decision of the Chief Inspector of Factories & Boiler, Labour Commissioner and Provident Fund Commissioner as the case may be shall be final and binding. Over & above thesaid provision, any court pronouncement having territorial jurisdiction shall be binding onboth parties as the case may be.
- 8.4.13 Amendments:Governmentmay,fromtimetotimeaddtooramendLabourLawsandrulesthereto and issue such directions as it may consider necessary for the proper implementation of these laws & rules or for the purpose of removing any difficulty which may arise in theadministration thereof.

## 8.5 CONTRACTLABOURREGULATION

- 8.5.1 *Definition:* In these regulations, unless otherwise expressed or indicated, the following wordsandexpressionshallhavethemeaningherebyassignedtothem:
  - (a) "InspectingOfficer" means any officer as mentioned below corresponding to different depart ments:

## Govt.Deptt. Designation

i) Labour:

#### RuralLabourInspectortoLabourCommissioner

- ii) Factory:InspectorofFactories&BoilerstoChiefInspectorofFactories&Boilers.
- iii) ProvidentFund:ProvidentFundInspectortoProvidentFundCommissioner
- iv) Anyotherpersonofabove departmentsdulyauthorizedbycompetentauthority.

Owner's Inspecting Officer means of ficers as mentioned below:

- i) PlantManager
- ii) Engineer-in-charge
- iii) GeneralManager(P&A)orhisauthorizedrepresentative
- iv) Safety/FireOfficer
- 8.5.2 Submissionofinformationbeforecommencementofwork:

Contractor shall, before commencement of the work, furnish in writing to the Engineer-in-charge of the area concerned the following information:

- (a) Nameandaddressofsubcontractorsasandwhentheyareengaged.
- (b) DateofCommencementofthework.
- (c) Numberofworkersemployedandlikelytobeemployed.
- (d) Wagesfordifferentcategoriesofworkers.
- 8.5.3 (i) Number of hours of work which shall constitute a normal working day:-

Thenumberofhours, which shall constitute a normal working day for an adult, shall be eighthours including ½ hr. rest after five hours of work. The working day of an adult worker can be so arranged that inclusive of intervals, if any, for restits hall not spread over more than ten/twelve hours on any day with prior approval of competent authority. If an adult worker is made to work more than nine hours on any day or for more than forty eight hours in any weekhes hall, in respect of overtime work, be paidwages at double the ordinary rate of wages.

- (ii) Weeklyrest: Everyworkershall begiven a weeklyd day of rest which shall be fixed and notified in a dvance. A workershall not be required or allowed to work on the weekly rest day unless he has or will have a substituted rest day, on one of the three days immediately before or after the rest day provided that no worker shall work for more than ten consecutive days without a full rest day.
- 8.5.4 Display of notice regarding Wages, Weekly Day of Rest etc.: The Contractor shall before hecommenceshisworkunderContract, displayandcorrectlymaintainandcontinuetodisplayan dcorrectlymaintainincleanandlegibleconditioninconspicuousplacesatsite, noticein English, Oriya & Hindi giving the rate of minimum wages, the hours of work for which suchwages are payable, the weekly rest days workers are entitled to and name and address of the Inspecting Officers.
- 8.5.5 *Fixation of Wage Periods:* The Contractor shall fix wage periods in respect of which wagesshallbepayable.Nowageperiodshallexceedonemonth.
- 8.5.6 PaymentofWages:
  - (i) Wagesduetoeveryworkershallbepaidtohimdirectortohisauthorizedperson.Allwagess hallbepaidincurrentcoinsorcurrencyorinboth.
  - (ii) Wages of every worker engaged under the Contract shall be paid where the wageperiodisoneweek, within THREE days from the end of the Wageperiod; and in anyoth er case before the expiry of the 7<sup>th</sup> day or 10<sup>th</sup> day from the end of the wage periodaccording as the number of workers does not exceed 1,000 or exceed 1,000.

- (iii) When employment of any worker is terminated by or on behalf of the Contractor, theduesofsuchworkershallbepaidwithimmediateeffect.
- (iv) Paymentofwagesshallbemadeattheworksiteonaworkingdayexceptwhentheworkisc ompetedbeforeexpiryofthewageperiod,inwhichcasefinalpaymentshallbemadeatthe worksitewithin48hoursofthelastworkingdayandduringnormaltime.
- 8.5.7 *Register of Workman:* A register of workmen shall be maintained in the Form appended in Annexure-Xandtherelevant particulars of everyworkman shall be entered therein immediately on his employment and kept at the work site.
- 8.5.8 *EmploymentCard:*TheContractorshallissueanemploymentcardintheFormappendedinAnnex ure-XI to each worker on the day of work or entry into his employment. On termination of employment the Employment Card shall be retained by the Contractor and a servicecertificateshallbeissuedinFormX.

## 8.5.9 RegisterofWagesetc:

- (i) ARegisterofWages-cum-MusterRollintheFormappendedinAnnexure-XIIshallbemain tainedandkeptattheworksiteorasneartoitaspossible.
- (ii) A wage slip in the Form appended in Annexure-XV shall be issued to every workeremployedbytheContractoratleastadaypriortodisbursementofwages.

## $8.5.10 \;\; Deductions, which may be made from Wages:$

- (i) Wages of a worker shall be paid to him without any deductions of any kind except thefollowing:
  - (a) fines
  - (b) deductions for absence from duty. The amount of deduction shall be inproportion to the period for which he was absent.
  - (c) deduction for damage to or loss of goods expressly entrusted to the employedperson for custody, or for loss of money which he is required to account
    - for, where such damage or loss is directly attributable to his neglector default.
  - (d) Rentofhouseaccommodation/amenities
  - (e) Deductions for recovery of advances or for adjustment of overpayment ofwages. Advance granted shall be entered in a register; and
  - (f) Anyotherdeduction, which the Owner may from time to time allow.
- (ii) Nofinesshallbeimposedonanyworkerinrespectofsuchactsandomissionsonhispartash avebeenapprovedbytheCompetentauthorityasinClause8.5.1.
- (iii) Nofineshallbeimposedonaworkerandnodeductionsfordamageorlossshallbemade from his wages until the worker has been given an opportunity of showing causeagainstsuchfinesordeduction.
- (iv) Thetotalamountoffineswhichmaybeimposedinanyonewageperiodonaworkershallno texceedanamountequalto3%ofwagesinrespectofthatwageperiod.
- (v) No fine imposed on a worker shall be recovered from him in installments, or afterexpiry of sixty days from the date on which it was imposed. Every fine shall be deemedto have been imposed on the day of the act or omission in respect of which it wasimposed.
- (vi) TheContractorshallmaintaininEnglish,Hindi&OriyaalistapprovedbytheLabourCommi ssioner, clearly stating the acts and omissions for which penalty or fine may beimposed on a workman and display it in good condition in a conspicuous place on theworksite.
- (vii) The Contractor shall maintain a register of fines and the register of deductions fordamage or loss in the Forms appended in Annexure-XIII & XIV respectively, whichshouldbekeptattheplaceofwork.

- 8.5.11 Register of Accidents: The Contractor shall maintain a register of accidents in Form 26prescribed under Rule 105 of Odisha Factory Rules, 1950 but the same shall include thefollowing particulars:-
  - (a) Fullparticularsofthelabourswhometwithaccident
  - (b) RateofWages
  - (c) Sex
  - (d) Age
  - (e) Natureofaccidentandcauseofaccident
  - (f) Timeanddateofaccident
  - (g) Dateandtimewhenadmittedinhospital
  - (h) Dateofdischargefromthehospital
  - (i) Periodoftreatmentandresultoftreatment
  - $(j) \qquad \text{Percentagelossofearning capacity and disability as assessed by Medical Officer}.$
  - (k) ClaimrequiredtobepaidunderWorkmen'sCompensationAct.
  - (I) Dateofpaymentofcompensation
  - (m) Amountpaidwithdetailsofthepersontowhomthesamewaspaid
  - (n) Authoritybywhomthecompensationwasassessed
  - (o) Remarks
- 8.5.12 *PreservationofRegisters:* The Register of work men and the Register of Wages-cum-Muster Rollr equired to be maintained under these Regulations shall be preserved for 3 years after the date on which the last entry is made therein Form IX.
- 8.5.13 Enforcement: The Inspecting Officer shall either of his own or on a complaint received by himcarryoutinvestigations, and send are portto the Engineer-In-charge specifying the amounts representing worker's dues and amount of penalty to be imposed on the Contractor for breach of these Regulations, that have to be recovered from the Contractor, indicating full details of the recoveries proposed and the reasons therefore. It shall be obligatory on the part of the Engineer-in-charge on receipt of such a report to deduct such amounts from payments due to the Contractor.
- 8.5.14 Disposal of amounts recovered from the Contractor: The Engineer-in-charge shall arrangepayment to workers concerned at the earliest from receipt of a report from the InspectingOfficer except in case where the Contractor had made an appeal under Clause 8.5.15. In casewhere there is an appeal, payment of workers dues would be arranged by the Engineer-in-charge, wherever such payments arise, within THIRTY days from the date of receipt of thedecisionoftheauthorityspecifiedinClause8.5.1
- 8.5.15 Appeal against decision of Inspecting Officer: Any person aggrieved by a decision of theInspecting Officer may appeal against such decision before the higher authority concernedwithin THIRTY days from the date of the decision, forwarding simultaneously a copy of hisappealtotheEngineer-in-charge.

Inspection of Books and other Documents: The Contractor shall allow inspection of theRegisters and other documents prescribed under these Regulations by Inspecting Officers andtheEngineer-in-charge/Owner/Owner'srepresentativeatanytimeonreceiptofduenotice ataconvenienttime.

*Interpretation, etc.:* On any question as to the application, interpretation or effect of theseRegulationsthedecisionoftheOwnerorhisrepresentativeshallbefinal&binding.

Amendments: Government may, from time to time, add to oram end Labour laws and issue such directions if considered necessary for the proper implementation of Labour laws or for removing any difficulty, which may arise in the administration thereof.

#### REGISTERSTOBEMAINTAINEDBYTHECONTRACTOR:

## FactoryAct1948:

1. RegisterofAdultworkers : Form-12

Registerofleavewithwages: Form-15
 RegisterofAccident : Form-26
 Registerofovertime : Form-10

5. Registerofhealth : Form-31

6. RegisterforissueofPPEs

7. Registerforcompensatoryholiday:Form-9

8. MusterRollwithWagesRegister

## ContractLabour(R&A)Act1970

9. MusterRoll : Form-XII
 10. Employmentcards : Form-X
 11. RegisterofContractWork : (FormVII)Part-II

PaymentofWagesAct-1936

12. RegisterofFines : Form-XVII

13. RegisterofDeduction : Form-XIV14. RegisterofAdvance : Form-XVIII

MinimumwagesAct

15. Wageslip : Form-XV

## PaymentofBonusAct

16. ConsolidatedRegister

## PFAct

17. ContributionRegister

18. InspectionRegister

## EqualRemunerationAct1976

19. Form'D'Register

## MiscellaneousRegister

20. RegisterforissueofPPEs

**EndofSection-VIII** 

#### SECTION-IX

#### 9.0 SAFETYPROVISIONS:

#### 9.1 GENERAL:

It is the objective of OPGC to maintain excellence in safety & loss control performance byContractors at all locations of ITPS. The Owner will provide the environment, encouragementand support to achieve this objective but is the Contractor's responsibility to establish,maintain,andmanageitsownsafety&losspreventionprogramme.

Contractor shall adhere to safe work practice and guard against hazardous and unsafeworkingconditionandshallcomplywithOwner'ssafetyrulesassetoutherein.Priortostar tof work, Contractor will be provided copies of Owners Health & Safety Manual for informationandguidance.

The contactor is expected to exert primary control through their line supervision to obtaindesired performance. Repeated poor safety performance shall lead to termination of ContractandshallbedebarredfromfutureparticipationinContractforoneyear.

#### **9.2** RESPONSIBILITY OF CONTRACTOR IN RESPECTOFS A FETY:

- 9.2.1 Inrespectofalllabours, directly orindirectly employed in the workfortheperformance of Contract, the Contractor shall at his own expense comply all the safety provisions as per (i) Bureau of Indian Standards, (ii) The Electricity Act & Rules, (iii) Regulations adopted by Owner and other orders made the reunder and other acts as applicable.
- 9.2.2 The Contractor shall observe and abide by all fire/safety regulations of the Owner. Beforestarting of work, Contractor shall consult Engineer-in-charge and ensure that any loss ordamage due to fire to any portion of the work under this Contract due to his fault shall bemadegoodbytheContractorathiscost.
- 9.2.3 Before entry into the plant premises, all the Contractor labours shall be imparted safetytrainingbyOwner'sSafetyOfficer/FireOfficerafterwhichgatepassshallbeissued.
- 9.2.4 TheContractorshallensurethatnecessaryskillinrespectofvariousjobsisacquiredbywayof working & certificate to that effect is available, e.g. for riggers, fitter & other such workmen.Operators/driversofvariousvehiclesmusthavevalidlicensefromcompetentauthorit y.

#### 9.3 SAFETYRULESOFOWNER:

- 9.3.1 The Contractor has to strictly abide by the Safety rules & regulations enforced by Owner fromtime to time. The Contractor shall provide proper Identity Card to their employees, whichshall be produced for verification on demand at security gate & in working areas. All theContractorworkershavetobeprovidedwithpersonalprotectiveequipmentaspertheBISHdu ly certified by Owner's Safety Officer. The Contractor has to make provision of standardPPEs as laid down in Clause 9.13 and get it approved from Owner's Safety Officer beforecommencement of the work, failing which the Contractor & their workmen shall not beallowedtoenterintotheplant/worksite.
- 9.3.2 Any Contract labour who shall be detected inside the plant without use of any of the PPEsshall not be allowed to continue in duty. On first occasion, he shall be sent back with warningandonsecondoccasion,heshallbesentback&shallbedebarredfromdutyfor3to5daysw ithout pay. Repetition of the same shall constrain the management to advise the ContractortoremovesuchpersonfromhisemploymentunderthisContract.
- 9.3.4 The Contractor workmen are restricted to go to any other department / work place Page **97** of **201**

during duty without permission of Engineer-in-charge.

- 9.3.5 Any Contractor workman detected on duty in drunken condition shall not be allowed tocontinueattheOwner'ssite.
- 9.3.6Facemask&apron/flashsuitofapprovedstandardaretobeprovidedbytheContractortoelectrical workmenasandwhenrequired.

#### 9.4 COMPENSATION:

For any accident of Contractor work men while on work the Contractors hall pay compensation to heir work men, supervisor as per Factory/Labour Act. Owners hall not be liable for any such compensation.

#### 9.5 SAFETYINOPERATION/MAINTENANCE:

- 9.5.1 Contractorshallhavetoundertakeanyjobas&whenrequiredatmutuallyagreedtimewiththecon cernedEngineer-in-chargeandwithproperworkpermit(PTW)forsafetyconsideration&uninter ruptedrunningoftheplant.
- 9.5.2 Noworkmancanbeengagedinovertimeduringnighthours&onholidayswithoutspecificapprov alofEngineer-in-charge.

#### 9.6 FIRSTAIDANDINDUSTRIALINJURIES:

- i) Contractor shall maintain first aid facilities for his employees and those of hissubcontractorsinadditiontothefacilityprovidedbytheOwner.
- ii) Contractor shall make outsidearrangements for ambulance service for the treatment of industrial injuries. Names of those providing these services shall be furnished toOwner prior to start of work, and their telephone numbers shall be prominentlypostedinContractor'sfieldoffice.
- iii) AllnecessarypersonalprotectiveequipmentsasconsideredadequatebytheEngineer-in -charge / Safety Officer shall be kept available for the use of personsemployedatthesiteandmaintainedingoodconditionsuitableforuse.Thestandard ofPersonalProtectiveEquipments(PPE'S)tobeprovidedbytheContractorstotheirempl oyeesshallbeasfurnishedunder'standard'ofPersonalProtectiveEquipmentsaslaiddo wninClauseNo.9.13
- iv) The Contractor shall report promptly to the Engineer-in-charge/his representative anyinjury, diseases, dangerous occurrence, nearmisses and shall cooperate with Enginee r-in-charge and the Safety Officer in investigation process to establish basic causes and recommendap propriate improvements in control and remedial measures.

#### 9.7 NOSMOKINGAREA:

Smoking is strictly prohibited in plant premises in general & in the Battery Area, HydrogenArea,tankfarm,Diesel/petrolfillingstation&warehouseinparticular.Violatorsofthe "NoSmoking" rules shall be removed from employment immediately. Smoking is prohibited inpublicplace.

## 9.8 NOTICESTOBEDISPLAYED:

Inadditiontothedutiesimposedbystatutoryobligations, the Contractorshall notify on his work premises the following norms relating to safety, health and environment imposed by the Owner.

Owner'sSafetyandHealthProcedures&rulesapplicabletoContractorworkmeninOwne r'spremises.

#### 9.9 BARRICADE:

i) Contractorshallerectandmaintainbarricadesrequiredinconnectionwithhisworktogua rd,protect&preventaccidentsbyothers.:

## **Areastobeguarded**

- a) Excavations
- b) Hoistingareas
- c) AreasconsideredhazardousbyeitherContractororOwner.
- d) Owner's existing property subject to damage by Contractor's operation.
- e) Railroad/unloadingspots.
- f) AnyotherplaceasdirectedbyEngineer-in-charge/Owner'sSafetyOfficer.
- ii) Contractor's employees and those of his subcontractors shall a bide by Owner's barricadi ng practice and the provisions thereof.
- iii) Barricadesandhazardousareasadjacenttobutnotlocatedinnormalroutesoftravelshallbe markedbyredflasherlanternsatnights.

#### 9.10 SCAFFOLDING:

i) Scaffolding shall be moved, erected and used adjacent to exposed high voltage lineonly in accordance with the Owner's Safety & Health Procedures and in compliancewith the requirements imposed by the Engineer-in-charge. All scaffold structures shallbear the scaffold identification serial number, the safe working load of its platform, the signature of Engineer-in-charge and a clear indication of the safe access period ofseven days. Incomplete scaffolds must bear a caution – "Scaffolding Incomplete" (bothinHindi&Oriya).

The Contractor shall maintain a register of all scaffolds erected, dates of erection andreports of inspection and certificate of fitness. No scaffolding new or modified shallbe used by any one unless it has been inspected by Owner's Safety Officer / competentpersonforsatisfactoryconditionbeforeuseandthereafterbeforeeverysubse quentseven days. If scaffolding members are provided by Owner, the Engineer-in-chargemustcertifythemembersofthescaffoldbeforeuse.

In case of any modification or alteration in scaffolding, the Contractor must display onthescaffoldsas"DONOTUSE" signuntilithas been in spected and accepted as a safestructure by Owner's Safety Officer.

None other than a skilled & experienced workman shall erect, alter, modify thescaffoldingundersupervisionofacompetentperson.

AnyContractorwishingtomakeuseofanerectedscaffoldmustensurethatpermission has been granted by the Engineer-in-charge / competent person for thepurposeandthatthestructureiscapableoftakingtheloadrequiredfortherelatedwor k. The Contractor must also confirm to the management instructions applicable toscaffoldworkcontrol.

For work at height, but for short duration, where provision of a full scaffold is notreasonablypracticable,safetyharnessmustbeusedasperdirectionofEngineer-in-ch arge.Walkingoverunguardedbeamatheightisstrictlyforbidden.

- ii) Suitable scaffoldings should be provided for workmen for all works that cannot safelybedonefromthegroundorfromsolidconstructionexceptsuchshortperiodworksa s can be done safely from ladders. When a ladder is used a Mazdoor shall be engagedforholdingtheladderandiftheladderisusedforcarryingmaterialsaswell,suitabl efootstepsandhandrailsshallbeprovidedontheladderandtheladdershallbegivenaninc linationnotsteeperthan1in4(1horizontaland4vertical).Nometallicladdershallbeallow edforuseinworkplace.
- swingor suspend from an overhead support or erected with stationary support shall have aguard rail properly attached, bolted, braced and otherwise retarded at least one meterhigh above the floor or platform of such scaffolding or staging and extending alongwith the entire length of the outside and ends thereof with only such openings as maybe necessary for the delivery of materials. Such scaffolding or staging shall be sofastenedastopreventitfromswayingfromthebuildingorstructure.
- iv) Working platform, gangways and stairways should be so constructed that they shouldnot sag unduly or unequally and if the height of the platform or gangway or thestairway is more than 3.25 meters above ground level or floor level, they shall beclosely & rigidly constructed, should have adequate width and be suitably fastened asdescribedin(ii)above.
- v) Every opening in the floor of a building or in working platform should be provided withsuitable means to prevent the fall of persons or materials by providing suitable fencingorrailingwhoseminimumheightshallbe1.0meter.
- vi) Safe means of access shall be provided to all working platforms and other workingplaces. Every ladder shall be securely fixed. No portable single ladder shall be over 9.0meter in length. The length of rung between the side rails of ladder shall in no case

belessthan30cmforladderuptoandincluding3.0meterinlength.Forlongerladdersthis length shall be increased at least 15 mm for each additional meter of length.Uniform step spacing shall not exceed 30 cms. Adequate precautions shall be taken

topreventdangerfromelectricalpower.Nomaterialsonanyofthesitesofworkshallbeso stackedorplacedastocausedangerorinconveniencetoanypersonorpublic.The Contractor shall also provide all necessary fencing and lights to protect theworkers and staff from accidents, and shall bear the expenses of defense of every suit, action or other proceedings of law that may be brought by any person for injurysustained owing to neglect of the above precautions and to pay any damages and costwhichmaybeawardedinanysuchsuitoractionorproceedingstoanysuchpersonor which may with the consent of the Contractor to compromise any claim by any suchperson.

## 9.11 EXCAVATIONANDTRENCHES:

All trenches 1.2 meters or more in depth shall at all times be provided with at least one ladderforeach50-meterlengthorfractionthereof.

Laddershallbeextendedfrombottomofthetrenchtoatleast1.0mtrabovethesurfaceofthe ground. The sides of the trenches, which are 1.5 meters or more in depth, shall be steppedback to give suitable slope, or securely held by timber bracing, so as to avoid the danger

ofsidestocollapse. The excavated materials shall not be placed within 1.5 meters of the edge of the trench or half of the trench depth which ever is more. Cutting shall be done from top

to bottom. Under no circumstance sunder mining or under cutting shall be done.

**9.12** SAFETYMEASUREINDEMOLITONWORK:

- Before any demolition work is commenced and also during the process of thedemolitionwork-
- a) All roads and open areas adjacent to the work site shall either be closed or suitablyprotected.
- b) Noelectriccableorapparatus, which is liable to be a source of danger, shall remain electric ally charged.
- c) Allpracticalstepsshallbetakentopreventdangertopersonsdeployedfromriskoffire or explosion or flooding. No floor, roof or other part of the building shall be sooverloadedwithdebrisormaterialsastorenderitunsafe.
- II) AllpersonalprotectiveequipmentsasconsiderednecessarybytheEngineer-in-charge /SafetyOfficershallbekeptavailablefortheuseofthepersonsemployedatthesiteand maintained in good condition suitable for use. The standard of PPEs to beprovided by the Contractors to their employees should correspond to Clause 9.13hereinafter.
- a) Workers employed on mixing asphaltic materials, cement and lime mortars/concreteshallbeprovidedwithprotectivefootwear,protectivegloves,dustmaska ndgoggles.
- b) Those engaged in white washing and mixing or stacking of cement bags or anymaterials, which are injurious to the eyes shall be provided with protective goggles & dust mask.
- c) Those engaged in welding and gas cutting works shall be provided with protective faceandeye-shields/weldingmask,handgloves&leatherapronetc.
- d) Stonebreakers shall be provided with protective goggles, protective clothing, handgloves&dustmaskandseatedatsufficientlysafedistances.
- e) When workers are employed in sewers and manholes which are in use, the Contractorshallensurethatthemanholecoversareopenedandareventilatedatleastfor onehourbeforetheworkersareallowedtogetintothemanholes, and themanholes soop enedshall becord one doff with suitable railing and provided with warning signals or board to prevent accident to the public. In addition, procedure to work in confined spaces hall be strictly followed.
- f) The Contractor shall not employ men below the age of 18 years and women on theworkofpaintingtheproductscontainingleadinanyform.Nofemaleworkershallbeall owed to work without tight apron near rotating machines. Wherever men abovethe age of 18 years are employed on the work oflead paintingthe following precautions shall be taken-
  - 1. No paint containing lead products shall be used except in the form of paste orreadymadepaint.
  - 2. Suitable facemasks should be supplied for use by the workers when paint is applied in the form of sprayor as urface having leadpaint, dryrubbed and scrapped.
  - 3. All the required PPEs shall be provided by the Contractor to the workmen andadequate facilities shall be provided to enable the working painters to wash themoncessationofwork.
- III) When the work is subject to a risk of drowning all necessary safety equipmentssufficientPPEsincludinglifebuoy&ropeshallbekeptforuseandalInecessary stepsshall be taken for prompt rescue of any person in danger and adequate provision shallbemadeforpromptfirstaidtreatmentofallinjurieslikelytobesustainedduringtheco urseofwork.
- IV) Use of hoisting machines and tackles including their attachment anchorage and supports shall conform to the following standard or conditions and must comply the part of the following standard or conditions and must comply the part of the following standard or conditions and must comply the part of the following standard or conditions and tackles including their attachment anchorage and support of the following standard or conditions and tackles including their attachment anchorage and support of the following standard or conditions and tackles including their attachment and tackles including their attachment anchorage and support of the following standard or conditions and tackles including their attachment anchorage and support of the following standard or conditions and tackles including the following standard or conditions and support of the following standard or conditions and support of the following standard or conditions are supported by the following standard or conditions are support of the following standard or conditions are supported by the s

rovision of Factory Act.

- a) These shall be of good mechanical construction, sound materials and adequatestrengthandfreefrominherentdefectandshallbekeptingoodworkingorder.
- b) Everyropeusedinhoistingorloweringmaterialsorasmeansofsuspensionshallbeofdura blequalityandadequatestrengthandfreefrominherentdefects.
- c) Every crane driver or hoisting appliance operator shall be properly qualified and nopersonundertheageof21yearsshallbeinchargeofanyhoistingmachineincludingany scaffoldingorgivesignalstotheoperator.
- d) In case of every hoisting machine and of every chain ring hook, shackle swivel andpulleyblockusedinhoistingorloweringorasmeansofsuspension,thesafeworkinglo ad&dateoftestingshallbelabeledontheequipment. Everyhoistingmachineandall gear referred to above shall be marked with the safe working load and theconditions under which it is applicable shall be clearly indicated. No part of anymachineoranygearreferredtoshallbeloadedbeyondthesafeworkingloadexceptfor thepurposeoftesting.
- e) In case of department machines, the safe working load shall be displayed on theequipmentbytheEngineer-in-charge.AsregardsContractor'smachines,theContractor shall obtain necessary test certificate from competent authority andinformtheEngineer-in-chargeforverification,wheneverhebringsanymachinerytos ite of work. The safe working load and date of load testing & due date of testing shallbelabeledontheequipmentinbothcases.
- f) Length of chain used for lifting shall not be adjusted by putting knot or slashing underanycircumstances.
- g) The lifting area including winch and other such equipment shall be isolated by suitablebarricadetoprevententryofotherpersons&animals.
- V) Motors, gears, transmission lines, electric wiring and other dangerous part of hoistingappliances shall be provided with efficient safeguards. Hoisting appliances shall be provided with such means as to reduce to the minimum the accidental descent of
  - theload. Adequate precaution shall be taken to reduce to the minimum risk of any part or parts of a suspended load becoming accidentally displaced. When workers are employed on electrical installations, which are already energized, insulating mats, wearing apparel such as gloves, sleeves and boots as may be necessary should be provided. The workers shall not wear any rings, watches and carry keys or other materials, which are good conductors of electricity.
- VI) Allscaffolding, ladders and others afety devices mentioned or described here in shall be maintained in safe conditions and no scaffoldings, ladder or equipment shall be altered or removed while it is in use. A dequate washing facilities shall be provided a torn ear places of work.
- VII) Thesesafetyprovisionsshallbebroughttothenoticeofallconcernedbydisplayingon a notice board at a conspicuous place of worksite. The person responsible forcomplianceofthesafetycodeshallbenamedthereinbytheContractor.
- VIII)To ensure effective enforcement of the rules and regulations relating to safety, thearrangements made by the Contractor shall be open to inspection by the Engineer-in-charge / Safety Officer of Owner or authorized representatives and the InspectingOfficersasdefinedintheContractLabour(R&A)Act.
- IX) Notwithstanding the above clauses there is nothing to exempt the Contractor from the operations of any other Act or rules in force in the Republic of India. The worksthroughoutincluding any temporary works, shall be carried out in such a manner as

 $not to interfere in anyway what so ever with the traffic on any \ roads or footpaths at$ 

- the site or in vicinity thereto or any existing works whether the property of the Ownerorathirdpartyisaffected.
- X) EveryContractor'semployeeshallbeatalltimesunderthepropersupervisionwhenwork ing in Owner's premises or outside working site under Contract. Where aContractor / subcontractor himself works alone or with 2-3 persons and does not havespecificallydesignatedsupervisors,theContractorshallbetreatedassupervisorand ensuresafetyofself&hisworkmen.
- XI) TheContractormustensurethatallequipmentbroughttositeareingoodcondition, maint ained in good condition, complies with the requirements of the Factories Actand/oranyotherspecificlegislationandisusedorerectedsafely. Minimumstock of PP Es must be maintained by the Contractor in site store to meet all times need atwork.
- XII) Contractor workers engaged in areas involving coal dust must use dust mask inadditiontosafetyshoes, hardhats & safetyglasses.
- XIII) Contractor labour while working in heights or on utilities connected to movingequipmentsetc.mustusesafetybelts/fullbodyharnessasperrequirement.
- XIV) Contractor labours engaged in areas involving high noise such as crusher, grizzlefeeder, traveling tripper & paddle feeders, locomotives, ball mill, FD,ID & PA fans,compressors,DGset,turbinehalletc.mustuseearplug/earmuff.
- XV) Theuseofcompressedairforcleaningofclothingandskinisforbidden.
- XVI) No source of ionizing radiation shall be brought to Owner's premises without the priorpermission of the Engineer-in-charge.
- XVII) Ladders, long objects and cranes must not be used in the vicinity of exposed highvoltagepowerlinewithoutpermissionoftheEngineer-in-charge.
- XVIII) Allsitehuts, storage facilities, shelters and the likeshall be provided with fire extinguishers a propriate to the risk and with a dequate means of escape which shall be kept clear at all times
- XIX) Gasfiresandradiantheatersareforbiddeninsitehuts.
- XX) TheContractormayonlyusehigh-pressurewaterwashing,on-linesealingandsteamclea ningapparatuswithpriorpermissionoftheEngineer-in-charge/hisrepresentative.

#### XXI) OverheadCrane:

- a) No work on overhead crane is permissible when persons are either working orotherwise available under the said work. Roadways must be barricaded when work iscarriedoutonroofshavingeaves(overhangingedgesofroof)paralleltoroadways.
- b) Allgirders, beams & overhead surfaces shall be kept free from nuts, bolts, tools and other materials.

## XXII) Electrical:

- a) Only authorized and qualified personnel shall work on the installations, wiring, troubleshootingorrepairofelectricalequipment.
- b) All electrical work including temporary wiring shall be done in accordance with the current Indian Electricity Regulations and with the permission of concerned departmental electrical engineers / competent authority.
- c) NoladdersotherthanelectricallyinsulatedfiberladdershallbeusedbyworkmenoftheCo ntractor.
- d) All electrical equipments provided by the Contractor and any temporary supplyinstallationsshallcomplywiththeprovisionsoftherelevantIndianElectricityRegulations.

- e) Portable tools, headlamps and other portable apparatus should be identified by aserial number, registered and periodically inspected & tested. All such equipmentsusedbytheContractorshallhaveacurrenttestcertificateofelectricalsafety.
- f) For tapping of power for temporary work, socket & adopter shall be used. Insertingwireinplugsocketshallbeliableforseverepenalty.

## XXIII) Crane:

- a) Cranes & other heavy equipment must be guided into and out of the plant by a person(pilot)walkinginfrontofthevehicleataSAFEdistance.
- b) Nopersonshallrideonacraneball,cableorboometc.
- c) Areaswithinthesurroundingradiusoftherearoftherotatingsuperstructureoftheheavy crane shall be barricaded to prevent personnel from being struck or crushed bythecranewhileinoperationatoneplace.
- d) Craneboomsmustnotbeoperatedwithin3metersofliveelectricalwires.
- e) Light of Crane: Head light & back light must be used irrespective of movement orworkinginastaticcondition.

#### XXIV) Vehicles:

- a) Contractors shall not be permitted to use company mobile equipment such as cranes, tractors, and industrial trucks, machinery etc. unless specifically authorized in writingtodoso.
- b) Automobiles and other vehicles shall be parked only indesignated areas.
- c) Maximumspeedlimitsshallbeaspertheroadsignsinsidefactorypremises.
- d) Vehiclestravelingonplantroadsatnightmustuseheadlightsatlowbeam. Allloadsmustb esecurely fastened.
- e) NoContractorlabourshallsitontheopentruckortractor/trailerbodyetc.
- f) Nobodyshouldenterorgetoutofanymovingvehiclesorequipments.
- g) Propercovershallbeprovidedforvehiclescarryingdust-emittingmaterials.

## XXV) HotWorkPermit:

- a) ContractorshallcontacttheEngineer-in-chargeoftheworktoobtainaHWPbeforestarti nganyflamecutting,welding,grindingorotherhotwork.
- b) The Contractors hall provide a firewatch if the hazard dictates the need for one.
- c) Allcompressedgascylindersmustbestoredinuprightpositionandproperlysecuredwith avalvecap.
- d) Ensure availability of approved extinguishers in good working order and properly filledbeforestartingthejob.
- e) Where cutting, burning or welding is to be done overhead, a person must be stationedbelow at a safe distance with an approved fire extinguisher. The area under overheadworkshallbebarricaded.
- f) Arc welding done at floor level must be shielded to protect personnel from weldingarea.
- g) Acetylene and oxygen welding / cutting must have approved back flow preventioncheckvalves(i.e.FlashBackArrestor).Cylindermustbeclosed/turnedoffafter use.
- h) Tarpaulins used shall be fire resistant. The placement & use of tarpaulins shall beunderstrictsupervision&controlofcompanypersonnel.
- i) Fire hydrants and hoses are not to be used without written permission of Engineer-in-chargeexcepttofightfires.
- j) NoLPGshallbeusedforanyindustrialpurpose.XX

## VI)CompressedGasCylinder:

Compressed Gas Cylinder must be moved, stored or handled in an upright position. Transporting horizontally or by means of "barrel rolling" tactics is forbidden. Nocylinder shall be moved with the protective cap off or regulator attached except

whensecured in an approved welding buggy. All cylinders whether charged or empty must be secured in an upright and approved manner remote from possible damage.

#### XXVII) Confined spaces:

Nopersonshallenteraconfinedspace(tank,vault,pit,sewer,orenclosedstructurewith restricted means of space) until such entry permit is issued and signed by thedepartmentalEngineer-in-chargeoftheconfinedspaceworkarea.

#### XXVIII) General

#### Practices:Intoxica

nts:

- a) Possession of or drinking of alcoholic beverages is strictly prohibited on companypremises. Violators will be immediately removed and permanently prohibited fromenteringtheplant.
- b) Possessionofdrugsforotherthan medicalreasonsisforbiddenoncompanypremises.
- c) Contractorpersonnelmustnotenteranybuildingorareanotrequiredbytheirwork&won deringabouttheplantisprohibited.

#### XXIX) HouseKeeping:

a)GoodHouse-Keepingpracticesaretobefollowedandtheworkplaceskeptcleanandorderly.Re jects&scrapsshallbedepositedinproperwastecontainers/placeasthecasemaybe.

Atnotimeshallanymaterialsorequipmentbeplacedsoastoblocktheaisles&emergencyexitsfro mworkplace.

#### XXX) MachineryGuarding:

Machinery, tools and equipments must not be operated without guards.

#### **XXXII) FireProtection:**

- a) Fire hydrants, extinguishers, hose racks and other emergency equipment shall not becoveredorblockedandfireequipmentlinesmustalwaysbekeptclear.
- b) All fire incidents must be reported to the Engineer-in-charge / Fire Officer / SafetyOfficerregardlessofdurationorextentandmeticulouslyinvestigated.

#### **XXXIII) TemporaryBuilding:**

TemporarybuildingandmaterialstorageareasshallonlybeallowedonwrittenapprovaloftheEngineer-in-charge.Theyshallnotbesetupunderpowerlinesoroverpipeways.

#### XXXIV) ClearanceProcedure:

Contractor must utilize the plant safety clearance procedure for performing work on processequipment, machines, and electrical equipment, as close supervisory coordination and controlar eneeded on the sejobs.

### XXXV) PlantUtilities:

Plant air, water, gas, electricity, fuel etc are not to be used by the Contractor unless the sourceofsupplyhasbeendesignatedandauthorizedbyEngineer-in-charge.

#### 9.13 MINIMUMQUALITYOFPERSONALPROTECTIVEEQUIPMENT:

Standard of personal protective equipments to be provided by the Contractors to theiremployeesareindicatedherebelow.

#### NAMEOFTHEITEMSWITHSPECIFICATION

1. IndustrialsafetyhelmetconforminglS:2925

2. SafetyshoesconforminglS:9473-1993

- 3. DustmaskconforminglS:9473-1983
- 4. SafetybeltconformingIS:3521-1983FullbodyHarnesswithfallarresttestedto22KNandabove.
- Safetyglassesfordustprotection

Light weights a fety glasses with side shield to protect against wind & ultravioletra y with a djust able side arm sfor personalized fit.

- 6.(i) EarmuffconformingIS:6229
  - (ii) EarplugorEarseal

Unique closed cell polyester from smooth tapered surfaces i milar to ear canal, swells slowly to fit individual Ear canal.

(Anyoneitemoutofthreetypesofearprotectiondeviceshouldbeissued)

- 7. Flame-Water-Oil-Acids&alkaliresistantworkwear(madeof100%cottonfabric)
- 8. SafetyglovesofKevlarorequivalent(hightemp.resistance)
- 9. Faceshield(conformingIS:8521partItype-I)
- 10. Electricalhandgloves440v&33KVconformingIS:4770
- 11. HandglovesforchemicallaboratorymadefrompurelatexAcidandAlkaliproof
- 12. HandglovesforconcentratedchemicalsmadefromsuperiorPVCinsidecottonreinforceforbette rgrip
- 13. Splitchromeleatherhandglovesforhandlingroughobject.
- 14. Canvashandglovesforhandlingsmoothobject&doinglightworkwithit.
- 15. Flip up goggles with stationery frame fitted with ophthalmic grade zero power toughened lensand fitting frame. Blue lens for furnace.Green shade No.4 for gas cutting, dark greenNo.11forglassesforARCweldingwheneverisrequired.
- 16. Panoramic type safety goggles for acid & alkali whenever is required. Contractor shall ensureproperuseofpersonalprotectiveequipmentbytheirworkmenandsupervisoronduty.

Before is sue of the above PPEs depending on the need of the area of work the sample of the same must be provided to Owner's Safety Officer for inspection & approval.

The Contractor shall be issued entry pass for their employees after due verification of thequalityofthestandardPPE'sandimpartingnecessarytrainingwellinadvance(i.e.before7day sofcommencementofwork)byEngineer-in-charge/SafetyOfficer.

- a) None of the Contractor's employees shall be allowed inside the plant premises without valid gate pass, safety shoes, helmet (hardhat) & safety glasses.
- b) Contractor shall ensure that all his employees use proper PPE's inside the plantpremisesasperthework&siterequirement.
- c) During the course of execution of the work the Contractor must ensure use ofappropriate tested tools by their workmen. Safe working practice must strictly befollowed, e.g. use of proper plug & socket for electrical connections, right size &standardspanner,rightcapacityandtestedlifting&pullingequipmentetc.
- d) TheContractormustensuretidinessoftheworkplaceduring&aftercompletionofthework
- e) Incaseofanydoubtrelatingtosafetyguidelines,theContractorshouldseekadviceofheE ngineer-in-charge/SafetyOfficerimmediatelyforclarification.

ANY DEFICNENCY IN SAFETY ASPECTS SHALL BE VIEWED SERIOUSLY BY THE OWNER. THECONTRACTORWILLBEPENALISEDUPTOTHEEXTENTOFRs.10,000/-(RUPEESTENTHOUSAN DONLY)PEREACHLAPSEASDETERMINEDBYTHEENGINEER-IN-CHARGE.OWNER

RESERVES THE RIGHT TO TERMINATE THE CONTRACT AND DEBAR THE CONTRACTOR TOPARTICIPATE ANY FUTURE BIDDING IN CASE OF CONTINUED FLOUTING OF THE SAFETYNORMSPRESCRIBEDBYTHEOWNER.

#### 9.14 CAREINHANDLINGINFLAMMABLEGAS:

The Contractor shall ensure all precautionary measures and exercise utmost care in handlingthe inflammable gas cylinder / inflammable liquids / paints etc as required under the lawand/orasadvisedbytheOwner'sFireOfficer.

#### 9.15 TEMPORARYCOMBUSTIBLESTRUCTURE:

Temporarycombustiblestructuresshallnotbebuiltnearoraroundworksite.

#### 9.16 PRECAUTIONAGAINSTFIRE:

The Contractor shall ensure availability of appropriate fire Extinguishers / Fire Bunkers anddrums/firebucketsatworksiteasrecommendedbyEngineer-in-charge.

#### 9.17 EXPLOSIVE:

Explosive shall not be stored or used in the works or at site by the Contractor without thepermissionoftheEngineer-in-chargeinwriting.Thestorage&usearealsorestrictedtotheext ent&inthemannertowhichsuchpermissionisgiven.Whenexplosivesarerequiredforthe works they shall be stored in a special magazine to be provided at the cost of theContractor in accordance with the Explosive Rules. The Contractor shall obtain necessarylicense for the storage and use of explosives and all operations in which or for whichexplosives are employed shall be at sole risk and responsibility of the Contractor and theContractor shall indemnify the Owner against any loss or damage resulting directly orindirectlytherefrom.

#### 9.18 CONTRACTOR'SLIABILITY:

- 9.18.1 Safety code: The Contractor shall at his own expense arrange for the safety provisions asrequired by the Engineer-in-charge in respect of all labour directly employed for performanceof the works and shall provide all facilities in connection herewith. In case the Contractor
  - fails to make arrangements and provides necessary facilities as a foresaid, the Engineer-in-charges hall be entitled to do so and recover double the cost thereof from the Contractor.
- 9.18.2 Failure to comply with safety code or the provision relating to and report on accidents and togrant of maternity benefits to female workers or submission of materially incorrect statmentshall make the Contractor liable to pay Liquidated damages an amount not exceeding Rs.500/-for each default. The decision of the Engineer-in-charge in such matters based on the reportsfromtheInspectingOfficerorfromrepresentativesofEngineer-in-chargeshallbefinalan dbinding and deductions for recovery of such liquidated damages may be made from anyamountpayabletotheContractor.

#### 9.19 PRESERVATIONOFPEACE:

The Contractor shall take requisite precautions and use his best endeavor to prevent anyriotousorunlawfulbehaviorbyoramongsthisworkmenandotheremployedontheworksan dforthepreservationofpeaceandprotectionoftheinhabitantsandsecurityofpropertyinthenei ghborhoodofthework.IntheeventoftheOwnerrequiringthemaintenanceofaspecialpolicefor ceatorinthevicinityofthesiteduringthetenureofworks,theexpensesthereofshallbebornebyth eContractorandifpaidbytheOwnershallberecoverablefromtheContractor.

#### **9.20** OUTBREAKOFINFECTIOUSDISEASES:

The Contractor shall remove from his camp such labour and their families who refuseprotective inoculation and vaccination when required to do so by the Engineer-in-charge. Should Cholera, Plague or other infectious diseases breakout, the Contractor shall burn the huts, bedding, clothes and other belongings of or used by the infected parties and promptly erect new huts on healthy site as required by the Engineer-in-charge failing which within the time specified in the Engineer's requisition, the said work may be done by the Owner and the cost the reof recovered from the Contractor.

#### 9.21 USEOFINTOXICANTS:

The sale of dent spirits or other intoxicating beverages upon the work in any of the buildings, encampments or tenements owned, occupied by or within the control of the Contractor or any of his employee is forbidden and the Contractor shall exercise his influence and authority to the utmost extent to secure strict compliance with this condition.

In addition to the above, the Contractor shall a bide by all provisions of Owner's Safety Code frame d from time to time.

**EndofSection-IX** 

#### **SECTION-X**

#### 10.0 PENALTY:

#### **10.1** FORNON-COMMENCEMENTOFWORKONDUEDATE:

The execution of work shall commence from 15<sup>th</sup> day after the date on which the Ownerissueswrittenorderstocommencethework.IftheContractorcommitsdefaultincomme ncingtheexecutionofworkasaforesaid,Ownershallwithoutprejudicetoanyotherright or remedy be at liberty to forfeit the earnest money absolutely. In addition, OwnerreservestherighttoterminatetheContractwithoutanyfurtherreferencetotheContractor.

#### 10.2 FORNON-PERFORMANCE:

In case the performance is discontinued by the Contractor without any cause attributable to Owner, the Contract can be terminated with three days notice at the discretion of Engineer-in-charge and the security & all other dues of the Contractor shall be for feited. This shall be in addition to other penalties.

#### **10.3** FORUNSATISFACTORYPERFORMANCE:

If the performance does not commensurate either to the standard of work as per BIStandard/standard specified by the Owner or the progress is not as per time schedule, theContract shall be terminated with 30 days notice and security & other dues of the Contractorshallbeforfeited.

#### **10.4** FORNON-PERFORMANCEDUETOLABOURSTRIKE:

Incaseoflabourstrike, the Contractorshall continue the work or keep the work continued by alternate arrangement failing which Owner reserves all rights to get the work done otherwise at the risk and cost of the contractor. Also Owner reserves the right to terminate the Contract and impose penalty as in Clause 10.2

#### **10.5** FORNON-PAYMENTOFWAGESWITHINSPECIFIEDPERIOD:

For non-payment of wages to his labours within the specified period penalty shall be imposed on the Contractor asperclause No. 8.1(x)

#### 10.6 FORNON-COMPLIANCEOFOTHERSTATUTORYOBLIGATIONS:

In case of non-compliance of statutory provision within stipulated period, the Contract isliableforterminationatthediscretionofEngineer-in-charge.

#### 10.7 FORNON-ADHERENCETOSAFETYNORMS:

Penalty shall be imposed on the Contractor as per Clause No.9.13 for non-adherence to safetynorms.

10.8 If generation loss contributes to the fault of Contractor, penalty to the tune of loss on account of disruption of generation or dues of Contractor including security, whichever is less shall

be imposed. The Contractor shall also be debarred from participation in any future bidding for at least 3 years the reafter.

If Contractor disputes to the decision of Engineer-in-charge regarding his fault, the case shallbe referred to Contract Review Committee. In such case the Contractor or his authorized representative shall be a member of the CRC for investigation and report. This joint reportshall be final and binding on both parties.

10.9 Jobs asked by Engineer-in-charge subject to availability of related materials shall be attendedwith immediate effect. However, if the Contractor fails to do the work within reasonablehours or maximum within 48 hours as the case may be, the job may be done by engagingother agency at the cost & risk of the Contractor. In such an event, Owner may terminate theContract&debarthepartyfromfutureworkfortwoyears.

#### 10.10 PENALTYFORNON-RETURNOFEXCESSMATERIALSISSUEDBYTHEOWNER.

The Contractor shall return all surplus materials, scraps, tools & plant if issued for the work tothe warehouse in proper manner and obtain receipt to this effect before issue of

Completion Certificate by the Engineer-in-charge. If the same is not complied, the Contractor shall be

liable for cost of the same and 20% additional charge over & above the value as perwarehouserecords and shall be recovered from Contractor's bills.

#### 10.11 PENALTYFORKEEPINGIDLEMACHINERIES, EQUIPMENTS, T&Petc. HIREDBYOWNER:

In case of machinery, tools & plant and equipments arranged on hire by the Owner and provided to the Contractor for work, idle charges beyond reasonable period for such workshallbetheliability of the Contractor.

#### 10.12 LIQUIDATEDDAMAGE(LD):

L.D. shall be imposed on Contractor as per clause No. 6.9 for delay in completion of work.

- 10.13 IncaseoffailureonpartofContractortoprovideconsumablesoranyothermaterialundertheir scope & the work is affected on account of this shortfall, Owner reserves the right toarrange the same at the cost & risk of the Contractor. The amount so incurred by Owner with25%additionalchargesshallberecoveredfromtheContractor.
- 10.14 ForfailureonpartoftheContractortomeettheliabilityunderW.C.Act,P.F.Actetc.,penalt yasperClause8.1(viii)&8.2.3shallbeimposed.

Notwith standing any clause elsewhere in General Conditions of Contract, all the penalty on Contractor shall be deducted from Contractor's:-

- 1. RunningBill
- 2. Securitydeposit
- 3. AnyotherduesofContractor

Or

In case the amount exceeds the dues of the Contractor in concerned Contract, the same shall be recovered from dues of other contract with Owner;

Or

If recovery shall not be possible from any of the aforesaid manner, the same shall be recovered as debt liability.

**EndofSection-X** 

#### **SECTION-XI**

#### 11.0 Arbitration:

All disputes or difference in respect of which the decision is not final and conclusive shall, on the initial and conclusive shall, on the initial and conclusive shall, on the initial and conclusive shall also the conclusion of the initial and conclusive shall also the conclusion of the initial and conclusive shall also the conclusion of the initial and conclusive shall also the conclusion of the initial and conclusive shall also the conclusion of the initial and conclusive shall also the conclusion of the initial and conclusive shall also the conclusion of the initial and conclusive shall also the conclusion of the initial and conclusive shall also the conclusion of the initial and conclusive shall also the conclusion of the initial and conclusion of the conclusion of the initial and conclusion of the conclusi ativeofeitherparty, bereferred to the adjudication of a sole arbitrator, within thirty days receipt of notice from the contractor of his intention to refer the disputes toarbitrationorbyEngineer-in-Charge,theMDorMD-in-chargeofOPGCshallfinalizeapanelof three arbitrators and intimate the same to the contractor. The contractor shall withinfifteendaysofthereceiptofthislistselectandconfirmhis acceptancetotheappointmentonefromthepanelasarbitrator. If the contractor fails to commun icatehisselection of the name within the stipulated period, the MD or MD-in-charge of **OPGC** shall delayselectonefromthepanelandappointhimasthesolearbitrator.IftheMDorMD-in-chargeof OPGCfailstosendsuchapanelwithinthirtydays,asstipulated,thecontractorshallsenda similar panel to the MD or MD-in-charge of OPGC within fifteen days. The MD or MD-in-charge of OPGCs hall then select one from the panel and appoint him as the sole arbitrator when the panel and appoint him as the sole arbitrator with the panel and appoint him as the sole arbitrator with the panel and appoint him as the sole arbitrator with the panel and appoint him as the sole arbitrator with the panel and appoint him as the sole arbitrator with the panel and appoint him as the sole arbitrator with the panel and appoint him as the sole arbitrator with the panel and appoint him as the sole arbitrator with the panel and appoint him as the sole arbitrator with the panel and appoint him as the sole arbitrator with the panel and appoint him as the sole arbitrator with the panel and appoint him as the sole arbitrator with the panel arbitrator with the panel and appoint him as the sole arbitrator with the panel arbitratithin fifteen days. If the MD or MD-in-charge of OPGC fails to do so, the contractor shallcommunicate to the MD or MD-in-charge of OPGC the name of one from the panel who shallthen be the sole arbitrator. The appointment of sole arbitrator so made shall be final andconclusive.

If the Arbitrator so appointed is unable or unwilling to act or resigns his appointment orvacates his office due to any reasons whatsoever, sole Arbitrators shall be appointed asaforesaidbytheMDorMD-in-charge,OPGC.Theworkunderthecontractor,shall,howevercon tinueduringthearbitrationproceedings.

The Arbitrators hall be deemed to have entered on the reference, the date he issues notices to both the parties fixing the date of the first hearing.

The Arbitrator may, from time to time, with the consent of the parties, enlarge time formakingandpublishingtheaward.

The Arbitrator shall give a separate award in respect of each dispute or difference and shall give a reasoned and speaking award/awards.

The venue of arbitration shall at Bhubaneswar only and jurisdiction for any proceedings arising out of or concerning or connected with such arbitration shall be of appropriat ecourtat Bhubaneswar under the jurisdiction of Odisha High Court.

The fees, if any, of the arbitrator shall, if required t be paid before the award is made and published, be paid at half by each of the parties. The costs of the reference and the awardincluding the fees, if any, of the arbitrator shall be in the discretion of the arbitrator who may direct to and by who mand in what manner. Such costs or any part thereof shall be paid and may fix and settle the amount of costs to be so paid.

Theawardofthearbitratorshallbefinalandbindingonboththeparties.

Subject to aforesaid, the provisions of the Arbitration and Conciliation Act, 1996 or anystatutorymodificationorre-enactmentthereofandtherulesmadethereunder, and for the time being inforce, shall apply to the arbitration proceeding under this clause.

Neitherpartyisentitledtobringaclaimtoarbitrationiftherequestforappointmentofarbitrator hasnotbeenmadewithinthirty daysafterexpirationofwarranty /guarantyperiod.

## 11.1 JURISDICTION / GOVERNINGLAWS:

### a) Jurisdiction

For all disputes, appropriate court at Bhubaneswar under the jurisdiction of OdishaHigh Court alone shall have exclusive jurisdiction in all matters arising under this contract.

## b) GoverningLaws

The Contract shall be governed by and constructed according to the laws in force inINDIA.

**EndofSection-XI** 

**EndofGCCVolume-II** 

## SCHEDULE

## 'A'REFERENCETOGENERALCONDITIONSOFCONTRACT

2.1	AcceptingAuthority	AuthoritywhofloatsNIT
2.19	MarketRate-percentageadditiontoCoverov erheadsandprofit	10percent
1.14	Earnestmoney	AsperNIT
4.9	SecurityDepositshallbecalculatedasunder: (i)ContractvalueuptoRs.1crore	10% of contract value
	(ii)ContractValuemorethanRs.1crorebutnot exceedingRs.5crore	7.5% of contract value
	(iii) ContractvaluemorethanRs.5crore	5% of contract value
	ScheduleofRatesapplicable	_
3.25	Timeallowed for execution of works or times chedule.	OPWD <b>AsperSCC</b>
	Authoritycompetenttodecideif "anyothercause"	OPGC
	of delay is beyond Contractor's control	OPGC
8.1(vii	Duration of return of number and description by Fortnig rades of work menemployed on works to be submitted to Engineer-in-Charge.	htlyt
	Authority competent to reduce compensation	OPGC
5.11	amount. Defects Liability Periods	AsperSCC
5.12	Trainingofapprentices	Maximum number tobeengagedasperth eApprenticeAct.1961.
	Category(a ) (b) (c)e tc.	••
6.3.1	Interimbills/runningbill	Monthly in case of maint.Contract&afterachi evingMilestone as agreed inScheduleofworkinconst-

Ructioncontract.

11.1 Authorityforappointingarbitrator

OPGC

## SCHEDULE'B'

## MATERIALFORISSUETOTHECONTRACTOR

ofwastage

Rateatwhichmaterialwillbeissued Sl.No. Particulars

Qnty.PlaceofissueMax.allowable% Unit Rs.

		OTHE	113.		•	astage
1	2	3	4	5	6	7
1	Cement	MT			ITPSwarehouse	3%
	ifissued				ornearest	
					Railhead	
2	ReinforcementSteel					
	a) Mildsteel 6 mm	MT			ITPSwarehouse	5%
	&abovedia				ornearest	
					Railhead	
	(b)Torsteelrod	MT			ITPSwarehouse	5%
	ofalldia				ornearest	
					Railhead	
3	StructuralSteel	MT			ITPSwarehouse	5%
	(platesandrolled				ornearest	
	Sectionsonly)				Railhead	
4	Allspares		NA		-do-	NA
5	Lubricant		NA		-do-	NA
6	FuelOil		NA		-do-	NA
7	Conveyorbelt		NA		-do-	NA
8	Railwaysleepers		NA		-do-	NA
9	Millliner		NA		-do-	NA
10	BallforBallmills		NA		-do-	NA
11	Rails		NA		-do-	NA
12	Point&crossing		NA		-do-	NA
13	Fishplate		NA		-do-	NA
14	Module		NA		-do-	NA
15	Cards		NA		-do-	NA
16	Monitor		NA		-do-	NA
17	Recorder		NA		-do-	NA
18	Indicator		NA		-do-	NA
19	Gauges, pressuretem	р	NA		-do-	NA
20	Switches		NA		-do-	NA

SignatureoflssuingOfficer	Signature of Contractor
Date	Date

NAMEOFTHEBIDDER:
NAMEOFTHEWORK:

## DETAILSOFWORKSANDSERVICESOFSIMILARNATUREDONEBYTHEPARTYDURINGTHELASTTHREEYEA RS

SI.	Name	Description	Valueof	Perio	od	The	work	is	done	Remarks
No.	of	ofwork	work			direct	lyorthro	ughs	ubcon	
	Claimant			From	То	tracto	or			

Note: Photocopy of Performance Certificate/Completion Certificate of Owner in Support of the work mentioned above is required to be enclosed.

NAMEOFTHEBIDDER:		
NAMEOFTHEWORK:		
CONCURRENTCOMMITMENTS		

SI.	Full postal	Description	Value	Date of	Scheduled/Revisedcompl	% age	Expecteddateof	Remarks
No.	addressofclient&n	of	of	commencementofw	etionperiod	completionason	completion	
	ameofOfficer-in-ch	theworkdone	contract	ork		date		
	arge							

SIGNATUREOFTHEBIDDER:

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	,
NAMEOFTHEBIDDER:	
NAMEOFWORK:	
DETAILSOFEQUIPMENTS,TOOLS&TACKLES	
Biddershallsubmithereindetailsofeguipments.tools.tacklesetcreguiredtoperformthework(a)alreadvownedbyBidderandayailableforuseint	thiscontract(b)a

Biddershallsubmithereindetailsofequipments, tools, tackleset crequired to perform the work (a) already owned by Bidder and available for use in this contract (b) anticipated to be hired by contractor or (c) anticipated to be purchased by contractor. In case of (b) and (c) commitment of hirerors uppliers hall be stated.

Category	Category- wiseSI.No	Ownership status(a),(b),(c)	Description, makemode I & capacity	Quantity	Capacity	Year of manufacture	Location ofavailabili ty	Remarks
			capacity					

Photocopy of correspondence between contractor & hirerand between contractor & suppliers hall be furnished.

NAMEOFTHEBIDDER: NAMEOFWORK:

## ORGANISATIONCHART SHOWINGNO.OF QUALIFIEDENGINEERS &SUPERVISORYPERSONNELETC.INTHEEMPLOYMENTOFCONTRACTOR&TOBEEMPLOYED.

Sl.No.	Classofmanpower/	DetailsofPersonneltobed	eployedonthiswork	No.
	engineer/supervisor	Available	Tobeemployed	
		with		
		contractor		

Note: Names and short resume of their qualification & experience may also be given for key personnel.

The tentative chart of your site organization as above furnished by you shall be subject to variation to suit the construction / maintenance / operation programme requirement and as directed byOwner/Engineer-in-charge.

NAMEOFTHEBIDDER:		
NAMEOFTHEWORK:		
INFORMATIONABOUTBIDDER		

- 1. <u>Incaseofproprietaryfirm:</u>
- 1.1 Nameofthebusiness:
- 1.2 Whetherhisbusinessisregisteredwithappropriateauthority. If yes, name of authority.
- 1.3 Dateofcommencementofbusiness:
- 1.4 WhetherhepaysIncomeTaxoverRs.10,000/-peryear
- 2. <u>Incaseofpartnership:</u>
- 2.1 Nameofthepartnershipwithqualification:
- 2.2 Whetherthepartnershipisregisteredwithappropriateauthority:
- 2.3 Dateofestablishmentoffirm:
- 2.4 HowmanyofthepartnersofthefirmpayIncomeTaxoverRs.10,000/-ayearandifless,whatistheamountpaidbythem.IfallofthemdonotpayIncomeTax,whoofthemispayingIncomeTax.
- 2.5 PermanentAccountNo.underlTAct:
- 3. <u>IncaseofLimitedliabilityCompanyorCompanyLimitedbyGuarantee:</u>
- 3.1 Amountofpaidupcapital:
- 3.2 NameoftheDirectors:
- 3.3 DateofincorporationwithRegistrarofCompany.
- 3.4 CopiesofbalancesheetoftheCompanyofthelasttwoyears:

Copies of audited profit & loss Account and the balances he et shall be enclosed in case of individuals, part nership as well as limited companies for the last three years.

SignatureoftheBidder

NAMEOFTHEBIDDER:	
NAMEOFTHEWORK:	
	LISTOFENCLOSURES
THEBIDDERISREQUIRE	DTOENCLOSETHEFOLLOWINGDOCUMENTSASPARTOFHISBID.
1.	PhotocopyofPowerofattorneyofthesignatoryofthetender
2.	IncomeTax/SalesTaxClearanceCertificate/PAN/GSTRegistration
3.	Documents showing annual turn over for similar works or otherwise for the past two years such as annual report, profit and loss account etc.
4.	CertificatebyNationalized/ScheduleBank/CharteredAcc ountantFirmshowingfinancialcapacity.
5.	ProvidentFundNo.&ESIRegistrationNo.
6.	BidGuarantee/E.M.D.
7.	Letterofundertaking
8.	PermanentAccountNumberofIncomeTax

NAMEOFTHEBIDDER:		
NAMEOFTHEWORK:		
	EXCEPTIONSANDDEVIATIONS	

Bidder may stipulate here exceptions and deviations to the tender conditions, if considered unavoidable.

Sl.No.	Page No. document	of tender	Clause/Sub tenderdocume	Subject	Deviation

ΔN	INI	FXI	IR	F-۱	//	П

NAMEOFBIDDER:	
NAMEOFWORK:	
DETAILSOFPROPOSEDORGANISATION	

ThebiddershallsubmithereindetailsofHeadOfficeandsiteorganizationproposaltobedevelopedforexecuti on of the work. Bidder shall also furnish the bio-data of the site-in-charge and key personnel to bedeployedintheformatprovidedinAnnexure-IV.

Bidder agrees to augment the list in Annexure-IV with additional number/categories if required and ifdirectedbyEngineer-in-chargeforsmoothexecutionofworktakenbytheContractor.

## LETTEROFAUTHORIZATION

(Tobesubmitted on a non-judicial stamppaper of Rs. 10 (Rupeesten) only)

Mr./Mrs	residingin
	andpresentlyholdingtheposition
	ofthe
	firm/Group/Individual,isdulyauthorizedbytheFirm/Group
/Individualtosignandfurrork_	is hall such information as desired by the OPGCL in this document in respect of the w 
	Signature:
	Date:
	(Secretary/Generalpartner/Individual/Contractor/Applicant)
	SEAL
WITNESS:	
1.	
2.	

## SUPPORTING/ATTACHEDDOCUMENTLIST

AnnexureNo.	Supportingdocument/AdditionalSheet	DocumentNo.
I		
II		
III		
IV		
V		
VI		
VII		
VIII		
IX		
Χ		
XI		
XII		
XIII		
XIV		
XV		
XVI		
XVII		
XVIII		

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				ANNEXURE-XI
NAMEOFTHE	EBIDDER:			
NAMEOFTHE	EWORK:			
ANNUALTURI	NOVERSTATEMENT			
	allindicatehereinhisan ountstatement.	nualturnov	erduringpreceding3yea	rsbasedontheauditedbalancesheet/pr
FINANCIAL	YEAR	ANNUALT	URNOVER(Rs.)	NETWORTH(Rs.)
	previousyear			
Previousye				
Presentyea	ar			
NOTE:1.			tswithprofitandlossacc edalongwiththeTechnio	
		Bidders	shallworkoutNetwortho	onthefollo
	wingbasis:N	letworth:	Reserve+Capital–	
	Accumulate	edloss.		
				SIGNATUREOFBIDDER

## **REGISTEROFWORKMEN**

(i)	NameandaddressofContractor
(ii)	Nameandaddressofestablishmentin/underwhichcontractiscarriedon
(iii)	Natureandlocationofwork

Name&addressofPrincipalEmployer.....

(iv)

SI.No	Name &surnameof	Age&Sex	Father's/Husba nd's	Nature ofemployments /Designation	. 4 4 5 60	Localaddress	Dateof commencemen tof				Remarks
1	2	3	4	5	6	7	8	9	10	11	12

## **EMPLOLYMENTCARD**

 $(d) \ \ Name and address of Principal Employer:$ 

Name	Sl. No.	Nature	Wagerate(	Wages	Periods	Remarks	Signatureo
ofthework	intheregis	ofemploymen	withparticu	period	ofemploymen		fcontractor
man	terofwork	t	larsof unit,		t		
	manempl	/designatio	incase				
	oyed	n	ofpiece				
			work)				
1	2	3	4	5	6	7	8

1	Sl.No.
2	SerialnumberinRegisterofw orkmenemployedby
3	Nameofemployees
4	Designation/Natureofwork
5	<u>Dailyattendance/No.ofunitsw</u> <u>orked</u>
6	Totalattendance/unitsofwor kdone
7	Dailyrateofwages/piecerate
8	Basicwages
9	D.A.
10	Overtime
11	Othercashpayments (nature of payment to be indicated)
12	Totaldeduction
13	Netamountpaid
14	Time&dateofpayment
15	Placeofpayment
16	Signature or thumbim pression of workmen
17	Initialsofcontractororhisauthoriz edrepresentative
18	InitialsofauthorizedorPr incipalemployer
19	Remarks

REGISTEROFWAGES-CUM-MUSTERROLL

## REGISTEROFFINES

(b)	NameandaddressofContractor	

- (b) Nameandaddressofestablishmentin/underwhichcontractiscarriedon:
- (c) Natureandlocationofwork:
- (d) NameandaddressofPrincipalEmployer:

	1	SI.No.
	2	Nameworkman/woman
	3	Father's/husband'sname
	4	Designation
	5	Act/omissionforwhichfi neimposed
	6	Dateofoffence
	7	Whether employershowedcauseag ainstfine
, -	8	Nameofpersoninwhosepr esence emplyee'sexplanation was
	9	Rateofwages
	10	Dateofwages
_	11	Amountoffineimposed
	12	Dateonwhichfiner ealised
	13	Remarks

## REGISTEROFDEDUCTIONSFORDAMAGESORLOSS

(c)	Nameandaddress of Contractor
(b)	Nameandaddressofestablishmentin/underwhichcontractiscarriedon:
	_

- (c) Natureandlocationofwork:
- (d) NameandaddressofPrincipalEmployer:

										Date ofrecov	ery	Remark s
	vorkman	s/husband' sname	noi	rticularsofdamage/loss	mage	Whetherworkershowedca useagainstdeduction	Nameofpersoninwhosepr esenceemployee's	Amountofdeductionimpo sed	Numberofinstrument			3
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## WAGESSLIP

Name&addressofContractor:

Name&addressofestablishmentin/underWhichContractiscarriedon:

Natureandlocationofwork:

Name and address of Principal Employer:

Nameandfather's/husband'snameoftheworkman:Forthe

week/fortnight/monthending:

Sexandidentificationtoken/ticketNo.:

No.ofdays	Rate of dailywages/piece	No.ofunits workedincaseofp iecerate	Dates on whichovertimew orked	Overtimehoursa nd amount ofovertimewag	Grosswagespayable	Deductions, if any	Actualwagespaid	Signature of thecontractor or hisrepresentativ
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At/Po-						
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da-768234.						
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(Signature)	(Signature)

Name	Name
 OfficialAddress	(DesignationwithBankstamp)
	AttorneyasperPowerofAttorneyNo.
	Date

#### **FORMOFBANKGUARANTEEINLIEUOFSECURITYDEPOSIT**

(On Non-Judicial Stamp

Paper)(ApplicabletoBidofvaluemorethanRs.25la

kh)

To OdishaPowerGenerationCorporationLtd.,Ib Thermal Power Station,At/Po-Banharpali, Dist-Jharsuguda-768234.

In consideration of the Odisha Power Generation Corporation Ltd. (Ib Thermal Power Station)havingregisteredofficeat7<sup>th.</sup>Floor,Module– A,FortuneTowers,Chandrasekharpur,Bhubaneswar-751023 (hereinafter called the "Owner / OPGC" which expression shall unless repugnant to the subject orcontext include its administrators successors and assigns) having agreed to the price, terms and conditions of Tenderand Letter of Intentbearing no. dated \_issuedwhichhasbeenunequivocallyacceptedbytheContractorM/s\_ (hereinafter called the said contract) to accept a fortheworkof performanceGuaranteeashereinprovidedforRs.\_\_\_ \_\_\_(Rupees\_ Nationalized bank in lieu of the security deposit to be made by the contractor or in lieu of the deduction to be made from the contractor's bills, for the due fulfill ment of the terms and conditions contained in the contractor's bills, for the due fulfill ment of the terms and conditions contained in the contractor's bills, for the due fulfill ment of the terms and conditions contained in the contractor's bills, for the due fulfill ment of the terms and conditions contained in the contractor's bills, for the due fulfill ment of the terms and conditions contained in the contractor's bills, for the due fulfill ment of the terms and conditions contained in the contractor's bills, for the due fulfill ment of the terms and conditions contained in the contractor's bills, for the due fulfill ment of the terms and conditions contained in the contractor's bills, for the due fulfill ment of the terms and conditions contained in the contractor's bills, for the due fulfill ment of the contractor's bills, for the contnthesaidcontractbythesaidcontractor, Wethe referredtoas"thesaidBank"andhavingourregisteredofficeat do here by under take and agree to indemnify and keep in demnified OPGC from time to time to the agree of the contract of thextentofRs. 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Page	e <b>123</b> of <b>201</b>

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5. It shall not be necessary for OPGC to proceed against the Contractor before proceeding against theBank and the Guarantee herein contained shall be enforceable against the Bank notwithstanding anysecurity, which OPGC may have retained or obtained from the Contractor shall at the time whenproceedingsaretakenagainsttheBankhereunderbeoutstandingorunrealized.

<ol><li>We,thesaidBank,lastlyundertakenottorevokethis@</li></ol>	Guaranteeduringitscurrencyexceptwiththepriorcor
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shall not discharge our liability hereunder.	If any further extension of this Guarantee
isrequiredthesame shall be extended to such	required periods on receiving instructions
fromM/s	onwhosebehalfthisguaranteeisissued.

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2.	Name&Designation
	AuthorisationNo
	DateandPlace
	Bank'sSeal

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	(hereinaftercalled "the said Contractor" which expressions hall unle
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## PERFORMANCEBANKGUARANTEEFORLUMPSUMADVANCE (OnNon-JudicialStampPaperofAppropriateValue)

To OdishaPowerGenerationCorporationLtd.,Ib Thermal Power Station,At/Po-Banharpali, Dist-Jharsuguda-768234.

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- 4. The owner shall have the full liberty without effecting in any way the liability of the Bank under thisGuaranteeofIndemnity,fromtimetotimevaryanyofthetermsandconditionsofthesaidContractort headvanceortoextendtimeofperformancebythesaid'Contractorortopostponeforanytimeand from time to time any of the powers exercised by it against the said contractor and either toenforce or forbear from enforcing any of the terms and conditions governing the said Contract or theadvanceavailabletotheownerandthesaidBankshallnotbereleasedfromitsliabilityunderthesepres ents by any exercise by the Owner of the liberty with reference to the matters aforesaid or byreasons of time being given to the said contractor or any other forbearance act or omission on thepart of the owner or any indulgence by the owner to the said Contractor on any other matter or thingwhatsoeverwhichunderthelawrelatingtosuretieswould,butforthisprovision,havetheeffectofso releasingtheBankfromitssuchliability.
- 5. ItshallnotbenecessaryfortheOwnertoproceedagainsttheContractorbeforeproceedingagainstthe Bank and the Guarantee here in contained shall be enforceable against the Bank not with standinganysecurity, which the Owner may have retained or obtained from the contractor shall at the time when proceedings are taken the Bankhere under beoutstanding or unrealized.
- 6. We, the said Bank lastly undertake not to revoke this Guarantee during its currency except with theprevious consent of the Owner in writing and agree that any change in the Constitution of the saidcontractororthesaidBankshallnotdischargeourliabilityhereunder.

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	AuthorisationNoSealoftheBank
Theaboveguaranteeisaccept	edbytheOwner

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For and On behalf of thelbThermalPowerStation

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## STANDARD OPERATING PROCEDURE

# CONTRACTOR SAFETY MANAGEMENT PROCEDURE [PART-II]







### **ODISHA POWER GENERATION CORPORATION LIMITED**

Document No.: OPGC/1/SFT/SOP/034

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#### 1. INTRODUCTION

The purpose of this standard is to specify the requirements for managing safety when contracting work. This safety standard is based on the best practices for managing contractor safety in the utility industry.

CONTRACTOR shall perform all work required by his Contract in a safe, healthy and environment friendly manner. During the course of work, the CONTRACTOR is directly responsible for; shall comply with; and enforce all laws, rules; regulations of OPGC are relevant to the work being performed. CONTRACTOR will manage all subcontractors on site and will be accountable for subcontractor performance with respect to Environment, Health & Safety and (EHS).

Prior to the start of any work, the Contractor shall survey the planned work and submit and review Contractor's SHE Program and Plan to the OPGC concerned Project Manager.

#### 2. SCOPE

This program lays down the SHE related requirements and guidelines and provides advice based on local experience and legal requirements for safe working practices for all activities of the project involved with high & medium risk. This SHE management program also applies to all personnel involved in Company projects. All parties are required to comply with this safety program as well as all National, State and Local regulatory guidelines.

#### 3. OBJECTIVE

These rules guide people's behavior during work days. They are needed to control hazards that can affect everyone. This procedure has been developed to assist both OPGC and Contractor Managements to control these hazards and ensure that high standards of safety to which OPGC is committed have been met. The procedure shall be provided to all high & medium risk contractors with other bid documents. Contractors participating in the bidding shall go through the procedure carefully & submit an undertaking in the format given as in **Appendix-2**.

#### 4. ENVIRONMENT, HEALTH & SAFETY POLICY OF OPGC:

Contractor (s) shall strictly follow OPGC EHS Policy guidelines. The spirit of the EHS Policy shall be reflected during the course of contract execution by implementing the minimum EHS expectation of OPGC as declared in the Policy objective. Refer OPGC EHS Policy as enclosed as enclosure.

#### 5. RESPONSIBILITIES

To clarify the individual party designations referred to within this guide, to identify the hierarchy of reporting and approval necessary, and to delineate the designated responsibilities related to the OPGC safety policy, the following is to be used:

**OPGC Project Manager** - OPGC personnel directly responsible for the site construction/safety activities on the project involved.

**OPGC Site Safety Manager** - Person designated to carry out, monitor, and enforce safety policies of OPGC on the project.

Contractor's Site Manager - Person designated as the senior site manager by the Contractor chosen for the project.

Contractor's Safety Manager - person designated to carry out, monitor, and enforce safety policies of the Contractor on the project, in compliance with the project agreements OPGC policies.

**Supervisor** - lead field labor supervisor or foreman for the Contractor/Subcontractors.

**Personnel** – individuals performing the labor tasks for the Contractor/Subcontractors.

#### 6. DEFINITIONS AND INTERPRETATIONS

excavation, welding, carpentry, civil work.

In the Contract, the following words and phrases have the meaning hereby assigned to them, except where the context otherwise requires.

<u>Contractor</u> – A person or company contracting with OPGC to supply products or services.

<u>Sub-Contractor</u> - A person or company employed by the prime or general contractor who is contracting with OPGC to supply products or services.

<u>Contractor Pre-qualification</u> – This process is an assessment of contractors wishing to work OPGC. The process is independent of individual contracts and is carried out to ensure that only contractors with acceptable past safety performance and appropriate safety programs are awarded work.

<u>Contract Administrator</u> – An OPGC person assigned responsibility for administering contracts, including preparation of the contract tender or request for proposal (RFP) documents, arranging pre-bid meetings, coordinating the bid/ proposal evaluation process and recommending the awarding of the contract.

<u>Project Manager</u> – An OPGC person who is given the overall responsibility and authority for the successful completion of a project. His/ her responsibilities include the assignment of the contract monitor, conducting the preconstruction site meeting, resolving contractor safety performance issues, final inspection of the work, conducting the closing meeting with the contractor and completing the contractor evaluation.

<u>Contract Monitor (Engineer In Charge/EIC)</u> – An OPGC person who reports to the Project Manager and is responsible for monitoring the contractor's safety performance and providing feedback to the Project Manager. The Contract Monitor will compare the contractor's work and work methods with the standards and expectations defined in the contract.

<u>OPGC Contact Person</u>- The EIC of the Contract is termed as the OPGC contact person for that contract only. <u>Contractor Safety Orientation</u> – A meeting at the start of each contract involving all contractor employees to discuss AES safety standards and the specific safety requirements for the contracted work.

<u>High-Risk Work</u> – Work that exposes contractor's employees to hazards that, should an incident occur, may result in a fatality or permanent disability; examples include but are not limited to, high voltage electrical work, confined space entry, exposure to asbestos, work around water, working aloft >6 ft., craning & rigging, scaffolding & shoring.

<u>Medium-Risk Work</u> – Work that exposes contractor's employees to hazards that, should an incident occur, may result in a temporary disability; examples include but are not limited to, plant and facility maintenance, minor

<u>Low-Risk Work</u> – Work that exposes contractor's employees to hazards that, should an incident occur, may result in a minor injury but not a lost time injury; examples include but are not limited to, training, consulting, office equipment maintenance, office cleaning.

<u>Hazard Assessment</u> – An assessment of the contracted work to identify and document the hazards inherent to the work site and facility. The hazard assessment is provided to the bidders as part of the bid/ request for proposal documents.

Daily Job Safety Plan – A process that individual employees and working crews must follow to assess and document

the critical safety issues pertaining to the day's work.

**Shall/Will:** The word 'shall' is to be understood as mandatory

**Should**: The word 'should' is to be understood as strongly recommended

**May:** The word 'may' is to be understood as indicating a possible course of action

**Restricted Areas**: A Restricted area is defined as that area over which OPGC exercise control of all movements and operations and where entry is granted only with permission from OPGC.

Hazardous Areas: An area in which there exists or may exist flammable or other hazardous atmosphere.

<u>Safety Document:</u> Is a formal written statement used to control the Risk associated with the works performing in OPGC Premises.

**<u>Electrical Equipment:</u>** Any producer, carrier or consumer of electrical energy.

### 7. PROGRAM REQUIREMENT & IMPORTANT GENERAL SAFETY

#### **INSTRUCTIONS:**

The goal of this program is to complete the project with zero incidents. This goal can only be achieved when everyone commits to error-free performance. The commitment to achieve this goal will result in increased productivity and the prevention of job related losses.

Active participation and personal cooperation of all supervision and employees, and a positive coordination of their efforts carrying out the following:

- Stop Work Authority program. It is both the right and responsibility of all EMPLOYEES, be they OWNER, CONTRATOR or SUB-CONTRACTOR to stop any work activity that currently has, or has the potential to develop into an unsafe situation. Work must stop immediately after an unsafe situation is identified, regardless of the job's priority or importance. Work shall resume only when the unsafe situation has been remediated. Never hesitate to stop work it doesn't matter if it's later determined that invoking the work stoppage was an error. A person will not suffer retribution or negative consequences of any sort for stopping work for safety reasons. Establish and maintain a system for early detection and correction of unsafe practices and conditions.
- > Contractors on OPGC site must obey OPGC safety rules, signs and instructions.
- > All contract employees have a responsibility for their own safety and the safety of others.
- ➤ The Contractor may not charge or back charge OPGC for any delays, work stoppage, or scheduling issues resulting from enforcement of the OPGC Safety Rules.
- Contractors are responsible for establishing control measures to protect employees under their control from exposure to hazards, including but not limited to chemical, health and physical hazards present at the work location.

- ➤ Contractor shall furnish, erect, and maintain warning notices, signs, signals, lights, protective guards, enclosures, platforms, barricades and other devices as necessary to adequately protect all personnel on site; including but not limited to employees, subcontractors, other contractors, OPGC people and the public.
- ➤ If the scope of work requires the removal of existing guardrails, handrails, floor grating or other physical barrier, contractor shall have written permission from OPGC Project Manager. Barriers that have been removed to facilitate work must be properly replaced as soon as the work is completed. Unguarded openings must be attended at all times.
- ➤ If covers are required to protect floor openings, excavations, trenches, pits, then the contractor must ensure the cover is capable of supporting, without failure, at least twice the weight of any employee, equipment and/or material that may be imposed on the cover at one time.
- > Chemicals must be handled in authorized manner. Handling of chemical must be carried in accordance with Material Safety Data Sheet (MSDS) regulation and EIC /Officer In charge/supervisor's guideline.
- Establish and implement safety education programs designed to stimulate and maintain the interest and active participation of all personnel involved with the project. Such programs should include:
  - Safety meetings and safety communications;
  - Use of incident trends and causal analysis to preclude reoccurrence of similar incidents;
  - Use of proper work procedures, personal protective equipment, and mechanical guards;
    - Safety instruction to individual employees and group safety training programs; and Managing records, incidents, claims, losses, and development of incidence/loss experience summaries.

#### 8. ESSENTIAL DUTIES:

- (i) Use effective verbal and written communication skills.
- (ii) Listen to directions and suggestions from Project Manager/EIC/Supervisor/EHS officers regarding safe and proper work practices.
- (iii) Work up to a 12 hour shift. Never work beyond 12 hours unless otherwise OPGC Project Manager allows to do so.
- (iv) Climb and maintain balance on steel framework, stairs, ladders and scaffolds.
- (v) Identify workplace safety hazards and take all necessary corrective action to eliminate or minimize them.
- (vi) Understand and respond appropriately to all safety hazards and warning devices (i.e. back-up alarms, smell of smoke, different colored warning tags, warning sirens).
- (vii) Understand and implement lockout/tag out procedures in a safe manner.
- (viii) Produce quality work, meeting requirements of company policies, procedures and industry standards.
- (ix) Be motivated and work productively.
- (x) Participate in the jobsite Safety meetings as required.

#### 9. OPGC SAFETY CARDINAL RULES/ZERO TOLERANCE ISSUES:

"Cardinal Safety Rules" are OPGC rules that, if violated, have a high probability of resulting in a serious adverse outcome. Contractors must ensure that employees working under their control do not violate these Cardinal Safety Rules. Failure to comply with Cardinal Safety Rules will result in immediate corrective action for the employee and, if OPGC determines it appropriate, the Contractor, up to and including termination from the current job and removal from consideration for future OPGC contracts. The OPGC Cardinal Safety Rules are:

- (i) Personal Protective Equipments (PPEs) as applicable to a given task must be used at all times.
- (ii) All high or medium risk jobs must be performed with valid Job Safety Analysis (JSA) followed by pre-job briefing.
- (iii) No entry to ITPS plant premise or no permission to do any work at ITPS under the influence of alcohol or drugs.
- (iv) Do not walk or work under a suspended load & use only tested & certified lifting tools & tackles on the job.
- (V) Do not handle and operate equipments unless authorized & licensed to do so.
- (vi) Do not tamper or remove guards, hand rails and other safety systems unless authorized to do so.
- (vii) Ensure energy isolations, lock-out-tag-out (LOTO) and strictly follow work permit instructions.
- (viii) Never work of & above 06 feet (1.8 meters) without fall protection.
- (ix) All injuries & near misses must be reported.
- (x) Illegal handling or disposal of hazardous materials not allowed.

(Note:- Deviation/lapses from the above cardinal rules but not limited to these are treated as major safety violation.)

## 10. HYGIENIE, GENERAL PRACTICES / UTILITIES FOR REST & FOOD INTAKE:

The Contractor shall ensure that its personnel shall maintain the highest standards of hygiene in connection with the performances of any contract for works or services it may have with OPGC.

The only safe source of drinking water is a drinking fountain/taps. Other sources shall not be used.

- > Do not use air, gas, water, electricity, fuel or other site facilities/utilities unless the source of supply has been designated & authorized by OPGC.
- > Contractor personnel must not enter any building or area not required by their work. Wandering about the plant is prohibited.
- ➤ Contractor personnel are permitted for taking food in designated places either in OPGC Canteen or in any other designated site.
- > Contractors shall take rest in designated rest sites. Taking rest in work places is prohibited.
- Taking rest & food in unauthorized sites will be treated safety rule violation;

#### 11. SITE ENTRY PROCEDURE

The Contractor must comply at all times with the requirements of OPGCSite Security rules. The contractor for all personnel requiring admission to the Site, a Security gate pass request must be processed in advance.

11.1. "Gate Entry Pass" will be issued by the OPGC site administration and contractor person/people need to proceed to the OPGC contact person directly to follow the safety induction procedures. Gate Pass will be issued after site safety induction/training and duly certified by EIC on the gate pass entry request application. After imparting safety trainings, the gate passes will be stamped/ marked as 'Safety training imparted'. No contractor and their employees shall be allowed to enter inside the Plant for carrying out jobs unless the safety training has been given to them and duly stamped as above

OPGC may issue to the Gate Entry Passes" for the admission of contractors and "Visitor Gate Passes" to the normal visitors.

These passes are to be returned on the demand of OPGC and in any case at the completion of the contract.

All Contractors'staff must enter and leave the site via the Security Gate.

All Contractors' staff will have to produce their gate entry pass if asked by Security when entering AND leaving site. This applies at all times.

If any of the Contractor's or Sub-contractor's staff is found unjustifiably outside the working areas, then they will be removed from Site.

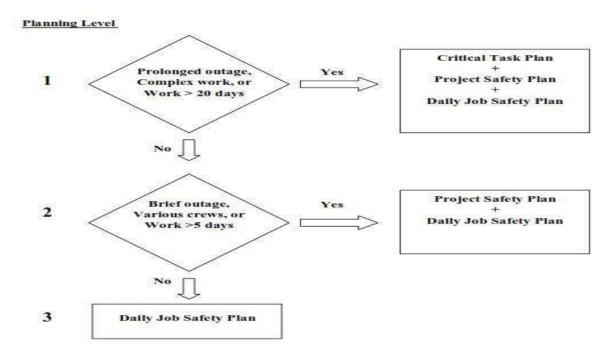
Ensure your name is recorded on the appropriate Contractors daily attendance page.

11.2. The contractor shall furnish to EIC the list of materials such as lifting tools and tackles, power tools, T &Ps (testing status to be maintained), gas cylinders, and any hazardous chemicals along with MSDS to be mobilized before commencement of work. All these materials shall be checked at Plant gate by Security, EIC & EHS for no objection. Contractor at no situation shall enter untested or substandard or unapproved tools, equipments or vehicles. Tested and approved tools, equipments& vehicles only can be entered into Plant Premises. Unauthorized entry of hazardous substance is strictly prohibited from Plant gate. Contractor materials shall be entered inside Plant with valid Security Certification on recommendation of EIC. Violation of the OPGC site entry rule shall be treated major safety violation. Strong disciplinary step will be booked against the violation.

#### 12. PROJECT SAFETY PLAN & DAILY JOB SAFETY PLAN:

After knowing the detail hazard information of high or medium risk jobs, contractor shall provide a comprehensive project safety plan fulfilling minimum Safety expectations of OPGC.

Daily Job Safety plan shall be prepared by the Contractor in advance before commencement of a particular day's job. The project safety plan & its suitability/ appropriateness for the Contract job shall be verified & approved by the Project Manager. This is one of the important Contractor's job planning activity.



#### 13. HEALTH & FITNESS

The Contractor shall ensure that all its employees engaged in the work are medically fit and healthy. Any medical disabilities including such disabilities which Contractor may consider will not adversely influence the employee's ability to perform his role in the work should be reported to OPGC prior to the start of the Work. Contractor shall provide health certificates in compliance with Odisha Factory rule for their personnel at the time of applying gate entry pass. No contractor personnel will be issued gate entry pass without the submission of health & fitness certificate in the prescribed form. Contractors will closely monitor the requirement of health check up at an interval of one year for their employees.

#### 14. WORK PERMIT

Work Permits will be issued in accordance to OPGC PTW procedures before performing any activity/function such as entry inside confined space, inside tank/vessel, excavation, work involving radiation sources etc, work at height, working with machineries &equipments. Specific permit for hot work e.g. cutting, welding, grinding, chipping or sand blasting shall also be issued. During such activities the contractor shall ensure that a fire watch is deployed and the person must clearly understand his duty & responsibility. Project manager/ EIC or his authorized representative supervising the job shall be responsible for obtaining & clearing the permit with the knowledge and consent of the contractor or his representative. It shall be the responsibility of the contractor to see that none of his employees start the job until, an appropriate permit has been issued with proper isolations followed by Pre-job briefing and job safety awareness by the EIC and the contractor or his safety coordinator.

#### 15. HOUSE KEEPING & CLEAN SITE

The Contractor shall ensure that the site of the works is kept free of surplus, waste or redundant materials or items and shall maintain a clean and tidy site throughout the duration of the work. Access ways and emergency exits shall be kept clear from obstruction at all times. Combustible scrap and debris shall be removed at regular intervals during the course of project. All solvents shall be kept in approved, properlylabeled containers. Contractors' bill payment will be held up unless otherwise housekeeping of their job site is maintained.

#### 16. SITE OFFICE AND STORES

The Contractor will be allowed a working area on the site which shall be maintained by the Contractor for his site offices etc and on completion of the contract shall reinstate this area at his own expense, to the satisfaction of OPGC. The Contractor will also be given access to any reasonable area around the site.

#### 17. SAFETY EQUIPMENT

The Contractor shall, at its own expense, provide adequate safety equipment of an approved type and amount as is required for the execution of the contract works. The Contractor shall maintain this equipment in a professional manner as dictated by legal and industry standards. In addition, the Contractor shall keep up-to-date records of all said equipment.

#### 17.1. PROTECTIVE PERSONNEL CLOTHING AND EQUIPMENT

The Contractor shall, at its own expense, supply its personnel employed at the site of the works with adequate protective personal clothing and other protective equipment which shall be maintained in good condition or replaced, and shall be worn on all relevant occasions as specified by OPGC and good practice. It is the responsibility of the contractor to provide adequate instruction/training for the correct usage and maintenance of these equipments& PPEs, inspection & suitable storage of their Personal Protective Equipments. The Contractor is also responsible for ensuring that the PPE is used and maintained in accordance with the manufacturer's specifications.

In the event that the Contractor fails to supply or provide adequate safety equipment or PPE, OPGC reserves the right to issue such safety equipment/PPE to the workforce provided by the Contractor and back charge the same from the Contractor with two (2) times of the cost of item as administration fee for every item issued.

PPEs shall meet the following minimum standard and shall be maintained in good condition to give desired level of protection to wearer. Contractor has to assess the quantity of PPE required considering the job hazard and nature of job.

#### **SPECIFICATION & SELECTION OF PPES:**

#### A. SAFETY HELMET/HARD HAT-

IS/ DGMS/ CE/ ANSI certified

Material- HDPE and ABS Plastic

Colour- DARK YELLOW with name of contractor mentioned in front portion.

All safety helmets shall have textile chin strap, padded head band & of Plastic or Cotton cradle.

Make & Brand- Karam PM 501/ MSA/Venus C-112 or 113/ Udyogi- Ultra 5000L/

Kalgem-Tortoise or any other equivalent brand approved by OPGC EHS

#### B. SAFETY GLASS/SAFETY GOGGLES - IS/CE/ANSI certified

Polycarbonate, UV protected, Anti scratch, Anti fog

Colour- Colourless for all time and strictly in low light areas and night time. Grey may be used in day time within areas with adequate visibility.

Make & Brand- 3M/ Uvex/ Udyogi-UD 61/ Karam-ES005/Venus- G-203-CHC or any other equivalent brand approved by OPGC EHS

Prescription glasses users shall use cover the glass.

#### C. SAFETY SHOE:

IS/ DGMS/ CE/ ANSI certified

Leather with Steel Toe

Anti Static, Anti Skit, Anti Shock, Oil & Acid resistant with shock absorber

Make & Brand- Bata / Liberty/ Jaypee 1217/ SG Security- Concord or Black night/ Udyogi- Tango,

Mallcom- Tiger/ ACME Fabrick- Atom/ or any reputed brand approved by OPGC EHS

#### D. DUST MASK-

IS/CE/ANSI certified

Venus V4 20 SLV- FFP2/3M with Fine particle filtration efficiency greater than 94%.

#### E. EAR PLUG/EAR SEAL/EAR MUFF-

IS/CE/ ANSI certified

3M/ Venus/ Karam/ Equivalent

#### F. HAND GLOVES -

IS/ DGMS/ CE/ ANSI certified

Material (Heavy Duty)- Finger Chome leather, 05 fingers provision

Material (Light Duty)- PVC dotted type of reputed brand

Make- Kaybee/ Udyogi/ Karam/ any reputed brand

Besides the above, for electrical, chemical handling or for any other special type activity, appropriate rating IS/CE/ANSI certified hand gloves shall be used.

#### G. WELDING FACE SHIELD ATTACHABLE TO HELMET -

IS/ DGMS/ CE/ ANSI certified /UV & IR protected, Superior quality

Make- Karam -ES 71, Unicare, Udyogi/ any other reputed brand

## H. FALL ARREST SYSTEMS (SAFETY HARNESS, ANCHORS, FALL ARRESTORS, LIFELINES ETC)

Shall be EN/ ANSI Certified with CE marking. Make- Karam/ Udyogi/MSA or any reputed brand finally approved by OPGC Safety Officer.

Life lines shall be EN 795, Class B of Karam Polyster webbing type or Polypropylene 16mm dia synthetic rope or 8mm standard wire rope 5000lbs (22KN) rating.

Refer section-41 (Fall Protection) for details.

Rest of the PPEs as appropriate to a particular hazard or as mentioned in MSDS (Material Safety Data Sheet) shall be provided to the persons engaged for the job by the Contractor in accordance with relevant BIS/ANSI/EN standards.

#### 17.2.PPE ZONES & PPE EXCUSE ZONES

Sl No	PPE type	Area of Use	Excuse areas/locations
1	Helmet	Compulsory from Plant Gate. Two wheeler riders & pillion riders must use crash helmet while driving  Compulsory while working in other facilities outside plant viz, Ubuda Coal loading point, Ash Pond, Ash brick plant, Sewage Treatment Plant and Colony premise.	Offices, Office Corridors, Control rooms, Canteen, hospital & Service Building front while people are with no work or with office work activities with no risk to head from external source.
2	Safety Shoe	Compulsory from Plant Gate  Compulsory while working in other  Facilities outside plant viz, Ubuda Coal loading point, Ash Pond, Ash brick plant, Sewage  Treatment Plant and Colony premise.	Places other than the areas specified.
3	Safety glass	Compulsory in all work areas  Compulsory while working in other facilities outside plant viz, Ubuda Coal loading point, Ash Pond, Ash brick plant, Sewage Treatment Plant and Colony premise.	Main road from Plant Gate to CHP Track hopper, Other roads except the roads inside Boiler area, Offices, Office Corridors, Control rooms, Canteen, Hospital while people are with no work or with office work activities with no risk to eye from external source.
4	Ear Plug/Seal/ Ear Muff	In all high noise areas greater than noise level 85 dBA	Places other than high noise areas
5	Hand Gloves	Compulsory during all field works, material handling, working where risk of injury to hand prevails	Office activities
6	Dust mask	In all dust generating areas(ESP hopper cleaning, Dry Ash handling, Cleaning, Sweeping, Soil excavation, Asbestos/Asbestos containing material handling, Coal Handling Plant, Painting work, visible fugitive emission in Boiler	Excuse for non dust generating Areas

		and other areas etc)	
7	Welding face shield	During welding operation only	Non Specified activities
8	Cutting glass	During cutting operation only	
9	Chemical respirators	During fuming Chemical handling or hazardous gas handling. Atmosphere with Chemical fumes, hazardous gas fumes. During welding operation.	
10	Chemical Suit/Apron	During hazardous Chemical/ substance handling, Lead acid Battery maintenance	
11	PVC/Rubber hand gloves	During hazardous chemical/substance/waste handling & Lead Acid battery maintenance.	
12	Chemical Goggle/ Face shield	During hazardous chemical/substance/waste handling & Lead Acid battery maintenance.	
13	Encapsulated suit for Chlorine	In Chlorine atmosphere greater than 50 PPM	
14	Self Contained breathing apparatus	Toxic gas atmosphere (Chlorine, Ammonia, Carbon monoxide, Acid fumes) where chemical respirator is not recommended, Confined Space with hazardous fume or gases	
15	Arc flash Suit with boot and hood of suitable rating	During Electric Panel Breaker & MCC modules Operation	
16	Electrical hand gloves of suitable rating	Working with live electrical power sources	

17	High temperature hand gloves & jacket	Working with Steam lines	
18	Hard toe rubber gumboot	Working in Mud, Sludge, Water, dense wild grass areas, other place taking Safety Officer's approval	
19	Lead laminated coverall	Working with radiographic substances	
20	Reflected jacket	Inside confined spaces and as advised by OPGC Project Manager/EHS	
21	Cotton Boiler Suit	Working inside Boiler / and as advised by OPGC Project Manager/EHS	
22	Full body harness	Working above 5.9 ft without fall protection	
23	Welding jacket/suit & hand gloves	Standard flame resistant welding jacket/suit & heat resistant leather hand gloves	

17.3.CONTROL ON PPE: The samples of PPE to be used by contractor at site shall be submitted to OPGC S a fe t y Officer i n a d v a n c e for approval. On approval, the Safety officer will retain the sample. The approved quality PPE (Make/Brand and colour) shall be used by contractor at worksite throughout the job. Any unauthorized change of model/ brand/ colour of PPE from the sample shall be considered as Safety violation and may lead to disciplinary action. On completion of work, the sample shall be returned to the contractor. The specification given above for different types of general PPEs is minimum quality standard. Contractors are free to provide better quality PPEs but such PPEs quality shall be approved from OPGC Safety Officer prior to use inside OPGC premises.

#### 18. TRAINING

#### 18.1. SAFETY ORIENTATION

The Contractor shall ensure that all its personnel have been given the necessary safety and job related training required by OPGC regulations and good practice prior to starting work.

Contractors will be responsible for providing their employees and any subcontract employee with all safety information provided to it by OPGC including, but not limited to:

Project-specific occupational health and safety expectations;

Exposure to atmospheric health, serious physical or chemical hazards; and Precautionary measures and procedures for performing the work.

#### 18.2. PRE- JOB BRIEFINGS

Contractors shall conduct pre-job briefings and toolbox talk/ safety talks with employees under their control prior to work each day. Additional job briefings shall be held if significant changes occur during the course of the work

that might affect the safety of the employees.

#### 19. COMPETENCY OF CONTRACT EMPLOYEES.

Contractor shall assign competent employees as per the requirement of the job. Supervisors should be so qualified that he can clearly communicate with his team members. Besides, Supervisors shall be able to communicate in English. All high skilled & semiskilled employees must have job specific competence. OPGC will evaluate/verify competence and will reject employees who are not found with inadequate competency.

#### 20. RESTRICTED AREAS

All Contractors must receive authorization from the OPGC Contact Person before performing work in areas posted "DANGEROUS" or "HAZARDOUS" or "RESTRICTED" or some other warning signs. Contractors shall install warning tape for areas that require additional warning because of the work being performed there.

#### 21. ALCOHOL AND DRUGS

The Contractor shall ensure that its personnel do not at any time, during the performance of the work, partake of or be under the influence of any alcohol, drug or other intoxicating substance, while on duty, other than for bonafide medical reasons certified by qualified medical practitioner. Person found with violation of this rule will be immediately removed out of OPGC site and appropriate disciplinary action will be imposed to the contractor.

#### 22. DRIVING & PARKING

All heavy vehicles and other related machinery required in connection with the work shall be fit for purpose, prior to and during the period of the work.

The Contractor shall ensure that only permitted personnel (by way of valid OPGC Driving License) are able to operate vehicles as per the classification of vehicle.

Contractor shall strictly comply with Speed limit of 20Kmph in all areas inside the plant for passenger vehicles. Heavy vehicles speed shall not exceed 10kmh at any point of time.

Parking of Vehicle is allowed only in the designated areas. Deliveries of materials, tools and/or equipment shall be coordinated with OPGC contact person and Security. After the delivery is made to the job site, the delivery vehicle must be parked in the designated parking area or must exit the job site.

Operators of mobile equipment must wear hard hats and safety glasses unless the equipment has a fully-enclosed cab. Seat belts must be worn when operating equipment. No Contractor shall permit earthmoving or compacting equipment that has an obstructed view to the rear to be used in reverse gear unless the equipment has in operation a reverse signal alarm distinguishable from the surrounding noise level or unless a contractor-designated employee signals that it is safe to do so.

The Contractor undertakes to ensure that all drivers comply with the following basic rules:

- Always wear a seat belt;
- ➤ Always observe traffic rules, especially speed limits;
- ➤ Never drive after consuming alcohol/drugs;
- ➤ Never drive when very tired;
- ➤ Never overload the vehicle:

- > Drive carefully;
- > Be sure that before starting the vehicle the area near and under the vehicle/trailer is free from persons asleep.
- ➤ Vehicles are PUC certified with validity of expiry.
- ➤ Heavy vehicles are provided with fire extinguishers

**CRASH HELMET USE** – Riding two wheelers without the use of crash helmet from plant gate is prohibited.

Contractor shall ensure, the crash helmet is all times being used by his people riding two wheeler.

#### 23. SAFETY MEETINGS

The Contractor shall be responsible for maintaining and enhancing the safety awareness of its personnel including arranging its own safety meetings and participating as appropriate in safety meetings held by OPGC.

#### 24. SAFETY INSPECTION / AUDIT

The Contractor shall inspect the work site, equipment and tools on regular basis for compliance with these rules and regulations, and shall be obliged to take the necessary measures to correct unsafe conditions and unsafe practices.

The Contractor shall allow OPGC representative access at any time to plant, equipment, personnel and records when requested, to enable OPGC to inspect aspects of Contractor's operations relevant to safety and working environment.

#### 25. REPORTING AND INVESTIGATION

The Contractor shall report all near misses, incidents or accidents to OPGC contact person or central control room immediately.

The Contractor shall allow OPGC representative access at any time to plant, equipment, personnel and records when requested, to carry out formal investigations to find out the root causes and there by identify the required corrective actions to avoid the reoccurrences.

Upon completion of the Work under contract and/or on a monthly basis, whichever is more frequent, the Contractor shall prepare a summary report of its safety performance together with accident statistics and submit to OPGC.

#### 26. INJURY MANAGEMENT

Basic Life support facility (first aid) is available in OPGC. Contractor supervisors should be trained with first aid.

In case of an injury to some contract worker, please inform immediately available OPGC personnel or first aid centre or central control room using (phone 248/222/06645222222).

Only trained and certified people shall provide first aid to the injured.

In case of doubt, injured personal shall not be moved or transport improper vehicles because it may complicate the injury more and some cases may lead to death.

Only Designated vehicles (Ambulance) shall be used for transportation of patients.

#### 27. JOB SAFETY ANALYSIS (JSA) & JOB SAFETY BRIEFING (JSB)

- ➤ The Contractor shall adopt the OPGC JSA & JSB practice/advice.
- The Contractor shall ensure that its supervisors and are fully conversant with OPGC JSA & JSB Process/ System.

- Under no circumstances must work be started until the appropriate JSA has been prepared and complete the Prejob briefing.
- > Competent person from the contractor and in-charge of the work from OPGC shall conduct the Pre- job briefing to all members.
- > Competent person from the contractor and in-charge of the work from OPGC shall make available a copy of the safety document at site.
- > Sample Job Safety analysis in prescribed format is furnished in appendix below.

#### 28. EMERGENCY PROCEDURES

The Contractor shall follow the OPGC Emergency Response Plan (ERP) during the period of the work and shall ensure that its staff are fully familiar with the actions to be taken in case of an emergency.

#### 28.1. EMERGENCY PLANNING:

Contractors must inform his people on the actions to be taken in the event of fire, explosion, personnel injuries or other emergencies. The contractor shall also keep abreast & acquaint of his persons regarding "Emergency Response Plan" of ITPS, assembly points, DO's & DON'Ts during emergencies at regular intervals in monthly EHS meeting.

#### 28.2. EVACUATION PROCEDURE:

Identify the escape routes available to you before you commence work. Know the assembly points and directions to reach there in case of emergency.

When the emergency siren sounds, immediately leave the area by your nearest evacuation route to Emergency Assembly Point. If you are using power equipments or vehicles you must switch it off and make it safe before evacuating.

#### DO NOT RUN AND DO NOT STOP TO COLLECT YOUR BELONGINGS.

Report to the emergency assembly Points as per the instructions given on loud speakers/ public address system.

Obey instructions given by the OPGC contact person staff and assembly point coordinator.

Remain at the assembly point until instructed otherwise. Do not re-enter evacuated areas until the 'all clear' announcement is made by the Main Control Room.

Emergency Siren test is carried out every Saturday at 11:00 hours for two minutes and require no action.

#### 28.3. REPORTING EMERGENCY:

If you discover a fire, or any other serious incident/emergency phone 222/233/244 using the site telephones, this will connect you to the Plant Main Control Room. Other

#### Emergency Contacts are-

Intercom P&T

Fire Station 777 06645222257

Ambulance 277/248 06645222216

Hospital 666 06645222243

Give your name, location, and the details of the emergency. Follow any instructions given.

Only take emergency action if competent to do so, e.g. resuscitation, first aid, fire fighting etc.

If safe to do so remain in the vicinity to give relevant information to the assistance when it arrives. **Never** endanger **your** safety.

#### 29. SAFETY SUPERVISOR

If the numbers of contract workers are more than or equal to 50 (fifty), the Contractor shall be required to provide full time safety supervisor who will be responsible for ensuring the work is performed in accordance with the applicable safety requirements. For every 50(fifty) employees thereafter there shall be one Safety Supervisor/Officer. The On-Site Contractor Safety supervisor/officer(s) must have appropriate knowledge and skills, to ensure job site safety. For contractor worker less than 50(fifty) in job, the work supervisor can be utilized for safety supervision but in case the Project Manager find ineffective supervision, the contractor may be asked to provide independent safety supervisor.

Contractor Safety Supervisors should be qualified & experienced enough to deliver their assigned jobs effectively as per expectation of OPGC Project Manager/EIC & EHS. Before their work assignment, Contractor has to provide the list of their safety professional along with Safety In charge stating name, qualification, and experience & contactnumber to the Project Manager & EHS. The supervisors' competency will be evaluated by OPGC EHS prior to issue of gate pass. Only OPGC EHS competence certified Safety supervisors will be permitted for Safety Supervision at Contractor work sites. Competency certification may vary depending on the nature & risk level involved with the contracted job. Contractors are not permitted to execute job without deployment of Safety Supervisor(s) as specified under this condition. Contractor Safety Supervisors performance will be monitored by OPGC EIC & EHS and the instruction & advice of OPGC shall be implemented promptly. OPGC will impose appropriate penalty if the Contractor fails to implement OPGC's safety expectation satisfactorily.

#### 30. COMMUNICATIONS

#### 30.1. COMMUNICATIONS WITH OPGC

The Project Manager or his authorized persons (EIC) and OPGC EHS shall be the point of communication for all EHS issues arising under this contract.

#### 30.2. COORDINATION WITH OTHER OFFICIALS

Contractor is fully responsible for coordinating with the proper authorities for moving heavy equipment, location of underground utilities, erecting barricades, traffic control, and other safety measures, unless otherwise specified.

#### 30.3. COMMUNICATIONS WITH MEDIA RESTRICTED

In the event of an accident or other condition on site, contractor shall not communicate with the media or any other entity without the expressed consent of OPGC.

#### 31. EQUIPMENT CERTIFICATION

The Contractor shall, at its own expense, ensure that all Portable electrical appliances, lifting equipment or other equipments required inspection or calibration has been inspected/certified by an authorized and a liable inspection/certification authority/company prior to its use in the works.

#### 32. RESTRICTED ARTICLES

The Contractor shall be required to ensure that written approval signed by OPGC contact person has been obtained prior to taking dangerous items such as drugs, knives, radioactive, corrosive, poisonous or toxic materials onto OPGC premises.

#### 33. PROHIBITED MATERIALS

Contractor is strictly prohibited from using any of the following types of materials in performance of the work:

- Asbestos, Asbestos Containing Material (ACM).
- Mercury containing material.
- Surface coating systems that contain lead, cadmium, chromium, barium or mercury.

#### 34. HAZARDOUS SUBSTANCES

- ➤ Before delivery of any hazardous materials to OPGC site, Contractor shall provide Material Safety Data Sheets for all anticipated hazardous materials.
- All containers containing hazardous materials must be clearly labeled indicating their contents and appropriate hazard warning information.
- ➤ Hazardous materials must be stored in a secure location agreed with the **OPGC Contact person**.
- > Don't dispose hazardous substances into drainage system and please inform any spill on the floor or on any personnel.
  - All operatives must understand the hazards of the materials they have to handle before use, some can be dangerous when used carelessly or when safeguards are overlooked. If in doubt, consult your own supervisor or OPGC Contact person for the relevant Hazard Data Sheet for specific health & safety information.
- ➤ Hazardous waste must not be dumped in general waste bins and the hazardous waste bins are provided around the plant premises.

#### 35. SMOKING

Plant premises are no smoking zone. Smoking is prohibited inside plant premises. Persons observed smoking inside Plant will be removed from job with immediate effect. Smoking is permitted inside declared/authorized smoking zone(s).

#### 36. SUB CONTRACTOR

The Contractor should ensure that sub-contractors shall be responsible for safety requirements as specified by OPGC. The Contractor shall regularly check subContractor's compliance with safety requirements

#### 37. LIFTING MACHINERY AND EQUIPMENT

#### 37.1. LIFTING TACKLE (ALSO KNOWN AS LIFTING/LOOSE GEAR)

Any item used to connect a load to the lifting appliance, but which is not in itself, capable to lift, lower, transport or suspend the load, such as; Chain, wire rope and webbing slings, Rings, links, hooks, shackles, eye bolts, swivels, blocks, snatch blocks, Beam clamps and plate clamps, Lifting beams, frames, baskets, Waste bins, tool boxes, cargo nets, containers, pallets, etc.

#### 37.2. STANDARD REQUIREMENTS

- All lifting tackle shall be tested and certified by approved competent person.
- ➤ The Contractor shall make available, as necessary, any certificates and inspection records.
- Lifting tackle shall not be issued or used without a current test certificate.
- ➤ All lifting tackles shall be visually inspected before use to identify any damage. Damaged or defective equipment shall be immediately removed from service.

- ➤ Only equipment, which has been properly tested and is clearly marked/labeled/coded, may be used. The SWL (Safe Working Load) or WLL (Working Load Limit) must be clearly marked on all equipment and must be adhered to.
- Makeshift lifting devices formed from bolts, rods or reinforcing steel shall not be used.
- ➤ Slings shall not be shortened with knots, bolts or other makeshift devices.
- > Synthetic web slings shall be marked or coded to show the manufacturer, the rated capacities for each type of hitch and the type of material.

Synthetic web slings shall be immediately removed from service if any of the following conditions are present:

- Acid or caustic burns
- Melting or charring of any part of the sling surface
- Snags, punctures, tears or cuts
- Broken or worn stitches
- Distortion of fittings
- No heavy loads or excessive strain may be placed on ropes.
- > Rope should not be driven over, ground into cinders or mud, wrapped around sharp or abrasive objects or burned by "snubbing off" too fast.
- ➤ Wire ropes or wire slings, shall not be used for raising, lowering or as means of suspension if any fraying, kinking or broken wires are apparent.

#### 37.3. LIFTING EQUIPMENT OR APPLIANCES

Is a generic term - "Lifting equipment "shall mean any machine, driven by manual or mechanical power which is able to raise, lower, suspend or transport loads and includes the supporting structure and all Plant, Equipment appliance, structures. This may include but not limited to Continuous mechanical handling devices (i.e. conveyors). Cranes (mobile, tower, pedestal, etc.), Wall/pillar cranes, derricks, Runway beams, pad eyes, gin pole and gin wheels Winches, hoist (air and electric), crabs, teller hoists, Powered working platforms, Elevators and Lifts, overhead cranes,

#### 37.4. STANDARD REQUIREMENTS

- ➤ Lifting machinery and equipment shall be retested by an approved competent person after any major alteration or repairs thereto.
- > Lifting machinery and equipment shall not be issued or used without a current test certificate.
- ➤ EOT crane operation shall be carried out by personal with valid rigger certificate with familiarization to operate the EOT cranes.

- ➤ All lifting operations are to be suitably planned and carried out with trained and qualified personnel. It shall be the duty of the Contractor to ensure that allemployees under its control know and are able to apply hoist signals and their uses.
- > One qualified person shall direct the rigging operation. This person shall give signals for the group. No crane operation will take place without an appointed and identifiable "SIGNAL MAN".
- ➤ All lifting equipment shall be visually inspected before use to identify any damage. Damaged or defective equipment shall be immediately removed from service.
  - Only equipment, which has been properly tested and is clearly marked, may be used. The SWL (Safe Working Load) or WLL (Working Load Limit) must be clearly marked on all equipment and must be adhered to.
- ➤ All lifting operation should be carried out in the barricaded area; no one should be allowed to walk underneath of suspended load.
- ➤ It is the Contractors responsibility to satisfy the OPGC Contact Person that all lifting equipment and machinery conforms to the relevant statutory provisions.
- ➤ All lifting machinery and equipment and all parts and working gear thereof, both fixed and mobile shall be of good construction, sound material and free from patent defect and shall be maintained and operated to comply with OPGC standards.
- Every dangerous moving part of lifting machinery should be guarded.
- The hoisting mechanism of a crane shall not be used for any purpose other than lifting a load vertically.
- > Cranes shall not be used to transport loads, unless specifically designed for this purpose. The hook of a crane shall be secured to prevent it swinging when the crane is in "Transit".
- ➤ Mobile Jib Cranes, side booms and "A" frames shall not work in the vicinity of overhead Power lines unless a safe working distance of total Length of the Jib + 10 feet is maintained.
- > Cranes with more than one ton lifting capacity shall be fitted with a safe working load indicator, and a crane capacity chart displayed inside the operators cabin.
- ➤ Contractor shall not operate the cranes of OPGC without permission from OPGC Contact person.
- > Critical lift plans must be developed by a qualified person, and then submitted to the OPGC Contact person for review and approval.
- > Contractor shall designate a person to observe clearance of the equipment and give timely warning for all operations where it is difficult for the operator to maintain the desired clearance by visual means.
- > Cranes with fixed or derricking jibs should be fitted with effective automatic safe load indicators which should be provided with appropriate visual and audible signals, Properly maintained and tested by a competent person after the erection or installation of the crane.

- ➤ Vehicular equipment, if provided with outriggers, shall be operated with the outriggers extended and firmly set as necessary for the stability of the specific configuration of the equipment. Before lowering outriggers, the contractor must verify the surface is firm and will support the weight of the equipment and operation to be performed. The Contractor shall place outrigger pads if conditions require.
  - While extending, lowering outriggers and retracting the outriggers, the operator shall visually inspect the area to verify it is clear of all personnel and obstacles.
- Instructions issued by the manufacturer, specifying weather and wind speed conditions which would be likely to affect the safety of the operation, lifting appliance should either not be used or used subject to limitations, should be followed.

#### 37.5. MULTIPLE LIFTS

The simultaneous use of more than one lifting appliance to raise, suspend, support or lower a single load should be avoided. Where the simultaneous use of more than one lifting appliance is unavoidable; contractor shall perform the lifting only with OPGC approved Risk assessment, Method statement and Rigging plan.

#### 37.6. PERSONNEL BASKETS AND MAN HOIST

- Personnel baskets should be of good design construction, sound material, and adequate strength, free from obvious defect and certified and clearly marked with the maximum number of persons permitted.
- Where a man hoist is operated by means of a winch, or where person is carried in a cage, skip or similar plant or equipment designed to lift persons, the winch should be so constructed that the brake is automatically applied at all times except when the controls are in the operating position.
- > No winch should be fitted with a pawl and ratchet gear on which the pawl has to be disengaged before the platform or cage can be lowered.

#### 37.7. INDUSTRIAL FORK LIFT

- > Industrial fork lift trucks shall not be used to lift a load greater than the maximum safe working load permitted for the truck.
- ➤ Passengers are forbidden to ride on vehicles, mobile plant or forklift trucks not specifically designed or fitted out for passengers use.
- > The Forklift operator shall have a valid operating certificate from a recognized authority and a valid OPGC driving license.

#### 37.8. CONTAINERS

- > Every container for raising, suspending, supporting or lowering articles, tools, equipment, and other materials should be of good construction, sound material, and adequate strength, free from obvious defect and suitable for the purpose for which it is required.
- Provided with adequate and suitable arrangements for securing the container to the lifting appliance or to lifting gear, as appropriate;
- Marked with its tare weight and the weight of the load which it may carry with safety;

So constructed as to prevent the accidental displacement of its load.

Loose materials or articles that could be displaced should be secured or covered to prevent such displacement.

#### 38. HAND TOOLS

- Tools shall not be placed on any type of energized equipment or where a tool might fall and become a hazard.
- ➤ Unacceptable placement includes on ladders, stairs, railings, mobile equipment, lying on the floor, on the scaffold, in walkways or cluttering work benches.
- Tools shall not be placed next to open trenches, manholes or vault openings.
- ➤ Tools, materials and parts used in elevated work locations shall be tied in place or kept in containers secured so that nothing can accidentally fall.
- ➤ Select the right tools for the job.
- Train your workers to select the right tools for each job, and ensure that the tools are available.
- Inspect the tool and ensure that it is in good condition and keep it in good condition.
- ▶ Unsafe tools include wrenches with cracked or worn jaws; screwdrivers with broken tips, or split or broken handles; hammers with chipped, mushroomed or loose heads and broken or split handles; mushroomed heads on chisels; dull saws; and extension cords or electrical tools with broken plugs, improper or removed grounding systems, or split insulation.
- ➤ Use all tools correctly.
- ➤ Keep tools in a safe place.
- Earry the tools to and from the work site in a tool box, cabinet, or other appropriate tool holder or pouch.
- ➤ Store the tools in the proper storage area.
- Tools should not be carried up or down ladders by hand. Appropriate pouches shall be used. Where pouches are not available, tools shall be lifted and lowered by hand lines.
- Tools should not be thrown from one level to another, nor should they be thrown from one location to another on the same level.
- > Spark proof tools should be inspected regularly to ensure that there are no steel splinters.

#### 39. PORTABLE ELECTRICAL APPLIANCES.

- All appliances should be tested and identified; records of test/re-test dates should be available.
- Equipments which do not have the test detail label will not permitted inside OPGC Premises.

Any equipment which is in poor condition will not be permitted inside the OPGC premises.

- ➤ Where any portable hand tool requires a supply above 110Volts A.C obtain permission from your OPGC Contact Person. If permission is granted, a residual current device (RCD) mustbe connected in the circuit.
- > Joining of cable is allowed only with industrial male and female sockets of IP67 rating. No twisting or taping of conductors is allowed.
- ➤ Bare cable/ conductors shall not be inserted to sockets.
- > Contractors must ensure that electric equipment connected by cord and plug in good condition.
- Each employee must be properly trained before using tools or equipment requiring special instruction or training (e.g., power tools, vacuum equipment, etc.).
- Extension cords used with portable electric tools shall be of the 3-wire type unless the tool or appliance is double-insulated or operated from an isolated power service. The ground wire must either be permanently connected to the tool frame for grounding means.
- Extension cords lay across walkways or driveways must be covered by protection or warning devices to prevent pedestrian or vehicle hazards.
- Found Fault Circuit Interrupters (GFCIs) are to be used whenever a portable electric tool is used.
- Electrically-powered tools may not be used on energized conductors.
- ➤ Compressed air hose connections shall be secured with a safety clip or retainer before use.
- ➤ If a machine guard is removed in order to work on equipment, it shall be replaced before the equipment is placed back in service. Lockout/Tagout procedures shall be followed.
- Power tools should be used, in accordance with the manufacturer's instructions.
- Where sparking or heat generated by the use of pneumatic tools, an approved coolant shall be used.
- ➤ Only patent pneumatic hose, couplings and fittings of the correct rating shall be used when using pneumatic tools.

#### 40. TEMPORARY WIRING

These provisions apply to temporary electrical power and lighting wiring methods. Temporary wiring shall be removed immediately upon completion of construction or the purpose for which the wiring was installed.

#### 40.1. TEMPORARY POWER PROGRAM PROCEDURES

- i. Only authorized and qualified people for electrical work shall work on the installation, wiring, troubleshooting or repair of electrical equipment.
- ii. All persons dealing with & handling electrical equipment shall be trained to apply the correct treatment for electric shock.
- iii. All portable tools, hand lamps & other apparatus must be connected to the system by means of appropriate rating plugs & sockets type.

- iv. All joints must be both electrically & mechanically sound. No twisting of conductors or tapping is permitted.
- v. Supplies to welding equipment must be specially arranged & the connections must be sufficient in size for the duty to be performed & properly protected against mechanical damage & electrical hazards.
- vi. All lamps for general illumination shall be protected from incidental contact or breakage. Metal-case sockets shall be grounded. Damaged cages/lamps shall be corrected upon notice.
- vii. Temporary lights shall not be suspended by their electric cords unless cords and lights are designed for this mean of suspension.
- viii. Portable electric lighting used in wet and/or other conductive locations, for example drums, tanks, and vessels shall be operated at 24 volts or less. However, 120 volt lights may be used on approval if protected by a GFCI.
- ix. Flexible cords and cables shall be protected from damage. Sharp corners and projections shall be avoided. Flexible cords and cables may pass through doorways or other pinch points, if protection is provided to avoid damage.
- X. Extension cord sets used with portable electric tool and appliances shall be of three-wire type and shall be designed for hard or extra-hard usage. Flexible cords used with temporary and portable lights shall be designed for hard or extrahard usage.
- xi. Electrical equipment shall not be opened, adjusted, repaired, or otherwise handled until it is de-energized and locked-out according to the lock-out policy.
- xii. De-energized equipment shall be tested before anyone works on it.
- XIII. All metal panels, boxes, covers, conduit, etc., that are part of electrical system shall be grounded.
- xiv. All splices and repairs shall be made inside an approved box or approved splice kit. Tape alone is not acceptable.
- **XV.** Metal ladders shall not be used for electrical work.
- **XVI.** All electrical equipment that is exposed to flammable gases or vapors, combustible dust, or ignitable fibres must meet hazardous location requirements in order to prevent explosions.
- xvii. Extension boards must have GFCI/RCCB protection with main power on/off switches. GFCI/RCCB should not be used as power on/off switching. xviii. Circuit breakers that protect hand tool receptacles shall have a maximum rating of 20 amps. Waterproof connectors shall be used as necessary.
- xix. All holes in panel boxes and gaps where circuit breakers are missing shall be securely plugged with a fireproof material.
- **XX.** Circuit breakers shall be matched as closely as possible to the electrical needs they supply.

#### 41. FALL PROTECTION

All persons, on any project that requires them to wear a personal fall arrest or restraint system, will follow these guidelines. A full body harness will be used whenever there is the potential for a fall from a height of 6 feet or more.

#### 41.1. PERSONAL FALL ARREST SYSTEMS (PFAS) & FULL BODY HARNESS:

A personal fall-arrest system is generally required whenever an individual is at risk of falling 1.8 meter or 5.9 ft or more ft from an elevated position. A properly designed system should include three components:

- A. An **anchor point** capable of supporting a minimum of 5,000 lbs (22.2 kN) per attached worker; will serve as a secure connection point for lifelines, lanyards or deceleration devices.
- B. A **full-body harness** designed to distribute fall-arrest forces over thighs, pelvis, waist, chest and shoulders; if a fall occurs, D-ring located in centre of the back will hold worker in an upright position until rescued.
- C. A **connecting device** such as a lanyard, deceleration apparatus, lifeline or a combination of these items with locking snap hooks. Must have a minimum breaking strength of 5,000 Lbs.

#### **WARNING:**

The maximum arresting force an individual is permitted to sustain while wearing a harness is limited to 1,800 lbs (8kN). To stay below this impact force, workers should keep the free fall distance as short as possible (max. 1.8 meter) and consider the use of deceleration devices or shock absorbing lanyards. During fall, the worker shall not come in contact any lower level and bring the worker to a complete stop and limit maximum deceleration distance an employee travels to 3.5 feet (1.07 m).

Each worker shall be attached to a separate lifeline and lifelines shall be protected against being cut or abraded.

#### FULL BODY HARNESS APPLICATION GUIDELINE-

Deceleration apparatuses (shock absorbers) attached double lanyard type harnesses shall be used only at height with fall distance of 6 meter or more.

For fall distance of less than 6 meter or more than 06 meter, self retractable type full body harness shall be used.

Full body harness after one free fall shall not be used again, it shall be condemned.

Harness shall be checked/inspected for wear/tear or any damage before use.

#### 41.2. ANCHORAGE CONNECTORS AND POINTS

An anchorage connector or point must be capable of supporting 5000lbs. per attached worker. This can be accomplished in a number of ways and must be engineered to ensure the point has that capability.

Only anchorages designed by a fall protection equipment manufacturer must approved by OPGC. Anchorage Points in concrete or attached to wooden structures must be approved by both the Contractor's Qualified Person & EIC.

The anchorage point must be installed at dorsal D-ring (shoulder) height or higher. An anchorage point at feet level is unacceptable for fall arrest application and will not be allowed.

#### 41.3. AUTHORIZED FALL PROTECTION SYSTEMS/EQUIPMENT

Only fall protection equipment approved by the OPGC will be used on OPGC projects.

#### **STORAGE**

The equipment should be stored and hung up freely by the back D-ring in a cool, dry place until needed. If materials appear to be faded or it tags and labels are illegible, consult the equipment manufacturer to determine if replacement is necessary.

#### 41.4. TIPS FOR FALL PROTECTION

- Make sure the harness fits snugly. Tighten all straps.
- Use an anchorage point above your head. Do not tie-off at your feet unless there is no other place to tie-off.
- Use two lanyards for 100% tie-off. One lanyard must be attached at all times and when moving from position to position.
- Never hook two lanyards together to get extra reach.
- Except with specific lanyards, hooks may not be tied back into the lanyard itself.
- Use cheaters only when your lanyard will not reach a tie-off point. Cheaters will not be used while tied off to the inside of a man basket.
- Shock absorbing lanyards may not be used in conjunction with retractable lanyards.
- Never tie a knot in your lanyard to reduce its length

#### **41.5. ACCESS**

Stairways and stair towers with complete hand and guardrails do not require fall protection.

Fall protection is not required while using a ladder as a means of access as long as the climbing distance is less than 10 feet. Once a worker has climbed 10 feet a ladderclimbing device is required or an enclosed cage must be present. If the worker stops at any point to conduct work from a ladder, and the worker's feet are more than 6 feet above the adjacent surface, fall protective equipment is required. A three-point contact must be maintained with a ladder regardless of the height a worker is above an adjacent surface.

#### 42. SCAFFOLDING

All scaffolds and staging shall comply with OSHA standards. Prior to using any scaffolding, it shall be approved by OPGC. A "GREEN SCAF-TAG" indicating OPGC acceptance will be attached to the scaffolding, the scaffolding is not to be used until the approval is given. The scaffolding shall meet the following minimum requirements:

- > Timber uprights and ledger shall not be used.
- Metal parts used for scaffolds shall be in good condition and free from corrosion.
- ➤ All poles, planks and general materials, used for scaffoldings, shall be kept in good condition and be inspected by a competent person appointed by the Contractor on each occasion before being used for erection.
- ➤ No materials, other than those specifically designed for the purpose, shall be used for scaffolding.

- A scaffold shall be erected only by men trained and certified in the job, working under the immediate supervision of a competent foreman, who knows the purpose of the scaffold and how it should be constructed to carry the loads which will be placed upon it.
- > Scaffolds shall be securely supported or suspended and where necessary braced to ensure stability. Unless constructed as an independent scaffold, it shall be rigidly connected to the building or structure.
- In the case of partially erected or dismantled scaffolds still capable of being used, access thereto should be effectively blocked and prominent warning notices shall be posted with a "RED SCAF-TAG".
- All platforms, scaffolds and other workplaces, from which persons may fall more than 1.8m (6 ft) shall have edge protection which consist of an upper rail not less than one meter (3 ft 3 inches) in height above the walkway and have at least one intermediate rail.
- Toe boards shall be fitted to all scaffolding.
  - When permanent hand rails have to be removed from elevated platforms, rope or wire hand rails shall be fitted in their place.
- Any load-bearing scaffolding should be constructed to a design previously submitted to and approved by an OPGC contact person.
- Parts of staging, tools and other articles and materials shall be properly lowered and shall not be thrown down from a height. They shall be raised by rope or other suitable means and not carried on the person.
- The Contractor's Representative shall ensure that no loose articles and materials are left lying about in any place from which they may fall on persons working, or passing beneath.
- > While erecting the scaffolding a RED SCAFF-TAG need to be hung until erection is finished

#### 42.1. REQUIREMENTS FOR BOARDS AND PLANKS

- ➤ Boards of 51 mm (2 inch) minimum thickness shall be used. These shall be at least 210 mm (8 inches) wide.
- The spacing of board supports shall depend on the thickness of the boards used and the load to be carried. There shall be at least three supports. Support for 51 mm (2 inch) boards shall not be more than 2.5 m (8 feet 6 inches) apart. All boards shall be supported at the ends.
- ➤ Boards shall be end-butted and close boarded throughout. Overhanging of boards of any thickness shall not exceed four (4) times their thickness and not less than 50 mm.

#### 42.2. WORKING PLATFORM

- All working platforms should be close boarded and all boards should be lashed or secured.
- Widths of platforms vary according to scaffolds purpose.
- As a general rule, if the platforms are to be used only as a footing, they shall be at least 610 mm (24 inches) wide. If small quantities of materials have to be put on them, the platform width shall be increased to 813 mm (32 inches) wide.

#### 42.3. MOBILE TOWER

- The height of a mobile tower should never exceed three times the length of the shortest side.
- There should be only one working platform on a mobile tower.
- Mobile scaffolds should only be used on ground which is firm and level.
- Moving the tower should only be done by pushing or pulling the base.
- The working platform must be clear of men and materials when the tower is being moved.
- ➤ Wheels should be turned outwards and brake must be on and locked before use.
- It is advised to tie the tower to the structure whenever possible.
- ➤ Never ride on a scaffold that is being moved.

#### 42.4. INDEPENDENT TOWERS

- The tubular scaffold used most often is the independent tower. The independent tower apart from necessary ties stands completely free from buildings or structures and is used mainly for access pipe bridges or high maintenance jobs where only a small working area is required.
- The foundation must be capable of carrying the weight of the tower, equipment and men.
- ➤ Base plates must be placed under all standards and if there is any danger of lateral movement they must be securely fixed, substitutes must not be used.
- > Special precautions must be taken to provide stability on soft soil, or surfaces likely to be damaged.
- > Standards must be vertical and joints must be staggered. The distance between standards must be no more than 2.5 m (8 feet 6 inches).
- Ledgers must be horizontal and fixed to the standards with load bearing clips.
- ➤ Generally ledgers will be vertically spaced at about 2 m centers for easy erection; also providing ample headroom if an intermediate working platform is required.
- > Diagonal bracings must be fitted on all lifts on all sides and a cross bracing should be fitted at the base and at other levels where necessary to keep the tower rigid, but at least every alternative lift.
- ➤ If the height of the tower is more than 3 1/2 times the length of the shortest side it must be adequately tied.
- ➤ It is good practice to tie scaffolds to the adjacent structure whenever possible irrespective of height.

#### 42.5. LADDERS

- All ladders used in the plant except in scaffoldings shall be made of Glass Reinforced Plastic (GRP) / FRP. No metallic / wood ladders are allowed in OPGC premises.
- ➤ Shall be factory made and shall be of sound construction.
- > No ladders with treads nailed to the stringers or which are in any other way faulty or unsound shall be used.

- ➤ Unless OPGC has granted prior written consent no ladder shall exceed 3.7 m (12 ft) in height.
- Ladders shall not be painted. Clear varnish or polyurethane is acceptable.

All ladders shall only be used for the purpose for which they were designed.

- > The Contractor shall ensure all ladders under their control are inspected for safe, clean and proper working parts before they are used.
- ➤ Defective ladders shall not be used, but instead shall be tagged and made inaccessible for use.
- Ladders should be placed upon a level, firm, solid and safe base and leaned against or hung from a solid, safe structure.
- ➤ When it is necessary to place a ladder on a non-level, smooth or slick surface, the base of the ladder shall be tied, blocked in place or held by another worker.
- > The base of a straight or extension ladder shall be placed back from the wall at a distance equal to one-fourth of the ladder's working length.
- The top of an extension ladder shall be tied off when possible.
- No one shall go up or down a ladder without the free use of both hands.
- If material must be lifted, a hand line must be used.
- Employees shall face a ladder while ascending or descending.
- A ladder used to transfer to a landing must have side rails that extend at least 3 feet above the landing.
- > Contractors shall ensure employees under their control are properly trained in ladder safety.
- ➤ Where ever the chance hitting ladder with moving traffic or some other equipments exists, adequate protections to be provided with warnings

## 43. ACCESS TO TRANSFORMERS/SWITCH GEAR ROOMS/SWITCHYARD AND OTHER RESTRICTED AREAS

Contractor will remain outside of all fenced electrical transformer, switchgear rooms, switchyard or any other high voltage areas and restricted areas unless authorized by the OPGC Contract person to enter. If it becomes necessary to enter these areas, the Contractor must notify the OPGC Contract person so that arrangements can be made to secure a safe work area.

#### **44. FIRE PROTECTION:**

Fire hydrants, extinguishers, hose racks, and other emergency equipment shall not be covered or blocked and fire equipment lanes must always be kept clear.

All fires must be investigated and reported to OPGC regardless of duration or extent.

All contractor persons should know the method of raising alarm & operation of first aid fire fighting appliances. Nobody should misuse the fire appliances, extinguishers etc.

#### 45. HOT WORK

Any activity which involves naked flames or can produce heat energy or spark shall be considered as Hot Work. e.g. Welding, Burning, Grinding, Cutting.

- ➤ The Contractor must coordinate hot work activities with the OPGC Contact person.
- All welding, burning, or other hot work will be carefully planned and safely executed by completion of a Hot Work Permit from OPGC.
- ➤ Welding machines and its accessories must be approved type & safe to use. Power supply cable should be of proper rating, joint free, copper and cut resistance type.
- ➤ When 'Hot Work' is in progress precautions must be taken as per the Hot Work Permit issued by OPGC to minimize the risk to other persons, particularly from fire.
- > Appropriate fire extinguishers shall be made available for the duration of the specific activities as mentioned in the Hot Work permit.
- > The Contractor shall provide fire watches during hot work activity & shall ensure firewatchers are trained on the use of fire extinguishers and other appropriate fire fighting gear. Fire watchers during fire watching cannot be assigned with other task.
- The Contractor shall ensure that firewatchers are equipped with appropriate equipment and dedicated only to the duties of the fire watch.
- ➤ The Contractor shall ensure that adequate guards and barriers (fire blanket, fire proof sheets) are used to ensure sparks and hot slag are confined to the immediate area and do not contact flammable or combustible materials.
- All open areas and floor grating/ wall openings shall be protected so that sparks or slag cannot reach flammable or combustible materials at any lower level.
- ➤ Hot work areas must be barricaded to prevent people from coming into contact with sparks and slag from hot work activities.
- > The Contractor must store flammable and combustible chemicals where they are not subject to hot work or other sources of ignition.
- > Use appropriate PPE for the job.

#### **46. CONFINED SPACES:**

A *Confined Space* is any space of an enclosed nature which is not designed for continuous human occupancy and presents a risk of death or serious injury from hazardous substance or dangerous conditions.

➤ The Contractor must coordinate Confined Space Entry work activities with the OPGC Contract person.

Confined Space Entry Permit shall be obtained to enter any Confined Space for any kind of work inside.

- Contractor shall perform no duties that might interfere and disturb the accepted safe working conditions in a confined space.
- Contractor shall maintain all safety barriers around the *Entry Point*.
- Appropriate PPE as per the Confined Space Entry Permit shall be used.
- Appropriate dust mask shall be worn by the *Entrant* if significant quantities of dust are present within the *Confined Space*.
- ➤ Head and eye protection shall be worn at all times by the *Entrant* unless specified otherwise by the *Control Room Engineer*.
- A body harness may be required by the *Entrant* if work is to be performed above ground level. An air purifying respirator and cartridge or Self Contained breathing Apparatus (SCBA) shall be used by the *Entrant* if *Entry* into a *Confined Space* containing a *Hazardous Atmosphere* is required and it is not physically possible to entirely remove the *Hazardous Atmosphere*.
- ➤ Contractor shall use the safety equipment as per the Confined Space Entry Permit.
- > Fire extinguishers suitable for the type of fires those are appropriate to the hazards that may be present in the *Permit Required Confined Space*.
- > Contractor shall deploy trained Confined Space Watcher/Hole Watcher to take control over the Confined Space entry & exit points during the period of work. Confined space opening either will be closed or entry prohibited through warning tape or barrier while no work is taking place inside the confined space. Contractor will not assign task other than Confined space watching to the watchers as long as they are performing the watching.
- > Contractor shall comply strictly with the following Electrical safety precautions
- Electrical equipment supplied from the mains should only be used where there are no practicable alternatives. Battery powered electrical equipment or pneumatic powered equipment shall be used whenever possible.
- ➤ If there are no practicable alternatives to using electrical equipment supplied from the mains, then they should be 24V. If this is not possible then they should be 110V supplied through a centre tapped transformer with the centre tap earthed.
- > Electrical equipment supplied from the mains should contain Ground Fault Circuit Interrupters / Residual Current Devices.
- Electrical equipment supplied from the mains shall have a valid test certificate.

#### 47. HIGH PRESSURE WATER/ SERVICE AIR CLEANERS

Improper use of water jets/ Service Air can cause serious injury. The contractor may only use high pressure washing apparatus with the permission of the OPGC Contact Person.

The contractor must satisfy the OPGC Contact Person as to the training of the operators, the arrangements for the place of work and a safe system of work.

#### 48. SCRAP/WASTE DISPOSAL:

Waste Bins are provided on site for General Housekeeping materials, metal scrap, Hazardous and Oily wastes and Chemical Wastes. Special or Hazardous Materials must not be dumped in general housekeeping bins and metal scrap bins. Please consult with OPGC Contact person for more details.

#### 49. GAS CYLINDERS

The following regulations apply to all industrial transportable gas cylinders including containers for dissolved acetylene.

#### 49.1. CYLINDER IDENTIFICATION

Gas cylinders shall be colour coded in accordance with relevant BIS code or applicable Gas Cylinder rule.

Full and empty cylinders must be clearly distinguished and stored apart.

#### 49.2. STORAGE OF CYLINDERS

- No flammable materials shall be stored on the site with them, or in the immediate vicinity. Cylinders must be kept at a safe distance from any heat source.
- > Cylinders shall be stored in such a manner that they can be readily removed in the event of fire.
- They shall be adequately secured to prevent falling over.
- > Cylinders shall be stored vertically and secured.

#### 49.3. HANDLING AND MOVEMENT OF CYLINDERS

- > Cylinders shall not be subjected to rough usage, or excessive shock, or used as rollers, or supports.
- > Cylinders shall not be dropped from a height.
- A proper carriage, or platform and not a sling, shall be used for moving cylinders, whether empty or full.
- ➤ When cylinders are being transported, they shall be loaded and firmly wedged to prevent violent contact when the vehicle moves.
- > On no account shall cylinder trolleys be towed by motor transport. The transportation of any gas filled cylinder shall always be in a proper rack, regularly maintained and properly inspected at least biannually.
  - The Contractor shall ensure that cylinders with faulty valve joints, immovable valve spindles, or valve leakage are immediately removed from the site.
- Only standard valve keys shall be used.
- > Only standard automatic pressure regulators and pressure gauges shall be fitted to cylinders.
- Regulators and gauges shall be checked to ensure they are functioning properly and damaged gauges or regulators shall be removed from service.
- ➤ RED hose shall only be used for Acetylene and BLACK hose shall be used for Oxygen and Nitrogen.

- ➤ Hoses shall be pressure tested and examined to ensure that they are free from cuts, cracks, burns and excessive wear.
- > Only secured hose connectors shall be used.
- ➤ It is strictly prohibited to bind hose connections with wire.
- All Oxy-acetylene sets which are portable shall be wheeled on a trolley.
- When not in use, blow-pipes and hoses shall not be left in confined spaces or enclosed areas.
- ➤ Where this cannot be done, the Oxygen and Acetylene connections shall be disconnected at the cylinders situated outside. Merely closing the valve is not a disconnection.
- > Empty cylinders and cylinders no longer required shall be removed from the Site as soon as practicable, caps shall be in place.
- Flashback arrestors (ESAB or any other ISI approved type) shall be fitted at the outlet of the regulator and at inlet of the cutting torch.
- ➤ When not in use, all cylinders shall have protecting caps screwed on.
- > Cylinder valves shall be closed immediately when gas is not required, or when the cylinder is empty and the hose depressurized.

#### 50. RADIOGRAPHY AND RADIO ACTIVE SUBSTANCES

- Radiography shall be done only after achieving a valid safety document. Proper barricading of the area and paging on the loud speakers should be done
- ➤ All operations involving the use of radioactive substances shall be supervised by the Contractor to ensure that protective measures are properly maintained and to check the extent of the protection afforded in practice.
- The Contractor is required to provide OPGC with a list of radioactive sources held by the Contractor and all employees who use or store these radio-active sources on OPGC's property.
- > The Contractor shall be responsible for the supply, operation and regular testing of all necessary monitoring equipment and to ensure that all protection barriers
  - are placed and altered as a result of survey radiation level readings in accordance with internationally acceptable levels.
- All radioactive substances not in use shall be kept securely in a dedicated storage place. The storage place should be clearly marked with the warning sign and the wording: "DANGER RADIOACTIVE MATERIAL" in clear and indelible print. Its access hatch or door should be provided with a lock, the keys of which should be kept by the authorized radiographer.
- ➤ Only authorized personnel should handle radioactive sources.

- ➤ Before any radiography work is started, the Contractor shall be required to establish procedures dealing with accident/incidents and foreseeing an emergency.
- ➤ The procedure shall clearly define responsibilities and actions/measures to be implemented.
- ➤ The emergency procedures shall be submitted to OPGC Contact person for review and approval.
- The Contractor shall also ensure that all personnel involved have been carefully instructed.
- **50.1.** During transport, radioactive substances should be kept in sealed sources for radiography with the exposure container should be kept inside a lead-lined box which has the radiation warning sign on the outside.

#### **50.2.** HANDLING PROCEDURE AND PERSONAL PROTECTION

- >Keep maximum distance from the source.
- Provide maximum shielding
- Keep exposure time down.
- A radiography permit shall be obtained on each occasion radiological work is carried out.
- A barrier shall be erected around each area where the source is exposed so that the level of radiation at the barrier does not exceed 0.75 Micro Seiverts per hour in air.
- > Suitable warning notices for display at barriers shall have the wording "RADIATION DO NOT ENTER".

  The notices shall also include the radiation symbol.
- All persons using radioactive substances shall be trained and certified in the use of such substances.
- ➤ The perimeter of the area shall be patrolled during the period of source exposure.
- An exposed source must be immediately returned to its safe container on the request of the operating personnel, or in the event of a fire or other emergency occurring

Any worker liable to be exposed to ionizing radiation shall wear on the appropriate part of his body a film badge to measure the amount of radiation accumulated.

#### **51. EXCAVATION**

- > The Contractor shall ensure that no Excavation work shall be carried out without the issue of an appropriate Safety Document.
- Any buried cables or pipelines unexpectedly encountered during excavation work shall be reported immediately to the OPGC Central Control Room and the work shall cease.
- ➤ Where, because of the nature, shape and slope of the excavation, material is liable to fall more than 1.3 meters (4 ft.) onto a person working, the sides of the excavation must be adequately shored.
- > Shoring shall be rigid and without holes or opening, and be properly braced with support structure.
- The shoring of every excavation where men are to work shall be examined each day by the Contractor's Representative.

- Excavated earth shall not be stored close to the trench edges and a minimum distance of at least one and a half times the depth of the trench shall be observed.
- No load, plant or equipment should be placed or moved near the edge of any excavation where it is likely to cause the collapse of the side of the excavation.
- Excavations in which persons are working and into which a person is liable to fall shall be suitably or protected by a barrier.
- > If the excavation is to remain open after dark, warning lights shall be placed around the excavation to warn others of its presence.
- > Temporary crossings over the trench shall be at least 609 mm (2 feet) wide and sufficiently strong with a railing on one side.
- The Contractor shall be responsible for the provision of all barricades, roping off and the provision of flashing lights as is required for the safety of persons and vehicles.

#### **52. SURPLUS MATERIALS**

Unless otherwise directed through written instructions issued by OPGC, Contractor shall promptly remove all excess surplus material from the jobsite. Final payment for performance of the work shall not be due and payable until such materials are removed from the jobsite. If surplus materials are not removed from the job site within fifteen (15) days of completion of the Work, OPGC may dispose of the materials and offset the cost associated with disposal against the unpaid balance of the Contract Price.

#### 53. SUSPENSION OF WORK AND LIMITATION OF LIABILITY

OPGC reserves the right through the project contact to suspend all or any portion of the work being performed in violation of these provisions. OPGC shall not be liable in contract, tort (including without limitation negligence and strict liability) warranty or under any other legal theory for damages, costs or expenses related to any suspension or stoppage of work, loss of business, or other special, incidental, consequential or punitive damages in connection with any failure on the Contractor's part to establish, enforce, or adequately monitor its Health and Safety Program.

#### **54. TEMPORARY BUILDING:**

Temporary buildings and material storage areas shall only be allowed upon written approval of the concerned Project Manager/EIC. They shall not be set up under power lines or pipe ways.

#### 55. UNSAFE AND/OR INAPPROPRIATE BEHAVIOR, DICIPLINARY ACTION

Any Contractor employee who appears unable to perform his job in a safe manner or exhibits any type of behavior inappropriate for the work place will be reported to the Contractor's on-site supervisor for evaluation and possible removal from the site. OPGC will not tolerate at any time any conduct that threatens, intimidates or coerces an OPGC person, another Contractor or any member of the public.

#### 55.1. DISCIPLINARY ACTION AND PENALTY AGAINST SAFETY RULES VIOLATION

- ➤ Unsatisfactory safety performance will go against the contractor in future bids.
- > OPGC reserves the right to even terminate unsafe Contractor from Contract with notice.
- In addition to the above disciplinary action, additional penalty for Safety Violation shall be applicable.
- > The penalty system is divided into two categories, Minor and Major. OPGC EHS shall decide about the minor or major safety penalty based on type of violations & risk involved with the violations

#### 55.2. EXAMPLES OF SAFETY VIOLATIONS

- Not wearing / improper wearing of personal protective equipment (PPE) as per OPGC PPE rule. Example-Safety Shoe, Helmet, Safety glass, Earplug, Hand gloves and other PPEs.
- Using grinder without wheel guard
- Taking electrical connection without using ELCB.
- Using damaged welding cable, faulty joints in cable
- Non-use of flash back arrester in oxy acetylene cutting set
- Non availability of standby person (hole watch) on man hole during entry into
- Confined space

Not responding to emergency sirens as per emergency handling procedure.

- Working overhead on road/ pathway without barricading
- > Dumping excavated earth on edge of excavation
- Non-reporting of Near Miss, accident, fire and/or explosion and property damage incident.
- > Improper housekeeping. Leaving work area with debris/ waste/ scrap material haphazardly
- ➤ Unauthorized disposal of hazardous substance (waste Oil, Grease, Chemical, Toxic Substance)
- Leaving excavated soil on road
- Spillage of waste on roads & work places

- ➤ Mishandling of gas cylinders

➤ Blocking access of emergency equipment or exits.

- ➤ Handling & disposal of hazardous substances in unauthorized manner.
- ➤ Violating OPGC any of the environmental guideline attached in separate sheet.

The following penalties shall be imposed on the contractor with the charge of safety violation by OPGC and shall be deducted from the Contractor's running/ final bill. Penalty can be imposed by E-I-C/Dept Heads &Tls/ Safety Officer/ EHS Manager/Safety Rovers or any officer authorized by the OPGC management.

- For first instance of Safety rule violation, counseling and verbal warning with punching of blue spot on I Card
- > On observation of second instance of Safety rule violation, counseling and strong verbal warning with punching of yellow spot on I Card
- ➤ On observation of 3<sup>rd</sup> Safety rule violation, punching of red spot on I Card with duty suspension or permanent removal from site
- For major Safety Violation for one instance also, there may be direct punching of red spot in I card with permanent removal/termination of the Contractor employee(s) responsible for that violation.
- ➤ Inadequate Safety Supervision leading to repeated minor or medium risk type safety violation- Fine/Penalty of Rs.5000/- (Rs. five thousand only) and I card punching of responsible contractor Supervisor.
- ➤ Inadequate Safety Supervision leading to repeated major risk type safety violation- Fine/Penalty of Rs.10000/- (Rs. ten thousand only) and I card punching of Contractor Supervisors with suspension or even termination of

responsible contractor supervisor. It can also be increased depending on the seriousness of the safety violation. It will be decided after joint discussion of EHS & concern EIC which can be maximum up to 0.5% of work order value.

#### 56. GENERAL GUIDELINES FOR ENVIRONMENTAL PROTECTION

The Contractor shall pay due regard to the environment by acting to preserve air, water, human life, animal and plant life from adverse effects resulting from its work or operation and to minimize any nuisance which may arise from such work or operations.

- 1. Uncontrolled releases of OPGC regulated materials, hazardous wastes, special wastes, and PCB or PCB contaminated materials from OPGC locations into the environment are prohibited.
- 2. All spills of OPGC regulated material, hazardous waste, special waste and PCB or PCB contaminated material must be cleaned up and waste residues generated disposed of properly. Planning must begin immediately and clean up must be initiated within 72 hours of discovery of the spill.
- 3. Use of PCB (Poly Chlorinated Biphenyl) containing products/ materials is prohibited.
- 4. Used oil & lubricants generated during work shall be collected in containers provided with lid and shall be placed at designated transit storage shed. This shall be subsequently sent to warehouse for storage in the designated shed in front of Store Shed No. 3 and final disposal to authorized recyclers / re-processors. Waste oil/lubricant spilled on the floor shall be contained and collected by the use of spill protection kit.
- 5. Used lead acid batteries shall be sent to Warehouse for storage at designated shed and final disposal to authorized recyclers / re-processors. Spilled lead acid shall be contained and collected by the use of spill protection kit. New lead acid batteries shall be procured against return of damaged used batteries to Supplier.
- 6. E- Wastes and used Ni-Cd batteries, fluorescent lamps, mercury vapour lamps are also treated as hazardous materials. These are to be collected and stored in identified places on impervious floor and under shed to avoid contamination. These shall be disposed in authorized manner.
- 7. Oil contaminated scraps, cotton wastes and other oil contaminated wastes shall be collected in specified collecting bins (designated as oil contaminated waste collecting bin) that are to be kept near work area and shall be sent to Warehouse for storage in specified collecting bin and final disposal to authorized recyclers/reprocessors, if possible. Otherwise the wastes shall be disposed off by warehouse in lined impervious covered pits.
- 8. Onsite work areas shall not be stored with improper and/or excessive amounts of scraps and debris.
- 9. Lead waste & other Non-ferrous metal wastes like, zinc, brass, copper, nickel and electronic wastes etc shall not be thrown around. It shall be collected in collecting bins and sent regularly to warehouse for storage in designated bins/shed and final disposal to authorized recyclers/re-processors.
- 10. Spent Resins shall be collected in barrels, provided with lids and shall be disposed as per authorized disposal means.
- 11. Acid/alkali / any other hazardous chemical contaminated scraps/wastes shall be collected in designated collecting bins to be placed near the work area and shall be returned to Warehouse for storage in designated collecting bin and final disposal to authorized recyclers/re-processors or else, these scraps can be disposed of by Ware House in

lined impervious covered pits. Similarly, acid/alkali/ any other hazardous chemical contaminated barrels/jars shall be returned to Warehouse for disposing it back either to the supplier (as per the condition of Purchase Order) or to the authorized recyclers.

- 12. Materials that yield Hazardous Substances shall be identified prior to their initial purchase.
- 13. Ample spill response materials shall be available to deal with any potential hazardous and special waste releases.
- 14. All containers used and stored on the site must have proper labels.
- 15. Debris and solid wastes generated during any activity shall be collected & disposed regularly at the designated place and the combustible materials shall be controlled fired under direct supervision of OPGC Fire or Safety Officer. It shall not be dumped /thrown here and there.
- 16. Tree trimming and pruning wastes shall be kept sufficiently away from plant. Steps shall be taken to dispose these to outside agencies to avoid unwanted fire.
- 17. Carry bags made of virgin or recycled plastic, which are less than 20 micron thick, are not allowed to be used in ITPS.
- 18. Energy efficient products (eco marked products) will be preferred for use insideITPS.
- 19. Goods packing material shall be bio degradable and environmental friendly material.
- 20. All chemicals shall be procured with its material safety data sheet (MSDS). The MSDS shall remain with the chemical for its entire period of stock inside OPGC.
- 21. Hazardous chemicals or substances in bulk transport will come with MSDS, TREM Card, hazard labeling of the lorry and containers. The transporters staffs/ staff shall be properly trained on emergency handling of the chemical.
- 22. Emergency preparedness shall be in place to handle chemical emergency or any other hazardous material emergency so as to prevent risk to environment.
- 23. Vehicular emission and noise shall be minimized in work zones by restricting use of defective vehicles, machineries and Tools & Plants.
- 24. Vehicles shall be certified with valid pollution under control certificate.
- 25. Source air emissions shall be controlled so as to meet regulatory norms. Incase of incidental higher emission level, immediate control measure shall be taken on priority. Continuous emission monitoring for Stack SPM, NOx, SO2 shall be made available all time except the period of planned maintenance. Alternative offline monitoring shall be in practice during the period of on line equipment maintenance.
- 26. Fugitive emission shall be controlled in work places (CHP, AHP, ESP, Ash Pond & Dry ash storage silo areas). These places shall be tested for dust concentration periodically to ensure taking step to reduce dust emission level to acceptable state. People working in these areas shall use dust mask to prevent inhaling dust.
- 27. Sufficient water spraying shall be ensured in haul roads and working areas to reduce fugitive emission during earth work by mechanical means.
- 28. While painting any structural materials on ground, the structural materials shall be kept on any impervious barrier so as to avoid land contamination by paints.

- 29. Use of Ozone Depleting Substance (ODS) like CCL4, CFC-11, CFC-12, Halon and other ODS based substances shall be phased out in phased manner. Venting of ODS gas to atmosphere is forbidden. During phasing out process of these substances, these ODS shall not be released to atmosphere. These gases shall be handled as per local regulation guideline. CFC containing equipments like refrigerators and hydrogen driers shall be replaced with non CFC refrigerant containing equipments.
- 30. SF6 consumption shall be managed in such way that there will be no waste or/ and release to atmosphere. The user shall maintain a consumption record covering the equipment name in which the gas is used, quantity and date of use.
- 31. Asbestos ropes and packing shall not be used in any work. No new asbestos sheets shall be used in any work. Before cutting/handling old asbestos sheets, the sheets shall be made wet and handled by using nose mask and hand gloves. Waste asbestos pieces shall be disposed in lined impervious covered pits.
- 32. During construction and maintenance works, melting of Bitumen should be done by using fuel oil / fire wood. In no case burning of rubber tyres will be allowed.
- 33. Smoking is prohibited inside plant.
- 34. Optimum utilization of water, energy and raw materials shall be ensured by minimizing the loss in any activity.
- 35. Spitting on walls is prohibited.
- 36. Preference shall be given for using eco-friendly materials/packing and technology, wherever it is techno-economically viable.
- 37. Special care shall be given for good housekeeping.
- 38. Non-biodegradable solid wastes like plastic pouches/packing materials shall be disposed in lined impervious covered pits.
- 39. Empty paint drums, brushes shall not be thrown around. It shall be the responsibility of the contractor to dispose it outside ITPS as per the provision of Hazardous Wastes (Management & handling) rule.
- 40. Waste water generated inside plant and sewage effluent shall be reused
- 41. Ground water and surface water adjacent to ash disposal area and coal pile area shall be tested periodically so as to ensure no adverse impact on environment.
- 42. Spillage and disposal of any liquid or solid waste into storm water drains is prohibited.
- 43. Spillage of Chemical or OPGC regulated material shall be reported to Manager (Environment) within 01 hour of the incident occurs.
- 44. For safe Handling and Transportation of Hydrogen, Chlorine, Petroleum Products and other Chemicals please MSIHC rule.
- 45. Any noisy operation more than 85dBA shall be carried with the use of appropriate noise abatement barrier. Wherever barrier cannot be provided, the person nearby must have ear protection.
- 46. Environmental monitoring equipment that has been originally designed and installed must be satisfactorily maintained and continually operated (with the exception of standard downtime for planned or unplanned maintenance).
- 47. Any abnormal environmental incident observed/ noticed shall be communicated to EHS

### INTEGRATED MANAGEMENT SYSTEM POLICY



Occupational Health & Safety, Environment, Quality and Energy Policy

Odisha Power Generation Corporation Limited., at Ib Thermal Power Station (ITPS), Banharpali, Jharsuguda, committed to satisfy its stakeholders and strive to establish itself as a world class power utility company by maintaining safe & healthy, green & clean environment in and around the plant generating quality power in an energy efficient manner.

#### In order to achieve the same, we are committed to ....

- Provide safe & healthy working condition by preventing work related injury and ill health through elimination of hazards and
  improvement of occupational health & safety performance including preparedness to respond to emergency situation with a believe
  to "Put Safety First at OPGC & All Occupational incidents are preventable";
- Ensure consultation and participation of workers to drive system improvements to adopt "Zero Tolerance" on OPGC Safety cardinal
   Rules .
- Comply with applicable legal, regulatory & other requirements pertaining to occupational health & safety, environment, products and Energy
- Empower everyone to stop & report any work when there is a reasonable belief that the work poses imminent risk of injury
- Be responsible for own safe behaviours & those of co-workers
- Protect the environment and prevent pollution by reducing emission and waste through efficient use and conservation of resources
  as well as reuse & recycle of waste
- Generate reliable and quality power by conforming to standard as laid down by statutory authorities and customer requirement and enhance customer satisfaction through improvement in business excellence
- Enhance energy performance by reducing specific consumption, controlling energy losses, supporting design &procurement of
  energy efficient products & services and by making information & resources available to meet objectives & targets
- Impart awareness and necessary competence through training to all working for or on behalf of OPGC for achieving conformity to product, safe working condition, protection of environment and conservation of energy; and to recognise outstanding performer
- Improve Continually the performance of Occupational Health & Safety, Environment, Quality, and Energy Management Systems
- To Support & promote employee wellbeing including a healthy work-life balance through work practice, a positive culture and leadership
- Communicate this policy to all stakeholders

Reviewed on: 01.07.2023

Manas Ranjan Rout
Occupier & Director (Operation), OPGC

Banharpali, Dist.: Jharsuguda, Odisha – 768 234.

# **APPENDICES- 2 OPGC High Risk Activities**

	Activity
1	Activities on or near equipment with the potential to cause Arc Flash
2	Activities in a road way with potential to be struck by vehicles (Does not include driving or travelling on a public road way.)
3	Activities with drowning potential
4	Activity involving work at height above 1.8 meters (6 feet) and any pole climbing
5	Handling of hazardous substance which can cause acute injury, exposure to ionization sources or potential to cause explosion
6	Activities with potential for live voltage exposure ≥50 Volt
7	Activities on or around pressurized safety valves or other energized energy relief devices where there is the possibility of exposure to the stored energy if released
8	Hoisting and Rigging
9	Hot Work outside of its designated locations
10	Activities involving Confined Space entry or potential for entrapment/engulfment such as work inside a trench, tunnel, etc.
11	Tree trimming and related activities with the potential to cause injury by tree trimming equipment and / or hit by falling tree or limb
12	Activities involving operation of or working in the vicinity of operating plant equipment
13	Activities in potential explosive areas due to accumulation of combustible dust or vapor
14	Activities on or near rotating, rolling or moving equipment or its parts having the potential to cause cut, entrapment, crushing or caught by injuries
15	Activities with the potential to cause a hit by falling objects

#### **APPENDIX-3**

# OPGC HSE RULES AND REGULATIONS FOR CONTRACTORS

#### **UNDERTAKING**

I hereby undertake that:

(1) I have received a copy of, and read, these regulations;

(2) I agree to execute the work under all provisions co	ntained herein;
(3) I understand & will make my entire project team u	nderstands the applicable rules & regulations;
Signature:	
Name :	
Date:	
Contract Company:	

#### **APPENDIX-4**

	EHS Violation	Record for Contractor	Date:	
b Thermal Power Station, Banaharpali				
Name of Violator:				
Location of Violation:				
Type of Violation:		_		
Contractor's Name	Signature			
Observer's Signature Name	Signature			

### **Revision Control & Approval**

### Revision control of the document

SI. No.	Page	Revision From	Date	Revision To	Date	Revision Description
1	All	-	-	00	03.07.2023	, 5
						Integrated Management System

### **Approval of the document**

Prepared By	Reviewed By	Issued by	Approved By
Dept. Team Members	Head-EHS	IMS Coordinator	Plant Manager



## TECHNICALSPECIFICATIONS, SCOPE OF WORK& TERMS & CONDITIONS

#### **SCOPE OF WORK**

- a) Party has to deploy the manpower and the scaffolding material for the period of Annual outage as specified in terms and condition. The scaffolding will be installed in any location inside the plant premises of OPGC/ITPS.
- b) The Agency shall Supply, Erect, Modify & Dismantle the Scaffolding as and when required as per the instruction of OPGC Engg. or Supervisor as per IS-1570.
- c) Scaffolding materials should be strictly MS pipe (tube) conforming to IS-1161 and couplers (Cup lock /Right Angle couplers/Swivel couplers) conforming to IS-1570. The Platform for Scaffolding should be provided with toe boards (300 mmX500 mm or 1200 sq cm) in order to prevent falling. Earth connection points are to be provided in case of Electric Power needs to pass through the scaffolding. The ladders are to be provided if the height of scaffolding is more than 6 mtrs.
- d) The material to be used for the scaffolding shall be as new & free of rust and the integrity of the material shall be checked by EIC or his authorized representative. The material rejected by them is to be replaced by the contractor.
- e) The Agency should deploy the Site supervisor as a Competent Person with high degree of supervising skills of Erection, Modification & Dismantling of Scaffolding.
- f) The personnel deployed for installation of scaffolding should have experience in installation and removal of the scaffolding in Power /Oil industry of similar capacity. They should be capable of working at height with safety. All the personnel who will be deployed has to submit the competency certificate exhibiting the capability /competence to do the job of installation & removal of scaffolding from industries of repute.
- g) The agency should replace instantly defective Scaffolding if any found during the course of work.
- h) OPGC will provide the detail planning of Scaffolding erection to the agency prior to the start of any scaffolding work.
- i) The site in charge shall mobilize the manpower& material within 2hrs of getting the information from Engr.-in —charge.
- j) If required party has to carry out the work during the extended hours, so party should be able to mobilize extra manpower with in 24 hrs of getting the information from EIC.

- k) If the material is to shifted more than 200 mtr. from the site store, then OPGC will provide the truck for shifting the material. For the distance less than 200 mtr. party has to make the arrangement of their own to shift the material from their site store and back.
- I) The Agency should take care of all housekeeping activity during and after completion of work.
- 2. Tentative quantity of job shall be around 10,000 Sq.mtr.FOR UNIT #2. The measurement shall be on the basis of scaffolding area measured on 4 sides excluding top and bottom area. The payment shall be on the basis of actual measurement certified by EIC.
- 3. While submitting the Quotation, the agency should see that the cost of PPEs is included in the quotation. Once the quotation is submitted, there shall be no consideration for the cost of PPEs during the entire tenure of contract. The agencies shall abide by the Safety, Health & Environment Guide Lines for contractors of OPGC. They are to use all required PPEs while working at site. Minimum required PPEs: Safety Shoes, Safety Helmet, Safety Glass, Ear Plug, hand gloves, Nose masks, Safety belts during working at height.
- 4. The party has to submit the competency certificate for the people to be deployed along with the submission of the price bid. FAILING TO THIS CONDITION THE OFFER WILL NOT BE CONSIDERED.

#### **TERMS AND CONDITIONS:**

- 1.0 The work as defined in Scope of work is to be carried out in Unit –II of IB Thermal Power Plant in time domain of 6 months in 2024-25.
- 2.0 The tentative overhaul work is schedule is as below:

Unit- II - Duration 20 days

- The schedule outage period mentioned is tentative and may vary as per the actual requirement/ situation of the dispatch instructions.
  - 3.0 The time interval between the overhaul shall be five/six month(s) and party has to make the arrangement for the deployment of the personnel accordingly.
  - 4.0 Time and Quality is the essence of the contract .The Contractor shall ensure that the repair work covered in scope of work will be conducted on time with best of the skill and the knowhow available with the contractor and will be carried out in conformance with the clearance and adjustment set forth in the manufacturer drawing / quality requirement and other information.
  - 5.0 The contractor shall furnish the Bar chart for the work to be carried out. Daily monitoring of the work progress shall be done. In case the work progress is not as per the schedule, contractor has to deploy the personnel to work round the clock, weekends and holidays. The contractor has to deploy two equal parallel strength of groups in 12 hrs. shift with equal T&P for all the jobs so as to complete the work in stipulated period or earlier.
  - 6.0 In case contractor fails to execute the job in accordance to the agreed program, OPGC reserves the right to get it done through other party at risk and cost of the Contractor.
  - 7.0 For the contractor executing scaffolding job for Duct work has to deploy qualified and experienced persons.
  - 8.0 No contractor personnel shall be deployed for more than 12 hrs/day for the work at site.

- 9.0 Guarantee/Warrantee- The work carried out shall be guarantee for 2 months from the date of commissioning of the system. If any defect is observed in the equipment which can be attributable to poor workmanship, it has to be attended free of charge. For that contractor has to mobilize the manpower when the shutdown is available.
- 10.0 Contractor has to keep their key personnel during the start up/ commissioning of the system /equipment and shall attend the defect, if observed due to poor workmanship. The contractor key personnel shall remain at site for minimum three days after the commissioning of the system.
- 11.0 All the Work is to be carried out as per the instruction and the satisfaction of EIC.
- 12.0 It is responsibility of the contractor to maintain the housekeeping of the plant , equipment and the surrounding during and after the work.
- 13.0 The name of the working personnel deployed by the contractor like Site –in charge, MWF, Fitter, Rigger during the job with full detail has to be submitted stating their area of work and experience and specialization of work to EIC before the start of the work. OPGC reserves the right to ask to change the people if not sound suitable for the work at any point of time during execution of the job.
- 14.0 Scrap and damaged parts taken out from the machine is to be shifted to scrap disposal area as indicated by EIC on regular basis.
- 15.0 The contractor shall be responsible for shifting of the material /spares from the stores to the site and return of the damaged spare /scrap to designated place. For shifting if lifting equipment is available that shall be provided. However at no point of time contractor shall take the excuse of non availability of lifting equipment for slow work progress.
- 16.0 The scaffolding installation /removal if is required for the execution of the work, same is to be carried out by the party. OPGC shall provide the scaffolding material free of cost.
- 17.0 Party has to make the arrangement for the illumination at the work place . Party has to arrange lights and also the certified electrician for making the connections.
- 18.0 Party has to be mobilized minimum one week in advance before the actual start of the work for completion of process like Gate pass, scaffolding installation, site store fabrication etc. Fabrication of the Temporary site store at site is to be done by the party, only suitable area will be allocated.
- 19.0 All the required tools & tackles for the jobs as per scope of work are to be arranged by the contractor. The 24 V lamps should have protective mesh.
- 20.0 The contractor has to abide by Safety Procedures enforced at OPGC. Each contractor personnel shall use PPE like Safety Shoes, Safety Helmet, Safety Glasses, Face shield, Ear Muff/Plug, Welding Helmet, Cover all (Boiler suit), REFLECTIVE VEST. The reflective vest should display the name of the contractor. Non compliance of above is liable for removal of the personnel from the site.
- 21.0 When the work is carried out at height Full Body harness is to be used having ISI mark, the Full body harness shall be arranged by the contractor.
- 22.0 The contractor has to deploy their SAFETY SUPERVOSOR/COORDINATOR to ensure the compliance of the safety procedures during the execution of the work. If the contractor is found not complying / adhering to the safety procedures in spite of repeated reminders, the contract can be terminated.
- 23.0 The contractor has to arrange all the consumables like Diesel , CTC , Waste Cloth, Markin cloth , Cutting wheel , Grinding wheels etc.
- 24.0 The contractor shall submit following documents before the start of work to EIC
  - Valid Test Certificate of pulling & Lifting equipment
  - Details of workers to deployed with name and the work experience and the assigned nature of work
  - Healthiness of all electrical operated hand held machines and welding machines.

- List of T&P to be brought inside the plant
- Labour License specific to the contract
- Insurance policy for all deployed personnel

#### 25.0 Period of Contract

• The contract is for the year 2024-25. However the contract can be extended for another one financial years at the SAME RATES AND TERMS & CONDITIONS. The extension of the contract shall be on sole discretion of OPGC. The criteria for the extension are the Quality job, Timely completion & Adherence to safety norms and execution of the work without LTA.



### Name of the work: "Rental Supply of Scaffolding materials, Installation & Dismantling of Scaffolding during COH of U#2, FY:2024-25."

ITEM No.	DESCRIPTION OF JOB	Quantity	иом	Unit Rate (Rs.)	Estimated Amount (Rs.)
	Supply of Scaffolding material and		_		
1	installation & removal	10000	Sq. mtr		
				TOTAL:	

In words: Rupees	Only
Note:	

• Bidder has to use the above Price Bid Format failing which Bid will be rejected.